The Directory of United States Coal & Technology Export Resources

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Profiles of Domestic U.S. Corporations, Associations and Public Entities, Nationwide, Which Offer Products or Services Suitable for Export, Relating to Coal and its Eltilization

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January 1994

U.S. Department of Energy Assistant Secretary for Fossil Energy Office of Planning and Environment

For copies of this directory please contact:

U.S. Department of Energy Office of Fossil Energy Office of Communications (FE-5) Washington, D.C 20585 (202) 586-6503

For further information about U.S. DOE programs related to this directory please contact:

Mr. Peter Cover, FE-4
Program Manager, Coal and Technology Exports
Office of Planning and Environment
Office of Fossil Energy (FE-4)
U.S. Department of Energy
Washington, DC 20585
(202) 586-7297

For inclusion in this directory free of charge send company name, address, and contact to:

The Directory of U.S. Coal & Technology Export Resources Resource Dynamics Corporation 8605 Westwood Center Drive Vienna, VA 22182 (703) 356-1300

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Department of Energy

Washington, DC 20585

December 1993

Dear Colleague:

The U.S. Department of Energy (DOE) and its Office of Fossil Energy are pleased to provide the third edition of *The Directory of U.S. Coal & Technology Export Resources*. The earlier editions of this directory were extremely well received and this year's edition adds many new organizations. It has also been made easier to use.

The purpose of *The Directory* is to offer a single source of information about U.S. coal, coal technology, and expertise that U.S. companies offer to the international marketplace. U.S. companies are leaders in international coal and coal technology markets based on the high value and quality of products and services they provide. In addition, DOE continues to support a "package" approach to purchasing (i.e., integrated project teams involving U.S. coal producers, engineering and construction firms, equipment manufacturers, financing and service organizations) that can provide the greatest value to coal consumers worldwide.

I sincerely hope that you find *The Directory* to be useful and you are encouraged to contact the organizations included in it.

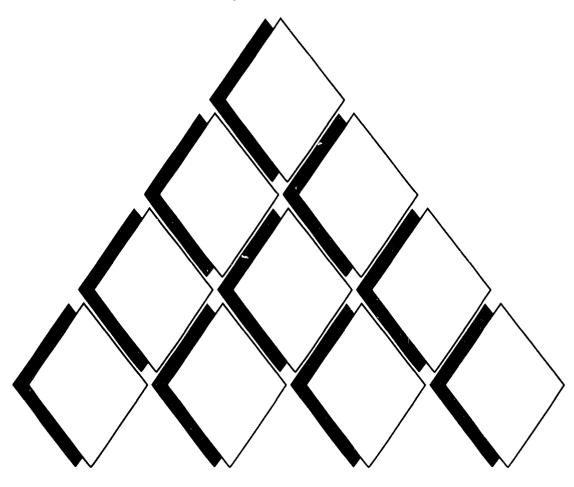
Jack S. Siegel

Acting Assistant Secretary

for Fossil Energy

The Directory of United States Coal & Technology Export Resources

Profiles of Domestic U.S. Corporations, Associations and Public Entities, Nationwide, Which Offer Products or Services Suitable for Export, Relating to Coal and its Utilization



January 1994

U.S. Department of Energy Assistant Secretary for Fossil Energy Office of Planning and Environment Washington, DC 20585







PREFACE

This third edition of *The Directory of U.S. Coal and Technology Export Resources* represents the continuing cooperative efforts of U.S. industry and the U.S. Department of Energy (DOE) to catalog readily available current export sources for U.S. coal and coal related technologies. This directory, first published in 1989, resulted from industry suggestions at a series of government/industry public meetings on international coal and technology trade opportunities. The directory is part of an ongoing government effort to cooperate with U.S. coal and fossil energy technology industries and to actively promote international trade opportunities.

This edition of the directory is comprised of more than 360 U.S. private sector entities offering coal and coal technology products that are available for export. Rapid gains in worldwide electrification coupled with growing environmental concerns promise to substantially boost demand for clean coal technologies. U.S. equipment suppliers will undoubtedly be called upon to play a lead role in satisfying this demand.

As always, U.S. DOE will continue to develop its list of organizations in this directory as industry awareness increases within the U.S. and as new products and technologies come to market.

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I. INTRODUCTION

The purpose of this directory is to provide a listing of available U.S. coal and coal related resources to potential purchasers of those resources abroad. The directory lists business entities within the United States which offer coal related resources, products and services for sale on the international market. Each listing is intended to describe the particular business niche or range of product and/or services offered by a particular company. The listing provides addresses, telephones, and telex/fax for key staff in each company committed to the facilitation of international trade. The content of each listing has been formulated especially for this directory and reflects data current as of the date of this edition.

The directory listings are divided into four primary classifications:

- Coal Resources
- Technology Resources
- Support Services
- Financing and Resource Packaging

The first three of which are subdivided as follows:

- Coal Resources
 - Coal Derivatives
 - Coal Exporters
 - Coal Mining
- Technology Resources
 - Advanced Utilization
 - Architects & Engineers
 - Boiler Equipment
 - Emissions Control and Waste Disposal Systems
 - Facility Construction
 - Mining Equipment
 - Power Generation Systems
 - Technical Publications
 - Transport Equipment
- Support Services
 - Coal Transport
 - Facility Operations
 - Freight Forwarders
 - Sampling Services and Equipment
 - Technical Consultants

Listings for the directory were solicited on the basis of this industry breakdown. Each of the four sections of this directory begins with a matrix illustrating which companies fall within the particular subclassifications specific to that main classification. A general alphabetical index of companies and an index by product/service classification are provided following the last section of the directory.

Expanded definitions for each subclassification are listed below and at the beginning of each section:

- Coal Derivatives Firms producing/selling products derived from coal through specific alternation technology or resource recovery.
- Coal Exporters Firms engaged in the marketing of U.S. coal for export.
- Coal Mining Firms engaged in coal mining.
- Advanced Utilization Providers of technology and equipment designed for utilization in a system
 environment which allows for combustion of coal without significant air or water pollution or solid
 waste stream control problems.
- Architects & Engineers Firms providing power and/or industrial plant design services.
- **Boiler Equipment** Firms providing coal and/or derivative combustion and steam generation equipment and systems.
- Emissions Control and Waste Disposal Systems Firms providing in-process (LIMB, etc.) and stack (ESP, Baghouses, cyclones, etc.) emissions control systems, and waste stream management, disposal, and recycling technology.
- Facility Construction Firms providing construction services, often in conjunction with A&E firms.
- Mining Equipment Firms providing equipment for underground and surface mining, as well as conveying, crushing, sizing, and beneficiation.
- Power Generation Systems Firms providing electrical generating systems for use in conventional steam plants, as well as gas turbine systems and combined cycle systems.
- Technical Publications Firms providing manuals, handbooks, and other technical literature relating to coal and coal technology.
- Transport Equipment Equipment used in rail and shipboard transport of coal.
- Coal Transport Firms providing transportation services between mine-mouth and ultimate consumer.
- Facilities Operations Firms providing plant operation and management (O&M) services on a contract basis.
- Freight Forwarders Firms providing brokerage services in domestic and international transport services.

- Sampling Services and Equipment Firms dedicated to assuring coal quality through services in any area related to coal and coal technologies.
- Technical Consultants Firms providing engineering, scientific and other technical services in any area related to coal and coal technologies.

Central to the benefits that can be realized by purchasing from U.S. industry is the "package concept." Individual products and services from U.S. companies can be combined to develop synergism in the use of resources. The package approach can potentially provide the buyer with lower total cost, greater system integration and efficiency, and require less effort. Potential purchasers of U.S. coal and technology resources may elect to structure a package from the categories listed in the directory. Depending on the availability of indigenous resources, such packages might encompass all or part of the example shown below:

Example Coal and Coal Technology Package

A comprehensive example of a Coal and Coal Technology Package might be the case of an overseas buyer contracting for the turn-key construction of a coal fired power generation facility and, at the same time, securing a 20 year coal supply contract to complement it.

The packagers of such a deal might put together these principal elements:

- Technology (plant),
- Coal (beneficiated), and
- Financing.

In the technology area a facility integrator could provide:

- Architecture/Engineering services,
- Advanced boiler equipment, e.g., AFBC,
- In-process emissions control technology (CCT),
- Stack emissions control technology,
- Steam driven generation equipment,
- Facilities construction, and even
- Operations & Maintenance (beyond turnkey).

The coal supplier would provide coal, C.I.F. the plant. This might involve:

- Coal, FOB mine 20 year quantity at spec. (sulfur, BTU, etc.),
- Dedicated or shared beneficiation process,
- Ground transport (U.S.),
- Ocean transport, and
- Ground transport (destination).

The financing package could cover the plant capitalization based on the projected revenue, stream over the sample period (20 years). The investment banking aspect of the financing would cover the integrating of public and private financing and take advantage of the import/export incentives that exist in various jurisdictions internationally. Further, developing a viable funding strategy would address contractor performance guarantees, liability issues, and plant performance guarantees.

It is possible that the potentially higher costs of individual elements in a package can be overcome by savings generated over the entire package. Additionally, companies may be willing to pay premiums on bulk resources if combined with technologies which do not impose further burdens on the environment.

II. COAL RESOURCES

Coal Derivatives: Firms producing/selling products derived from coal through specific

alteration technology or resource recovery.

Coal Exporters: Firms engaged in the marketing of U.S. coal for export.

Coal Mining: Firms engaged in coal mining.

Company Name	Coal Derivatives	Coal Exporters	Coal Mining
ABSCO Scales			•
Acurex	•		
AMAX Coal Industries, Inc.			•
Amax Coal West, Inc.		•	•
Amerikohl Mining, Inc.		•	•
ANDALEX Resources, Inc.		•	•
Anker Energy Corporation		•	•
Aristech Chemical Corporation	•		
Ashland Coal, Inc.		•	•
B & N Coal, Inc.			•
Bechtel Corporation	•		•
Berwind Coal Sales			•
Black Gem Coal Company		•	•
Buckeye-Industrial Mining Co.			•
C & K Coal Company			•
Cannelton Coal Sales Company			•
Carbon Fuels Corporation	•		
Centralia Coal Sales Company			•
Chatterjee and Associates, Inc.	•		

Company Name	Coal Derivatives	Coal Exporters	Coal Mining
CLI Corporation			•
Coal Reserves, Inc.	•	•	
Coal Technology Corporation	•		
Coastal Coal Sales, Inc.		•	•
Colowyo Coal Company			•
Commercial Testing & Equipment Co.	•		
CONSOL, Inc.		•	•
Consolidated Rail Corporation		•	
CQ Inc.	•		
Delta Coal Sales, Inc.			•
Drummond Company, Inc.		•	•
EAMarketing, Inc.		•	•
Eastern Europe, Inc.		•	
Electric Fuels Corporation	•	•	•
Ellison Consultants	•		
Emerald International Corporation		•	
Energy International Corporation	•		
Energy Resources, Inc.		•	•
Energy Trading Corporation		•	
Exxon Coal and Minerals Company		•	•
Farrell-Cooper Mining Company		•	•
Fluor Daniel		•	•
Franklin Coal Sales Company		•	•
GeoResearch, Inc.	•	•	•
Global Associates, Inc.	•	•	•
Global Energy USA	•	•	
Hawley Fuel Corporation		•	
The Hiller Group, Inc.	•	•	

Company Name	Coal Derivatives	Coal Exporters	Coal Mining
Illinois Dept. of Energy & Natural Resources Office of Coal Development & Marketing		•	
Joy Technologies, Inc.			•
JTM Industries, Inc.	•		
Kerr-McGee Coal Corporation		•	•
K-Fuel, Inc.	•	•	•
Kiewit Mining Group Inc.		•	•
Knife River Coal Mining Company	•		•
Lamarche Manufacturing Company			•
Lehigh Valley Coal Sales Company		•	•
Levin-Richmond Terminal Corporation		•	
Logan & Kanawha Coal Company, Inc.		•	•
MAPCO Coal Inc.		•	•
Maran Coal Corporation		•	
Marine Coal Sales Company		•	
A.T. Massey Coal Company, Inc.		•	•
Miller Trading Company		•	
Monex Resources	•		
Morrison Knudsen			•
NERCO Coal Corporation		•	•
Norfolk Southern Corporation		•	
The Ohio Valley Coal Company		•	•
Oxbow Carbon International, Inc.	•	•	•
Pacific Basin Resources		•	•
Pacific Coast Coal Company		•	•
Pen Coal Corporation		•	•
Pincock, Allen & Holt, Inc.			•
Pittsburg & Midway Coal Mining Company			•
Pittston Coal Sales Corporation		•	•
Port of Long Beach		•	

Company Name	Coal Derivatives	Coal Exporters	Coal Mining
Powder River Coal Company			•
Process Technology, Inc.			•
Science Applications International Corporation Fossil Energy Technology Division	•		
Seneca Coal & Coke Corporation		•	
Shipyarad River Coal Terminal		•	
Slurrytech, Inc.	•		
Stinnes Hanson Coal Company, Inc.		•	
Stone & Webster Engineering Corporation			•
Summers Fuel, Inc.		•	
Sun Coal Company	•		•
TECO Coal Corporation		•	•
U.S. Steel Mining Company, Inc.		•	•
United Coal Company		•	•
United Eastern Coal Sales Corporation		•	•
Usibelli Coal Mine, Inc.		•	•
Jim Walter Resources, Inc.	•		•
Waterloo Coal Company, Inc.			•
Williams Technologies, Inc.	•		

ABSCO Scales 9807 Johnstown Road New Albany, OH 43054

Telephone:

(614) 855-9500

FAX:

(614) 855-2993

President:

Mark / Stoj

Domestic Offices:

Main - Columbus, OH

Branch - Ashland, Canton, Cleveland, Dayton and Toledo, OH

Design and manufacture legal regular and heavy duty vehicle scales. Standard and custom design of load cell mounting hardware to convert non-weighing material handling equipment into weighing devices. Design and manufacturing of floor scale platforms to a capacity of 100K. Custom computerized systems for data acquisition and material control.

Products/Service	Description
Vehicle Scales	Regular and heavy duty electronic truck scales. NTEP approved from 30' to 90' long. Capacities 300,000 lbs.
Load Cells & Mounts	Hardware to instrument bins, tanks and hoppers for weighing applications. Conversion kits to convert mechanical scales to electronic weighing devices.
Data Processing	Complete hardware and software packages for truck scale in/out weighing, bulk load out systems and process control systems.

Acurex Environmental Corporation 555 Clyde Avenue P.O. Box 7044 Mountain View, CA 94039

Telephone: (415) 961-5700

Telex: 325961 FAX: (415) 964-6523

President:

Howard L. Morse International Sales Manager: John W. Schaefer

Domestic Offices:

Eastern Region: P.O. Box 13109, Research Triangle Park, NC 27709; Incineration Research Facility:

NCTR - Building #45, Jefferson, AR 72709; Southwest Region: 4879 E. La Palma Ave., Ste. 201, Anaheim, CA 92807

Acurex

Environmental

CORPORATION

A Geraghty & Miller Company

International Offices:

Please contact headquarters for information

Acurex Environmental Corporation is a full-service energy and environment engineering and consulting firm. The company specializes in air and multimedia environmental compliance and technologies with emphasis on combustion systems. They provide services to industrial and utility clients and public jurisdiction in compliance with federal, state, and district regulations. These services include emission and combustion systems monitoring, process and emissions characterization and controls, environmental and energy facilities operation, clean alternative fuels demonstration and implementation in mobile and stationary applications, and incineration technology and monitoring. Acurex Environmental has a staff of over 200, and is a wholly-owned subsidiary of Geraghty & Miller, Inc.

Product/Service	Description
Coal Derivatives	Technology development, application engineering, and introduction to use of coal-derived methanol and environmentally-clean coal briquettes
Advanced Utilization	Technology development in emission controls for IGCC powerplants, in combustion and emission controls, including low NO _x burners, for industrial and utility combustion equipment, and in coal briqueting for low emissions, high efficiency combustion
Architect & Engineers	Design, fabrication, and installation of research and prototype coal combustion equipment including boilers, furnaces, gasifiers, and fluidized bed combustion
Boiler Equipment	Technology development, testing application engineering, and implementation of combustion and emission controls, hazardous waste cofiring, and natural gas reburning for industrial and utility boilers
Emissions Control and Waste Disposal Systems	Technology development, testing, application engineering, and implementation of NO _x and SO ₂ , air toxics, PM10, and CO ₂ controls for utility and industrial combustion equipment.
Facility Construction	Construction management and installation of research and prototype coal combustion equipment
Power Generation Systems	Technology development, texting, application engineering, and implementation of emission and combustion control systems, burner systems, and boiler modifications
Facility Operations	Operate and perform research and development in advanced combustion equipment
Sampling Services and Equipment	Emission sampling and analysis (testing as used above) of all emissions, and measurement of all combustion parameters, including mass and energy balances, design and fabrication of specialized test equipment
Technical Consultants	Consulting and engineering in all services described above

AMAX Coal Industries, Inc. 200 Westlake Park Boulevard Houston, Texas 77079



Telephone:

(713) 368-1200

FAX:

(713) 368-1504

Chief Executive Officer:

Douglas H. Ashby

International Sales Managers:

Fred Alvarez, VP-Sales, AMAX Coal West, Inc.

(303) 980-2300

Richard Meschke, VP-Sales, AMAX Coal Company

(812) 421-3900

Richard Clonch, VP-Sales, Cannelton Inc.

(304) 926-2200

Domestic Offices:

Houston, TX; Lakewood, CO; Evansville, IN; Charleston, WV

AMAX Coal Industries, Inc. is a wholly-owned subsidiary of AMAX Energy, which is a subsidiary of AMAX Inc. AMAX Coal is the nation's third largest coal producer and is known throughout the industry for its innovative mining methods and technological advances. In 1992, the company produced 41.1 million tons of coal from mines located in Illinois, Indiana, Tennessee, West Virginia, and Wyoming. Early in 1993, the company announced it was relocating its headquarters office from Indianapolis, Indiana to Houston, Texas. The company now combines offices with its parent company and AMAX Energy's other subsidiary, AMAX Oil & Gas. By operating in the same location, AMAX Energy and its subsidiaries will be in a better position to puruse its goal of providing the fuels of choice - coal and natural gas - to the growing electric power and industrial markets.

Product/Service

Description

AMAX Coal's sales team provides complete coal marketing services including transportation assistance, technical support, contract administration, and market development. Electric utility and industrial customers who purchase coal through AMAX can rely on an experienced and qualified staff for technical expertise in all areas of coal marketing.

Amax Coal West, Inc. 165 South Union Blvd., Suite 1000 Lakewood, CO 80228

Telephone:

(303) 980-2300

FAX:

(303) 980-2303

President:

J. Mark Cook

Sales Manager:

Fred L. Alvarez, Vice President, Sales

Domestic Offices:

Lakewood, CO

Amax Coal West, Inc. owns and operates two mines located in Campbell County, Wyoming. In 1992, Amax produced over 2.6 million tons of subbituminous coal from the Powder River Basin. Amax Coal West, Inc., with its affiliates Cannelton Holding Company and Amax Coal Company, own and operate mines in Indiana, Illinois, Tennessee, Kentucky, West Virginia, and Wyoming.



Amerikohl Mining, Inc. 202 Sunset Drive Butler, PA 16001



Telephone: (412) 282-2339 (412) 282-3226

FAX: President/Owner:

John M. Stilley

Vice President Sales:

Gerard P. Baroffio, Butler Division

Robert J. Shaffer, Central Pennsylvania Division

Domestic Offices:

BUTLER, PA: 202 Sunset Drive TEL: (412) 282-2339; ACME, PA: P.O. Box 427, Acme, PA 15610 TEL: (412)

423-8700

Amerikohl Mining, Inc. was originally incorporated in 1978 by John M. Stilley and employs approximately 100 dedicated employees with an average of six (6) years with the company. Our principal business is the mining and preparation of steam coal sold primarily to electric utilities in the Northeast, Great Lakes Region, West Virginia, and Ohio.

Product/Service

Description

Coal Mining

High quality steam coal from mines in Western and Central Pennsylvania and West Virginia.

ANDALEX Resources, Inc. 12001 Hurstbourne Place 9300 Shelbyville Road Louisville, KY 40222

Telephone: (502) 339-5000

Telex: 204 245 ANDALEX LVL FAX: (502) 339-5050 Chief Executive Officer: Robert Anderson Jr. **Executive Vice President:** Malcolm Thomas Director of Marketing: Larry Washington Director of Western Sales: Ronald Powers **Director of Eastern Sales:** Darrell Mahone

Domestic Offices:

9300 Shelbyville Rd; Highway 41A North, Madisonville, KY; 707 17th St, Denver, CO.

ANDALEX Resources, Inc. is a private company formed by a family which has been mining coal continuously for over 150 years. ANDALEX Resources comprises three active mines and current production capacity is in excess of four million tons per year. The company has earned recognition as a reliable large-volume long-term supplier to industry and public utilities in the United States and overseas. A primary company goal is the flexibility necessary to respond to customers quickly and cost effectively.

Product/Service

Description

Cimarron Division

An Area surface mine operation with long-term and spot sales in excess of 2 million tons. Cimarron can load on CSX or P&L rail lines with rail-to-barge transfer at several river ports for gulf shipments.

Tower Division

Operates underground drift access, room and pillar mines in the Book Cliffs Coal Fields of Utah. Sales include longterm and spot contracts to utility and industrial customers. Is a major supplier to the far east primarily through the

port of Los Angeles.

Little Creek Division

Surface and underground mining operations located in eastern Kentucky with production capacity of 1.5 million tons. Has proven to be a competitive supplier to industrial and utility customers from Michigan to Florida, 4 hour unit train loadout capability on CSX rail. Export shipments primarily through New Orleans, Mobile, and Charleston.

Anker Energy Corporation Route 12, Box 245 Morgantown, WV 26505

Telephone: (304) 296-1616 **FAX:** (304) 296-3692

President/CEO: John J. Faltis

VP - Sales: Royden L. Loucks, Neil Cregg

Domestic Offices: Route 12, Box 234, Morgantown, WV; 26 Columbia Turnpike, Florham Park, NJ 07932

International Offices: Anker Kolen Maatschappij, B. V.

Anker Energy Corporation produces in excess of 4.5 million tons of coal per year from its U.S. operations and ships about 6.5 million tons per year to worldwide and domestic consumers. Anker Kolen Maatschappij is a worldwide supplier of steam and metallurgical coals and is headquartered in Rotterdam.

Anker's U.S. mining operations supply low and mid sulfur, high Btu steam and metallurgical coals that can be exported through east coast or gulf ports to markets worldwide.

Anker Kolen provides coal to the world markets with coals originating from all the supplying countries. Anker also provides services relating to purchasing to the buyer; such as financing, quality control, intermediate storage and all aspects of transportation to fit the customers needs.

Aristech Chemical Corporation Coal Chemicals Unit 600 Grant Street, Room 1090 Pittsburgh, PA 15230

ARISTECHA

Telephone: (412) 233-2128

Telex: 6503608865 FAX: (412) 233-2141

Product Manager: Mr. Michael B. Yuhas Sales Manager: Mr. Wayne E. Smith, Jr.

Domestic Offices: Pittsburgh, PA: 600 Grant St., Room 1090, Pittsburgh, PA 15230, (412) 433-2747

Clairton, PA: 300 N. State St., Clairton, PA 15025, (412) 233-2128

Aristech Chemical Corporation (formerly the USS Chemicals Division of USX) is an indirect subsidiary of Mitsubishi Corporation. The Coal Chemicals Unit is one of seven major businesses. Our creosote and binder pitch is produced by the distillation of coal tar. Creosote meets North American specifications, and binder pitch is produced to meet customer specifications.

Product/Service Description

Binder Pitch Aristech produces liquid and solid binder pitch to meet customer specifications for use in producing anodes for

smelting aluminum and graphite electrodes for steelmaking. Solid pitch is a rod of approximately 3/8 x 3/4 inches,

which makes it easily shipped by bulk cargo loads internationally.

Ashland Coal, Inc. Post Office Box 6300 **Huntington, WV 25771**



FAX:

Telephone: (304) 526-3333

(304) 526-3678 Chief Executive Officer:

William C. Payne

Sales Manager:

C. Henry Besten, Senior Vice President - Marketing

International Sales Manager:

V. Sam Lewis

Domestic Offices:

Ashland Coal, Inc.: P.O. Box 6300, Huntington, WV 25771; Ashland Coal Sales, Ohio: 183 W. Main

Street, St. Clairsville, OH 43950

International Offices:

Ashland Coal International, Ltd.: 20 Boulevard de la Republique, 92210 St. Cloud, France

Ashland Coal, Inc. is an eastern coal company engaged in marketing, mining, processing, and distribution of low sulfur bituminous coal, which it markets primarily to utilities in the eastern United States and in the European area. Ashland Coal, Inc. is comprised of independent operating subsidiaries including Hobet Mining, Inc.; Coal-Mac, Inc.; Dal-Tex Coal Corporation; Mining Logan Coal Company; Tri-State Terminals, Inc.; and, Tri-State Testing Co., Inc.

Product/Service

Description

Steam Coal

Ashland Coal, Inc. produces primarily high quality, low sulfur steam coal and highquality compliance coal for

utility power production.

Metallurgical Coal

Ash'and Coal, Inc.'s Mingo Logan Coal Company produces high volatile metallurgicalcoal in addition to

steam coal.

B & N Coal, Inc. P.O. Box 100

Dexter City, OH 45727

FAX:

Telephone: (614) 673-3575

(614) 783-5455

President/CEO:

Carl Baker, Jr.

Sales Manager:

Carl Baker, Jr.

Our company surface mines coal in Southeastern Ohio. We presently produce approximately 750,000 tons per year. This coal is hauled by truck to a local plant where they use it to generate electricity.

Our company has received many awards in the State of Ohio and has received two National Awards for our outstanding reclamation after remining of predominantly previously mined and unreclaimed strip mined land. We are capable of mining much more coal than we are presently. The coal can be made readily available for other markets.

Products/Service

Description

Coal

Our coal is high in sulfur content; however, it is high in BTU's.

Limestone

Our limestone is produced by our subsidiary company - Sharon Stone Company. It is used locally for road surface

materials and riprap.

Reclamation and Construction We reclaim many acres of previously unreclaimed strip mine spoils. We also bid on jobs which are contracted by abandoned mine lands and RAMP Programs. We also do site development and construction.



Bechtel Corporation Fifty Beale Street P.O. Box 193965 San Francisco, CA 94119-3965

Telephone: (415) 768-1234

Telex: 184907 BECHTEL SFA FAX: (415) 768-9038

President/CEO: Riley Bechtel

Domestic Offices: Athens, AL; Boston, MA; Charlotte, NC; Gaithersburg, MD; Houston, TX; Kingsport, TN; Los Angeles, CA;

Louisville, KY; New York, NY; Oak Ridge, TN; Palm Beach Gardens, FL; Pottstown, PA; San Francisco, CA; Savanna

River, SC; Washington, DC

International Offices: Aberdeen, Scotland; Abu Dhabi, UAE; Bangkok, Thailand; Beijing, PRC; Caracas, Venezuela; Melbourne, Australia;

Manila, Philippines; Montreal, Canada; Moscow, Russia; Rio De Janeiro, Brazil; Riyadh, Saudi Arabia; Santiago, Chile; Seoul, Korea; Singapore; Tokyo, Japan; Toronto, Canada. Besides these there are several joint venture offices in various

parts of the world.

Since its establishment in 1898, Bechtel has developed into one of the world's largest, most experienced engineering and construction firms. In the past 95 years, Bechtel has been engaged around the world to perform studies, engineering, procurement, construction, and plant operation services. Bechtel has specialized in many areas including fossil-fired and nuclear power generation, refineries and chemical plants, mining and metals facilities, all types of pipelines, and hydro and community facilities.

Bechtel has engineered and constructed facilities for coal mining, handling, storage and transportation, electric power generation, coal conversion, and pollution control. Bechtel maintains a long-term involvement in federal, state, and local governments' clean coal development programs, and works with various industries to expand clean coal technology commercial applications.

Service De	escription
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Engineering, Procurement, and Construction in the following major business areas:

Petroleum, Chemical &

Industrial

Bechtel has earned a reputation as one of the finest builders of petroleum, gas, pipeline and chemical projects in the

world

Power Bechtel's share of the U.S. fossil market is approximately 25%

Civil Major construction (national as well as international) in the area of airports, tunnels, roads and bridges

Environmental Bechtel is the largest environmental contractor in the world with experience in all phases of the environmental

business.

Mining & Metals Bechtel, as the market leader, is actively involved internationally in a variety of mining projects.

Berwind Coal Sales Co. 3000 Centre Square West 1500 Market Street Philadelphia, PA 19102

Telephone: (215) 563-2800 **Fax:** (215) 563-2725

Chief Executive Officer: Harry M. Easton, President International Sales Manager: John C. Culp, Vice President



Berwind has been in the coal business for over 100 years. We are privately owned and currently mine over 1,200,000 tons of coal per year in Somerset County, Pennsylvania, and Pike County, Kentucky, where we own very extensive reserves.

Product/Service

Description

Coal Mining

Various grades of Pennsylvania low volatile (15-17%) coals loaded on Conrail and the B&O Railroads.

Low sulfur, high volatile (30%+) eastern Kentucky coals loaded on the C&O and N&W Railroads.

Black Gem Coal Company P.O. Box 931 Cincinnati, OH 45239-0931

BLACKGEM

Telephone: (513) 931-1426

Chief Executive Officer: International Sales Director: H.M. Vonderheide H.M. Vonderheide

Domestic Offices:

All business conducted through the Cincinnati, Ohio USA office.

Company has been in existence since 1976. Product line consists of steam, stoker, and metallurgical coals available from USA coal areas of southern West Virginia, southwest Virginia, southeastern Kentucky, eastern Tennessee.

Product/Service

Coal Mining, transportation by truck, rail, USA river system to ports for export. Coal brokers/finders/sales. Mining equipment both deep and surface (as commonly utilized in USA coal mines).

Buckeye Industrial Mining Co. P.O.Box 389 4719 Industrial Road Lisbon, OH 44432

Telephone: (216) 337-9511 or (216) 424-7281

FAX: (216) 337-3730

Chief Executive Officer: John C. Grisham Industrial Sales Manager: Jack M. Grinwis

International Offices: Please contact Corporate Headquarters for further information.



Industrial Mining Co. was founded in 1948 and merged with Buckeye Mining Co. (1938) in 1971 to form Buckeye-Industrial Mining Co. Surface and underground mining is conducted in five Northern Ohio counties. A preparation facility and Conrail unit train siding is located in Kensington, Ohio. Additional Norfolk and Southern Rail loading facilities are located at Canton, Ohio. Multi-seam mining techniques are employed with production in the Ohio No's. 5, 6, 6A, 7, and 7A seams. With multi-seam mining and unique blending capabilities, Buckeye-Industrial Mining Co. produces an inclusive range of utility and industrial coal qualities with a complete range of sizing.

Product/Service Description

Coal Mining Coal qualities currently produced range from 1% sulphur at 13,000 BTUs to 3% sulphur at 12,000 BTUs with both

high and low fusion characteristics. Within the reserve portfolio, the company controls a significant amount of less

than 1% sulphur 13,000 BTU coal.

C&K Coal Company P.O. Box 69 Clarion, PA 16214

Telephone: (814) 226-6911 **FAX:** (814) 226-9517

President and Chief Executive Officer: Gary C. Wilson Vice President, Marketing: F. Lee Derrick, Jr.

International Offices: Please contact Headquarters for further information

C&K Coal Company is a producer and seller of three qualities of steam grade, prepared bituminous coal with sulfur contents of 1.8, 2.0 and 2.8%, respectively. Between 1.5 and 2.0 million tons of Pennsylvania coal is surface mined annually which can be shipped to East Coast ports via Conrail. Our company maintains a substantial reserve base and is experienced in performing under short, medium and long term contractual commitments.

Cannelton Sales Company 315 70th Street Charleston, WV 25304-2909

Cannelton Sales Company

is



Telephone: (304) 926-2200 **FAX:** (304) 926-2293

President: Stephen L. Warren

International Sales Manager: Richard W. Clonch, Vice President - Sales

Robert L. Plotter, Director - Sales Joseph P. Jefferson, Director - Sales

Cannelton Sales Company is now an affiliate of AMAX Coal Company, the third largest coal producer in the United States. Last year AMAX produced over forty million metric tons of coal from the states of West Virginia, Indiana, Illinois, Tennessee and Wyoming. As part of AMAX, Cannelton is responsible for the export sales of coal to Europe, Africa, the Middle East, South America, and Canada.

Cannelton Sales Company is a producer and supplier of low sulfur coal from West Virginia. Our production includes low and high quality steam coals and low and high volatile metallurgical coals. Cannelton has the ability of loading unit trains on the C&O and N&S Railroads. In addition we have a barge loading facility on the Kanawha River that can load up to 3000 tons per hour. Cannelton presently has a total of 350 million tons recoverable reserves in Kanawha, McDowell, Boone, Fayette and Raleigh Counties. Cannelton has the ability to make volume shipments to either New Orleans, Louisiana or Newport News, Virginia for vessel loading.

Product/Services	Description			
Steam Coal	Kanawha Division: This operation has production capacity of five million tons per year. KCAL/KG ranges from 6400 to 6900, percent sulfur ranges from .70 to 1.5, percent ash ranges from 9 to 16. Our barge loading facility is located at Mile Post 84.3 on the Kanawha River in West Virginia and can load over 10,000 tons per day.			
High Volatile Metallurgical Coal and Steam Coal	Indian Creek Division: This operation has production capacity of one million tons per year. Our high volatile quality is 7.0% moisture, 6% dry ash, .85% dry sulfur, and a dry volatile of 38%. Our steam coal quality is 6600 to 6900 KCAL/KG, less than 1% sulfur and 10% to 12% ash. This operation has the ability to load 100-car unit trains on the CSX Railroad or barges on the Kanawha River.			
Low Volatile Metallurgical Coal	Pocahontas Division: This operation has the production capacity of one million tons per year. Our low volatile quality i 7% to 8% moisture, 4% to 6% dry ash, 1% dry sulfur and 18% to 20% dry volatile. This operation is located in McDowell County, West Virginia and is served by the N&S Railroad.			
Low Volatile Metallurgical Coal	Maple Meadow Mining: This operation has the production capacity of 1.4 million tons per year. Metallurgical Countypical quality is 6% to 7% moisture, 6% dry ash, .80% dry sulfur, and 19% dry volatile. This peration is capable of loading 100-car unit trains on the CSX Railroad.			
As an affiliate of AMAX Coal Industries we are also able to offer coal produced from our mines in the Illinois and Powder River Basins.				
Steam Coal Indiana/Illinois	In the states of Indiana and Illinois AMAX produced over ten million tons from five different perations. KCAL/KG ranges from 5900 to 6400, percent sulfur ranges from .70% to 4%, percentash ranges from 6% to 12%, percent moisture ranges from 9% to 15%.			
Steam Coal Wyoming	AMAX was the first company to develop the coal reserves in the Powder River Basin. Production our Belle Ayr and Eagle Butte mines totals thirty million tons per year. Dual rail service from the CN&W and BN can provide our customers with a competitive advantage. KCAL/KG ranges from 4700 to 4600, sulfur ranges from .30% to .50%, ash ranges from 4% to 5.5%.			

Carbon Fuels Corporation Denver Technological Center 5105 DTC Parkway, Ste. 317 Englewood, Co 80111

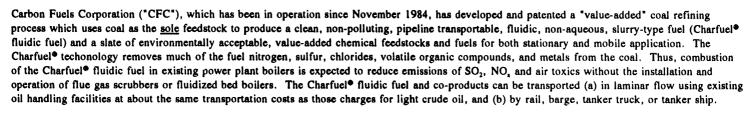
Telephone: (303) 770-7667 **FAX:** (303) 770-7683

Chief Executive Officer: Mr. Lee G. Meyer International Sales Manager Mr. Earl A. Bowers

Domestic Offices: ENGLEWOOD, CO: Coal Refining

Corporation of America (wholly owned subsidiary), addresssame as above; LARAMIE, WY: Wyoming Coal Refining

Systems, Inc., 2020 Grand Avenue, Suite 250, Laramie, WY 82071



Product/Services	Designation	Description
Charfuel [®] Fluidic Fuel	Coal Derivatives	Charfuel® fluidic fuel is an admixture of char, wet methanol, and hydrocarbon oil produced during the Charfuel® process and has a higher heating value than the parent coal. The Charfuel® fluidic fuel contains from about 50% to about 75% by weight solids (char) and has a heating value in excess of 13,000 Btu/lb. It is expected to be available for commercial export in small quantities by 1993 and in larger quantities by the year 2000.
Oxygenated Fuels (i.e., methanol, MTBE)		These transportation fuel additives, produced during the Charfuel® coal refining process, are expected to be available for export by the year 2000.

Centralia Coal Sales Company P.O. Box 478 Wilkes-Barre, PA 18703

Telephone: (717) 822-4135 **FAX:** (717) 824-1884

Chief Executive Officer: Joseph A. Frank
International Sales Manager: Joseph A. Frank, Jr.
Domestic Sales Manager: Michael J. Costanza



Founded in 1947, Centralia Coal Sales Company is headquartered in Wilkes-Barre, in the heart of the Pennsylvania Anthracite Fields and well within reach of all the eastern coal reserves. Centralia Coal Sales Company is the exclusive sales agent for several large producers and represents a total of more than 30 producing companies in Pennsylvania, West Virginia, and Kentucky. It is undoubtedly, the largest independent coal marketing company in the Anthracite industry. Multiple supply sources assure customers of a reliable, continuous source of high-grade coal that fully meets their specifications. Years of experience and the growing promise of coal insure that Centralia will be here to serve its customers for many years to come.

Product/Service Description

Anthracite Coal Anthracite coal has unique physical and chemical properties which make it valuable in the broad range of processes and applications including: a clean, slow burning, low sulfur fuel for heating and generating electric power, a low cost

and applications including: a clean, slow burning, low sulfur fuel for heating and generating electric power, a low cost substitute for foundry and blast furnace coke, a reducing agent in the refining of metal ores, a raw material in the manufacture of cathode block, and carbon electrodes, source material for briquetting, an effective, long lasting filter media, a source for advanced synthetic fuels through gasification and liquefaction and for light oil and chemicals.

Chatterjee and Associates, Inc. 4883 Windermere Drive Newark, CA 94560-1462

Telephone: (510) 795-5436 FAX: (510) 792-0693 Chief Executive Officer: International Sales Manager:

Anil K. Chatterjee, P.E. Anil K. Chatterjee, P.E.



Chatterjee and Associates, Inc. offers a broad range of technical feasibility study, economic justification analysis, environmental impact study, regulatory/institutional problem evaluations of process technologies associated with the combustion and power generation with fossil and non-conventional fuel resources. C&Al has experience in working with developing countries under US-AID, the World Bank and UNIDO.

Product/Service	Description
Advanced Fuel Conversion Technologies	C&Al provides technical, economic, and environmental evaluation studies of conventional and non-conventional fuels densification, combustion and gasification process technologies, including AFBC/PFBC, and CSFs.
Environmental Pollution Control System Study	C&Al evaluates plant and fuel specific appropriate pollution control measures and performs comparative cost estimates (investment and O&M) and specifications.
Field Testing and On-site Monitoring	C&AI will perform ASME code power plant and environmental pollution control equipment performance testing and on-site monitoring of plant operation.
Data Acquisition and Analysis	C&AI has experienced staff in developing on-site data acquisition systems & rending on-line data analysis service.

CLI Corporation 430 Park West One Pittsburgh, PA 15275

Telephone: (412) 788-6688 **FAX:** (412) 788-6690

Chief Executive Officer: David G. Chedgy International Sales Manager: David G. Chedgy



International Offices:

Please contact company headquarters for further information

CLI Corporation is a major design and construction company in the coal and mineral industry. The Corporation specializes in feasibility studies, definitive estimates, engineering and turnkey construction for coal preparation and other mineral processing plants and the associated material handling systems. The Company also produces specialty equipment related to the processing industry. A subsidiary company is also involved in contract operations of mining facilities. The Company has internationally recognized coal and mineral processing specialists and a full complement of professional engineers and construction specialists.

Product/Service	Designation	Description
Architecture/ Engineering	CLI-1	Conceptual, preliminary, and actual design of coal and mineral process plants and material handling systems, including conveying, blending, and storage.
Coal Mining	CLI-2	Contract operations of mines and processing plants, including owner/operator contracts. Major coal processing of contracts of 1200 TPH presently under contract.
Facility Construction	CLI-3	Construction of turnkey or negotiated process plants and material handling facilities.

(Continued on next page)

CLI Corporation (Continued)

Advanced CLI-4 Producer of ultra-low ash and sulfur coal and coal water slurries (CWS).

Utilization

Specialty Equipment CLI-5 Manufacturer of Hi-Intensity Wet Drum Magnetic Separators.

Coal Reserves, Inc. P.O. Box 1623 Provo, UT 84603

Telephone: (801) 272-1604 **FAX:** (801) 785-1100

Chief Fxecutive Officer: Richard Bigler



Coal Reserves' primary business is the production and export of high quality steam coal, the enhancement of coal technologies for coal water mixtures and the control and reduction of pollution emissions.

Product/Service	Designation	Description
Coal Production and Export	N/A	CRI produces steam coal in the U.S. and Canada for both export to the Pacific Rim and local consumption.
Coal Water Mixture	C.W.M.	CRI has formulated a coal slurry fuel product which consists of 72 micron pulverized coal, 28 percent water by weight, and two percent catalyst additive. The catalyst enables the CWM to be fed directly into oil fired burners with only minor modification - typically, nozzle replacement only. This process increases the net Btu content of the fuel product while producing a cleaner burn due to the increased oxygen in proximity to the reaction. Catalyst enables the CWM to be substituted for bunker oil; it can be transported like oil, burns with a stable flame, burns cleaner than oil, yet costs less than oil and has a more stable price. Testing has demonstrated both static and dynamic stability for the CRI formulated CWM, e.g., coal particles remain in solution during storage periods of over a year and has fluidity for transportability. Minimum cost to convert existing burners at power generating facilities, and existing transport and storage capabilities are adaquate in most instances. Environmentally efficacious formulation.
Y ² Ultra Filter	In development	The Y ² Ultra Filter is an extraordinary unique filter which will have a dramatic effect on the control and/or elimination of pollution worldwide. With this product it is possible to filter out particles in air (gas) of less than 0.001 microns in size which includes viruses, sumes, smoke, large sized molecules and others. It is very cost effective and can be designed to retrofit existing filters. It is projected to have significant applications in enhancing the combustion of fossil fuels.

Coal Technology Corporation 103 Thomas Road Bristol, VA 24201

Telephone: (703) 669-6515 **FAX:** (703) 669-2161

President/CEO: Richard A. Wolfe, Ph.D.



Coal Technology Corporation (CTC) specializes in the research and development of advanced coal cleaning, fine coal recovery and dewatering, and new methods of coal utilization using advanced technologies. CTC holds four (4) patents for a fine coal dewatering centrifuge and one (1) patent for their coal liquids, char and coke (CLCC) process. Currently CTC is developing a cyclone process for advanced fine coal cleaning and an advanced continuous process to manufacture a char for ferroalloy industries or domestic use as a "smokeless fuel," and/or a metallurgical coke for steel industries with recovery of coal liquids for further refining as a by-product (process patent pending). CTC is investigating formation of a joint venture for construction of a commercial plant using the CTC/CLCC process.

Products/Service	Description
Contract Research	CTC has been involved in the successful completion of many coal related research projects, both as prime contractor and as sub-contractor, for the U.S. Department of Energy, utilities and other companies.
Technical Consulting	CTC has pilot plant and laboratory facilities staffed by personnel skilled in the wide range of coal related research.
Advanced Utilization	CTC markets and/or will license their patented technologies.
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Coastal Coal Sales, Inc. P.O. Box 1871 Roanoke, VA 24008

Telephone: (703) 983-0222, USA (except VA): (800) 336-5722

Telex: 888415 FAX: (703) 983-0267

Chief Executive Officer: Robert A. Feilner
International Sales Manager: Robert A. Feilner



Coastal Coal Sales, Inc. is responsible for the marketing of over 17 million tons of coal and petroleum coke produced by other units of The Coastal Corporation as well as independent high quality producers. Its principle affiliates are ANR Coal Company, Brooks Run Coal Company, Enterprise Coal Company, Virginia Iron, Coal and Coke Co., Coastal States Energy Co., Southern Utah Fuel Co. and Utah Fuel Co. Coastal Coal Sales also represents several independent operators. Coastal Coal Sales, Inc. is a financially stable company that is an integral part of the Coastal Corporation, an \$8 billion, diversified energy company.

Product/Service	Description
Coal Exporters	Exporters of thermal and metallurgical grade coals through the Ports of Hampton Roads, VA, Los Angeles, CA, San Francisco, CA, New Orleans, LA, Mobile, AL, Baltimore, MD and Philadelphia, PA.
Coal Mining	A solid reserve base with major blocks in Kentucky, Utah, Virginia and West Virginia. Flexibility with modern mining facilities and state-of-the-art preparation plants.

Colowyo Coal Company 5731 State Highway 13 Meeker, CO 81641

Telephone:



Colowyo Coal Company is a 50/50 partnership of subsidiaries of Grace

Energy Corporation which is 100% owned by W. R. Grace. Colowyo's surface coal mine, located in northwest Colorado, is the largest in the state, and produces in excess of 4.6 million tons annually of super-compliance, high-quality, low sulfur steam coal.

Product/Service	Designation	Description
Steam Coal	2x0	Subbituminous-A coal having 10,700 Btu/lb. (24,867 joules/g) with 0.37% sulfur and 4.5% ash (as received).
Stoker Coal	Stoker	Custom-sized coal can be produced, ranging in size from 1.5" to .25" (38mm to 6 mm). Stoker coal can be oiled on request. Colowyo stoker coal produces 11,000 Btu/lb. (25,564 joules/g) with 0.45% sulfur and 3.5% ash (as received).

Commercial Testing and Engineering Co. 1919 S. Highland Avenue, Suite 210-B Lombard, IL 60148

Telephone: (708) 953-9300

Telex: 285951 COMTECO LMB UR FAX: (708) 953-9306

President/CEO: Sales Manager:

Michael A. Hildon, PhD William E. Katterhenry

Domestic Offices:

DENVER, CO TEL. (303) 373-4772; GOLDEN, CO (Instrumental Analysis Division) TEL. (303) 278-9521; TAMPA, FL TEL. (813) 248-6566; SOUTH HOLLAND, IL TEL. (708) 331-2900; HENDERSON, KY TEL. (502) 827-1187; MIDDLESBORO, KY TEL. (606) 248-4205; PIKEVILLE, KY TEL. (606) 432-2511; ST. ROSE, LA TEL. (504) 467-5522; BALTIMORE, MD TEL. (410) 255-8688; CONNEAUT, OH TEL. (216) 224-2261; TOLEDO, OH TEL. (419) 698-8049; CHARLEROI, PA TEL. (412) 483-3549; NEW BETHLEHEM, PA TEL. (814) 275-4515; NORTH CHARLESTON, SC TEL. (803) 744-7240; DEER PARK, TX TEL. (713) 478-8228; NORFOLK, VA TEL. (804) 626-0006; CEREDO, WV TEL. (304) 453-6682; CHARLESTON, WV TEL. (304) 925-6631; ANCHORAGE, AK (Anchorage Environvmental Division) TEL. (907) 562-2343; BECKLEY, WV TEL. (304) 255-0422; BILLINGS, MT (406) 252-5818; CLARKSBURG, WV TEL. (304) 623-3329; COLLEGE STATION, TX TEL. (409) 693-1045; ELKO, NV TEL. (702) 753-8462; FAIRBANKS, AK (Anchorage Environmental Division) TEL. (907) 474-8656; ISOM, KY TEL. (606) 633-1082; LOMBARD, IL (Utility Services Division) TEL. (708) 953-9300; ST. LOUIS, MO TEL. (314) 429-6659; SANDUSKY, OH TEL. (419) 627-2027; SAN PEDRO, CA TEL. (310) 831-1331; SEATTLE, WA TEL. (206) 340-0755; SOMERSET, CO TEL. (303) 929-5022; SOUTH HOLLAND, IL (Laboratory Quality Services International) TEL. (708) 331-3249; VILLA PARK, IL (Fuel Research Instrument Division) TEL. (708) 279-4770; WEST CREEK, NJ (Environmental Drilling Division) TEL. (908) 286-3232; BALTIMORE, MD (Technical Testing Laboratory Division) TEL. (410) 247-7400; BALTIMORE, MD (Environmental Drilling Division) TEL. (410) 563-6018; CHARLESTON, WV (Technical Testing Laboratory Division) TEL. (304) 346-0725; CINCINNATI, OH (Technical Testing Laboratory Division) TEL. (513) 752-9696; GOLDEN, CO (XRAL Laboratories) TEL. (303) 277-1377;

BIRMINGHAM, AL TEL. (205) 942-3120; MOBILE, AL TEL. (205) 432-2781; KENAI, AK TEL. (907) 283-2211;

International Offices: CT&E is owned by SGS Societe Generale de Surveillance, headquartered in Geneva, Switzerland. SGS has presence in 140 countries with 265 laboratories worldwide.

CT&E, founded in 1908, has become America's largest independent coal testing and consulting company based on our on-going drive for professional excellence and integrity. We continue to expand and upgrade our staff and services to meet ever increasing demands of the rapidly changing coal industry.

(Continued on next page)

Commercial Testing and Engineering Co. (Continued)

CT&E has over 50 laboratories and 30 sampling locations, strategically located in principal coal mining areas, Great Lakes and tidewater ports, river loading facilities, and major consumption areas, processing plants, domestic and international shipping ports, and is part of the world-wide SGS Group.

CT&E provides worldwide management, training, inspection, sampling, and analytical services for coal, coke, RDF, minerals, chemicals, ferro-alloy, and environmental properties. We conduct inspections, sampling, and analysis of shipments of loading, in transit, and at destination. Our laboratories perform routine chemical and physical analyses on materials from reserve evaluation through utilization. We perform plant evaluation and personnel training for coal consumers.

Products/Service	Description
Laboratory and Field Services	Coal Core logging and evaluation. Inspection, sampling and analysis of coal, coke, RDF, and environmental parameters.
Technical Services	Sampling system performance testing; weighing system and certification, stockpile inventories, coal quality evaluation; inter-laboratory performance evaluations; power plant performance, evaluation, start-up, operator training, combustion and emission studies; laboratory audits, ISO 9000 programs.
Equipment and Product Sales	Crushers, pulverizers, rotary sample dividers, coal testing equipment and non-toxic heavy liquids.

CONSOL, Inc., a member of the CONSOL Coal Group Consol Plaza, 1800 Washington Road Pittsburgh, PA 15241

Telephone: (412) 831-4000 **Telex:** 247-634 CONSLUR **FAX:** (412) 831-4916

Chairman/President/CEO: B.R. Brown Executive V.P.-Marketing: R.B. Atwater

Domestic Offices: Atlanta, Chicago, Cleveland, Norfolk, Philadelphia, Rochester

International Offices: Brussels

CONSOL Coal Group consists of Pittsburgh-based Consol Inc. and other related companies, among them Consolidation Coal Company, Consol Pennsylvania Coal Company, Enlow Fork Mining Company, Fairmont Supply Company, and others.

CONSOL Coal Group is the nation's second-largest coal producer, having produced 56.3 million tons of coal in 1992 from 25 mines and related facilities in six states and Alberta, Canada.

Most of that coal -- about 69.1 percent -- went to the electric utility market, while 13 percnet was exported overseas. The remaining 17.9 percent found its way into the steel and coke industries and industrial and other applications.

In recent years, the CONSOL Coal Group companies have made extensive capital investments in new mine development and in modernizing existing operations. It is the leading user of modern longwall mining technology in the United States.

Products/Services Description

Business: Steam and Metallurgical Coal Products; Coal Export Terminal.

S.I.C.: 1221; 1222



Consolidated Rail Corporation 2001 Market Street Philadelphia, PA 19101-1420

Telephone: (215) 209-7480 FAX: (215) 209-7448

Chief Executive Officer: Mr. J. A. Hagen, Chairman, President, and CEO Assistant Vice President: Mr. R. W. Lynch, Coal Coke and Iron Ore

Mgr - Coal Mktg/Sales Export: Mr. R. B. Schurr

PHILADELPHIA, PA TEL. (215) 209-7480 Sales Office-Domestic/International:

With rail lines in 14 Eastern and Midwestern states in the United States, Conrail offers direct rail transportation links between coal producing regions, shippers, and international coal buyers. The diverse characteristics of coal accessible by Conrail are well-suited to the energy needs of the world economy, providing premium energy required to generate electrical power and coking coals for metallurgical applications. Reserves in excess of 25 billion tons of bituminous and anthracite coal for steam and metallurgical use are located within Conrail's operating areas and are readily available for the export market. Conrail is committed to continue its partner relationship with coal producers, traders, and international coal buyers.

Product/Service

Description

Provide seamless transportation service and price for transportation of coal into the export market. Conrail offers a full range of routing and shipping options combined with state-of-the-art transfer, blending, and storage capabilities; along with the ability to load 7,000 tons of coal per hour and up to 15 million tons per year. Conrail has direct access to The Consolidation Coal Sales Terminal at the Port of Baltimore. Conrail, through its modern, high-capacity transfer operations located on Lake Erie at Ashtabula, Ohio, is strategically positioned for export coal movement through the Great Lakes/St. Lawrence Seaway. Also, through interchange with other railroads, Conrail can deliver to any port in the U.S.A.

CO Inc.

tests; weighing and sampling equipment selection and troubleshooting; toxics control studies, coal

CO Inc. **One Quality Center** Homer City, PA 15748

Telephone: (412) 479-3503

Chief Executive Officer: Mr. Clark D. Harrison International Sales Manager: Mr. James W. Parkinson

(412) 479-4181 FAX:

International Offices:

Studies

Please contact company headquarters for further information.

CQ Inc. -- a wholly owned subsidiary of the Electric Power Research Institute -- is dedicated to providing coal suppliers and power producers worldwide with products and services that will help them remain within emissions compliance limits; keep prices competitive; reduce risks; and optimize operating performance. CQ Inc. experience includes management of a \$21.7 million project sponsored by DOE and EPRI to develop a software tool that utilities can use to determine the least expensive coal to burn while remaining within emissions limits; O&M contracts for commercial-scale and demonstration coal cleaning plans; production of specialty coals and coal-water fuel in 5000-gallon batches for demonstration testing; comprehensive characterizations of coals of all ranks; demonstrations of advanced coal cleaning technologies; and toxics control studies.

Product/Service	Description
Fabricated Fuels	Supply customized coal in large quantities, including premium-quality coal and coal-water fuel for diesel engines. Also developing alternative fuels mainly composed of waste materials.
Contract O&M Services	Ensure reliable, accurate operation and maintenance of scales, samplers, and on-line analyzers at customer sites. Operate customers' coal cleaning plants, producing consistent-quality compliance coal at maximum plant efficiency.
Contract Research and Engineering	Provide commercial-scale coal characteristics: coal cleaning and dewatering equipment performance

processing simulation studies, and energy-related software support.

Delta Coal Sales, Inc. P.O. Box 309 Grantsville, MD 21536

Telephone: (301) 895-5921 **FAX:** (301) 895-5661

President: Sales Manager: David L. "Bob" Jones

Joseph F. "Jay" Kamineck

Delta is a coal mining and sales company that began operations in Maryland in 1972. Today, Delta manages properties and mines, and provides sales and consulting services in Pennsylvania, Maryland, and West Virginia.

Product/Services

Description

Coal Mining

Delta is a producer of low and medium sulfur coals with shipping capabilities off the East Coast and out of the Gulf.

Coal Sales

Coal Brokerage

Drummond Company, Inc. P.O. Box 10246 Birmingham, AL 35202



Telephone: (205) 945-6400

Telex: 261327 DRUM UR FAX: (205) 384-6440

Chief Executive Officer: Garry N. Drummond

President - Export Sales, Drummond Coal Sales, Inc.: George E. Wilbanks

International Offices:

JAPAN: Y. Abe, Drummond Coal International, Tokyo, TEL: 81-33-2460281, FAX: 81-33-2460113; ENGLAND: Rod Savage, Drummond Coal Ltd., Lymm, Cheshire, TEL: 44-925-756044, FAX: 44-925-756020; ITALY: Roberto Missiroli, Drummond Italia, Milan, TEL: 39-2-44691815, FAX: 39-2-44814302; NETHERLANDS: Jan Meijers, Drummond Coal Sales Netherlands, B.V., Dordrecht, TEL: 31-78-311333, FAX: 31-78-312816.

Drummond Company, Inc., an independent, privately owned company, has been engaged in the mining and selling of coal since 1935 -- initially for the domestic market. For more than 20 years, Drummond has also been a major exporter of coal from the United States to Japan and other Pacific countries, Europe, and South America. Drummond, which has 2,800 employees, operates mines in Alabama, producing metallurgical and steam coal, and also has extensive reserves in five other states. Drummond Coal Sales, Inc., acts as agent for Drummond Company, Inc. A related entity, Drummond Ltd., is developing a major new mine in Colombia.

Product/Service

Description

Coal Exporters, Coal Mining

Coal Transport

Drummond Company mines high quality metallurgical and steam coals from its own surface and underground mines and also has access to other coal resources worldwide to meet any specifications. Drummond Coal Sales has annual sales of approximately 15 million tons. Exports are shipped through warm-water Gulf ports or from the East Coast, as necessary. Drummond coordinates transportation needs, whether by truck, rail, barge, or oceangoing vessel.

EAMarketing, Inc. 5010 Mayfield Road Cleveland, OH 44124

EAMarketing Inc.

Telephone: (216) 291-2840 **FAX:** (216) 291-3422

Chief Executive Officer: Mr. Edmund F. Avolio

RAPID FOAM™ is a product developed and designed by EAMarketing for use as a slag foaming agent in High Voltage Electric Furnaces. This product is available for bulk shipment via Gulf or East coast U.S.A.

EAMarketing has been a processor and trader of coal and coke since 1975.

The GRAY STAR™ Division of EAMarketing operates a metallurgical coke drying and screening plant in Birmingham, Alabama.

Product/Services	Designation	Description
Slag Foamer	RAPID FOAM™	This product was especially designed and developed to quickly raise a thick foamed slag for high voltage electric furnaces.
Dried metallurgical coke		Sizes 2" and smaller
Metallurgical coke/coal		All types and sizes

Eastern Europe, Inc. 460 W. 34th Street New York, NY 10001

Telephone: (212) 947-8585

Telex: 12319 East Eur NYK FAX: (212) 629-3147
Chief Executive Officer: Dr. Robert Ross

Specializing in the export of metallurgical coal, steam coal, petroleum coke to utilities, steel factories, cement plants, government agencies. A major sales organization with over 500 employees. Sells in excess of 2,000,000 tons of high quality steam and metallurgical coal from mines in Illinois, Kentucky, West Virginia and Wyoming. Eastern Europe, Inc. has the capability of exporting coal from port facilities in Newport News and Norfolk, VA; New Orleans, LA; Charleston, SC; Mobile, AL; and Los Angeles/Long Beach, CA.

Product/Service Description

Coal exporters High quality steam and metallurgical coal, petroleum coke.

Electric Fuels Corporation 235 Third Street South P.O. Box 15208 St. Petersburg, FL 33733

Telephone: (813) 892-2700

Telex: 514168 FAX: (813) 892-2702

Chief Executive Officer: Richard D. Keller International Sales Manager: Robert Ramey



Electric Fuels Corporation (EFC) through its many subsidiaries is involved in coal mining, coal transportation, coal transfer facilities, fuel research in the coal area and the development of coal-based alternative fuels. Electric Fuels has developed a coal management system that has proved to be successful and highly competitive in supplying coal from mine site to the customer. This fully-integrated system is composed of five essential groups: coal, operations, marine and terminaling; alternative fuels and international marketing. The integration of these groups under Electric Fuels' management provides the necessary exposure to all phases of the coal industry.

Products/Service	Description
Advance Utilization	With access to experts in virtually every application of coal combustion, Electric Fuels can provide qualified technical know-how in the areas of ash utilization, mineral and metal recovery from ash and in ash disposal. From start to finish, Electric Fuels' customers are assured of experienced assistance with all their coal handling needs. EFC has developed services ranging from field and laboratory functions to advanced computer support.
Coal Derivatives	Electric Fuels' involvement in the development of alternative fuels is through COMCO, a leader in the manufacture of coal-oil mixture (COM), coal-water mixture (CWM) and petroleum coke-oil mixture (PETCOM). Coal-liquid mixtures are produced at COMCO's Port Sutton, Florida facility. REDICOAL, COMCO's new powdered coal product for industrial and utility use, has proved to be an economical replacement for fuel oil and natural gas.
Coal Mining	The coal group is responsible for the mining and preparation of coal from sites containing approximately 300 million tons of reserves located in the states of Virginia, West Virginia and Kentucky. Origin points have capability to load barges, trucks and unit trains.
Coal Transport	Marine Equipment Management Corporation, a wholly-owned subsidiary, handles coal from all inland river origins in either single barge or unit tow lots. Standby loading is available. Covered barges are available. MEMCO also offers switching and fleeting services at various Mississippi River ports.
	Dioxide Fuels Limited offers handling, storing, terminaling and transporting bulk cargo by sea-going marine transportation equipment.
Facility Operations	International Marine Terminals is a bulk materials handling facility strategically located near the mouth of the Mississippi River. The recently expanded terminal consists of modern facilities, ground storage/blending and a coal testing laboratory operated by an independent agent.
	Hatfield Terminals operates transfer facilities in Cincinnati, Ohio, on the Ohio River and near Charleston, West Virginia, on the Kanawha River.
	Kentucky May Coal operates a coal transfer facility on the Big Sandy River.

Ellison Consultants 4966 Tall Oaks Drive Monrovia, MD 21770-9316

Telephone: (301) 865-5302 **FAX:** (301) 865-5591

Chief Executive Officer: Mr. William Ellison International Sales Manager: Mrs. Gerd A. Ellison



Formed in 1981, this independent consultancy specializes in assessment and commercial application of SO₂, NO₂ and air toxics control technologies and methods for management of collected wastes. The firm has extensive engineering design and technical marketing experience and background in all worldwide countries that utilize state-of-the-art technology for control of air pollution in the firing of solid fuels including municipal solid wastes. Clients include government agencies, electric utility companies, gas cleaning equipment and gypsum manufacturing companies, law firms, and technical development organizations.

Product/Service

Description

Control Technology
Evaluation

Consulting expertise in evaluation, selection and conceptual design of applicable emission control means for SO₂,
NO_x and air toxics.

Management of Collected
Gas Cleaning Wastes

Expert technical services in planning and establishment of programs for utilization or environmentally acceptable disposal of solid and liquid wastes.

Emerald International Corp. 7310 Turfway Rd., Suite 330 Florence, KY 41042

Telephone: (606) 525-2522 **FAX:** (606) 525-4052

Partners: Aidan C. Bowles / Jack J. Wells, Jr.

Sales Manager: Robert (Bob) Houk

International Offices: Please contact headquarters

Emerald International founded in 1991 brings together an experienced coal team. Emerald supplied circa 1 million tons of coal in FY 1992. We have exclusive representatives of a number of small to medium sized low-cost producers. We will procure, tranship and load coal for export on an FOBT or CIF basis. We have supplied coal for utilities and industrial end users, domestic home heat and specialty application. Please contact us for aggressive quotations on your coal needs and you will be assured of prompt and professional service.

Product/Services Description

Coal Exporters High quality bituminous coal for utilities and industrial end users. Sized, washed coal for domestic home heating.

Low ash highly reactive coal as a reductant in ferro-alloy production.



Energy International Corporation 135 William Pitt Way Pittsburgh, PA 15238

ENERGY INTERNATIONAL CORPORATION

Telephone: (412) 826-5350

Telex:

5106019265 (U-PARC UQ) FAX: (412) 826-5378

President: VP, Business Development: Dr. Alan H. Singleton Mr. R.K. (Kim) Penland

Energy International Corporation (EI) was formed to develop, license, and market new technologies and services for the advanced utilization of coal, special coal processing services, and the conversion of gas to premium liquid fuels. EI provides these services worldwide, including resource evaluation and selection, environmental impact evaluation, market assessments and project development. These services are available from project inception through operational startup and can involve intermediate and final products.

Product/Service	Description
Advanced Utilization	El provides special Mineral Processing Services for grinding, washability studies, and testing of coals.
Power Generation Fuel (Underground Coal Gasification)	El's Underground Coal Gasification technology can supply a range of gas products for industrial fuel use, electrical power generation, or synthesis gas to produce transportation fuels, fertilizers, and plastics from uneconomically minable coal resources.
Coal Derived Products (Coal Water Slurry Fuels)	El develops and supplies specialized Coal Water Fuel slurries containing from 55% to 65% coal solids which can replace heavy fuel oil for electric power generation and for industrial boilers.
Mulled Coal	El provides and licenses technology for solving wet fine coal handling problems; provides economic alternatives to thermal drying and coal water slurries.
Coal Liquefaction	El provides and licenses technology for indirect coal liquefaction via gasification followed by proprietary Fischer Tropsch catalyst and process; the F-T technology is also applicable to natural gas feedstock.
Technical Consultants	El provides resource assessments, coal evaluations, technology transfer, process design, and project development and management services.

Energy Resources, Inc. 29525 Chagrin Boulevard, Suite 111 Pepper Pike, OH 44122



Telephone: (216) 765-1240 **FAX:** (216) 765-2654

President: office)

Peter J. Vuljanic (Brockway, PA

Domestic Offices:

BROCKWAY, PA: P.O. Box 259, Brockway, PA 15824 TEL. (814) 265-8021, FAX (814) 265-8295

Energy Resources is a central Pennsylvania producer of mid-sulfur coals from the Freeport and Kittanning Seams. It can supply spot or contract orders of up to 50,000 TPM. Current production is by surface mining, but large deep reserves are also under present control. Total recoverable reserves of over 39 million tons. The mine has ground storage and unit train loading facilities on the Conrail System near DuBois, PA. It can also load on the P&S Railroad or ship by truck.

Product/Service

Description

Coal Exporters

Typical coal specifications as received:

Coal Mining

% Ash - 10-13 BTU/ib. - 12,000-12,500

% Sulfur - 1.5-2.5

Energy Trading Corp. 767 Fifth Avenue, 44th Floor New York, NY 10153

Telephone: (212) 421-1930

Telex: 968693 ETCOAL NYK FAX: (212) 421-1937

President: Mr. Emmanuel Merle

Assistant to the President: Domestic Sales Manager: Marketing Manager: Mr. Jean-Francois Baudry

Mr. Dan McQuade Mr. Laurent Lebras

Energy Trading Corp. is very active in the export of coal through the U.S. East Coast and Gulf ports. While most of their European steam exports originate from the Gulf, they rely on the East Coast for metallurgical products.

Recently, Energy Trading Corp. has become more involved in the "Northern Tier" and relies on Pennsylvania, Virginia, and West Virginia coal products to supply a growing number of domestic industrial accounts.



Exxon Coal and Minerals Company P.O. Box 1314 Houston, TX 77251-1314

Telephone: (713) 973-5333

Telex: 762171 EXXON ECM HOU FAX: (713) 978-5618
President: R. P. Larkins
Vice President: R. J. Doyle
Vice President: G.E. Tillman
Marketing Manager U.S. Coal: H.W. Ellis
Marketing Manager International Coal: E. W. Markowski



Exxon Coal and Minerals Company, a division of Exxon Corporation, markets coal produced from mining operations located in New South Wales, Australia; Colombia, South America; and Illinois and Wyoming U.S.A. During 1992, Exxon's share of production from these operations was 41 million short tons of coal, of which 12 million short tons were produced outside the United States. Exxon Coal USA, Inc., an affiliate of Exxon Coal and Minerals Company, was the fifth largest United States coal producer.

Product/Service Description

Coal Mining/Coal Marketing Exxon Coal USA, Inc. has two operating divisions within the United States. The domestic operations are The Carter Mining Company and Monterey Coal Company. The Carter Mining Company is an

are The Carter Mining Company and Monterey Coal Company. The Carter Mining Company is an Eastern Powder River Basin coal producer which operates two surface mines in the Gillette, Wyoming, area that produced 24 million short tons in 1992. The Monterey Coal Company is an Illinois Basin coal producer which operates two underground mines in Illinois and produced over

5 million short tons in 1992. Coal quality specifications are available upon request.

Technical Support

Mining operations and marketing are supported by a coal research laboratory, and related facilities, with full time research personnel at Exxon Research and Engineering Company in Baytown, Texas.

Combustion furnace and state of the art technical facilities are available along with research personnel to analyze optimum, cost saving coal use for our customers. Technical service personnel visit on site

with power plant staff for problem analysis.

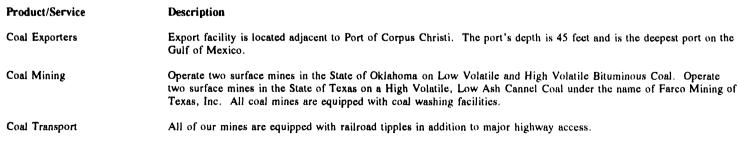
Farrell-Cooper Mining Company P.O. Box 1947 6001 South Zero Fort Smith, Arkansas 72902

Telephone: (501) 646-4366 **FAX:** (501) 646-3220

Chief Executive Officer: William J. Cooper International Sales Manager: William J. Cooper

International Offices: Please contact company headquarters for further information.

Farrell-Cooper Mining Company is in the business of mining, transporting and exporting bituminous coal and cannel coal for industrial fuel and domestic home heating fuel. We operate coal loading facilities on the Arkansas River (1,500 ton barges), but mainly at the Port of Corpus Christi, Texas. At Corpus Christi, we handle product for export as well as product being imported.





Fluor Daniel 3333 Michelson Drive Irvine, CA 92730



Chairman and CEO: President and COO:

Les G. McCraw Vince L. Kontny

Sales Manager: Telephone: FAX:

Dick Behrman (803) 281-5959 (803) 281-8157

Sales Manager: Telephone: FAX:

John Bradburne (202) 955-9300 (202) 833-1630

Worldwide Offices:

The Americas: Anchorage, AK; Bakersfield, CA; Calgary, Alberta, Canada; Caracas, Venezuela; Charleston, WV; Chicago, IL; Cincinnati, OH; Corpus Christi, TX; Dallas, TX; Denver, CO; Detroit, MI; Greenville, SC; Houston, TX; Irvine, CA; Kansas City, MO; Kingston, Ontario, Canada; Mexico City, Mexico; New York, NY; Philadelphia, PA; Richmond, VA; San Francisco, CA; San Juan, Puerto Rico; Santiago, Chile; Sudbury, Ontario, Canada; Tulsa, OK; Vancouver, British Columbia, Canada; Washington, D.C.

Asia/Pacific: Bangkok, Thailand; Beijing, China; Brisbane, Australia; Hong Kong; Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; Melbourne, Australia; Perth, Australia; Seoul, Korea; Singapore; Sydney, Australia;

Tokyo, Japan

Europe/Africa/Middle East: Asturias, Spain; Bergen op Zoom, Netherlands; Camberley, England; Dhahran, Saudi Arabia; Dubai, U.A.E.; Dusseldorf, Germany; Haarlem, Netherlands; Jeddah, Saudi Arabia; Leipzig, Germany;

London, England; Madrid, Spain; Manchester, England; Paris, France; Weisbaden, Germany

Fluor Daniel provides a full range of engineering, construction and related services through over 50 offices worldwide. These services include feasibility studies, conceptual design, project management, engineering, procurement, construction, technical services, project financing, consulting, environmental services, maintenance and plant operations. Our affiliate, AT Massey Coal Company, produces both high-quality low-sulfur coal and metallurgical coal and ranks among the five largest coal marketers in the United States. Massey sells produced coal and markets coal for independent producers. Fluor Daniel, in partnership with Duke Power, designs and constructs or modernizes coal-fired power plants and performs operations and maintenance.

Product/Service	Description
Power Generation Systems	Fluor Daniel provides design engineering, procurement and construction of integrated coal gasification power generating systems as a part of our work with combustion turbine technology. Duke/Fluor Daniel has engineered or constructed over 75 conventional fossil fuel generating stations ranging from 5Mw to 1080Mw and provided maintenance and operating services in over 150 units.
Advanced Utilization (CCT)	Fluor Daniel offers engineering, procurement, construction and consulting support to Clean Coal Technology (CCT) projects. We have performed over 105 coal gasification studies and participated in 14 major projects including Sasol, the world's largest coal gasification facility, on which Fluor Daniel performed engineering, procurement and construction.
Coal	Through Fluor Corporation's subsix asy, A.T. Massey produces high-quality, low-sulfur steam coal for the electric generating industry and metallurgical coal for the steel industry. Massey operates through a network of nine operating companies.
Engineering/Procurement/ Construction	Fluor Daniel's engineering, procurement and construction experience includes coal mines, coal handling and transport facilities, and plants for utilities and other coal consumers.

Franklin Coal Sales Company 50 Jerome Lane Fairview Heights, IL 62208

Telephone: (618) 394-2400 **FAX:** (618) 394-2515

President/CEO: Sales Manager: E.J. O'Neil M.V. Altrudo

Domestic Offices:

50 Jerome Lane

Fairview Heights, IL 62208

Franklia Coal Sales Company subsidiary of Zeigler Coal Holding Company Zeigler

GeoResearch, Inc.

Franklin Coal Sales Company is a subsidiary of Zeigler Coal Holding Company, responsible for international and domestic marketing of metallurgical and steam coals from Zeigler's mining operations throughout the United States. With the acquisitions of Old Ben Coal Company in 1990 and Shell Mining Company in 1992, Zeigler has grown from two million tons per year in the mid-1980's to become one of the largest coal producers in the United States.

Products/Service Description

Metallurgical Coal Old Ben Coal Mine #20 in Mingo County, West Virginia produces about 1.2 million tons of high-volatile

metallurgical coal, reknowned the world over for its high quality.

Steam Coal Franklin Coal Sales represents a wide variety of low sulfur and higher-sulfur steam coal production from

Zeigler-owned mines in Central Appalachia, the Illinois Basin, and the Powder River Basin. Coals may be exported

from the East, Gulf, or West Coasts as customer needs dictate.

GeoResearch, Inc. 115 N. Broadway Billings, MT 59101

Telephone: (406) 248-6771 **FAX:** (406) 248-6770

Chief Executive Officer: Douglas Richardson, Ph.D. International Sales Manager: Douglas Richardson, Ph.D.

International Offices: Please contact company headquarters for further information.

Description

GeoResearch, Inc., provides comprehensive environmental consulting services to coal mining, coal processing, and coal burning industries.

GeoResearch is an experienced multidisciplinary firm, with staff including expert hydrogeologists, meteorologists, air quality specialists, analytical chemists, environmental engineers, and computer programmers. GeoResearch has extensive experience in issues pertaining to acid rain. GeoResearch is currently conducting a two year study in conjunction with the Government of Italy to assess the occurrence and potential for acid rain there.

GeoResearch also offers Global Positioning Satellite (GPS) survey services integrated with computer based Geographic Information Systems (GIS) to produce surveys, maps, and to effectively manage geographic data of all types.

Air Quality Services

Monitoring system design and computer dispersion modeling of all relevant parameters including: meteorology, SO₂, NO₂, O₃, H₂S, odor, total and respirable particulates, etc. Acid rain studies. Source apportionment.

Water/Ground Water Services

Hydrogeologic analysis, aquifer testing, ground water monitoring, water supply, mine dewatering, mine drainage, water quality, hydrochemistry, flow measurements, aquifer remediation.

Computer Mapping Services

State-of-the-art computer based survey and mapping capabilities utilizing Global Positioning Satellite technology integrated with ARC/INFO and other GIS software. Positional and topographic tolerances to ± 2 cm. Developer and distributor of the GeoLink Mapping System, which combines GPS and GIS.

Product/Service

Global Associates, Inc. 4515 Poplar Avenue Suite 426 Memphis, TN 38117

Telephone: FAX:

(901) 685-6835 (901) 685-6906

President/CEO:

William H. Morris

Sales Manager:

J.R. Noonan

Domestic Offices:

4515 Poplar Avenue, Suite 426, Memphis, TN 38117

International business consultants with a special focus on serving as international coal brokers for clients in Europe and the Far East.

Products/Service

Description

International Coal Brokers

Serve as intermediary for coal exporters and importers.

Global Energy USA 1500 Chiquita Center 250 East Fifth Street Cincinnati, OH 45202



Telephone:

(513) 621-0077 (513) 621-5947

FAX: (:
President/CEO:

H.H. Graves

Domestic Offices:

Global Energy de Mexico SAdeCV, 3773 Cherry Creek North Drive, Suite 1001, Denver, CO 80209

Phone: (303) 321-8811 FAX: (303) 321-7690

International Offices:

UK: Global Energy Europe Limited, c/o Fife Energy Limited, Westfield Development Centre, Cardenden,

Fife KY5 0HP, Phone: 0592-860293 FAX: 0592-860193

Global Energy USA serves as technology supplier and project developer for a new class of environmentally superior Power Stations. These Power Stations utilize Global Energy's patented Advanced Fuel Technology (AFT) and Integrated Gasification Combined Cycle (IGCC) based on the highly acclaimed British Gas/Lurgi slagging gasifier. This technology combination yields a Fuel Island, Gas Island and Power Island as major Power Station components. The AFT Fuel Island produces fuel briquettes comprised of coal and organic waste that serve as a low cost feedstock for the IGCC. The net result is low cost power generation and low cost waste elimination all from an environmentally superior Clean Coal Technology Power Station.

Global Energy USA is developing domestic and international projects through its subsidiaries in conjunction with specific project partners.

Description of Products/Services

Global Energy USA offers environmental technology supply and project developer services for AFT-IGCC Power Stations. These power stations are designed to serve Major Metro areas with low cost power generation and low cost waste elimination within an environmentally superior Clean Coal Technology package. IGCC is well regarded as the power station technology of the future with emission levels at less than 10% of the US EPA New Source Standard. This ultra clean technology becomes available today via the economic boost provided by the AFT Fuel Island in the way of low cost feedstock.

Global Energy USA is committed to helping major metro areas achieve low cost power generation and low cost waste elimination with Environmental Technology.

Hawley Fuel Coal, Inc. **Reliance Building** P.O. Box 188 Altoona, PA 16603



SINCE 1879

Telephone: FAX:

(814) 944-1730

President/CEO: Sales Manager:

(814) 944-9756

Jean-Paul Ruff Theodore Sohnen

Domestic Offices:

Reliance Building, Altoona, PA 16603

International Offices:

Empire State Building, Suite 8004, New York, NY 10118

Hawley Fuel was founded in 1879 and is currently engaged in supplying coal to the domestic utility markets as well as utility and metallurgical markets worldwide. Hawley Fuel is one of the largest and oldest independent coal exporters from the U.S. Besides dealing in coal for counter-trade purposes, Hawley has also become involved in steel, pig iron, coke, petroleum coke and cement business. Hawley's main sphere of international trade is to the major utilities of Western Europe and to the steel mills in Eastern Europe and Japan.

Products/Service

Description

Description

Water filtration.

On coal exports, Hawley provides full service including shipment by rail or barge, transloading at either East Coast or Gulf Coast piers, ocean freight chartering, ocean freight, insurance and financing and/or barter trade where necessary.

The Hiller Group, Inc. 5321 Memorial Highway Tampa, FL 33634

Telephone: (813) 882-3313 Telex: 52653 FAX: (813) 882-4294

Chief Executive Officer:

Product/Service

Wesley T. Hiller Vice President: Martin H. Hiller Robert J. Moran **Export Manager:**



The Hiller Companies have been in operation since 1975. The Hiller Group was incorporated in the State of Florida in 1985 and is a privately held corporation. We offer a full range of services. We are a shipping company delivering Steam, Metallurgical, Anthracite, Petroleum Coke, Furnace and Foundry Coke to domestic and international customers. The Hiller Group is a specialized coal marketer with exclusive sale and management control. We are the principal in all products that are sold, and do not act as a broker. We have a broad range of supply from Pennsylvania, Eastern and Western Kentucky, West Virginia, Virginia, Ohio, Tennessee, Oklahoma, Arkansas and Alabama. Our shipments originate by rail and water, and can be loaded at the following ports: Mobile, AL; Philadelphia, PA; Baltimore, MD; Hampton Roads, VA; Newport News, VA; New Orleans, LA; Los Angeles, CA; Long Beach, CA.

Ferro-Alloy Industry	Hiller is a major supplier to the Ferro-Alloy and Metals Industry for coal reducers of high reactivity and low ash.
Statistical Process Control	We have developed our own statistical process control (SPC) to assist customers with quality control programs.
Technology	We also assist customers in Ferro-Alloy coal technology.
Steam Coal	Low - F.S.I. Coals, Low-Medium-High sulphur coals, ALL SIZED industrial stoker, ALL SIZED house coal.
Metallurgical	Low-medium-high volatile coals, high fluidity - high F.S.I., good Petrographics and high Coke strength after reaction (CSR).
Anthracite	ALL SIZES Metallurgical quality.

Anthracite Filters

Illinois Department of Energy and Natural Resources Office of Coal Development and Marketing 325 W. Adams, Room 300 Springfield, IL 62704-1892



Telephone: (217) 782-6370 **FAX:** (217) 524-4177

President/CEO: Kim Underwood Sales Manager: Kim Underwood

Domestic Offices: Springfield, IL: 325 W. Adams Street, Room 300

The Illinois Department of Energy and Natural Resources' Office of Coal Development and Marketing (OCDM) seeks to ensure the continued and expanded use of Illinois' coal resources in environmentally safe and economically viable ways. The OCDM is committed to assisting the Illinois coal and utility industries to improve the image and utilization of high-sulfur Illinois coal. This commitment will be achieved by developing research agendas responsive to current and anticipated needs, increasing research and development productivity, demonstrating promising clean coal technologies, expanding and enhancing the quality of current programs and heightening the effectiveness of energy-related products and services offered statewide to the coal industry, utility companies and the general public.

Product/Service	Description
Research and Development	The Coal Research and Development Program works toward increasing extraction and utilization of Illinois coal. This is accomplished by prioritizing the basic and applied research agenda and selecting those projects based on technical merit that will best serve constantly changing energy patterns. Research is presently being conducted in areas of resource extraction, fuel utilization and environmental protection.
Marketing	The Coal Marketing Program is committed to assisting the coal industry in improving the marketability of high-sulfur Illinois coal. The Marketing Program will assist the industry by identifying Illinois coal sales opportunities on national and international levels. The Coal Marketing Program also seeks to promote the application of new technologies compatible with high-sulfur coal.
Demonstration and Planning	The Coal Demonstration and Planning Section is committed to identifying innovative clean coal technologies and providing financial assistance for selected demonstration projects through the Coal Demonstration Program. The program assists the technology developer by identifying potential hosts for the demonstration project, providing guidance in securing the required permits (state and local) and suggesting funding sources for the project. Most recently, the efforts of the Coal Demonstration and Planning Section have been directed at providing support for respondents to the U.S. Department of Energy's Clean Coal Technology Program.

Joy Technologies, Inc.
One Oxford Centre, 39th Floor
301 Grant Street
Pittsburgh, PA 15219-1490



Telephone: (412) 562-4500 **FAX:** (412) 562-5570

Chairman/President/CEO: Marcus F. Wray
Mining Machinery Div. President: John Hanson
VP - Sales: Eugene C. Willis

Domestic Offices:

U.S. MANUFACTURING OPERATIONS: Franklin, PA 16323, 120 Liberty St., Tel: (814) 437-5731;

Claremont, NH 03743, Foundry Division, Grissom Lane, Tel. (603) 543-1228;

Cleveland, OH 44142, Smith & Harris Division, 5170 W. 130th St., Tel. (216) 267-3366; Solon, OH 44139, Bedford Gear Division, 6160 Cochran Road, Tel: (216) 248-7970

U.S. REGIONAL SALES OFFICES & SERVICE CENTER-WAREHOUSES: Mt. Vernon, IL 62864, Industrial Park, P.O.B. 1269, Tel. (618) 242-3650; Homer City, PA 15748, 350 Lucerne Road, Tel. (412) 479-3555; Houston, PA 15342, 2101 W. Pike St., MeadowLands Service Cent, Tel: (412) 873-4300; Price UT 84501, 1556 East 100 South, P.O. Box 757, Tel. (801) 637-6161; Bluefield, VA 24605, State Route 720, Route 2, Box 157,

Tel. (703) 322-5454; Duffield, VA 24244, State Route 772, P.O.B. 256, Tel. (703) 431-2821

International Offices:

Joy Manufacturing Company (Pty.) Limited - Tel. 011-61-48-682011, Moss Vale, Australia 2577, Vale Road, P.O.B. 314; Joy Manufacturing Company (Africa) (Pty.) Limited - Tel. 011-27-11-613-6831, Johannesburg, South Africa 2000, Steel St., Steeledale, P.O.B. 4070; Joy Manufacturing (U.K.) Limited - Tel.

011-44-3552-39121, East Kilbride, G745LN, Scotland, United Kingdom, Peel Park Place

Joy Technologies Inc. is a full service supplier that designs, manufactures, markets and services mining equipment worldwide for the underground extraction of coal and other bedded materials. The Company maintains an extensive global network of service and distribution centers to service, rebuild and update equipment and to provide parts and services to its customers.

Products/Service

Description

Continuous Miners
Longwall Shearers
Shuttle Cars
Continuous Haulage Systems
Highwall Miner Systems

The Company's Mining Machinery Division designs, manufactures and distributes continuous miners, longwall shearers, shuttle cars and continuous haulage systems for use in underground mining, and highwall mining systems for applications in surface mining operations. It maintains an extensive network of service and spare parts distribution centers to rebuild and service equipment and sell spare parts. This network includes six service centers in the U.S. and four abroad. The Mining Machinery Division also manufactures conventional underground mining machinery and equipment, consisting principally of drills, loaders, cutters and related equipment.

JTM Industries, Inc. 1000 Cobb Place Boulevard Building 400 Kennesaw, GA 30144

JTM INDUSTRIES, INC.

Telephone: (404) 424-1900 FAX: (404) 424-9290

CEO: Bill G. Fletcher Executive V.P., Sales and Marketing: Dennis L. Kinder

Domestic Offices (Regional Offices): MID CENTRAL REGION: 2278 Grange Hall Road, Beavercreek, OH 45431

TELEPHONE (513) 426-7711, FAX (513) 426-1511;

NORTH CENTRAL REGION: 5665 Flatiron Parkway, Boulder, CO 80301

TELEPHONE (303) 938-5500, FAX (303) 938-5520;

SOUTH CENTRAL REGION: 4800 Sugar Grove Boulevard, #410, Stafford, TX 77477

TELEPHONE (713) 240-4082, FAX (713) 240-4173;

NORTHEAST REGION: Commerce Plaza, 5100 Tilghman Street, Bldg. 2, Suite 255, Allentown, PA 18104

TELEPHONE (215) 366-1959, FAX (215) 366-1968

SOUTHEAST REGION: 1000 Cobb Place Boulevard, Building 400, Kennesaw, GA 30144

TELEPHONE (404) 424-1900, FAX (404) 499-9219

ENGINEERING SUBSIDIARY: KBK ENTERPRISES, INC., 1000 Cobb Place Boulevard, Building 400,

Kennesaw, GA 30144

TELEPHONE (404) 426-5944, FAX (404) 499-9219

JTM Industries, Inc. (JTM), a wholly-owned subsidiary of USPCI and Union Pacific Corporation (UP), is a full service coal combustion by-product management company headquartered north of Atlanta, Georgia. With substantial financial strength as part of UP and over 15 years of experience, JTM remains a stable force in a rapidly changing environmental field and currently manages over seven million tons of by-products each year. JTM provides total by-product management programs to the generators of coal combustion by: (1) developing and implementing proprietary processes which generate higher market value products from coal combustion residue; and (2) developing proprietary processes to accommodate reuse and/or disposal of more highly regulated non-hazardous ash streams. JTM has five regions, each concentrating on by-product management while drawing upon expertise available throughout the corporation.

Products/Service Description

Total Coal Combustion By-Products Management To provide a comprehensive coal combustion by-product management program, including all activities related to utilization, marketing or disposal as well as engineering, permitting, design and construction of material handling systems and disposal cells.

K-Fuel, Inc. 1999 Broadway-Suite 2505 **Denver, CO 80202**

K-FUEL®, INC.

FAX:

Telephone: (303) 293-2992

(303) 293-8430

General Partner:

Ted Venners

Domestic Offices:

Corporate:

1999 Broadway-Suite 2505/Denver, Colorado 80202 Telephone: (303) 293-2992/FAX: (303) 293-8430

Government Affairs/International:

901 North Stuart Street-Suite 750/Arlington, VA 22203

K-Fuel Processing Facility and Laboratory:

P.O. Box 1777/Gillette, Wyoming 82717 Telephone: (307) 687-1013/FAX: (307) 687-1635

K-Fuel, Inc., successor to K-Fuel Partnership which was formed in 1984, markets and licenses the K-Fuel technology worldwide. Partnership-funded research and development has taken the technology from benchtop, pilot plant, and full-scale demonstration facility phases, to commercialization at Fort Union Coal Mine near Gillette, Wyoming. The Gillette facility includes a state-of-the-art laboratory, where feedstock, process, and product analyses allow optimum plant operation and a custom-made end product.

Product/Service

Description

Advanced Utilization Coal Technology Coal Industry

Low-rank, carbonaceous feedstocks (i.e., subbituminous coals and lignites, biomass, woodwaste, municipal solid waste, peat, bagasse) require derating of capacity or costly equipment modifications in order to meet utility and industrial boiler requirements and environmental restrictions. These feedstocks are difficult to handle and expensive to transport because of high moisture content and combustibility. K-Fuel is a proven, patented, advanced beneficiation technology that economically upgrades low-rank feedstocks to high-Btu, low sulfur, low moisture environmentally acceptable product that addresses these problems. This technology is available for licensing worldwide.

Coal Exporters

K-Fuel produced using a proven, patented, advanced coal beneficiation technology that economically upgrades a variety of low-rank feedstocks, is a viable, high-Btu, low sulfur, low moisture energy source for utility and industrial users. Produced to meet the user's boiler specifications and having stable handling and storage characteristics, K-Fuel is competitively priced in the solid fuels market.

Kerr-McGee Coal Corporation P.O. Box 25861 Oklahoma City, OK 73125

Telephone: (405) 270-2552

Telex: 673-5377 UW FAX: (405) 270-2967
President: Robert C. Scharp
Executive Vice President: Wayne T. Ewing

Domestic Offices:

Same address as above.

International Offices:

ICF Marketing Ltd., 450 London Road, North Cheam, Surrey SM3 8H2, England TEL. (081-641-1171) FAX: (081-641-7327); Incontra Ltd., Hochhaus Zur Palme, 33, Bleicherweg, Zurich, Switzerland TEL. (01) 201 3535 FAX: (01)

202 4422

Kerr-McGee Coal produces and markets lower-sulfur, high quality bituminous and subbituminous coals from mines in West Virginia, Illinois, and Wyoming. The company currently supplies 21 million tons annually for use in power generation, industrial, and metallurgical applications in the U.S. and several foreign countries.

Product/Service	Description
Subbituminous Coal	Low-sulfur subbituminous coals are mined from the Jacobs Ranch and Clovis Point Mines in the Powder River Basin of northeastern Wyoming.
Bituminous Coal	Mid- to low-sulfur bituminous coal is mined at the Galatia Mine in southern Illinois. This coal is suitable for steam, coking blends and PCI use, and is exported from Gulf Coast ports.
Metallurgical Coal	Pioneer Fuels Corp., a subsidiary of Kerr-McGee Coal, produces high-quality metallurgical coals from its mines in Wyoming County, West Virginia.

Kiewit Mining Group, Inc. 1000 Kiewit Plaza Omaha, NE 68131

Telephone: (402) 342-2052 **FAX:** (402) 271-2908

Coal Mining

Chief Executive Officer: Bruce Grewcock International Sales Manager: Don L. Mouw



Kiewit Mining Group, Inc., a subsidiary of Peter Kiewit Sons', Inc., is a full-service coal and materials mining company. The company began coal mining in 1943 and today manages and operates five surface coal and lignite mines located in Montana, Wyoming and Texas. The 1992 combined coal production for these operations was in excess of 20 million tons. The company is also involved in mining and production of various construction materials, including railroad ballast, construction aggregate, volcanic cinder, ready-mix concrete, and asphaltic concrete. As a subsidiary of Peter Kiewit Sons', Inc., one of the world's most respected construction firms, the Kiewit Mining Group has a broad range of capabilities including exploration, resource development, site construction, and mine operation.

Product/Service	Description
Coal Exporters	The Kiewit Mining Group coal operations currently include the Decker Coal Company, located in Decker, MT; Big

Horn Coal Company, located near Sheridan, WY; Rosebud Coal Sales Company, located near Hanna, WY; Black Butte Coal Company, located near Rock Springs, WY; and Walnut Creek Mining Company, located near Bremond, TX. The subbituminous coal mined from the Montana and Wyoming operations is a 9500 Btu low sulfur coal

available for export. Coal specifications are available on request.

Knife River Coal Mining Company 1915 North Kavaney Drive Bismarck, ND 58501



FAX:

Telephone: (701) 223-1771 (701) 255-0560

President and Chief Executive Officer: Vice President Operations:

Terry D. Hildestad

Larry G. Duppong Vice President Engineering and Environment: Curtis L. Blohm

Manager - Special Projects:

Rod Nibbe

Knife River Coal Mining Company, a subsidiary of MDU Resources Group Inc., is a major full-service coal mining and sales company. Knife River Coal began operations in 1917 with an underground operation in Western North Dakota. Today, the company operates three lignite surface mines in North Dakota and Montana as well as owns and operates aggregate mines in California and Alaska. The company produces over 4.5 million tons of lignite annually.

Product/Service

Description

Coal Derivatives

Knife River Coal has extensive reserves of LEONARDITE (oxidized lignite) which has many applications including:

organic fertilizers, drilling fluids, and soil conditioners. Specifications available on request.

Coal Mining

Knife River Coal is a major producer of low sulfur lignite coal and has extensive reserves in the Williston Basin.

Lamarche Manufacturing Company 106 Bradrock Drive Des Plaines, IL 60018

Telephone:

(708) 299-1188

President/CEO: Sales Manager:

John Walsh John Pawula



Lamarche, founded in 1945, has and continues to manufacture battery-chargers and power supplies. We service the mining industry with various size and model battery-chargers for scoops, shuttles, etc. Lamarche does all of its own engineering, manufacturing and assembly. Besides mining, Lamarche services telecommunications, aviation, engine starting, automatic guided utilities, materials handling (motive power), marine railroad, computer back-up, UPS, utilities and others.

Product/Service

Description

A45M

Mag-AMP series of battery chargers for above ground and in mine use.

A35M

Ferro resonant series of battery chargers for mine use.

A70B

SCR series of battery chargers for above ground use.

Lehigh Valley Coal Sales Co. P.O. Box 450 Pittston, PA 18640

Telephone: (717) 654-3355

Telex: 510-658-3453 FAX: (717) 654-1422

President: Joseph R. Pagnotti, Sr.

Lehigh Valley Coal Sales is a leading producer, shipper and exporter of industrial quality anthracite. Our mines produce metallurgical grade coal that has high carbon content, low volatility, low sulphur content, and is low in phosphorus. Lehigh Valley exports through the Port of Baltimore, MD.

Levin-Richmond Terminal Corporation 402 Wright Avenue Richmond, CA 94804

Telephone: (510) 232-4422

Telex: 650 282 2846 MCIUW FAX: (510) 236-0129

Chief Executive Officer: William S. Benak, President

Terminal Manager: James C. Powell Director of Marketing: Jim Cannon

International Sales Manager: Mike McCoy, Marketing Representative



Levin-Richmond Terminal is a privately owned dry bulk marine terminal located in the North East portion of the San Francisco Bay. Over 43 different products have been handled at the terminal since 1981. In addition to coal, the primary exports are petroleum coke and scrap metal. Imports include furnace coke, cement, clinker, bauxite, gypsum and various other commodities. Marketing services include truck and rail contracting and vessel chartering. Levin Richmond Terminal Corporation also owns a short line railroad, Parr Terminal Railroad.

Product/Service	Description
Facility Operation	Eighty-four car coal train loads are delivered to a local switchyard. Levin's short line, the Parr Terminal Railroad receives coal directly from the Southern Pacific and the AT&SF Railroads. Coal is bottom dumped from railcars, stockpiled, or loaded on board vessels. Stockpiles are reclaimed by front end loaders. Loading rate of a portable ship loader is 12,000 MT per day.
Coal Transport	Two berths are available to load coal. The berths have 40 ft. and 38 ft. of available water depth. The ship channel is maintained at 35 feet (MLLW) with daily tides adding an additional 6 feet of water. Vessels are limited to Panamax size. Maximum coal storage is 100,000 MT.
Coal Exporter	As a private facility, Levin-Richmond Terminal will contract with suppliers or customers to provide a commodity and full transportation services. Combined rail, loading and ocean transportation services at competitive rates can be provided.

Logan & Kanawha Coal Co., Inc. 8044 Montgomery Road, Suite 157 Cincinnati, Ohio 45236

Telephone: (513) 891-8333 FAX: (513) 891-8808

President/CEO: Sales Manager:

Kenneth A. Meyer Ronald W. Haley

Logan & Kanawha Coal is actively engaged in domestic and international sales for coal produced from owned and controlled mines in West Virginia, Kentucky, and Ohio.

Product/Services

Description

Coal

Metallurgical - Steel Market Steam - Utility Market

MAPCO Coal Inc. 1717 South Boulder Tulsa, OK 74119

♦♦

Telephone:

(918) 592-7238

Telex:

6866129 MCCOAL UM

President:

FAX: (918) 582-8421 Mr. Joseph W. Craft III

Vice President:

Mr. Gary J. Rathburn (918/592-7266)

MAPCO Coal Inc. is a subsidiary of MAPCO Inc. MAPCO Coal Inc. produces and markets bituminous coal for domestic and foreign markets from eight mining complexes in Kentucky, Maryland, Illinois, and Virginia. MAPCO also operates a coal terminal on the Ohio River near Mt. Vernon, Indiana, used for storage and transloading of coal.

Product/Service

Description

Coal Exporters

MAPCO Coal steam coal is sold primarily to electric utilities, and industrial and cogeneration customers located in the Eastern United States and, to a lesser extent, in Europe. MAPCO's

Coal Mining

metallurgical coal is sold to steel and coke producers located primarily in Japan, Europe, and North

Africa.

Maran Coal Corporation 1114 Avenue of the Americas 26th Floor New York, NY 10036



Telephone: (212) 704-9944

Telex: 239530 (MARAN UR) FAX: (212) 398-9031

President/Chief Executive Officer:

Mark R. Joseph

Export Manager:

Douglas W. Shook, Jr.

Traders of metallurgical and steam coals, coke and coke breeze from all major producing areas and ports of the United States.

Product/Services

Description

Coal Exporters

Traders of metallurgical and steam coals, coke and coke breeze.

Marine Coal Sales Co. 645 W. Carmel Drive Carmel, IN 46032

Telephone: (317) 844-6628 FAX: (317) 844-6842

President:
Vice President:

Richard E. Miller Larry F. Kaelin

Domestic Offices:

645 W. Carmel Drive, Carmel, IN 46032; P.O. Box 223, Santa Claus, IN 47579

Marine Coal Sales Company is a domestic trading company engaged in the activity of sourcing and marketing coal domestically and internationally. As a domestic trading company, Marine Coal Sales Company buys, sells, and brokers coal under long-term arrangements. Marine also secures coal reserves to be mined by contract miners and sold exclusively by Marine. Marine currently controls over 38 million tons of coal reserves. Marine Coal Sales Company ships approximately 2,000,000 tons per year to domestic and international utilities as well as industrial customers. Since 1981, Marine has loaded over 120 vessels and 6.0 million tons of coal through the U.S. Gulf. Marine will customize the coal purchase or sales transactions to meet the needs of the parties involved. This customization could include coal blending, innovative financing arrangements, or creative transportation packages. Marine is a customer-oriented company that is market driven. All of Marine's efforts are focused on providing coals and coal related services that fulfill our customer's needs at a competitive price.

A.T. Massey Coal Company, Inc. P.O. Box 26765
Richmond, VA 23261



(804) 788-1800

FAX:

(804) 788-1811

Chairman/President/CEO:

Donald L. Blankenship Wynston D. Holbrook

Executive Vice Pres.-Sales:

Domestic Offices:

P.O. Box 26765

Richmond, VA 23261



Massey Coal, a wholly-owned subsidiary of Fluor Corporation, is the premier supplier of Central Appalachian coal to world markets. Diversity is what sets Massey Coal apart from its competitors--diversity in technology, products, markets, human resources, mining methods and modes of transportation. With ten mining complexes located throughout Central Appalachia's coalfields, Massey Coal is uniquely positioned to supply a diversity of products. We sell coal to electric utilities and industrial and steel-producing customers throughout the United States, and we export all grades of bituminous coal to customers around the world.

Product/Service

Description

State-of-the-art, computer-controlled coal processing plants make it possible for Massey Coal to provide a wide range of products. Our plants are operated under Statistical Process Control guidelines, and our laboratories are capable of the full spectrum of coal analyses and quality control tests.

Meticulous design of coal storage, handling and blending facilities insures that we achieve our customers' exacting quality specifications.

MONEX

Miller Trading Company Miller Building No. 2 Hale Street Charleston, WV 25301

Telephone:

(304) 343-9524

FAX:

(304) 343-9530

Chairman:

Mr James W. Miller

President:

Mr. David S. Miller

Vice President:

Mr. Gary J. Miller

Miller Trading, a family held company, was incorporated in the early 1960's and merged with Maryland Coal & Coke Company in 1970. Following the sale of Maryland Coal & Coke Interests, Miller Trading Company renewed its services to the industry.

Product/Service

Description

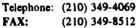
Coal Mining

Coal Exporters

Miller Trading Company actively markets Coal and Coke both domestically and internationally. In addition, Miller Trading Company offers exclusive representation to foreign companies interested in the acquisition of

American coals. Close personal representation is offered by area and by country.

Monex Resources 45 NE Loop 410 Suite 700 San Antonio, TX 78216



Chief Executive Officer:

International Sales Manager:

Gerry J. Gordon W.E. Ellis, Jr.



SAN ANTONIO, TX: Corporate Office, 45 NE Loop 410, Suite 700, San Antonio, TX 78216 TEL. (210) 349-4069; ATLANTA, GA: Southern Regional Office, 2030 Powers Ferry Road, Suite 206, Atlanta, GA 30339 TEL. (404) 955-0089; GREENSBORO, NC: Mid-Atlantic Regional Office, 1515 W. Cornwallis, Suite 100, Greensboro, NC 27408 TEL. (919) 274-1140; AUBURNDALE, FL: Southeastern Regional Office, 227 Pearl Street, Auburndale, FL 33823 TEL. (813) 967-6626; SAN ANTONIO, TX: Western Regional Office, 45 NE Loop 410,

Suite 445, San Antonio, TX 78216 TEL. (210) 341-6182.

Monex Resources, Inc. is an American corporation headquartered in San Antonio, Texas with over one million tons of fly ash and bottom ash sold annually. Currently nearing the beginning of its fourth decade of operations, Monex Resources has become a national leader in fly ash marketing and handling by providing a fly ash distribution system including over fifteen power plants in ten states reaching from Virginia through the Carolinas, Georgia, Florida to Texas. The Company also operates admixture manufacturing facilities in Florida, North Carolina and Texas and ash landfills throughout the southern and southeastern states.

(Continued on next page)



Monex Resources, Inc. (Continued)

Product/Service

Description

Fly Ash

Through selective collection and classification at the power station, Monex is able to produce only the highest quality, consistent fly ash, featuring lower loss on ignition (carbon content) and the highest performance characteristics in concrete. In addition to its utilization in the production of concrete and concrete products, fly ash is also provided for use as a mineral filler in asphaltic concretes and other industrial uses, as an additive for the stabilization of chemical wastes and sludges, as an effective pozzolanic cementing agent in grouts and controlled density fills, and in the production of road base and roller compacted concretes.

Bottom Ash

Monex bottom ash is a valuable additional by-product of the coal combustion process. In its processed form, Monex pyrite-free bottom ash is an attractive, cost-effective alternative to manufactured lightweight aggregates in the manufacture of concrete products. While the characteristics of the bottom ash vary by source, significant savings in the cost of aggregates are possible, while producing a concrete unit of desirable texture, weight, absorption characteristics, and shrinkage. Bottom ash is also extensively utilized as a correcting material, in the manufacture of Portland cement providing a source of alumina and iron compounds required for cement clinker production.

Ash Disposal

Through its Utility Services division, Monex performs ash management services for the electricity generating industries. Utility Services is responsible for the management, transportation, placement, compaction, and reclamation of fly ash, bottom ash, and ponded ash in environmentally acceptable landfills. This division managed some 1.5 million tons of ash disposal in the year ended June 1988.

Morrison Knudsen Corporation One Erieview Plaza Cleveland, OH 44114



FAX:

Telephone: (216) 523-3706 (216) 523-5539

Chairman/Chief Executive Officer: V.P. - International Operations:

Tom Zargots Darryl G. Moffett

Domestic Offices: International Offices:

Los Angeles, CA; Boise, ID; St. Louis, MO; San Francisco, CA; Washington, DC Manila, Philippines; Warsaw, Poland; Singapore; London, England; Cairo, Egypt

Product/Service

Description

Architecture/Engineering

Facilities Construction

Morrison Knudsen Corporation is an international firm engaged in design, construction, and program management in energy, industrial, and government markets. It has proven capability for construction of totally integrated grassroot facilities, plant expansion, and modernization and retrofit programs. MK services range from feasibility studies through design, procurement, construction, and startup. The company has extensive experience in power and steam generation and related environmental control facilities, having completed over 150 such major projects in the past 10 years. Recent projects include: flue gas cleaning systems for Ontario Hydro, Sunflower Electric, Cleveland Electric Illuminating Co., and Tucson Electric Power Co.; coal-fired power plants for Utah Power & Light and Central and Southwest Services; wood-fired power plant for Washington Water Power Co.; and two NOXSO power plants for U.S. DOE.

NERCO Coal Corp. 500 N. E. Multnomah, Suite 1200 Portland, OR 97232-2045



Telephone: (503) 731-8000 **FAX:** (503) 731-8005

President:

Vice President:

Director - International Marketing & Sales:

Nicholas P. Moros

Ronald R. Tarner

Marvin C. Davis

NERCO Coal Corp. is one of the 20 largest coal companies in the United States with annual sales in excess of 27 million tons. The company has extensive high-quality reserves and production capacity in the western (Powder River Basin) coal-producing region. NERCO Coal Corp. is active in both export and domestic trade.

Product/Services

Western coals for domestic use and export.

Norfolk Southern Corporation Three Commercial Place Norfolk, VA 23510-2191

Telephone: (703) 985-6707 (Roanoke, VA)

FAX: (703) 985-6398

Chief Executive Officer:

Vice President, Coal &

Ore Traffic: W. B. Bales

Assistant Vice President,

International Coal and Ore Traffic: T. E. Rappold

Domestic Offices: 110 Franklin Road, Roanoke, VA 24042-0026

D. R. Goode

NORFOLK SOUTHERN The Thoroughbred of Transportation.

Norfolk Southern (NS) is a holding company formed in 1982 with the merger of the Norfolk and Western and Southern Railways. As of December 31, 1992, NS operates 14,700 miles of track covering 21 states, primarily in the East, Southeast, and Midwest sections of the U.S. Rolling stock includes 47,350 open top coal hoppers which have an average hauling capacity of 96 tons per car and 2,048 locomotives. During 1992, coal mines located on the NS rail system loaded 115 million tons. Of this total, 31.2 million tons were exported through the NS Pier 6 Coal terminal located at Lamberts Point, Norfolk, VA. The mines served by NS ship high-quality, low-sulfur steam and metallurgical coal.

Product/Service	Designation	Description
Coal Export Terminal	Pier 6	Pier 6 is 1,850 feet (564 meters) in length, has two traveling shiploaders capable of loading two ships simultaneously or these two loaders can concentrate on one ship. Combined loading rate of both loaders is 16,000 tons per hour. The pier can accommodate vessels with a beam of 175 feet (53 meters), air draft of 55.5 feet (17 meters), and can accommodate a sailing draft of 50 feet (15.24 meters). New in 1993 are two surge silos with a capacity of approximately 5,000 tons each. These silos will allow ships to be dispatched sooner and will increase annual dumping capacity by 6.0 million tons to 48.0 million tons.
Sandusky Dock		NS owned and served facility, located on Lake Erie, operated by Sandusky Dock Corporation. Storage capacity of 875,000 tons is available with reclaimed coal and rail cars loaded to vessel simultaneously. Annual throughput capacity of 7.0 million tons.

(Continued on next page)

Norfolk Southern Corporation (Continued)

Wheelersburg Terminal

An NS served and owned river coal terminal located on the Ohio River at Mile Marker 344.6, Wheelersburg, OH. Annual throughput capacity of 9.0 million tons with ground storage capacity of 1.0 million tons. Terminal is equipped with a rotary dumper, barge loader, unit train loader, and track scales.

The Ohio Valley Coal Company 56854 Pleasant Ridge Road Alledonia, Ohio 43902

Telephone: (614) 926-1351

FAX:

(614) 926-1615

President: Sales Manager:

Robert E. Murray Richard S. Rice

Domestic Offices:

56854 Pleasant Ridge Road Alledonia, Ohio 43902



The Ohio Valley Coal Company is a coal production and sales enterprise. In 1992, the Company produced 3,500,000 tons of fully washed, thermally dried, high quality bituminous coal from its Powhatan No. 6 mine in Belmont County, eastern Ohio. Coal is shipped from the Ohio Valley Coal Company's facilities via The Powhatan Transportation Center, owned by an affiliate, The American Coal Sales Company, at MilePost 110.8 on the Ohio River. At this facility coals from throughout the eastern United States can be transloaded to trucks, trains, or barges, and accurately blended into homogeneous products. These blended products can then be loaded into trains for export through East coast ports or into barges for export through New Orleans, Louisiana.

Products/Service

Description

Coal

High quality, fully washed, thermally dried bituminous coal.

Oxbow Carbon International, Inc. 1601 Forum Place, Suite 1202 West Palm Beach, FL 33401



Telephone: (407) 640-8800 **FAX:** (407) 697-1876

President/CEO: Hans H. Fleskes
Executive Vice President: Patrick E. Valentine
Manager European Sales: Christopher C. MacEachern

From OCI headquarters in West Palm Beach, FL, OCI conducts trading and marketing activities in petroleum coke, coal, alumina, fly ash, and other products; develops new marketing opportunities, especially in regards to petroleum coke and fly ash consumption; evaluates potential projects and acquisitions; and sources fuels for cogeneration projects in the United States.

Louisiana Carbon Company is a joint venture with Conoco Carbon & Minerals, Inc. which markets fuel grade petroleum coke produced by Conoco, Inc. and other refineries. Annually, LCC ships over 2,500,000 tons to overseas customers and over 500,000 tons in the North American Market. Oxbow/LCC manufactures preblended fuels consisting of coal and petcoke for consumption in the utility industry.

Products/Service

Description

OCI is a privately held company whose primary business is marketing and trading solid fuels such as petroleum coke, coal and other bulk solids including fly ash, cement, bauxite and other aggregates. OCI is active in marketing, blending, brokerage and other value-added business on both an export and import basis. Product is transported via truck, rail, barge and vessel to serve OCI's domestic and overseas suppliers and customers.

Ash Separation OCI has formed a Joint Venture with International Separations Systems, Inc. (ISSI) to separate carbon from fly ash.

Pacific Basin Resources, A Division of Oxbow Carbon & Minerals Inc. 3480 Buskirk Avenue, Suite #205 Pleasant Hill, CA 94523

Telephone: (510) 932-0878 **FAX:** (510) 932-8920

President/CEO: Brian L. Acton
Sales Manager: Lawrence H. Black

Domestic Offices: Pacific Basin Resources, 7901 South Park Plaza, Suite #202, Littleton, CO 80120

International Offices: Pacific Basin Resources, 560-5900 No. 3 Road, Richmond, B.C. Canada; 115 Norfolk Street, Guelph, Ontario,

Canada N1H 4J7

Coal mining and trading of Petroleum Coke and other bulk materials.

Product/Services Description

Coal High Btu, low sulfur metallurgical and steam coals.



Pacific Coast Coal Company 900 Fourth Ave., Suite 3625 Seattle, WA 98164

Telephone: (206) 624-6590 **FAX:** (206) 340-2267

Chief Executive Officer: David J. Morris International Sales Manager: David J. Morris

International Offices:

Please contact company headquarters for further information.

Pacific Coast is one of two coal operators located in Washington state and the only one producing export quality bituminous coal. The open pit John Henry mine began producing in 1987 and is located just 310 km south of Roberts Bank terminal on the Burlington Northern RR. It produces at the rate of about 300,000 mtpy. This favorite location results in an extremely competitive transportation cost for steam coal delivered into the Pacific Rim countries. Coal reserves are large enough to allow for mine expansion as markets grow.

Product/Services

Description

Steam Coal

Washed or raw steam coal ranging from 6,700-7,000 kcal/kg (air dried); 14-17 percent ash; 6-10 percent moisture (2 percent inherent); 28-32 percent V.M.; less than 1 percent sulfur; high ash fusion. Available in 10-60,000 tonne lots subject to prior commitments.

Peabody COALSALES Company 701 Market Street, Suite 830 St. Louis, MO 63101

Telephone: (314) 342-7600 **FAX:** (314) 342-7609

CAM. (314) 342-7009

Officer: Richard M. Whiting (President)

International Sales Manager: D.D. Turnbull (V.P. Sales & Marketing, Charleston, WV)

Domestic Offices:

Charleston, WV, Peabody COALSALES Company, 500 Lee Street, Laidley Tower, Suite 200, Charleston, WV 25301

TEL: (304) 340-1725 FAX: (304) 340-1749. Also: Henderson, KY and Flagstaff, AZ.

Peabody COALSALES Company markets more coal than any other U.S. organization. Domestic and export sales in 1992 were 90.8 million short tons of steam and metallurgical coal from mining operations in eight states. The company is the principal sales agent for Peabody Coal Company, Peabody Western Coal Company, Powder River Coal Company and Eastern Associated Coal Corp. The majority of the company's export shipments originate from West Virginia and are transloaded through Dominion Terminal at Newport News, VA. Peabody Holding Company, Inc., Peabody COALSALES' parent, owns a 30 percent interest in Dominion Terminal.

Product/Service

Description

Customer Services

COALSALES markets all grades of steam and metallurgical coal to consumers in at least 14 countries worldwide.

COALSALES personnel identify coal souring options meeting customer specifications, analyze and identify transportation modes to maximize efficiency and economy, arrange product test burns, and provide technical assistance.

Pen Coal Corporation
5110 Maryland Way, 3rd Floor
P.O. Box 2128
Brentwood, TN 37024-2128

Telephone: (615) 371-7330

Telex: 555187 PEN (P&K) NAS
Chief Executive Officer:
International Sales Managers:

FAX: (615) 371-7388
William E. Beckner
Joseph Davis, V.P Sales

Joe C. Johnson, Export Sales Rep.

International Offices: Contact company headquarters for further information.

Pen Coal Corporation is a producer, terminal operator and marketing company engaged in the shipment of coal to U.S. and international coal users. Pen Coal's Kiah Creek Reserve in western West Virginia covers 23,000 acres and holds over 100 million tons of recoverable low sulfur coal. Pen Coal also owns two Big Sandy River Coal Terminals and a large interest in the International Marine Terminal near New Orleans, Louisiana. Pen Coal has the capability to export through both East Coast and Gulf ports and ship by rail and river for domestic distribution.

Product/Service

Description

Coal Mining, Processing, Marketing and Exporting Pen Coal Corporation is primarily engaged as a supplier of low sulfur steam coal which generally meets a range of specifications as follows: 0.65-1.50% sulfur, 11000-12500 Btu, 7-15% ash, 5-8.0% moisture, 25-34% volatile matter.

Pincock, Allen & Holt, Inc. 274 Union Boulevard, Suite 200 Lakewood, CO 80228

Telephone: (303) 986-6950

Telex: 666457 KAPIN Fax: (303) 987-8907
President: John J. Antony, P. Eng.
Manager-Coal Services: K.M. Kolin, P.E.

Domestic Offices:

Denver, Colorado: Telephone (303) 986-6950

15 Valley Drive, Greenwich, CT 06830: Telephone (203) 661-4411

Pincock, Allen & Holt, Inc. (PAH) is an international consulting engineering firm specializing in the evaluation, planning, design and management of mining industry projects. Since its founding in 1968, PAH has completed over 1600 assignments related to precious and base metals, industrial minerals and coal. Through its Geology, Mine Engineering, Mineral Processing, and Mineral Economics Departments, PAH serves the mining, financial and governmental communities.

Products/Service

Description

Mineral Industry Consulting Services

- Geologic investigations
- Manual and computer-based reserve estimation
- Property appraisals
- Surface and underground mine planning
- Capital and operating cost estimates
- Economic and financial analysis
- Commodity and market studies
- Conceptual and detailed process design and engineering
- Bankable documents
- Environmental audits, mitigation and permitting



The Pittsburg & Midway Coal Mining Co. A Chevron Company P.O. Box 6518 Englewood, CO 80155-6518

Telephone: (303) 930-3600 **FAX:** (303) 930-4204

Chief Executive Officer: Barry G. McGrath, President

International Sales Manager: M. W. Dix, Jr., Vice President, Marketing



P&M was founded in southeastern Kansas in 1885, making it one of the oldest continuously operating mining companies in America. As a unit of Chevron, P&M combines the resources of one of the largest U.S. corporations with the hands-on operating expertise of a closely run enterprise. P&M and Chevron share a commitment to coal as an essential energy resource for today and for the future.

P&M produced over 16.5 million tons of coal in 1992 at ten mines located throughout the U.S. The company owns substantial undeveloped reserves located primarily in the southeastern and western U.S.

Product/Service

Metallurgical Coal

Production available from the York Canyon Mine at Raton, New Mexico for export from the West Coast or the Gulf.

Steam Coal

Production available from the York Canyon and McKinley mines in New Mexico, the Sebree Mine in western Kentucky, the North River Mine in Alabama, and the Kemmerer Mine in Southwestern Wyoming for export from the West Coast or the Gulf.

Undeveloped Reserves

Substantial reserves located in Alabama would be suitable for export through the Gulf.

Pittston Coal Sales Corp. 100 First Stamford Place P.O. Box 120070 Stamford, CT 06912-0070



Telephone: (203) 978-5200 Telex: I.T.T. Telex CT 421129 Cable Address: 'Pittston GRC' FAX: (203) 978-5360

President: Senior Vice President: Mr. Thomas F. Tabacchi Mr. Joseph P. McEnaney

International Offices:

Please contact company headquarters for further information

Pittston Coal Sales Corporation is a subsidiary of 'The Pittston Company' engaged in the sale of bituminous coal in the Canadian and overseas market. Today, "Pittston" owns more than 1.1 billion tons of high quality metallurgical and steam coal reserves in the Appalachian region. During the past 30 years the corporation has exported over 200 million tons and has been America's premier shipper of the highest quality coking coal in the overseas market.

Product/Services Description

Coal Exporter Pittston Coal Sales Corp. offers premium grade bituminous metallurgical and steam coals, backed by a worldwide

reputation for dependable service and reliability in its consistent quality products; the characteristics that have made

"Pittston" products the acknowledged leader in its field.

Port of Long Beach P.O. Box 570 Long Beach, CA 90801



Telephone: (213) 437-0041

Telex: 656452 FAX: (213) 437-3231

Chief Executive Officer: Steven R. Dillensbeck

International Sales Manager: Don Wylie

Domestic Offices: LONG BEACH, CA: 925 Harbor Plaza, Long Beach, CA 90802

International Offices: Please contact domestic office for details

The Port of Long Beach, established 1911, is a Department of the City functioning through a five-member Board of Harbor Commissioners. Currently comprising over 2,800 acres, the Port has expansion plans to add an additional 1,400 acres by the year 2020. Since over 50% of its tonnage volume is comprised of bulk cargo, the Port remains committed to handling cargos of all types. As the West Coast's largest Port in total tonnage, Long Beach offers facilities capable of handling current and future coal export volume.

Product/Service Description

Special Coal System Coal exports move through the Pier G facility operated by Metropolitan Stevedor Company. The Port's rail yard can

hold up to two unit trains. With unloading capability of 30 cars/hr throughput of four trains per day is achievable. The terminal operates two loaders with 3,000 mt/hr and 5,000 mt/hr capability. Two berths handle panamax and cape size vessels up to about 130,000 tons. Rail service into the Port is by Sante Fe, Southern Pacific and Union Pacific

Railroads.

Powder River Coal Company Caller Box 3034 Gillette, WY 82717-3034

Telephone: (307) 464-0054

President: Larry H. Fox

Vice President-Sales: James C. Campbell (314) 342-7632

RIVER

Powder River Coal Company, a wholly-owned subsidiary of Peabody Holding Company, Inc., operates two surface mines in Wyoming and an underground mining complex in Colorado. The company produces and sells 32 million tons of very low sulfur steam coal annually to more than 35 customers.

Product/Service Description

Coal mining Very low sulfur steam coal.

Process Technology, Inc.

Headquarters: 1122 Calumet Avenue Calumet, MI 49913

Telephone: FAX:

(906) 337-0020

(906) 337-0023

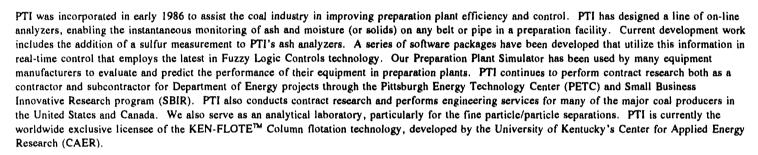
Sales & Service Office 2767-69 East Fourth Avenue Columbus, OH 43219

Telephone:

(614) 252-9583

FAX: (614) 252-9562

Chief Executive Officer: Mel J. Laurila International Sales Manager: Mel J. Laurila



Products/ Services

Description

PTI Ash Monitor Coarse Ash Monitor Microwave Moisture Meter Nuclear, in-plant, automated slurry ash and solids analyzer Nuclear, in-plant, automated coarse coal ash monitor

Nuclear, in-plant, automated moisture meter to determine moisture content of the coal on

the belt.

KEN-FLOTE™ Flotation Column

Software Packages

PTI Preparation Plant Simulator and Fuzzy Logic Control

Advanced Coal Cleaning Technology Development

Development of new coal cleaning technologies, pyritic sulfur removal, and super clean

coals



Science Applications International Corporation Fossil Energy Technology Division 1710 Goodridge Drive, Mail Stop 2-2-1 McLean, VA 22102



Telephone: (703) 749-8675

FAX: (703) 827-9514 or (703) 827-7390

Division Manager: Dr. James T. Bartis (703) 442-5691
Principal Point of Contact: Dr. Anton Dilo Paul (703) 442-5697

Domestic Offices: 39 offices in key geographical locations nationwide

International Offices: 5 International offices

Fossil Energy Technology Division

Science Applications International Corporation (SAIC), established in 1969, is one of the foremost R&D companies in the U.S. At the leading edge of new technology developments, the Fossil Energy Technology Division concentrates on concept development, technology transfer, and systems engineering in the areas of coal preparation, coal-based alternate fuels, advanced power generation systems, and environmental compliance strategies. The Division's in-depth analyses and assessments on technical, economic, and regulatory issues has led to the success of several energy-related R&D projects and business ventures.

The Division provides technical and management support for the U.S. Department of Energy (DOE) to formulate, evaluate, and execute R&D projects in advanced systems for coal preparation and combustion. Our analyses have led to the development and commercialization of advanced coal preparation technologies as a viable environmental compliance strategy. DOE's Combustion 2000 Program, a major research and demonstration program to build coal-fired, high-efficiency power systems with extremely low emissions, was established using conceptual designs, analyses, and costings developed by Division Engineers. We are playing a lead role in the development of data and computer models for a Coal Market Module within the National Energy Modelling System under the Energy Information Agency. Our expertise is also extending overseas with coal-based energy projects in the Ukraine, Eastern Europe, and India.

Products/Services	Description
Technology Assessments	 Concept development, definition, and evaluation for energy projects. Technical opportunities and risk associated with conventional and advanced coal preparation, combustion and synthetic fuel applications.
Economic Analyses	- Market potential for energy technologies under varying economic conditions Rate of return and cost/benefit evaluations and sensitivities.
Policy & Regulatory Analysis	- Impacts of environmental legislation/regulation Identification and analysis of alternative regulatory structures.
Energy Resources	 Technical evaluations of potential energy sources, including prices projections and price stability analyses. Development and analysis of utility and industrial fuel procurement, transportation strategies, and contracts.
Scientific Research	- Fluid dynamics of multiphase systems Thermodynamics and kinetic phenomena associated with coal, coal processing and coal utilization.

Seneca Coal & Coke Corporation 69 Dutchtown Road - Box 178 Belle Mead, NJ 08502

Telephone: (908) 359-8860

(908) 874-4458

Chief Executive Officer: M International Sales Manager: M

Mrs. Rose L. Rogozinski Mrs. Rose L. Rogozinski

Seneca Coal & Coke Corporation is a sales company with 40 years experience in domestic and export sales to many parts of the world. It acts as sales agent engaged in the sale of all types of coal as well as foundry coke. It specializes in carload and less than carload quantities for the smaller users of these products.

Product/Service

Coal Exporters High quality coal and coke suitable to specifications.

Description

Shipyard River Coal Terminal 1801 Milford Street Charleston, SC 29405

Telephone: (803) 722-2878 **FAX:** (803) 722-5720

President/CEO: Charles M. Whitten Sales Manager: Greg Hutchison



Shipyard River, a subsidiary of SMC Mining Company, is located in Charleston, South Carolina. Shipyard River Coal Terminal owns and operates a multi-product import/export marine terminal. Shipyard River Coal Terminal's main product is coal for export. Shipyard River Coal Terminal has ground storage space for 250,000 mt of coal is rated for 2.5mm tons per year throughput. Controlling draft is 43 feet. Shipyard River Coal Terminal is served by both the CSX and NS rail systems. Shipyard River Coal Terminal also handles other dry bulk commodities and operates a liquid tank farm.



Slurrytech, Inc. 7027 S.W. 148th Terrace Miami, FL 33158

SLURRYTECH, INC.

Telephone: (305) 253-4560 FAX: (202) 333-0474

Chief Executive Officer: International Sales Manager: Donald D. Dunlop Donald D. Dunlop

Domestic Offices:

WASHINGTON, DC: 1425 44th Street, N.W., Washington, DC 20007

Slurrytech, Inc. is the licensing entity for Co-AL, the patent protected coal water fuel technology originally developed at Alfred University. Since 1980, the technology has led the coal water fuel development field in process, scale-up, and combustion advancement. Slurrytech has worked with development partners around the world to complete the commercial development of Co-AL.

Product/Service

Description

Coal Water Fuel

Coal Water Fuel, marketed under the name Co-AL, developed originally at Alfred University and patent protected worldwide. Co-AL is unique in the use of particle size distribution to realize a high solids loading (up to 75%) with a low viscosity (1000 cps). Because of this particle size distinction, Co-AL is a stable fuel and does not require costly stabilizing chemicals. Slurrytech has this technology available for license and, alternatively, will supply slurry product through its parent corporation, Fuels Management, Inc.

Licensee of the National Research Council of Canada (NRC): Low Oil Agglomeration Coal Cleaning Process.

Exclusive licensor of a patent jointly held with NRC of a coal fines drying process.

Licensor of a new CoProcessing technology to simultaneously upgrade heavy oil and dry high moisture coals.

Stinnes Hansen Coal Company, Inc. 605 Third Avenue 44th Floor New York, NY 10158

Telephone: (212) 972-4800

FAX: (212) 682-5570 President:

Mr. Juergen H. Lorenz Executive Vice President: Mr. Michael T. Madden Vice President: Mr. Joseph Groneman Treasurer: Mrs. Connie Grossman

Mr. Daniel J. Duda, Sr. General Manager: Mr. Robert Nagle Manager:

333 West Vine Street Regional Office: Lexington, KY 40507

(606) 233-3324 FAX: (606) 233-3328

Telephone:



Stinnes Hansen Coal Co., Inc. (formerly Hansen Coal Corp.) a coal and coke marketing company, has serviced domestic and foreign consumers since 1965. Representing a broad spectrum of independent coal producers and affiliated coal companies, they provide metallurgical utility, industrial and specialty coals and coke worldwide. A wholly owned subsidiary of Stinnes Intercarbon AG, Mulheim, Germany, Stinnes Hansen Coal, in addition to their New York location, maintains an office in Lexington, KY as well as several international locations.

Stone & Webster Engineering Corporation 245 Summer Street Boston, MA 02210

▲ Stone & Webster

Telephone: (617) 589-5111

Telex: W.U. 94-0001 FAX: (617) 589-2156 or (617) 589-8071

President:

Ben Charlson

Vice President:

Albert M. Ferrer (617) 589-6627

Domestic Offices:

Anchorage, AK; Boston, MA; Chattanooga, TN; Cherry Hill, NJ; Denver, CO; Fort Lauderdale FL; Houston, TX; San

Francisco, CA; New York, NY; Washington, D.C.

International Offices:

United Kingdom: Milton Keynes; Canada: Toronto; Saudi Arabia: Damman. Stone & Webster also maintains offices in

the following cities: Abu Dhabi, Bangkok, Kuala Lumpur, Seoul and Taipei. Please contact headquarters in Boston for

further information.

Stone & Webster Engineering Corporation, which celebrated its Centennial in 1989, is one of the world's largest engineering and construction firms. Since its founding as a two-man consultancy in Boston, the firm has planned, engineered and provided construction and construction-management services for utilities and industrial power concerns worldwide. Have designed and/or built plants with a total capacity exceeding 50 million kilowatts, the company is considered one of the world's largest and most experienced engineer-constructors of coal power facilities. Over the years, Stone & Webster has helped many domestic and international clients develop technologies that can lead to cleaner and more efficient use of coal. For instance, in the United States the company ha conceptually designed integrated gasification/combined cycle systems for new generating stations and evaluated the use of coal liquids for existing oil-tired stations. Stone & Webster also worked on the first utility coal gasification project in Brazil Today, we continue to work with government agencies and private firms on new ways to clean and burn fossil fuels. Our development projects include fluid bed combustors, a retrofit combustor system that eliminates a variety of pollutants and a furnace injection system that removes sulfur dioxide. Listed below are some of the areas in which Stone & Webster applies its consulting, engineering and construction expertise.

Products/Service	Description
Advanced Utilization	Coal processing systems: direct and indirect liquefaction; coal gasification combined cycle power systems; advanced power generation systems; pressurized fluidized bed technology; externally fired high temperature gas turbine combined cycle systems and direct fired dual working fluid power cycles.
Coal Industry	Coal drying technologies: surface and underground coal mining; coal handling; fuel analysis.
Coal Mining	Correlation and preliminary evaluation of data; mine planning and engineering design (surface and underground): pit planning and design; underground planning and design, production engineering, land reclamation. Drilling; blasting engineering and optimization; equipment selection and justification; budget review; reserve analysis; haulroad design; coal evaluation and loading design; auxiliary utility design: compressor systems, water piping systems; ventilation design; slop stability engineering; economic analysis; fatal flaw analysis; geological aspects: exploration methods and requirements, preliminary evaluations.
Coal Transport	Railroad construction, design and engineering; truck-shovel optimization; coal slurry technology.
Facility Construction	Silo design and engineering; conveyor systems; coal loadout facilities; crushing operations and design.

Summers Fuel Inc. Suite 1201 28 Allegheny Avenue Towson, MD 21204

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Telephone:

(410) 825-8555

FAX:

(410) 828-8657

Chief Executive Officer: Executive Vice President: William N. Clements, II William N. Clements, III

Summers Fuel, Inc., is a coal trader with steam and metallurgical coal available from mines in Pennsylvania, West Virginia, Virginia and Maryland. Summers Fuel exports coal from the ports of Baltimore, Maryland; Philadelphia, Pennsylvania; Lamberts Point and Newport News, both in Hampton Roads, Virginia.

Summers Fuel has been marketing coal since 1962. Summers Fuel has equity and financial interests in low, medium and high volatile mines and is a member of the National Coal Association and the Coal Exporters Association of the United States.

Product/Service

Description

Coal Exporters

Sec Above

Sun Coal Company 4711 Old Kingston Pike P.O. Box 10388 Knoxville, TN 37939-0388

Telephone: (615) 558-0300

Coal Derivatives

Telex: 55-7045 FAX: (615) 558-3280
Chief Executive Officer: Merie D. Wolfe
International Sales Manager: Donald B. Denecke

Sun Coal Company has mining operations in Kentucky (2) and Virginia. The three different mining operations produce low sulfur coals for the steam and metallurgical markets. Sun also owns and operates a "non-recovery" coke plant of unique design in Virginia and sells high quality furnace coke to the steel industry. Sun Coal is a wholly-owned subsidiary of Sun Company, Inc., a major U.S. oil company.

Product/Services	Description
Coal Mining	Sun Coal is a major coal mining company supplying high quality steam coals for the electric utility industry and mid and high volatile coking coals to the steel and ferro-alloy industries. Sun Coal also makes high quality furnace coke
Coal Exporters	with its patented "non-recovery" coke oven technology utilizing its mid volatile coking coal exclusively.

TECO Coal Corporation P.O. Box 39 Nevisdale, Kentucky 40754



Telephone: (606) 549-3145

Telex: 213550 FAX: (606) 549-5495

President/CEO: Vice President - Sales: J. J. Shackleford R. Douglas Cornwell

Sales Manager - Export:

David Potter

Domestic Offices:

Knoxville, TN; Lexington, KY; Prestonsburg, KY

TECO Coal produces a wide variety of coals for utilities and international users, as well as metallurgical coal for domestic and industrial customers.

Product/Services

Description

Coal Exporters

All of our mines ship coal via the N/S and CSXT railroad systems to piers at Norfolk, Newport News, Charleston,

and the Gulf of Mexico.

Coal Mining

Presently more than four million tons of coal are mined and shipped annually. Plans for expansion call for TECO to

produce between 8 to 10 million tons per year by 1995.

United Coal Company Glenway Avenue P.O. Box 1280 Bristol, VA 24203

Telephone: (703) 466-3322

Telex: 510-580-2108

Chief Executive Officer: International Sales Vice President:

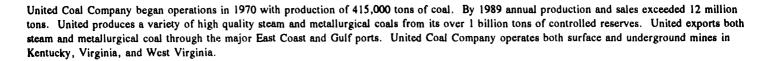
FAX: (703) 466-5641

Mr. Charles T. Carter Mr. Ralph D. Haring

International Offices:

Product/Service

Please contact company headquarters for further information.



Description Steam and metallurgical coal is exported through East Coast ports via the CSX and Norfolk Southern railways. Coal Exports United maintains good commercial relationships with ground storage terminal operations in Newport News, Virginia and the lower Mississippi.

United's two coal producing divisions operate independently with their own engineering, preparation and loading Coal Mining

facilities, quality control laboratories and repair shops. 1992 production and sales: 8.5 millions tons.

United Eastern Coal Sales Corporation P.O. Box 729 Indiana, PA 15701

United Eastern **Coal Sales Corporation**

FOLINDED 1934

Telephone: (412) 349-6254 FAX: (412) 349-5460

Mark A. Stefanov, Vice President Sales Manager:

United Eastern Coal Sales Corporation is a subsidiary of Rochester & Pittsburgh Coal Company. The company markets bituminous coal for steam and metallurgical applications to domestic and export markets. United Eastern serves as the principal sales agent for R&P, Eighty-Four Mining Company, DSB Company, Kent Coal Mining Company, and Maud Mining Company. Transportation options available include unit train service on Conrail, truck delivery, and barge shipment on the Ohio River system.

Product/Services Description

Steam Coal Mid-sulfur, low to high volatile coals from central and southwestern Pennsylvania sources are sold primarily to

electric utilities in the northeastern United States.

Metallurgical Coal High volatile, low sulfur, Pittsburgh seam coal from Eighty-Four Mining Company with shipment via Conrail unit

trains, Ohio River system barge, and track.

U.S. Steel Mining Company, Inc. 600 Grant Street - Room 1880 Pittsburgh, PA 15219-2749

Telephone: (412) 433-4640

Telex: 86-6425 FAX: (412) 433-5839

International Sales Manager: Mr. Keith Jansen

Chief Executive Officer: Mr. John F. Dickinson II Mr. Gerald A. Liberatore

After 100 years of experience serving U.S. Steel, U.S. Mining was formed in 1981 and, as a wholly owned subsidiary of USX, USM has been serving metallurgical and steam markets throughout the world since that time. High-vol coal is available from mines in Pennsylvania and can be exported from Great Lakes, east coast or Gulf ports. Low-vol coal in West Virginia is exported through east coast or Gulf ports, while low-vol coal in Alabama is exported from the Gulf.

Usibelli Coal Mine, Inc. P.O. Box 1000 Healy, AK 99743

Telephone: (907) 683-2226 FAX: (907) 683-2253

President: Vice-President Marketing: Joseph Usibelli, Jr.

John Sims

Domestic Offices:

Mine Office: P.O. Box 1000, Healy, Alaska, 99743; Marketing Office: 122 First Ave., #302, Fairbanks,

Alaska 99701, Tel. (907) 452-2625, FAX (907) 451-6543

Usibelli Coal Mine (UCM) was founded in 1943 and produces ultra-low sulfur subbituminous coal. In 1991, UCM produced 800,000 short tons for the power and heating requirements of six Interior Alaska utilities and military bases including a 25 megawatt mine-mouth power plant. An additional 730,000 short tons were exported through the Port of Seward to the Honam Power Plant in Korea. The Usibelli mine, located north of the Alaska Range near the town of Healy, transports its coal north to interior power plants and south to the Seward coal terminal via the Alaska railroad. UCM has a work-force of 110 employees and operates year-round.

UCM is a participant in the Healy Clean Coal Project that was selected for funding under the third round of the Department of Energy's Clean Coal Technology program. The Healy project will construct a 50 megawatt mine-mouth power plant using entrained coal combustion technology.

Product/Service

Description

Ultra Low Sulfur Steam Coal

Raw steam coal crushed to 2"0". As received analyses (3 year average): 7800 Btu/lb; 26.45% moisture; 8.08% ash; 34.87% volatile matter; 30.6% fixed carbon; and 0.17% sulfur. UCM coal also has a low nitrogen content, a high

calcium content and high reactivity.

Jim Walter Resources, Inc. Mining Division P.O. Box 830079 Birmingham, AL 35283-0079



USIBELLI COAL MINE

Telephone:

(205) 481-6150; 554-6150

Telex:

261391 JWRB UR FAX: (205) 481-6161; 554-6161

President: Senior Vice President: William Carr James M. Sims

Assistant Vice President:

R.W. Pollard

Domestic Offices:

BROOKWOOD, AL: Route 1, Box 133 - Highway 216, Brookwood, AL 35444

International Offices: Please contact company headquarters for further information

Jim Walter Resources, Inc., is a 9 million (net) ton per year producer of high quality metallurgical (low and medium volatile) coal from the Blue Creek seam. The coal is produced from 4 underground mines in north central Alabama. These mines are served by both barge and railroad and approximately 6 million tons per year are exported from McDuffie Terminals in Mobile, Alabama. With more than 275 million tons of recoverable reserves, Jim Walter Resources will be producing high quality, single seam metallurgical coal for many years to come. Customers worldwide depend on Blue Creek coals, and Jim Walter Resources has ample reserves to back up long-term commitments.

(Continued on next page)

Jim Walter Resources, Inc. (Continued)

Product/Service	Description
Low Volatile Metallurgical Coal (No. 3 and No. 7 mines)	Volatile matter 19-22%, ash 8%, sulfur .67% (all dry basis), moisture 8% typical, HGI +90, ARNU 75-120, fluidity 400-1200 DDPM, FSI 9, size 50 mm x 0 (other specifications upon request).
Medium Volatile Metallurgical Coal (No. 4 and No. 5 mines)	Volatile matter 24-27%, ash 8.8%, sulfur .78% (all dry basis), moisture 8% typical, HGI +90, ARNU 120-140, fluidity 2000-4000 DDPM, FSI 9, size 50 mm x 0 (other specifications upon request).
Dry, Granular Coal	Medium volatile coal produced at No. 4 mine is thermally dried. Annually, approximately 250,000 (net) tons of "dryer dust" is captured in the dryer's emissions control system. This coal has 7% dry ash, is sized at 2 mm x 0 and has less than 2% moisture. This would be an excellent product for granular coal injection in a blast furnace.
Coal-Water Fuel (CWF)	Also located at No. 4 mine is a pilot scale CWF plant capable of producing 10 tons (50 barrels, 42 gallons each) of CWF per hour. However, with no continuous production commitments, the plant is available to produce batch samples of CWF produced from Blue Creek coal or customized CWF's with customer provided coals. Jim Walter Resources can also custom design and produce CWF to meet any special requirements.

Waterloo Coal Company, Inc. P.O. Box 626
Jackson, OH 45640

Telephone: (614) 889-1538/(614) 682-7787

FAX: (614) 682-3967

President: T.L. Darlington Jr.

resident: 1.L. Darington 31.

A miner of high quality Ohio coals for over 56 years. We offer sizes from 2 x O to specialty screening.



Williams Technologies, Inc. 320 South Boston, Suite 831 Tulsa, OK 74103



Telephone: (918) 582-5811

FAX: **Chief Executive Officer:**

(918) 584-0474

David R. Williams, Jr.

International Sales Manager:

H.J. Brolick

International Offices:

Please contact the company headquarters for further information.

Principal business is project assessment, development, and management from initiation of concept through commercial implementation, including financial sourcing. Williams Technologies, Inc. is an equity owner of The Black Mesa Pipeline, Inc. coal slurry pipeline and provides executive management, technical, administrative and accounting support services for the operation and maintenance of the pipeline system. Provides consulting with regard to economic feasibility or technical evaluation of energy or resource projects. Manages operating facilities and technology development for others. Special expertise in development of coal slurry pipeline projects through past worldwide experience and ongoing operations management of Black Mesa Pipeline.

Product/Service	Description
Coal Transport	Provides development, management, financial packaging and operation management of coal slurry pipeline systems.
Architectural/Engineering	Provides consulting services in planning and feasibility study, as well as management of design, construction, and operations for coal slurry pipeline and oil and gas pipeline systems. Provides similar services for cogeneration plants and alternative energy projects.

III. TECHNOLOGY RESOURCES

Advanced Utilization: Providers of technology and equipment designed for utilization

in a system environment which allows for combustion of coal without significant air or water pollution or solid waste stream

control problems.

Architects & Engineers: Firms providing power and/or industrial plant design services.

Boiler Equipment: Firms providing coal and/or derivative combustion and steam

generation equipment and systems.

Emissions Control and Firms providing in-process (LMB, etc.) and (ESP, Baghouses, cyclones, etc.) emissions control systems, and waste stream

management disposal, and recycling technology.

Facility Construction: Firms providing construction services, often in conjunction with

A&E firms.

Mining Equipment: Firms providing equipment for underground and surface mining,

as well as conveying, crushing, sizing, and beneficiation.

Power Generation Firms providing electrical generating systems for use in

conventional steam plants, as well as gas turbine systems and

combined cycle systems.

Technical Publications: Firms providing manuals, handbooks, and other technical

literature relating to coal and coal technology.

Transport Equipment: Equipment used in rail and shipboard transport of coal.

Systems:

Company Name	Advanced Utilization	Architects & Engineers	Boiler Equipment
ABB Combustion Engineering Systems			•
Acurex Environmental Corporation	•	•	•
AirPol, Inc.	•	•	
The American Gulf Company			•
Applied Power Associates, Inc.		•	
B & N Coal, Inc.		•	
Babcock & Wilcox, a McDermott Company			•
Baker Environmental, Inc.	•	•	
Battelle	•		
Bechtel Corporation	•	•	•
Bechtel Power Corporation		•	
Benthamite Corporation	•		
Bibb and Associates, Inc.		•	
Black & Veatch		•	
B∕-wser-Morner		•	
John T. Boyd Company		•	
Burns & McDonnell	•	•	
Carnot	•		•
Challenge Engineering Consultants, Inc.		•	
CLI Corporation	•	•	
Coal Tech Corp.	•		
Coal Technology Corporation	•		
Combustion Power Company	•		•
CONSUL, Inc.		•	
CQ Inc.	•		
Crosby Valve & Gage Company			•
CRS Sirrine Engineers, Inc.		•	
D'Appolonia Engineering Division		•	
Detroit Diesel Corporation		•	
Diamond Power Specialty Company			•
Duke Energy	•	•	
Dunn-Behre Dolbear, Inc.		•	
Eavenson, Auchmuty & Greenwald		•	

Company Name	Advanced Utilization	Architects & Engineers	Boiler Equipment
Electric Fuels Corporation	•	•	
Ellison Consultants	•		
EnCoal	•		
Energotechnology Corporation	•		
Energy and Environmental Research Corporation	•	•	•
Energy International Corporation	•		
Everlasting Valve Company			•
Fluor Daniel Inc.	•	•	
Foster Wheeler Corporation	•		•
GAI Consultants		•	
GeoResearch, Inc.		•	
Gilbert/Commonwealth, Inc.		•	
Global Associates, Inc.	•		
Global Energy USA	•	•	
GPS Technologies, Inc.		•	
Greenhorne & O'Mara, Inc.		•	
Hawley Fuel	•		
Hays Republic Corporation			•
HDR, Inc.		•	
Henry Vogt Machine Co., Inc.			•
HNTB Corporation		•	•
Honeywell Incorporated			•
HRI, Inc.			
ICE Export Sales Corporation			•
ICF Kaiser Engineers		•	
Illinois Department of Energy and Natural Resources	•		•
Jenike & Johanson, Inc.		•	
JTM Industries, Inc.	•	•	
Leas Industrial Assoc.	•		
Lee-Simpson Associates, Inc.		•	
LeHigh Valley Coal Sales Company	•	•	
K-Kuel, Inc.	•		
The M.W. Kellogg Company	•	•	

Company Name	Advanced Utilization	Architects & Engineers	Boiler Equipment
McNally Wellman	•		
Membrane Technology and Research, Inc.	•	,	
MicroFuel Department, Fuller Power Corporation	•		•
J.W. Miller & Associates, Inc.		•	
Montague Systems, Inc.		•	
Morrison Knudsen Corporation	•	•	
Neundorfer, Inc.	•	•	•
Non Recovery Coke Associates		•	
NUS		•	
H.C. Nutting Company		•	
Otisca Industries, Ltd.	•		
Oxbow Carbon International, Inc.	•		
P & L Systems, Ltd.		•	
Parsons Brinckerhoff Inc.	•	•	•
Parsons Main, Inc.		•	
The Raiph M. Parsons Company	•	•	
Peabody Engineering Corporation			•
Pedco Incorporated	•		•
Pennsylvania Coke Technology, Inc.	•		
Process Technology, Inc.	•		
Progress Materials, Inc.	•		
PSI Technology	•		
Quad Three Group, Inc.		•	
Raytheon Engineers & Constructors, Inc.		•	•
Reiss Viking	•		
Riley Stoker Corporation			•
Roberts & Schaefer Company		•	
Sargent & Lundy	•		
Schnabel Engineering Associates		•	
Science Applications International Corporation Fossil Energy Technology Division	•	•	
Science Applications International Corporation Physical Sciences Group		•	
Slurrytech, Inc.	•		

Company Name	Advanced Utilization	Architects & Engineers	Boiler Equipment
Soros Associates		•	
Spire Corporation		•	
SSR Engineers, Inc.		•	
Stock Equipment Company		•	•
Stone & Webster Engineering Corporation	•	•	
STV/Sanders & Thomas		•	
TAMS Consultants, Inc.		•	
Techno-Economic Consulting, Inc.			
Tippett & Gee, Inc.		•	
Todd Combustion, Inc.			•
Valley Forge Laboratories, Inc.		•	
Wahlco, Inc.	•		
Williams Technologies, Inc.	•	•	

Company Name	Emissions Control and Waste Disposal Systems	Facility Construction	Mining Equipment
ABB Combustion Engineering Systems	•		
ABC Industries, Inc.			•
ABSCO Scales			•
Acurex Environmental Corporation	•	•	
Adalet-PLM			•
AirPol, Inc.	•	•	
Alanx Products L.P.			•
The American Gulf Company			•
The American Mine Door Company			•
Amerikol Mining, Inc.			•
B & N Coal, Inc.			•
Babcock & Wilcox, a McDermott Company	•		
Baker Environmental, Inc.	•		
Baker Hughes Mining Tools, Inc.			•
Barron Industries, Inc.	•		

Company Name	Emissions Control and Waste Disposal Systems	Facility Construction	Mining Equipment
Battelle	•		
Bechtel Corporation	•	•	
Birmingham Steel Corporation - Birmingham Bolt Div.			•
Black Gem Coal Company			•
Boston Sciencie, Inc.	•		
The Bowdil Company			•
Brechbuhler Scales Inc.			•
Brookville Mining Equipment Corporation			•
Bucyrus-Erie Company			•
Burningtons, Inc.			•
Burns & McDonnell	•		
Carlisle Equipment Company			•
Carnot	•		
Caterpillar Inc.			•
CeraMem Separations	•		
CH2M Hill International Ltd.	•		
The Clarkson Company			•
CLI Corporation		•	
Coal Tech Corp.	•		
CONSOL, Inc.	•		
Conn-Weld Industries, Inc.			•
R.L. Coolstaet Construction Co.		•	
Corhart Refractories Corporation			•
Cummins Engine Company, Inc.			•
Denver Equipment Company	•		•
Detroit Diesel Corporation	•		•
Diamond Power Specialty Company	•		
Drilex Corporation			•
Duke Energy		•	
Ecology and Environment, Inc.	•		
EIMCO Coal Machinery Incorporated			•
Electric Fuels Corporation	•	•	

Company Name	Emissions Control and Waste Disposal Systems	Facility Construction	Mining Equipment
Ellison Consultants	•		
EnCoal	•	•	
Energy and Environmental Research Corporation	•		
ENSR Consulting and Engineering	•		
The ERM Group	•		
ESCO Corporation			•
ETS, Inc.	•		
John Fabick Tractor Company		•	•
J.H. Fletcher & Company			•
Fluor Daniel Inc.		•	
FMC Corporation			•
Foster Wheeler Corporation	•	•	
GAI Consultants	•		
GAMMA-METRICS	•		•
GAR International Corporation			•
The Gates Rubber Company			•
GE Environmental Systems	•		
GeoResearch, Inc.	•		
Global Associates, Inc.	_	•	
Global Energy USA		•	
GPS Technologies, Inc.			•
GRAY STAR™ Division		•	
Greenley Energy Holdings of PA, inc.	•		
T.J. Gundlach Machine Company			•
Hays Republic Corporation	•		
HDR, Inc.	•		
Hebden, Schilbe & Smith, Inc.	•		•
HNTB Corporation	•		
ICE Export Sales Corporation			•
ICF Kaiser Engineers		•	
IGR Enterprises, Inc.	•		
Illinois Department of Energy and Natural Resources	•		

Company Name	Emissions Control and Waste Disposal Systems	Facility Construction	Mining Equipment
Interstate Equipment Corporation			•
ITT Flygt			•
Jeffrey Division, Indresco Inc.			•
Jenike & Johanson, Inc.			•
Joy Environmental Technologies, Inc.	•	•	
Joy Technologies, Inc.			•
JTM Industries, Inc.	•	•	
Kaskaskia Valley Scale Company			•
The M.W. Kellogg Company		•	
Koehler Manufacturing Company			•
Komatsu Dresser Company			•
Lamarche Manufacturing Company			•
LeHigh Valley Coal Sales Company			•
John B. Long Co.			•
Long-Airdox Company			•
LSR Technologies, Inc.	•		
Marietta Structures Corporation		•	
McNally Wellman	•		•
Mettler-Toledo, Inc.			•
MicroFuel Department, Fuller Power Corporation	•		
J.W. Miller & Associates, Inc.			•
Modern Refractories Service Corp.		•	
Monex Resources Inc.	•		
Montague Systems, Inc.		•	
Morrison Knudsen Corporation		•	
Neundorfer, Inc.	•		
Non Recovery Coke Associates		•	
Nordberg Inc.			•
Norton Chemical Process Products Corporation	•		
O'Brien Industries, Inc.	•		
Ohio Central Steel Co dba "The Screen Machine"			•
Ohmart Cororation			•

Company Name	Emissions Control and Waste Disposal Systems	Facility Construction	Mining Equipment
Oxbow Carbon International, Inc.	•		
Parsons Brinckerhoff Inc.	•		
The Raiph M. Parsons Company	•	•	
Pennsylvania Coke Technology, Inc.	•		
Pennsylvania Crusher Corporation			•
Philippi-Hagenbuch, Inc.			•
Progress Materials, Inc.	•		
Prox Company, Inc.			•
PSI Technology Company	•		
Pure Air	•		
Raytheon Engineers & Constructors, Inc.	•	•	
REICHdrill, Inc.			•
Sargent & Lundy	•		
Savage Industries, Inc.		•	
Science Applications International Corporation Fossil Energy Technology Division	•		
Silo International, Inc.			•
Simmons-Rand Company			•
Stock Equipment Company			•
Stone & Webster Engineering Corporation	•	•	
STV/Sanders & Thomas			
TAMS Consultants, Inc.		•	
Thunderbird Pacific Corporation			•
W.S. Tyler, Inc., Wedge Wire Division			•
Wahlco, Inc.	•		
Wheelabrator Air Pollution Control, Inc.	•		
Zinkan Enterprises, Inc.	•		

Company Name	Power Generation Systems	Technical Publications	Transport Equipment
ABB Combustion Engineering Systems	•		
ABSCO Scales			•
Acurex Environmental Corporation	•		
AirPol, Inc.	•		
Alanx Products L.P.	•		
Aspen Systems Corporation		•	
B & N Coal, Inc.		•	
Bechtel Corporation	•	•	
Black & Veatch			•
Brookville Mining Equipment Corporation			•
Burns & McDonnell	•		
Caterpillar Inc.	•		
Coal Extraction and Utilization Research Center		•	
Crosby Valve & Gage Company		•	
CSX Transportation			•
Cummins Engine Company, Inc.	•		•
Detroit Diesel Corporation	•		•
Diamond Power Specialty Company	•	•	
EnCoal	•		
Energy and Environmental Research Corporation	•	•	
John Fabick Tractor Company	•		
The Fieldston Company, Inc.		•	
Fluor Daniel Inc.	•		
Foster Wheeler Corporation	•		
GE Environmental Systems	•		
Global Associates, Inc.	•		
Global Energy USA	•		
Heyl & Patterson, Inc.			•
Honeywell incorporated	•		

Company Name	Power Generation	Technical Publications	Transport Equipment
	Systems	Publications	Equipment
ICE Export Sales Corporation	•		•
Illinois Department of Energy and Natural Resources		•	
International Software Co.		•	
Interstate Equipment Corporation			•
JTM Industries, Inc.		•	•
Lamarche Manufacturing Company	•		
McGraw Hill Inc./Coal Week		•	
McNally Wellman			•
MicroFuel Department, Fuller Power Corporation	•		
Morrison Knudsen Corporation	•		
NRG Energy, Inc.	•		
O'Brien Industries, Inc.			•
Oxbow Carbon International, Inc.		•	
Parsons Brinckerhoff Inc.	•		
Parsons Main, Inc.	•		
Peabody Engineering Corp.			
Pincock, Allen & Holt, Inc.		•	
Raytheon Engineers & Constructors, Inc.	•		
Resource Data International, Inc.		•	
Resource Dynamics Corporation		•	
Riley Stoker Corporation	•		
Savage Industries, Inc.			•
Science Applications International Corporation Fossil Energy Technology Division	•		
Silo International, Inc.	•		•
SSR Engineers, Inc.	•		
Steam Turbine Alternative Resources	•		
Stickney, Dufour & Associates, Inc.			•
Stone & Webster Engineering Corporation	•		
Trinity Industries, Inc.			•
Trinity Marine Group			•
Tuthill Corporation - Coppus Murray Group	•		
Western Branch Diesel, Inc.	•		

ABB Combustion Engineering Systems 1000 Prospect Hill Road Windsor, CT 06095

Telephone:

(203) 285-5895

FAX:

(203) 285-4250

President/CEO: Sales Manager:

Richard Cronin Michael Bray

Domestic Office:

Several domestic offices

ABB Combustion Engineering Systems (ABB CE) is a world leader in the design and manufacture of steam-generating equipment. ABB C-E offers a full scope of electric utility and industrial boilers to the power plant marketplace, including: pulverized coal fired units, heat recovery steam generators, circulating fluidized bed boilers, chemical recovery units and package boilers. ABB C-E's boiler designs are being driven by customers' needs for wide-fuel-range capability, maximum efficiency, maximum operating flexibility and reduced maintenance. All designs offer environmentally compatible, cost-effective solutions for reliable steam production.

Products/Service Description

Fossil-fired boilers The ABB C-E tangential system is the basis for efficient low NOx firing for pulverized coal. Tangential firing's unique rotating flame envelope ensures thorough mixing and proper residence time of fuel and combustion all within the furnace. The result is maximum fuel burnout with low NOx emissions over the entire boiler load range. ABB C-E also offers a complete range of infurnace and post-combustion NOx control systems to meet the most stringent emission standards.

ABB's environmentally sound steam-generating systems are readily adapted to the fuel, load and layout of any plant.

ABC Industries, Inc. P.O. Box 77 Warsaw, IN 46581-0077

Telephone: (219) 267-5166 FAX: (219) 267-2045

Chief Executive Officer: International Sales Manager:

Stephen B. Rufenbarger Robert B. Foust

Domestic Offices:

GRAND JUNCTION, CO: P.O. Box 2928, Grand Junction, CO 81501 TEL. (303) 242-3904 FAX (303) 245-6113;

WALLACE, ID: P.O. Box 1142, Wallace, ID 83873-1142, TEL. (208) 752-1157 FAX (208) 556-7621; WAYNESBURG, P.A.: P.O. Box 33, Waynesburg, PA 15370 TEL. (412) 627-8141 FAX (412) 852-1746

International Offices:

Please contact company headquarters for further information

Established in 1926, ABC Industries, Inc. is a leading manufacturer of mine and tunnel ventilation products in the U.S. Mining products include brattice cloth, mine curtains, flexible (layflat) blower tubing, wire-related exhaust tubing, fiberglass ventilation tubing, and vaneaxial or centrifugal fans.

Product/Service	Designation	Description
Ventilation Tubing	MINEVENTO MINEDUCTO RIGIDUCTO	Flexible (Layflat) Blower Tubing Wire-Reinforced Exhaust Tubing Filament-Wound Fiberglass Ventilation Tubing

(Continued on next page)

ABC Industries, Inc. (Continued)

Plastic Brattice VENTATEX®

Weft Insertion Knitted Scrim between two sheets of viny! film. Meets ASTM E-162. VENTATEX® made with a patented, highly tear-resistant Weft Insertion

VENTATEX®
RIPSTOP

Knitted Scrim.

Mining Accessory POWDER BAGS

TANK COVERS

TUBING REPAIR KITS

Ventilation Fan FLOLINE™ FAN Vaneaxial or centrifugal fans for mine and tunnel ventilation.

Tubing Cassette MINEVENT[♦] Allows easy pay-out of MINEVENT[♦] (layflat) Blower Tubing.

AUTO-FEED™ Usually mounted on TBM equipment

TUBING CASSETTE

ABSCO Scales 9807 Johnstown Road New Albany, OH 43054

Telephone: (614) 855-9500 **FAX:** (614) 855-2993

President: Mark A. Stoj

Domestic Offices: Main - Columbus, OH

Branch - Ashland, Canton, Cleveland, Dayton and Toledo, OH

Design and manufacture legal regular and heavy duty vehicle scales. Standard and custom design of load cell mounting hardware to convert non-weighing material handling equipment into weighing devices. Design and manufacturing of floor scale platforms to a capacity of 100K. Custom computerized systems for data acquisition and material control.

Products/Service Description

Vehicle Scales Regular and heavy duty electronic truck scales. NTEP approved from 30' to 90' long. Capacities 300,000 lbs.

Load Cells & Mounts Hardware to instrument bins, tanks and hoppers for weighing applications. Conversion kits to convert mechanical scales

to electronic weighing devices.

Data Processing Complete hardware and software packages for truck scale in/out weighing, bulk load out systems and process control

systems.

Acurex Environmental Corporation 555 Clyde Avenue P.O. Box 7044 Mountain View, CA 94039

Telephone: (415) 961-5700

Telex: 325961 FAX: (415) 964-6523

President:

Howard L. Morse

International Sales Manager: John W. Schaefer

Domestic Offices:

Eastern Region: P.O. Box 13109, Research Triangle Park, NC 27709; Incineration Research Facility:

NCTR - Building #45, Jefferson, AR 72709; Southwest Region: 4879 E. La Palma Ave., Ste. 201, Anaheim, CA 92807

Acurex

Environmental

CORPORATION

A Geraghty & Miller Company

International Offices:

Please contact headquarters for information

Acurex Environmental Corporation is a full-service energy and environmental engineering and consulting firm. The company specializes in air and multimedia environmental compliance and technologies with emphasis on combustion systems. They provide services to industrial and utility clients and public jurisdiction in compliance with federal, state, and district regulations. These services include emission and combustion systems monitoring, process and emissions characterization and controls, environmental and energy facilities operation, clean alternative fuels demonstration and implementation in mobile and stationary applications, and incineration technology and monitoring. Acurex Environmental has a staff of over 200, and is a wholly-owned subsidiary of Geraghty & Miller, Inc.

Product/Service	Description
Coal Derivatives	Technology development, application engineering, and introduction to use of coal-derived methanol and environmentally-clean coal briquettes
Advanced Utilization	Technology development in emission controls for IGCC powerplants, in combustion and emission controls, including low NO, burners, for industrial and utility combustion equipment, and in coal briquetting for low emissions, high efficiency combustion
Architect & Engineers	Design, fabrication, and installation of research and prototype coal combustion equipment including boilers, furnaces, gasifiers, and fluidized bed combustion
Boiler Equipment	Technology development, testing, application engineering, and implementation of combustion and emission controls, hazardous waste cofiring, and natural gas reburning for industrial and utility boilers
Emissions Control and Waste Disposal Systems	Technology development, testing, application engineering, and implementation of NO ₂ and SO ₂ , air toxics, PM10, and CO ₂ controls for utility and industrial combustion equipment.
Facility Construction	Construction management and installation of research and prototype coal combustion equipment
Power Generation Systems	Technology development, testing, application engineering, and implementation of emission and combustion control systems, burner systems, and boiler modification
Facility Operations	Operate and perform research and development in advanced combustion equipment
Sampling Services and Equipment	Emission sampling and analysis (testing as used above) of all emissions, and measurement of all combustion parameters, including mass and energy balances, design and fabrication of specialized test equipment
Technical Consultants	Consulting and engineering in all services described above

Adalet-PLM 4801 West 150th Street Cleveland, OH 44135

Telephone: (216) 267-9000

Telex: 98 5349 FAX: (216) 267-1681

President/Chief Executive Officer: James W. Sutherland V.P. Sales and Marketing: Frank P. Sincaglia International Sales: William Chapman



Adalet and PLM acquisitions of Scott Fetzer Company, were consolidated as Adalet-PLM in 1977. Adalet, manufacturing cast aluminum electrical enclosures for the petrochemical industry, was founded in 1928. PLM, founded in 1951, manufactures splices, fittings, and terminations for armored, paper insulated lead and extruded dielectric cables. In 1957, PLM developed a coupler for joining trailing cables in underground and surface mines. The PLM design was the first coupler designed with a ground check interrupting circuit for safe disconnect, and the first capable of handling 500 amperes and voltages up to 7500 volts (later extended to 15000).

Product/Service Designation Description

Coal Mining PLM 415 Portable Cable Couplers

Power Generation Systems

Mining Equipment

PLM High Voltage Portable Cable Couplers with rigid, nonbreakable EPDM insulators for 0-15,000 volt, 500 ampere application in surface and underground mining. Quik-Thread positive 2-1/2 turn coupling collar eliminates mating problems and makes safe, fast, easy connection. Water-tight construction, corrosion resistant aluminum body, positive built-in "first make last break" ground connection, line or equipment mount types, ground check circuit contacts.

AirPol, Inc. 30 Henry Street Teterboro, NJ 07608

Telephone: (201) 288-7070 **FAX:** (201) 288-6441

President/CEO: Willard L. Goss
Sales Manager: Jorgen G. Hedenhag

Domestic Offices: 30 Henry Street, Teterboro, NJ 07608

2572 S. Union Avenue, Bakersfield, CA 93307

AirPol, Inc. is a wholly owned subsidiary of FLS miljo, which is part of FLS Industries (F.L. Smidth), a worldwide organization with corporate headquarters in Copenhagen, Denmark. The annual sales of the group exceed \$2 billion and it employs more than 10,000 people.

AirPol has been a leader in the U.S. for over 25 years in furnishing air pollution control systems to a broad base of customers and has established a network of offices throughout the United States and Canada to offer our clients quality service and direct communication.

Among AirPol's unique achievement:

Over 1000 gas scrubbing installations;

Over 1200 precipitators and 200 FGD boiler systems on stream;

Supply and construction of major gas scrubbing processes, including sodium, lime, limestone, Thiosorbic lime, magnesium oxide, and dual alkali;

Designers of systems utilizing the enhanced Thiosorbic lime process. This process is installed on over 8500 MW of utility generating capacity.

Installation of dry scrubber (GSA) demonstration plant, at TVA Shawnee Power Station in Paducah, KY as part of the DOE Clean Coal Technology Program.

(Continued on next page)



AirPol, Inc. (Continued)

Products/Service

Description

Products and Services provided by AirPol include systems for particulate control flue gas desulphurization and absorption of gaseous pollutants. The pollution control equipment comprises electrostatic precipitators, fabric filters, dry scrubbers and wet scrubbers and absorbers. The systems are supplied on an equipment only or on a turnkey basis. Erection advisory services as well as installation with start-up and operator training are also part of the AirPol scope of supplies.

Alanx Products L.P. 101 Lake Drive Newark, DE 19702

Telephone: FAX:

(302) 454-6900 (302) 453-0194

President: Sales Manager: Richard Webb Bob Martin



Alanx Products L.P. provides engineered wear solutions to many industries, including coal, hard-rock mining, utilities and chemical industries. Founded in 1988 to commercialize a unique technology, the company today manufactures a wide range of products based on ceramic/metal composites and other advanced, highly wear-resistant materials. Typically ALANX® composites outperform conventional materials many times over, and their use leads to significant cost savings.

Product/Service	Description
Pump components	Alanx Products manufactures and stocks a wide range of ceramic/metal composite pump components, including liners, impellers and shaft sleeves for most slurry pumps.
Cyclone components	Apexes, cones, vortex findes and other cyclone parts are manufactured and stocked for most cyclone types and sizes in ALANX® 2K+ ceramic/metal composite.
Linings	Alanx Products manufactures custom-made components such as chute linings and other specialty parts using unique ceramic/metal composites.

The American Gulf Company P.O. Box 721494 Houston, TX 77272-1492

Telephone: (713) 561-6273

Telex: 287233 AMEGU UR Chief Executive Officer: International Sales Manager: FAX: (713) 495-9645

Mr. Manuel Araya Mr. Manuel Araya

Domestic Offices:

6218 Highway 6 South, Houston, TX 77083

International Offices:

Please contact Company's Headquarters for further information.

The American Gulf Co. is a Procurement and Export Service company. It was established in 1974 to serve the Mining Industry. Our export line

includes:

Product/Service

Description

Electric Equipment

Laboratory Equipment

Mining Equipment Boiler Equipment Transport Equipment

Freight Forwarders

Extracting, crushing, conveying.

Including freight consolidation at any U.S. airport.

The American Mine Door Company P.O. Box 6028 Canton, OH 44706

Telephone: (216) 454-7055 **FAX:** (216) 454-7057

President/CEO: Sales Manager:

Lawrence R. Vignos Lawrence R. Vignos

Domestic Offices:

1387 Clarendon Avenue, S.W., Canton, OH 44710

Manufacturers since 1906 of custom built ventilation control doors for track or trackless installations. Doors are available with either pneumatic or hydraulic operated opener. Introduced mechanized track cleaning to underground mines in 1943 with custom built "Canton Track Cleaners". A leader in the manufacture of cable vulcanizing machines since the introduction of the "Big John" cable vulcanizer in 1970.

Products/Service Description

Doors Used around the world in all types of mines--track or trackless, successfully controlling air pressures of 18" WG and above.

Track Cleaners Towed by a haulage locomotive, this D.C./hydraulic powered machine cleans and levels the roadbed to tie level 6-1/2 feet

each side of track center line. Used in coal and ore mines worldwide.

Cable Vulcanizers Available with steel frame (for shop use) or aluminum frame (for in mine use). Vulcanizes cables from #8 to 4/0.



Amerikohl Mining, Inc. **202 Sunset Drive** Butler, PA 16001



APPLIED POWER ASSOCIATES

Telephone: (412) 282-2339 FAX: (412) 282-3226

President/Owner:

Vice President Sales:

John M. Stilley

Gerard P. Baroffio, Butler Division

Robert J. Shaffer, Central Pennsylvania Division

Domestic Offices:

BUTLER, PA: 202 Sunset Drive TEL: (412) 282-2339; ACME, PA: P.O. Box 427, Acme, PA 15610 TEL: (412)

Amerikohl Mining, Inc. was originally incorporated in 1978 by John M. Stilley and employs approximately 100 dedicated employees with an average of six (6) years with the company. Our principal business is the mining and preparation of steam coal sold primarily to electric utilities in the Northeast, Great Lakes Region, West Virginia, and Ohio.

Product/Service

Description

Coal Mining

High quality steam coal from mines in Western and Central Pennsylvania and West Virginia.

Applied Power Associates, Inc. 9330 Underwood Avenue, Suite 400 Omaha, NE 68114

Telephone: (402) 390-9300 FAX: (402) 390-2005

Richard E. Holloway, P.E.

AC/DC system analysis, PLC design services.

Chief Executive Officer: Spencer C. Stevens, P.E. International Sales Manager:

Applied Power Associates, Inc. (APA) is a multi-discipline engineering and architectural firm. APA provides mechanical, civil/structural, chemical, electrical and instrumentation and control consulting services to a wide range of electrical power generation clients including public, private and independent power producers. Project capabilities include: siting studies, facility layout, system design, specification development, construction management, and plant startup and operation services.

Product/Service	Description
Architecture/Engineering	Full services for coal-fired power generation facilities including conceptual design, environmental analyses, licensing/permit development, economic analysis, energy conservation, planning, scheduling and procurement.
Mechanical	HVAC, piping and plumbing design, pipe stress analysis, thermal analysis design services.
Civil/Structural	Building and equipment support structural design services, seismic analysis.
Chemical	Sludge handling, water and waste water treatment systems, chemical feed systems, protective coating, sampling and analysis design services.
Electrical/I&C	Electrical distribution development, substation development, protective device coordination, cathodic protection,

Aspen Systems Corporation

Aspen Systems Corporation 962 Wayne Avenue Suite 701 Silver Spring, MD 20910

Telephone: (301) 585-8181

Telex: 405708 FAX: (301) 495-8655

Chief Executive Officer:

Harvey Byrd

International Sales Manager:

Patrick M. McCarthy

Domestic Offices: International Offices: OAKRIDGE, TN; NEWPORT NEWS, VA; CRYSTAL CITY, VA; PORTSMOUTH, NH; SAN DIEGO, CA

Please contact company headquarters for further information.

The Applied Management Sciences Division of Aspen Systems Corporation, a private professional services research firm, was established in 1970 on the premise that leaders and managers in government and industry require timely, objective, and thorough information to make better short-term and long-term decisions. Aspen Systems has over 1000 employees; the Applied Management Sciences Division professional staff numbers over 100 economists, engineers and energy analysts. Over the years, Applied Management Sciences has applied state-of-the-art methodological techniques to a wide range of analytical management problems. Refinement of our techniques and approaches has enabled us to offer proven, cost-effective solutions to client problems and to make valuable contributions to several fields of specializations. More recently, Applied Management Sciences has begun offering conference support for technical symposia on energy-related specialty subjects. Applied Management Sciences' field of specialization include market forecasting, marketing studies, market surveys, quality control program designs, price modeling, and management information systems.

Product/Service	Description
Marketing Research Services	Collects market data using surveys, elite interviewing, public document review. Prepares market reports on general or specific subjects related to fuel use and energy. Prepares status reports of technology usage and state-of-the-art. Evaluates technologies' potential in specific markets. Identifies markets for fuels and energy technologies. Prepares market overviews. Analyzes economic benefits of programs designed to influence customer energy usage.
Quality Control	Provides customized sample designs for fuel sampling and product quality control.
Conference Support	Creates and manages conferences, seminars and workshops on specialized energy subjects. Services include calls for papers, invitations, agendas, hotel and travel logistics, meals, audio and visual aids. Provides travel and related logistic services for technical and market exchange visits with other countries. Prepares and publishes formal proceedings. Recent international experience has been with U.K. and U.S.S.R.
Management Information Systems	Develops specialized PC or mainframe management information systems for tracking project costs, progress, budget, and schedule. Collects and creates associated databases. Develops information systems in a variety of commonly used software.

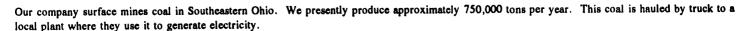
B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727

Telephone: (614) 673-3575 **FAX:** (614) 783-5455

President/CEO: Sales Manager:

Carl Baker, Jr.

Carl Baker, Jr.



Our company has received many awards in the State of Ohio and has received two National Awards for our outstanding reclamation after remining of predominantly previously mined and unreclaimed strip mined land. We are capable of mining much more coal than we are presently. The coal can be made readily available for other markets.

Products/Service	Description				
Coal	Our coal is high in sulfur content; however, it is high in BTU's.				
Limestone	Our limestone is produced by our subsidiary company - Sharon Stone Company. It is used locally for road surface materials and riprap.				
Reclamation and Construction	We reclaim many acres of previously unreclaimed strip mine spoils. We also bid on jobs which are contracted by abandoned mine lands and RAMP Programs. We also do site development and construction.				

Babcock & Wilcox, a McDermott Company 20 South Van Buren Avenue Barberton, OH 44203

Babcock & Wilcox

a McDermott company

Telephone: (216) 753-4511 **FAX:** (216) 860-1886

President: V.P., Sales and Service:

Joe J. Stewart J.E. Pollock

Domestic Offices:

AKRON, OH: (216) 334-2530, FAX (216) 336-8662; ATLANTA, GA: (404) 939-6292, FAX (404) 621-3922; BARBERTON, OH (Staff): (216) 753-4511, FAX (216) 860-1886; BIRMINGHAM, AL (Service): (205) 985-0333, FAX (205) 988-3095; BOSTON, MA: (508) 366-8786, FAX (508) 366-8467; CHARLOTTE, NC: (704) 334-4742, FAX (704) 334-1438; CHERRY HILL, NJ: (609) 665-2490, FAX (609) 665-7057; CHICAGO, IL: (708) 963-0180, FAX (708) 719-5098; CINCINNATI, OH: (513) 772-1606, FAX (513) 772-2176; DALLAS, TX: (214) 233-9924, FAX (214) 233-9566; DENVER, CO: (303) 988-8203, FAX (303) 985-1842; HOUSTON, TX: (713) 870-5800, FAX (713) 870-5851; KANSAS CITY, MO: (816) 941-2073, FAX (816) 941-2296; LOS ANGELES, CA: (714) 236-0432, FAX (714) 236-0752; NEW YORK, NY (Service Only): (212) 679-3922, FAX (212) 679-3969; ST.

PETERSBURG, FL: (813) 576-6770, FAX (813) 576-0626; VACAVILLE, CA: (707) 451-1100, FAX (707) 448-1506; VANCOUVER, WA (was Portland): (206) 944-5477, FAX (206) 944-5481;

Resident Salesman:

R.S. Leckonby, 5 St. Andrews Dr., Queensbury, NY 12804, (518) 798-1506, FAX (518) 798-1307

International Offices:

B&W Beijing Boiler Works, Beijing, China; Thermax B&W, Pune, India; PT Babcock & Wilcox Indonesia,

Batam, Indonesia; Babcock & Wilcox International, Cambridge, Ontario, Canada

Babcock & Wilcox, founded in 1867, is the oldest major U.S. supplier of boilers and steam generating equipment for power generation and industrial applications. In 1992, Babcock & Wilcox booked orders for 4,800 MW of new boilers, more than 20 percent of the entire world market for new boilers, and more than any other reaccording to McCoy Power Reports. B&W's steam generating units are designed for the full spectrum of fossil fuels, including the complete range of coals (anthracite, bituminous, and lignite). B&W manufactured 35 percent of the utility fossil-fueled boilers in operation in the United States today. McDermott International, Inc. acquired B&W in 1978. Total company revenues in Fiscal Year 1992 were \$3.5 billion, including \$1.6 billion from Babcock & Wilcox. Net Income in FY92 came to \$77 million. Total McDermott employees number 30,000.

(Continued on next page)

Babcock & Wilcox (Continued)

Products/Service

Boilers

Watertube boilers from 20,000 pounds per hour steaming capacity up to 9,300,000 pounds per hour; boilers for steam, electric power, cogeneration, chemical process recovery or incineration of municipal solid waste; boilers burning coal, oil, natural gas, wood, agricultural waste, refuse, kraft liquor, bagasse and other fuels; boilers fired by stokers, fluid beds, pulverizers, or other fuel feed systems; burners; pulverizers.

Boiler Services

Boiler maintenance and repair; boiler condition assessment; boiler erection; boiler upgrades and retrofits; for example, cycling systems, balanced draft conversions, fuel changes, and other upgrades.

Environmental Control Systems

Scrubbers to remove sulfur dioxide from flue gas; electrostatic precipitators to remove particulate; selective catalytic reduction systems to remove nitrous oxides, and low NOx burners.

Baker Environmental, Inc. 420 Rouser Road, Building 3 Airport Office Park Coraopolis, PA 15108



Telephone: (412) 269-6000

Telex: 866287 FAX: (412) 269-6097

Chief Executive Officer: Andrew P. Pajak, P.E.

International Sales Manager: Peter S. Bussey

Domestic Offices: MERRILLVILLE, IN: 701 East 83rd Avenue, Merrillville, IN 46410 - Phone (219) 736-0263;

PRINCETON, NJ: 307 College Road East, Princeton, NJ 08540 - Phone (609) 734-7900;

CYPRESS, TX: 18119 Telge Road, Cypress, TX 77429 - Phone (713) 351-9847; WESTBORO, MA: Lyons Street, Westboro, MA 01581 - Phone (508) 366-9191;

International Offices: WIESBADEN, GERMANY: Abraham-Lincoln-Strasse 34, 6200 Wiesbaden - Phone 0611-700003

CAMBRIDGE, ENGLAND: Milton Road, Cambridge, England CB44GF - Phone (0223) 420051

Baker Environmental, Inc. is the environmental management unit of the Michael Baker Corporation, a full service architectural, engineering and planning firm established in 1940. The firm has a long history of providing professional services to the coal industry and major consumers of coal, including the electric utility and steelmaking industries. Specific coal related services include by-product disposal and utilization investigations, landfill design and permitting, economic evaluations and regulatory impact analyses. Clients include the U.S. Department of Energy, Electric Power Research Institute, National Coal Association/American Mining Congress, Consolidation Coal Company, USX Corporation, Bethlehem Steel Corporation, and Armco Steel Corporation.

Product/Service	Description		
Emissions Control and Waste Disposal Systems	A full range of emission control by-products utilization and disposal services are offered. Baker/TSA, Inc. is capable of evaluating a full range of combustion and emission control technologies.		
Advanced Utilization	A full range of emission control by-products utilization and disposal services are offered. Baker/TSA, Inc. is capable of evaluating a full range of combustion and emission control technologies.		
Utilities	A full range of emission control by-products utilization and disposal services are offered. Baker/TSA, Inc. is capable of evaluating a full range of combustion and emission control technologies.		
Architecture/Engineering	Various units of the Corporation provide a full spectrum of A/E services including environmental engineering, geophysical testing, geotechnical engineering, mining engineering, industrial hygiene, asbestos abatement design, architecture, civil engineering, structural engineering, electrical engineering, mechanical engineering, and fire protection design.		

Baker Hughes Mining Tools, Inc. P.O. Box 531226 Grand Prairie, Texas 75053-1226 U.S.A.



Telephone: (214) 988-3322

Telex: 163152 BH Chief Executive Officer:

163152 BHMTGP UT FAX: (214) 602-3135 ve Officer: Mr. Robert W. Thomas

V.P./General Manager: Mr. Robert W. Thomas

International Offices:

SOUTHWEST EUROPE AND WEST AFRICA: Daniel Moawad, 7 Rue du Bilaa, 64230, Lescar, France, TEL: 33-

59-811397, FAX: 33-59-811438;

SOUTH AFRICA: Andre Kruger, P.O. Box 8235, Elandsfontein 1406, Republic of South Africa, TEL: 27-11-826-

5182, FAX: 27-11-823-1939, TELEX: 960 740154;

MEXICO: Roberto Ibarra, Rio San Lorenzo No. 442 Oriente, Col. Del Valle, 66220 Monterrey, N.L., Mexico, TEL: 91-83-78-0720, FAX: 91-83-78-0721, TELEX: 1774248 EVTME; AUSTRALIA: Ross Jackaman, P.O. Box 308, Hamilton Central, Qld. 14007, Australia, TEL: 61-7-268-4044, FAX: 61-7-268-4251, TELEX: 790-41266

Baker Hughes Mining Tools is the world leader in reducing total drilled cost through higher penetration rates and longer time on bottom. Rotablast Tri-Cone blasthole bits and big-hole boring tools cover every type of mining drilling operation, including blast holes, exploration, water wells, shaft drilling, and raise boring. Strategically located throughout the world, sales technicians and engineers work closely with customers to provide the best solutions to specific drilling problems by tailoring tools and services to local applications. The company has two manufacturing and engineering facilities, including the 85,000 sq ft world headquarters near Dallas, Texas.

Product/Service

Description

Rotablast Tri-Cone bits are a premium-quality product for the mining industry, providing lower total drilled cost through higher penetration and longer time on bottom. Available as tungsten carbide insert or steel-tooth bits, models range in size from 2-15/16 to 17-1/2; special sizes and applications are available on request.

Big Hole Tools

The company is the leader in both raise-boring and shaft drilling for very large diameter holes. Cutters and heads are available for the full range of diameters and rock types commonly mined today. Product developments include three new raise-boring cutters that can be arranged for either 2 in. or 1 in. kerf spacing, all on the same head.

Barron Industries, Inc. P.O. Box 570 Leeds, AL 35094



Telephone: (205) 956-3441

FAX:

(205) 956-2265

General Manager:

B.L. Benner

Barron Industries, a subsidiary of New York Blower Corporation, was formed in 1973, and is engaged in the design, manufacture, sale, service, and repair of fans and related flue gas handling equipment used in process applications.

Product/Service	Designation		Description		
Flue Gas Handling Fans	Radial Blade Airfoil Radial Tip Forward Curve Backward Curved		Fans for extremely low to extremely high airflows with moderate to extremely high pressures, particularly for abrasive or corrosive atmospheres.		
Dampers	Guillotine Multilouver Butterfly Variable Inlet Vane		Round or rectangular, for low leakage or zero leakage, for draft control, for temperature control, flow control, or controlling fan performance.		
Dust Collectors	High Efficiency Multi-Tube Centrifugal Type Dust Collectors		9", 14" and 24" tube diameters, accessible, unlimited size.		
Dump Valves	Double Dump, Airlock Seal Valves		8", 10", and 12" double dump valve for evacuating material from hoppers and bins while maintaining an airlock seal.		
Expansion Joints	Gas & Vapor Duct & Low Pressure Metal & Cloth		Up to 100" pressure, rectangular and round, U-shape convoluted style.		
Access Doors	Bolted Doors for Ducts, Hoppers, etc.		Ductile iron, 6" x 9", 18" x 18", 18" x 24", & 24" x 30", including door, frame & quick clamps.		

Battelle 505 King Avenue Columbus, OH 43201



Telephone: (614) 424-6424

Telex: 24-5454 FAX: (614) 424-5263

Chief Executive Officer:

Dr. Douglas E. Olesen
International Sales Manager:

Mr. John S. Christic

International Offices: Am Romerhof 35, Frankfurt Germany; Tel: 49-69-79080, 7, route de Drize, Carouge-Gneva; Tel: 41-22-

270270

Battelle assists industry and government in developing, commercializing, and managing technology. With a wide range of scientific and technical capabilities, Battelle solves problems, develops and improves products and processes, provides on-site technical assistance, and manages large, complex technology programs. Its 8,400 staff serve clients in more than 30 countries with other offices in many of the largest cities in the world. Battelle was founded by Ohio industrialist Gordon Battelle, who recognized that a constantly changing world can be improved through advances in technology and education.

Product/Service	Description
Coal Utilization Technologies	A multiclient effort to identify and assess new coal utilization technology is now in its ninth year of operation. There are no significant penalties for late participants.
Fluidized-Bed Technology:	Extensive experiences with multisolid fluidized-bed technology is available for use in various applications including combustion, gasification, desulfurization, etc. Some uses are now available only through licenses.
New Materials	As in most applications, the performance of materials eventually becomes the primary factor limiting usage. Battelle has numerous ongoing programs to assist in problem definition and materials selection with regard to various coal utilization technologies.
Coal Beneficiation	Processes for advanced treatment of coal is an area of much current activity with substantial patent protection now being developed. Use of combined fields and application of genetic manipulation of biological agents are under study.
Emissions Control	The research area still receiving much attention is the development of improved technology for the control of emissions, including hydrothermal treatment, means to optimize cleaning plants, high temperature combustion systems, fiber filters, use of additives, improved wet-scrubbing processes, and waste utilization and disposal. A 20-year-old international multiclient stack gas coordination center also continues to provide implementation information.
Process Optimization	One of the key aspects of any new technology is proper modeling of the system before construction and installation of the full scale system. Battelle has provided pioneering of this service in this area over the years.

Bechtel Corporation
Fifty Beale Street
P.O. Box 193965
San Francisco, CA 94105-1895

Telephone:

Service

(415) 768-1234

Telex: 184907 BECHTEL SFA FAX: (415) 768-9038

President/CEO:

Riley Bechtel

Description

Domestic Offices:

Athens, AL; Boston, MA; Charlotte, NC; Gaithersburg, MD; Houston, TX; Kingsport, TN; Los Angeles, CA; Louisville, KY; New York, NY; Oak Ridge, TN; Palm Beach Gardens, FL; Pottstown, PA; San Francisco, CA;

Savanna River, SC; Washington, DC

International Offices:

Aberdeen, Scotland; Abu Dhabi, UAE; Bangkok, Thailand; Beijing, PRC; Caracas, Venezuela; Melbourne, Australia; Manila, Philippines; Montreal, Canada; Moscow, Russia; Rio De Janeiro, Brazil; Riyadh, Saudi Arabia; Santiago, Chile; Seoul, Korea; Singapore; Tokyo, Japan; Toronto, Canada. Besides these there are several joint venture offices in various parts of the world.

Since its establishment in 1898, Bechtel has developed into one of the world's largest, most experienced engineering and construction firms. In the past 95 years, Bechtel has been engaged around the world to perform studies, engineering, procurement, construction, and plant operation services. Bechtel has specialized in many areas including fossil-fired and nuclear power generation, refineries and chemical plants, mining and metals facilities, all types of pipelines, and hydro and community facilities.

Beechtel has engineered and constructed facilities for coal mining, handling, storage and transportation, electric power generation, coal conversion, and pollution control. Beechtel maintains a long-term involvement in federal, state, and local governments' clean coal development programs, and works with various industries to expand clean coal technology commercial applications.

	•
Engineering, Procurement, and Construction in the following major business areas:	
Petroleum, Chemical & Industrial	Bechtel has earned a reputation as one of the finest builders of petroleum, gas, pipeline and chemical projects in the world.
Power	Bechtel's share of the U.S. fossil market is approximately 25%.
Civil	Major construction (national as well as international) in the area of airports, tunnels, roads and bridges.
Environmental	Bechtel is the largest environmental contractor in the world with experience in all phases of the environmental business.
Mining & Metals	Bechtel, as the market leader, is actively involved internationally in a variety of mining projects.

Bechtel Enterprises, Inc. Fifty Beale Street San Francisco, Ca 94105-1895

Telephone: (415) 768-6745

Telex: 184907 BECHTEL SFA FAX: (415) 768-2154

Chief Executive Officer: John D. Carter
International Sales Manager: Timothy D. Statton

Domestic Offices: SAN FRANCISCO, CA: 50 Beale Street, 22nd Floor, San Francisco, CA 94105-1895;

TEL. (415) 768-6745, FAX (415) 768-2154

GAITHERSBURG, MD: Ronald L. Lillejord, 15740 Shady Grove Road, Gaithersburg, MD 20877-1454;

TEL (301) 417-0195, FAX: (301) 926-6003

International Offices: ENGLAND: Steven C. Williams, 245 Hammersmith Road, London, W6, 8DP; TEL. (44-81) 846-5111,

FAX: (44-81) 846-6940

SINGAPORE: Michael A. Adams, 331 North Bridge Road #18-02, Odeon Towers, Singapore 0718; TEL (65)

339-5022, FAX (65) 339-8090

As a developer and merchant banker subsidiary of Bechtel Group, Inc., one of the world's leading engineer-constructors, Bechtel Enterprises provides a full spectrum of project services to assist clients develop projects. Services include economic, financial, and technical feasibility studies; preliminary engineering; site selection and acquisition; formation of development partnerships; structuring of commercial arrangements, such as sales contracts, supply arrangements, operating arrangement, and construction contracts; arranging debt and equity financing; permitting and approvals; and startup and operations. Bechtel Enterprises has funded development efforts and taken equity positions on projects throughout the world.

Product/Service	Description
Development	Bechtel Enterprises works with developers from concept through startup and operations and can utilize Bechtel's considerable technical and engineering resources. Experience includes coal-fired power and cogeneration facilities, coal gasification, mining, marine terminals, coal slurry pipelines, and other projects.
Financing	Bechtel Enterprises has arranged over \$7 billion in project financing over the last decade from international sources, such as commercial banks, export credit agencies, international financial institutions, bilateral agencies, and other sources.
Operation	Bechtel Enterprises is experienced in starting up and managing the operations of power and other facilities.

Bechtel Power Corporation 9801 Washingtonian Boulevard Gaithersburg, MD 20878-5356

Telephone: (301) 417-4817

Telex: (301) 374-6647 FAX: (301) 990-1642
Chief Executive Officer: A. Zaccaria
Vice President and Manager: R. J. Clipper

Domestic Offices: Gaithersburg, MD; San Francisco, CA; Los Angeles, CA; Houston, TX; Chicago, IL; Palm Beach

Gardens, FL; Athens, AL

International Offices: London, Moscow, Madrid, Cairo, Hong Kong, Singapore, Riyadh, Taipei, Tokyo, Toronto

Bechtel Power Corporation, a member of the Bechtel group of companies, is well-known throughout the world as a premier engineering/construction/management firm specializing in a wide range of services to the power industry. Bechtel's experience includes operating plant services, and the engineering and construction of over 325 fossil-fired units. Services provided to the power industry include planning, engineering studies, environmental licensing, emission control, detailed engineering, procurement, construction, construction management, project management, plant operation, availability improvement, and plant life-cycle management services.

Product/Service

Description

Advanced Coal Utilization

Services to design and build coal transport, handling, and beneficiation systems to provide a fuel which best matches the boiler and emission control requirements. Conceptual design, detailed system design, and equipment selection for fuel systems from the mine to the boiler; Coal Technology - Services to provide feasibility studies, economic evaluations, conceptual design, cost estimates, detailed engineering, procurement and construction utilizing advanced coal technology such as direct and indirect liquefaction/gasification combined cycle plants; atmospheric and pressurized fluidized bed combustors; pulverized coal-fired plants with wet or dry flue gas desulfurization systems. Services to provide conceptual designs and cost estimates for the commercialization of advanced cleaning, drying, and wet carbonization technologies and processes under development. Design, construction, and operation of pilot plants and proof-of-concept test facilities; New Fuel Forms - Services to design and build process, transport, and distribution facilities for new fuels from coal such as coal-water slurries, agglomerated fine coal, and dewatered lignite.

Architect/Engineer

Architect/engineer and construction services to domestic and international governments and utilities, independent power producers, and cogenerators. Full service turnkey programs including lump sum contracting, economic and technical feasibility studies, environmental licensing, project management, and start-up services. Operating plant services including refurbishment, availability improvement, and life cycle management.

Benthamite Corporation 1110 Springfield Pike, Suite 4 Cincinnati, OH 45215

Telephone: (513) 821-4344

Chief Executive Officer: International Executive Director: Mr. Anthony R. Browne Mr. Barry R. Brown

International Offices:

ENGLAND: Prince Consort House, 27 Albert Embankment, London, England SE17TF

TEL. 011-44-71-735-6730

Benthamite Corporation (formerly Firebrand International Corporation) has over the past eleven years created through extensive research and development, twelve (12) patents. Each is atomically designed and intrastructured with precision for their advantage as an unprecedented technology and process in the control and capture of SO₂ and NO₄ emissions from stationary coal-fired sources.

Two classes of materials have been developed:

(1) Composite Materials: These are multiphasic (80 m²/g), nonoscopic mixtures containing highly reactive bases dispersed on a complex layered oxide matrix containing a catalyst, producing a new architectural assembly.

(2) Precipitated Materials: These are very high surface area (120 to 230 m²/g) crystalline materials that contain atomically dispersed transition metal centers for the oxidation of SO₂ to SO₃.

Product/Service	Designation	Description
Advanced Utilization (CCT)	FISS	Furnace Injected Super Sorbent
	CLASS	clay Adjunct Super Sorbent
	Re-CLASS	Regenerable Super Sorbents

Bibb and Associates, Inc.
Engineers * Architects * Consultants
6750 Antioch Road
Shawnee Mission, KS 66204

Telephone: (913) 236-7200 **FAX:** (913) 236-4426

Chief Executive Officer: Robert A. Bibb, P.E., President, Shawnee Mission, Kansas International Sales Manager: Robert A. Bibb, P.E., President, Shawnee Mission, Kansas

BIBB ENDINEERS - ARCHITECTS - CONSULTANTS

Bibb and Associates is an engineering, architecture and consulting firm focusing on studies and design for fossil and alternate fuel district heating and power plants. The firm has worked extensively in the U.S. market and is expanding its services to international projects. Approaches to projects include EPC, turnkey, design/build and conventional engineer-owner relationships. Full inhouse resources include mechanical, electrical, structural, civil, controls, sanitary, and chemical engineers and architects.

Product/Service

Description

Architecture/Engineering (A&E)

Bibb and Associates offers extensive expertise in technical and economic feasibility studies for coal, oil and natural gas fired steam and steam electric district heating and power plants; simple and combined cycle combustion turbine power and cogeneration plants, and diesel and dual fuel engine generator plants. Full engineering services are provided from studies through detailed design, resident engineering, construction management, startup, and performance testing. Services are provided to electric utilities, power developers, and industrial companies.

Birmingham Steel Corporation Birmingham Bolt Division P.O. Box 1208 Birmingham, AL 35201-1208

BIRMINGHAM STEEL CORPORATION

BLACK & VEATCH

PROGRESS BY DESIGN

Telephone:

(205) 985-9290

FAX:

(205) 444-3353

President/CEO: Vice President, Marketing: Paul H. Ekberg Henry A. Leonard

Domestic Offices:

Corporate Offices: Alabama

Plants: Alabama, Ohio, Illinois, Utah, Virginia, Tennessee

Birmingham Steel Corporation's Birmingham Bolt Division is a major supplier of roof control products to the U.S. underground coal mining industry. The Company is an almost totally raw materials integrated, full service manufacturer of every type of roof bolt and accessory used by the underground mining industry.

Product/Service

Description

Roof Control

Birmingham Steel Corporation's Birmingham Bolt Division manufactures the following: Conventional Roof Bolts 5/8", 3/4", 7/8"; Full Column Resin Grouted Bolts 5/8", 3/4", 7/8"; Resin Assisted Point Anchored Tensionable Bolts; Bearing Plate 4x4 - 8x8 Grades 1-4; Expansion Shells 5/8", 3/4", 7/8"; 1" Borehole, 1-3/8" Borehole; Roof

Truss Systems.

Black & Veatch, Engineers - Architects 8400 Ward Parkway Kansas City, MO 64114

Telephone:

(913) 339-2000

Telex:

42-6263

FAX:

(913) 339-8711

CEO and Chairman:

P.J. Adam

Senior Vice President, BVI:

J.R. Hover

Domestic Offices:

More than 30 throughout U.S.

International Offices:

Bangkok, Thailand; Buckinghamshire, United Kingdom; Singapore, Singapore; Sydney, NSW, Australia; Tokyo, Japan; Leipzig, Germany; Wolverhampton, United Kingdom; New Delhi, India; Taipei, Taiwan;

Jakarta, Indonesia; Cairo, Egypt

Black & Veatch, founded in 1915, is one of the largest engineering firms in the United States, as well as being one of the oldest and most experienced. The firm is a partnership with headquarters in Kansas City, Missouri, and offices in more than 30 cities around the world. Black & Veatch is directed by a chairman and six managing partners. All major disciplines are represented. More than 50 percent of the 4,000 employees have college degrees. These include professional civil, electrical, mechanical, nuclear, chemical, sanitary, architectural, and structural engineers. Associated with them are architects, planners, economic and financial specialists, hydrologists, chemists, biologists, and administrative personnel.

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Description

Engineering Services for Fossil Power Plants

The firm engages in engineering services for the generation, transmission, and distribution of electric power; and collection, treatment, and disposal of wastewater. Comprehensive licensing, permitting and environmental consultation on mining, transportation and power plant projects. Mine engineering and mine reclamation consultation.

Coal Handling Systems

Black & Veatch designs the bituminous, subbituminous and lignite terminating and handling facilities which are integral to coal fueled power plants. These facilities include systems for unloading (ocean-going ships, barges, railcars and on/off highway trucks), storing, reclaiming, crushing and weighing of coal to annual throughput capacities in excess of 9 million tons per year. Coal procurement and transportation consultation in areas of strategic planning and contracting. Heavy-haul railroad consultation including new and rehabilitated rail lines, motive power and railcar acquisitions, and equipment maintenance facilities.

(Continued on next page)

Black & Veatch (Continued)

Coal Quality Analysis

The Utilization Cost Program (UCP) is a rapid evaluation tool developed by Black & Veatch that takes you from coal quality data to total busbar costs on both new and existing units. It provides the capability to determine the impact of coal quality on unit design, unit performance, capital costs, and operating costs.

Port Facilities

The complete design of dock and cargo handling facilities has been accomplished by Black & Veatch in connecting with a number of projects. These design engagements have included facilities for the unloading, storage, and loading of various fuels and general cargo as well as ancillary facilities, including railroad sidings, warehousing, and bulk storage.

Black Gem Coal Company P.O. Box 931 Cincinnati, OH 45239-0931

BLACKGEM

Telephone: (513) 931-1426

Chief Executive Officer: International Sales Director:

H.M. Vonderheide H.M. Vonderheide

Domestic Offices:

All business conducted through the Cincinnati, Ohio USA office.

Company has been in existence since 1976. Product line consists of steam, stoker, and metallurgical coals available from USA coal areas of southern West Virginia, southwest Virginia, southeastern Kentucky, eastern Tennessee.

Product/Service

Coal Mining, transportation by truck, rail, USA river system to ports for export. Coal brokers/finders/sales. Mining equipment both deep and surface (as commonly utilized in USA coal mines).

Boston Sciencia, Inc. (BOSTON) P.O. Box 6298 1401 Timken Place, S.W. **Canton, OH 44706**



Telephone:

(216) 452-3383

FAX:

(216) 452-7337

Chief Executive Officer: International Sales Manager: Raymond C. DesMarais, Jr. James Peavler - (410) 832-7444

Boston Sciencia, Inc. (BOSTON) is an Ohio-based corporation which performs chemical research and catalyst development via a unique technology, which it has termed "Catalysis Prediction." Catalysis Prediction is a method of conducting a catalyst search based on fundamental principles of matching the energies or vibrational frequencies of the exact chemical reactants. The vibrational frequency match is computed for the most effective catalyst (lowest temperature) and exact oxidation state of that catalyst. The metal required to conduct the reactions by definition, will modulate the vibrational energy of the reactants to enable a very high efficiency reaction. Through the use of this proprietary computerized technology, an optimized catalyst discovery can be accomplished in the most expedient and cost-effective manner with the very high certainty of results. BOSTON enters into contractual arrangements to apply this technology to a specific area of interest. Since research and development is performed essentially at cost, commercially viable projects conclude with a negotiable license or sale of the process.

Product/Service

Description

Catalytic Flue Gas Treatment

The prediction of catalysts for use in systems to remove harmful effluents (NO., SO., etc.) from flue gas, decompose harmful chemical species and reform known chemical compounds much more efficiently.

The Bowdil Company 2030 Industrial Place, SE P.O. Box 20470 Canton, OH 44701-0470

Telephone: (216) 456-7176

WATS: (800) 356-8663 FAX: (216) 456-4625 President:

L.N. Smith

International Sales Manager:

James S. Bowman

Domestic Offices:

CANTON, OH 44701-0470

International Offices:

Please contact company headquarters for further information

Established in 1924, the Bowdil Company enjoys a well earned reputation for high quality mining equipment, mining components, custom machining, heat treating and metal fabrication. In 1988, Bowdil acquired the Universal Cutting Machine line of The Goodman Corporation. Accordingly, we have become the spare parts source for Goodman Universal Cutting users around the world. Other mining equipment includes cutter chains for any type cutting machine, cutter bars, cutter bar head assemblies, sprockets and bits. Our machining and metal fabrication capabilities embrace a wide range of applications. Heat treating includes both in-atmosphere and vacuum systems depending upon customer requirements.

Product/Service	Designation	Description
Bowdil Cutter Chains	BOW-40	Drop forge construction not only eliminates hooking and stalling but provides greater work safety and reduces machine stress. Types available are all lug, lug/link, and all lug wraplock. Designed to use either pyramidal or roto type bit (pick). Trimmer chains available to fit all continuous boring machines, makes and models.
Bowdil Cutter Bar	BOW-281/282	Designed and fabricated for the rugged use it will be subjected to. Wearing strips are high carbon-high chrome. Available in lengths 6'-0" through 17'-0" or designed to operators specifications.
Roller Bearing Cutter Head	BOW-30	Lowers noise level, saves energy and reduces maintenance and downtime. Used in conjunction with a Bowdil special alloy sprocket, heat checking causing metal fatigue is reduced.

(Continued on next page)

The Bowdil Company (Continued)

Sprockets	BOW-14	Sprockets are available in clutch, spline and keyed styles - single or double tooth arrangement. Will manufacture to customers specifications.
Bits (Picks)	BOW-1-85, 1-86	1-85 Pyramidal (flat) is designed, constructed and heat treated to obtain a strong and rigid shank. 1-86 rotates while in use to equalize wear and expand time between changes. Both types are carbide tipped. Will manufacture other types to customers specifications.
Machining and Metal Fabrication	BOW-MMF	With the latest machinery, we are a complete source for precision machining and fabrication. Duplication of matching parts or reproduction from customers drawings result in identical pieces.
Heat Treating	BOW-HT	State of the art vacuum furnace allows us to meet the customers most exacting needs. Ferrous and non-ferrous materials can be processed in any one of 15 furnaces. The most advanced materials can be safely modified.

Bowser-Morner 4518 Taylorsville Road P.O. Box 51 Dayton, OH 45401-0051

Telephone:

(513) 236-8805

FAX:

(513) 233-2016

President/CEO: Sales Manager:

Steven M. Bowser

William M. Treasure

Domestic Offices:

Lexington, Kentucky; Toledo, Ohio; Indianapolis, Indiana; Dayton, Ohio.

A consulting engineering and independent commercial testing laboratory serving industry, business and government with geotechnical engineering, geo-environmental consulting, subsurface exploration, construction observation and field testing, analytical chemistry, product evaluation and material testing, metallurgical testing, construction materials and geotechnical testing. Specific services include design of dams, refuse disposal systems, surface and deep mines, permit applications, foundation exploration and design, hydrologic studies, environmental studies, feasibility studies, coal stockpile inventories, site assessments, groundwater/soil sampling, installation of groundwater monitoring wells, testing of concrete, asphalt, masonry and mineral aggregates (lab & field), chemical analysis, corrosion studies, and product testing (humidity, vibration, corrosion).

Products/Service	Description
Consulting	Environmental Assessments, Coal Analysis, Coal Exploration, Coal Mining Exploration, Feasibility Studies, Geological, Geophysical, Land Reclamation.
Engineering & Contracting	Mine Subsidence Monitoring, Exploration Drilling, Ground Geophysics, Coal Refuse Disposal, Land Reclamation, Mine Drainage Treatment, Coal Slurry Pumping and Transport, Coal Refuse Embankment Design and Permitting.

John T. Boyd Company 400 Oliver Building 535 Smithfield Street Pittsburgh, PA 15222-2384



Telephone: (412) 562-1770 **FAX:** (412) 562-1953

Chief Executive Officer:
Assistant to the President:
Senior Vice President:

James W. Boyd Bradley Charles Lewis Ronald L. Lewis

Domestic Offices: DENVER, CO: 1400 South Tower - Denver Place

999 18th Street, Denver, CO 80202-2414 TEL: (303) 293-8988 FAX: (303) 293-2232

John T. Boyd Company (BOYD) is an international mining and geological engineering consulting firm serving the world's mining, mineral, and utility industries. Services include mine design, planning, closure, and monitoring; due diligence; asset appraisals; contract negotiations; equipment selection; environmental compliance; and geological/geotechnical investigations. BOYD reports are accepted by the Securities and Exchange Commission for reserve certification; utilized by financial institutions for project financing; submitted in arbitration, litigation and regulatory nearings on numerous mining related issues; and provided to energy producing and consuming companies relative to development of strategic plans for marketing or purchasing fuel including potential major sales or acquisitions of energy resources.

BOYD is recognized internationally for its expertise in assisting local and national governments to plan and implement privatization efforts inclusive of providing short- and long-term technical advice, in-country training, and supporting publicity of privatization.

Product/Service	Description
Mining/Geological Engineering	Mine planning, monitoring, due diligence, and feasibility studies; valuations; ventilation; reserve quantity and quality estimates; reserve classification; exploration drilling, geologic and geophysical logging, and analytical testing; asset appraisals; equipment selection; contract negotiations; bid solicitations; supplier reviews; transportation alternatives;
Architecture/Engineering	market forecasts and analyses; health and safety; training; sales brochures; strategic planning; computer modeling and database maintenance. Mining, reclamation and environmental issues. Evaluations on reliability and consistency of
Technical Consulting	potential suppliers; quantity, quality, price, contract terms and transportation options.

Brechbuhler Scales Inc. 1424 Scale Street, S.W. Canton, OH 44706-3096

Telephone:

(216) 453-2424

FAX:

(216) 453-5322

President/CEO: Sales Manager:

Kraig F. Brechbuhler David B. Markle

Domestic Offices:

Canton, Cleveland, Columbus,

Cincinnati, Dayton, Mansfield,

Youngstown, Lima, Charleston, Parkersburg



BRECHBUHLER SCALES, INC.

Brechbuhler Scales, Inc. is an independent distributor and specialized manufacturer of custom weighing systems and scales. Scale sales, service, rentals and systems are available through a network of eleven branch locations. In house fabrication facilities allow for replacement weighbridges, drip pits and custom design weldments to meet specific applications. State certified technicians are available 24 hours a day, 7 days a week for your convenience. Our test trucks carry weights traceable to National Bureau of Standards to ensure scale accuracy.

Products/Service

Description

Truck Scales

Provide, install and service truck scales including heavy duty units used in pit operations.

Belt Scales

Belt scales used to load barges, monitor production and blending of coal.

Lab Scales

Analytical scales used in coal analysis and testing.

Brookville Mining Equipment Corporation 20 Pickering Street Brookville, PA 15825

Telephone: (814) 849-7321 **FAX:** (814) 849-5229

President:

Dalph S. McNeil

Sales Coordinator:

Christine E. Clinger



Brookville offers a complete line of yard, tunneling and underground diesel locomotives, as well as underground transportation support equipment rail and rubber tired such as maintenance jeeps, personnel carriers, rock dusters and tractors.

Our machines are known for their high productivity and reliability, and Brookville can offer the new Dry System Technology. This unprecedented option of exhaust conditioning offers an advanced alternative to water bath scrubbers.

Other Brookville advantages include ease of maintenance in all our equipment, 4-speed powershift/torque converter transmission, chevron suspension, planetary drive axles which permits bolt-on wheels and low spare parts pricing.

Our new Model BJ 3 Plus 3 Powershift Transmission enables Brookville to build our "Low Pro" equipment with an overall height of 28" in both rail and rubber tired, perfect for low seam coal.

For price competitive quotations, please call Brookville at (814) 849-7321 or fax us at (814) 849-5229.

Products/Service

Description

Locomotives

"Low Pro" from 4 to 35 tons with an MSHA approved diesel engine, hydraulic powershift of hydrostatic transmission, chevron suspension, planetary final drive, optional state-of-the-art Dry System Technology for explosion proofing or

conventional water scrubbers.

(Continued on next page)



Brookville Mining Equipment Corporation (Continued)

Tractors 8 to 35 ton solid frame full-time, four-wheel drive with front or front and rear wheel steer, planetary axle with wet-disc

brakes, 52 front wheel steering with 86" to 114" turning radius, soft ride suspension and equipped to meet MSHA

regulations.

Rubber-Tired Series 4 to 20 man rubber-tired "low height" personnel carriers, maintenance jeeps and inspection vehicles to meet all current

MSHA coal mine requirements, for moving materials, personnel and supplies.

Bucyrus-Erie Company 1100 Milwaukee Avenue P.O. Box 500 South Milwaukee, WI 53172



Telephone: (414) 768-4000

Telex: 3797350 FAX: (414) 768-4474

Chief Executive Officer: International Sales Manager: Mr. William B. Winter Mr. Robert J. Kline

Domestic Offices:

3057 Tranquility Drive, P.O. Box 161236, Memphis, TN 38186-3880; Highway 14 North, P.O. Box 1479,

Gillette, WY 82716; 2501 University Drive, P.O. Box 61030, Phoenix, AZ 85082-1030

International Offices: Bucyrus (Africa) Pty. Ltd., P.O. Box 8267, Elandsfontein 1406, Republic of South Africa,

TEL 27-11-826-6412, FAX 27-11-826-6929; Bucyrus-Australia Pty Ltd., 9th Floor, G.W.A. House, 10 Market Street, Brisbane, QLD 4000, Australia, TEL 61-7-229-9316, FAX 61-7-229-8165; 2529 Strathmore Road, Muswellbrook, NSW 2333, Australia, TEL 61-65-434-633, FAX 61-65-425-350; 99 Kew Street, Welshpool, WA 6106, Australia, TEL 61-9-361-7365, FAX 61-9-362-2652; Bucyrus (Brasil) Ltd., Av. Das Nacoes, 4069, Distrito Industrial, Prof. Jose Vicira de Mendonca Caixa Postal 40, Cep: 33.200 Vespasiano MG Brasil, TEL 55-31-621-1899, FAX 55-31-621-1817; Bucyrus-Erie Company of Canada Ltd., 1310 8th Street, Nisko, Alberta TOC 2G0, Canada, TEL 403-955-7771, FAX 403-955-2145; P.O. Box 970, Wabush, Newfoundland, Canada AOR 1BO, TEL 709-282-3215, FAX 709-282-3053; Bucyrus-Chile Ltd., Avda 11 de Septiembre 2155, Coyancura 2241 Of. 61, Providencia, Santiago, Chile, TEL 56-2-232-2785, FAX 56-2-232-6234; Bucyrus-Europe Ltd., Becor House, Green Lane, Lincoln LN6 7DL, England, TEL 56-

83-242410, FAX 56-83-241993.

Bucyrus-Erie Company is a world leader in the manufacture of surface mining equipment. Founded in 1880 and located in South Milwaukee, Wisconsin, this privately owned company has over the years manufactured dredges, railroad cranes, water-well drills, ordnance equipment, all types of construction machinery, and surface mining equipment. Today, guided by an experienced and progressive management team, Bucyrus-Erie is devoted solely to the mining industry with a complete line of Electric Mining Shovels (9-58cm), Rotary Blasthole Drills (152-445mm), and Walking Draglines (7-175cm). With a worldwide network of sales, manufacturing, spare parts, and service facilities, Bucyrus-Erie is well organized to support the international mining community in over 130 countries throughout the world.

Product/Service	Description
Electric Mining Shovels	Model Numbers: 195BI (12.2 cm), 290BII (15.3cm), 295BII (20.6cm), 395BII (31.3cm), and the 495B (40.5cm). Features include AC static variable frequency control drive systems (ACUTROL), state-of-the-art mechanical designs, diesel/electric applications, and the FASTFIL dipper.
Rotary Blasthole Drills	Model Numbers: 45R (36,288kg), 47R (40,842kg), 49R (45,360kg), 59R (58,968kg), 60R (56,700kg), 61R (58,968kg), 65R (70,308kg), 67R (72,576kg). Features include counter rotating crawlers, chainless pulldown, angle drilling, automatic drilling, and one-man operation.
Walking Draglines	Model Numbers: 680W (19.9cm), 1260W (30.6cm), 1300W (35.9cm), 1370W (51.2cm), 1570W (61.2cm), 1570WS (70.3cm), 2570W (107.1cm), 2570 WS (122.1cm) 3270W (148.1cm). Features include modular designs, AC static drives (ACUTROL), pressurized tubular structures, standardized drive components, and the High Production System Buckets (H.P.S.).

Burningtons, Inc. 324 W. Third Street Alliance, NE 69301-3306

Telephone: (308) 762-8716

Telex: 510-6001150 WIU FAX: (308) 762-8717

Branch Manager/Manager, Marketing:

Mr. David Burnett



Burningtons is an exporter of spare and replacement parts for U.S. built equipment for the mining, railroad and construction industries.

Product/Service

Description

Mining Equipment

Exporters of OEM Genuine, OEM Supplier and High Quality Aftermarket Spare and Replacement Parts for U.S. built

mining equipment.

Parts available for GM/Detroit Diesel, Allison Wabco, Unit Rig, Terex, Euclid, Dart, Dresser, Clark/Michigan, Komatsu, Hough, IH, Bucyrus, P&H, EMD, GE, Marathon-Letourneau, Pettybone, Mack, American Hoist, VME,

Fuller, Manitowoc, and other brands of U.S. built equipment.

Suppliers of engine cylinder sleeves and liners, pistons, transmission parts, filters, bearings, electrical, traction and control equipment, radiators, dynamic grids, compressor parts, gears, gaskets, turbochargers, braking equipment parts, hydraulic pumps, valves and motors and parts, wheel parts, hoses, batteries, starter motors, etc.

Burns & McDonnell 4800 E. 63rd Street

Kansas City, MO 64130

Telephone: (816) 333-4375

FAX: **Chief Executive Officer:**

(816) 333-3690

International Sales Manager:

Newton A. Campbell Walter C. Womack



Founded in 1898, Burns & McDonnell is a full-service architectural/engineering firm. Employee-owned since January 1986, Burns & McDonnell is a leader in electric power design, and has provided comprehensive engineering for coal-fired units ranging in size up to 670 megawatts. The firm has also engineered more than 35 fluidized-bed boiler projects. Burns & McDonnell has designed and specified air pollution control systems for utility and industrial clients since the early 1950's. Expertise includes wiring equipment specifications, detail process design, construction and start-up services, and emission compliance and performance testing.

Product/Service

Description

Architecture/Engineering

Burns & McDonnell's involvement in electric power generation began in 1900 with the design of a coal-fired electric power plant. The firm's experience includes a wide range of unit sizes and plant features, including wet and dry FGD systems, electrostatic precipitators and baghouses. Burns & McDonnell also has experience with a variety of coals. Each power plant is designed to include the features needed to meet siting, operational, environmental and other requirements.

Carlisle Equipment Company P.O. Box 308 Newport, KY 41072



Telephone:

(606) 441-7400

FAX:

(606) 441-7400 ext. 392

Chief Executive Officer: International Sales Manager: Wayne Carlisle

Rick Kaup, V.P. Sales

Domestic Offices:

LOUISVILLE, KY: 3800 Crittenden Drive, Louisville, KY 40209

Since 1937, a supplier of heavy construction equipment for sale or lease in the mining, quarrying, and building construction industry.

Description Product/Service Designation Wheel loaders 1 to 7 yard buckets; dozers 70-350 hp; cranes from 15 to 500 tons Fiatallis Mining Equipment Kochring Cranes from 10 to 45 tons Excavators and shovels to 26 cubic yards; dozers 110-330 hp Liebherr PPM-P&H Cranes 15 to 250 tons Kobelco Excavators and wheel loaders

Excavators and cranes

Carnot 15991 Red Hill Avenue Suite 110 **Tustin, CA 92680**

Telephone: (714) 259-9520

LinkBelt

FAX:

(714) 259-0372

Chief Executive Officer: International Sales Manager:

Manager, Utilities Systems:

Director of Testing Services:

Barry L. McDonald

Mark D. McDannel

David O. Czerniak

Robert A. Finker

Carnot is an engineering services and consulting organization specializing in fuels, fuels utilization, combustion and combustion-generated air pollution emissions, emissions control, emissions testing, and regulatory affairs. The organization possesses technical expertise for a variety of stationary combustion device types including utility and industrial boilers; municipal solid waste and other refuse-fueled boilers; as well as medical and hazardous waste incinerators, fluidized-bed boilers; and simple-cycle, combined-cycle, and cogeneration gas turbines and a variety of specialized process equipment.

Product/Service

Description

Emissions Control, Process Improvement

Carnot offers unbiased expertise in the selection of appropriate control technologies (many of which its people helped pioneer). Carnot's philosophy is that combustion-generated air pollutant emissions should and can be controlled using the most-effective available technique with the least impact upon unit operating flexibility and thermal performance. Carnot has experience with devices burning conventional fuels (i.e., coal, natural gas, fuel oil, etc.), as well as less-common fuels such as petroleum coke, refinery gas, wood and agricultural wastes, coal-water slurries and coal-oil mixtures, oil-water emulsions, municipal solid waste, landfill gas, and methanol. Carnot's emissions expertise covers a wide variety of species including NO₂, SO₂, CO, particulates of all types, metals, organics, and other toxics.

(Continued on next page)

Carnot (Continued)

Research, Development, and

Design

Carnot uses its combustion and process expertise to design investigative programs to solve many different realworld process and emissions problems. The company has conducted many successful technology

demonstrations and aided in their development. Our expertise includes advanced burner and combustor design, post combustor controls, reagent injection for emissions reduction, and emissions control planning. When appropriate, Carnot designs small scale experimental simulators and laboratory investigations for novel

problems.

Emissions Testing Carnot provides a full range of in-house testing and process equipment including mobile laboratories,

continuous emission monitors, and sampling methodologies for virtually any industrial pollutant of concern in

liquid, solid, and gaseous streams.

Regulatory Engineering Carnot's regulatory staff keeps abreast of domestic and international affairs and offers assistance in permitting

and siting projects, especially those of a unique nature. Carnot has helped its clients meet some of the most

demanding emissions regulations in the world.

Air Toxics Carnot has pioneered air toxic measurement in California in the early 1980's. Now Carnot is conducting

several comprehensive toxic test programs on oil, gas and coal-fired boilers across the United States as part of

an Electric Power Research Institute sponsored PISCES program and the DOE Clean Coal program.

Continuous Emission Monitoring System Carnot's extensive experience with Continuous Emission Monitoring Systems (CEMS) has been directly obtained from various field appplications including research and development activities. Carnot has provided

strategies and implementation solutions for its clients.

Caterpillar, Inc. 100 N.E. Adams Street Peoria, IL 61554

Telephone:

(309) 675-1000

President/CEO:

Donald V. Fites

Sales Manager:

Local Caterpillar Dealer (over

200 worldwide)

Caterpillar Inc. manufactures machines and products used in highway, dam, pipeline, building and other construction; and in logging, mining, agricultural, waste disposal, industrial, warehousing, material handling, stevedoring, and maintenance activities.

Machines include track-type tractors; pipelayers; hydraulic excavators; wheel and track skidders; feller bunchers; wheel tractor scrapers; motor graders; off-highway trucks and tractors; articulated dump trucks; wheel loaders; integrated toolcarriers; wheel tractors; soil compactors; landfill compactors; track-type loaders; backhoe loaders; pavement profilers; asphalt pavers; road reclaimers/soil stabilizers; diesel and spark ignited engines; generator sets; turbines; lift trucks; self-guided vehicle systems; and container handlers.

Caterpillar engines are used in earthmoving and construction machines; on-highway trucks; marine, petroleum, locomotive, agricultural and industrial applications, and electric power generation systems. Diesel and spark-ignited engines meet power needs from 42 to 7,300 horsepower (31 to 5,400 kilowatts) and, in generator set configurations, from 40 to 4,910 kilowatts. Turbines range from 1,340 to 12,600 horsepower (100 to 9,400 kilowatts) and, in generator set configurations, from 1,080 to 8,840 kilowatts.

Caterpillar products are sold primarily through a worldwide organization of 216 independently-owned dealers and one company-owned dealership. Caterpillar Inc. is a multinational company, incorporated in 1925 and headquartered in Peoria, Illinois.

Centrifugal & Mechanical Industries 146 President Street St. Louis, MO 63118

Telephone: (314) 776-2848 Telex: 477256 FAX: (314) 776-2918

President/CEO: Mr. Nick Andos International Sales Manager: Mr. A. Buddy Sebastiao

Domestic Offices: St. Louis, MO; Beckley, WV

International Offices: Distributors in Salisbury, England and Calgary, Alberta, Canada

Centrifugal and Mechanical Industries, known to its customers as CMI, is a company based in St. Louis, Missouri that was founded in 1938 by an inventor named Andrew Howe. Still at the original location, the company has gone through many changes and expansions to become the market leader in the supply of centrifugal solids-liquids separation equipment to the U.S. Coal Industry.

Approximately 50% of the 1 billion tons per year of U.S. Coal production requires washing to remove rock and impurities. Of this 500 million ton portion of production, 350 million tons per year are dried in centrifuges made by CMI.

On an international level, distributors are located in Calgary, Alberta to serve Canada and in Salisbury, England to serve the European Community. CMI equipment has been sent > 12 different countries covering every inhabited continent in the world.

Vibratory Centrifuges Coarser coal up to 3 inches in size is dewatered in the Model VC-48 and VC-56 at rates of up to 325 tons per hour.

Screen-Scroll Centrifuges The Model EBR and EBW are available in two sizes each, to dewater small coal and fine coal respectively.

Chipwringer Centrifuges Two models are available for the continuous separation of coolants and cutting oils from a variety of metal cutting

chips

CeraMem Separations 12 Clematis Ave. Waltham, MA 02154

CeraMem Separations

Telephone: (617) 899-0467 **FAX:** (617) 899-1227

President: Dr. Robert Goldsmith
Principal Point of Contact: Mr. Richard F. Abrams

CeraMem is a developer and manufacturer of ceramic membrane filters for flue gas and hot gas clean-up. Founded in 1986, the company also produces ceramic ultrafilters and microfilters for liquid applications. CeraMem is currently demonstrating its hot gas filters in two DOE Phase II SBIR sponsored programs.

Product/Service Description

Hot Gas Ceramic Filters The CeraMem Ceramic Monolith Filter (CCMF) can be used for virtually complete removal of particulate matter

from hot gas (up to 1800°F) streams. Elements are regenerated in place using reverse air backpulse. The elements contain over 175 ft² of filter area/ft³ of volume which is significantly higher than other ceramic filters currently

available.

CH2M Hill International Ltd. 6060 S. Willow Drive P.O. Box 24548 Denver, CO 80222

Telephone: (303) 796-9001

Telex: 4742047 CH2M PTL FAX: (303) 796-8710

President and CEO: Howard Schirmer, Jr., PE

Domestic Offices: CH2M HILL, Inc. includes nearly 60 offices in North America

International Offices: AUSTRALIA: Sydney, Australia; EGYPT: Alexandria and Cairo, Egypt; ENGLAND: Bracknell and London,

England; FRANCE; Paris, France; HUNGARY: Budapest, Hungary, TAIWAN: Taipei, Taiwan

CH2M HILL International Ltd. is a wholly-owned subsidiary of CH2M HILL Ltd., a firm of engineers, planners, economists, and scientists with more than 25 years experience in international projects in 63 countries. CH2M Hill provides comprehensive planning, study, design, and construction management services for clients with interests in: industrial plants and processes, geotechnical services, solid and hazardous waste management and disposal, water supply and wastewater, water resources, irrigation, city and regional planning, economics, and program management.

Product/Service

Description

Pre-project planning and project support services include feasibility studies and assessments; earth sciences; environmental impact studies; regional/urban/rural planning and site evaluation. Among project preparation services are detailed designs, technical appraisals, funding and procurement advice, tender documents, and bid evaluation. Additional services include construction implementation and post-construction services.

Specialized services include site environmental audits, industrial site selection, permitting and development, plus hydroelectric, thermal, solar, bio-energy, geothermal, and cogeneration systems. Industrial wastes management and control services are also provided.

Challenge Engineering Consultants, Inc. 301 East Main Street, Suite 650 Lexington, KY 40507

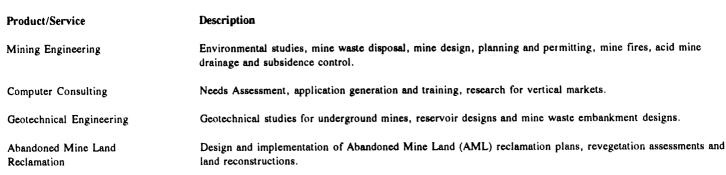
Telephone: (606) 233-2215 **FAX:** (606) 255-9138

Chief Executive Officer: Dean K. Hunt, Esq. P.E.

International Sales Manager: Dean K. Hunt

Domestic Offices: JACKSON, KY: P.O. Box 233, Jackson KY 41339 TEL: (606) 666-4318

Challenge Engineering Consultants, Inc. was organized in 1984 to provide industry and government clients with a nationally experienced management team and staff. Former managers of several national and local firms including D'Appolonia Consulting Engineering, United States Office of Surface Mining, and Skelly and Loy Engineering Consultants make up the professional staff of Challenge Engineering Consultants, Inc. The Challenge organization provides Engineering and Consultants services to coal, natural resources, waste management industries and government agencies. Challenge's multi-disciplinary staff includes the full range of engineers, geologists, computer scientists, and environmental specialists necessary to address most engineering and natural resources issues.





CH2M HILL

INTERNATIONAL, LTD.

The Clarkson Company 650 Spice Islands Drive Sparks, NV 89431

Telephone: (702) 359-4100 **FAX:** (702) 359-4306

Chief Executive Officer: Curtis W. Clarkson International Sales Manager: Hank Frohlich



The Clarkson Company is an engineering and manufacturing firm dedicated to the design, production, and distribution of slurry handling and processing equipment. Headquartered in Sparks, Nevada, the company was founded in 1950 as an equipment supplier to the Western states mining industry. Since that time, Clarkson has broadened its product offering and markets and is conducting business in a variety of industries around the world.

The Clarkson Company is an organization built on problem solving. The Company's objective is to find a need and apply its unique blend of innovative, technology, and manufacturing expertise to achieve a solution consistent with the company's dedication to quality products and responsive customer service.

Product/Service	Designation	Description
Emissions Control and Waste Disposal Systems Power Generation Systems	Knife-gate valves Control valves, and Feeders	Equipment used in the handling and processing of suspended solids in a liquid medium known generically as slurries, or in some industries, more commonly referred to as pulp or pulp stock.

CLI Corporation 430 Park West One Pittsburgh, PA 15275

Telephone: (412) 788-6688 **FAX:** (412) 788-6690

Chief Executive Officer: David G. Chedgy International Sales Manager: David G. Chedgy

International Offices: Please contact company headquarters for further information



CLI Corporation is a major design and construction company in the coal and mineral industry. The Corporation specializes in feasibility studies, definitive estimates, engineering and turnkey construction for coal preparation and other mineral processing plants and the associated material handling systems. The Company also produces specialty equipment related to the processing industry. A subsidiary company is also involved in contract operations of mining facilities. The Company has internationally recognized coal and mineral processing specialists and a full complement of professional engineers and construction specialists.

Product/Service	Designation	Description
Architecture/ Engineering	CLI-1	Conceptual, preliminary, and actual design of coal and mineral process plants and material handling systems, including conveying, blending, and storage.
Coal Mining	CLI-2	Contract operations of mines and processing plants, including owner/operator contracts. Major coal processing of contracts of 1200 TPH presently under contract.
Facility Construction	CLI-3	Construction of turnkey or negotiated process plants and material handling facilities.
Advanced Utilization	CLI-4	Producer of ultra-low ash and sulfur coal and coal water slurries (CWS).
Specialty Equipment	CLI-5	Manufacturer of Hi-Intensity Wet Drum Magnetic Separators.

Coal Extraction and Utilization Research Center Southern Illinois University at Carbondale Carbondale, IL 62901

Telephone: (618) 536-5521 FAX: (618) 453-7346

Chief Executive Officer: John S. Mead International Sales Manager: David G. Arey

Domestic Offices: CARBONDALE, IL: 325 W. Grand St., Carbondale, IL 62901



The Coal Research Center at Southern Illinois University-Carbondale was established in 1974 to coordinate the coal related research activities of more than 100 faculty and 200 graduate students. Coal research at SIUC has been broad in scope, covering nearly all aspects of coal extraction, preparation, transportation, combustion, pollution control, and reclamation. The Center works closely with the Illinois Department of Energy and Natural Resources' Office of Coal Development and Marketing and its Illinois Clean Coal Institute. SIUC operates a unique link-trainer dragline simulator which provides hands-on experience for operators and management personnel.

Product/Service Description

Dragline Training Program

The Dragline Training Program is a comprehensive and progressive training program designed to increase dragline productivity and reduce operating costs. It provides participants with an efficient and cost effective method of increasing their knowledge about dragline operations and operator skills. Two courses are offered. The supervisor training course is tailored to supervisors, engineers, mine management, experienced dragline crews, and support personnel. The operator training course is primarily for dragline foremen and dragline crew members. Each course simulates the client's specific application of the dragline.

Illinois Coal Development Park

The Coal Research Center in cooperation with the Illinois Department of Energy and Natural Resources operates the Illinois Coal Development Park. In addition to the laboratory/testing services described below, the Park is the site of a high bay building with overhead crane and up to 6000 square feet of space for product development and testing.

Mining & Reclamation Technical Assistance The Illinois Mining and Minerals Resources Research Institute and the National Mine Land Reclamation Center Midwestern Region are located at SIUC. Technical reports concerning mining and reclamation are published. SIUC's Cooperative Wildlife Research Laboratory is world leader in technical aspects of mine land reclamation by way of wetland habitat creation.

Laboratory/Testing Services

A G/C Mass Spectrometer Laboratory having a Kratos MS-80 high mass, medium resolution mass spectrometer with fast magnet. There are three ionization sources: electron impact, chemical ionization, and fast atom bombardment. A Coal Testing Laboratory having the capability of performing elemental analysis, total sulfur, proximate analysis, ash fusion temperature, and Btu content. A coal grinding facility consisting of various grinders and crushers and a micronizer capable of grinding to micron size. The micronizer has on-line sampling capability which feed into a Leeds Northrup Microtrak particle size analyzer which can measure particle size down to 0.75 um. A thermo-gravimetric analysis capability centered around Perkin-Elmer TGA-7. A combustion capability centered around two instrumented fluidized bed combustors: one capability of 1,000,000 Btu/hr which can operate in either the bubbling or circulating mode and the other with a capability of about 100,000 Btu/hour.

Coal Tech Corp. P.O. Box 154 Merion Station, PA 19066

COAL TECH CORP

Telephone: (215) 667-0442 **FAX:** (215) 667-6632

Chief Executive Officer: International Sales Manager: Dr. Bert Zauderer Dr. Bert Zauderer

Domestic Offices:

MERION STATION, PA: 275 N. Highland Avenue, Merion Station, PA, 19066 TEL. (215) 667-0442

For the past decade, Coal Tech has developed an advanced air cooled combustor which to-date has demonstrated 80+% ash retention in the form of inert slag, 67% NO₂ reduction to 0.26 lb./MMBTU, and 85% SO₂ reduction to 0.34 lb./MMBTU. The computer-controlled combustor has been tested on a 20 MMBtu/hr [5 MMkcal/hr] boiler since early 1987. Combustor applications are: retrofit to existing industrial and utility boilers for NO₂ and SO₂ control, cofiring of coal/oil/gas with solid/liquid waste fuels such as refuse derived fuels and sludge, vitrification of fly ashes to marketable product. The technology yields considerably lower capital and operating costs than other advanced technologies.

Product/Service	Description
Advanced Utilization (CCT)	Coal Tech has developed designs for applying the combustor to new or existing industrial oil/gas type boilers in the 20,000 to 300,000 lb./hr. range using coal and solid waste fuels.
Facilities Construction/ Technical Consultants	Coal Tech will design and fabricate combustors in the 20 to 150 MMBtu/hr. range. The Company also designs and assembles advanced microprocessor base power plant and boiler control systems.
Emission Controls & Waste Disposal System	The Coal Tech combustor and computer control technology is available for licensing for use in combustion systems for solid fuels and vitrification of fly ashes.

Coal Technology Corporation 103 Thomas Road Bristol, VA 24201

Telephone: (703) 669-6515 **FAX:** (703) 669-2161

President/CEO: Richard A. Wolfe, Ph.D.



Coal Technology Corporation (CTC) specializes in the research and development of advanced coal cleaning, fine coal recovery and dewatering, and new methods of coal utilization using advanced technologies. CTC holds four (4) patents for a fine coal dewatering centrifuge and one (1) patent for their coal liquids, char and coke (CLCC) process. Currently CTC is developing a cyclone process for advanced fine coal cleaning and an advanced continuous process to manufacture a char for ferroalloy industries or domestic use as a "smokeless fuel," and/or a metallurgical coke for steel industries with recovery of coal liquids for further refining as a by-product (process patent pending). CTC is investigating formation of a joint venture for construction of a commercial plant using the CTC/CLCC process.

Products/Service	Description
Contract Researach	CTC has been involved in the successful completion of many coal related research projects, both as prime contractor and as a sub-contractor, for the U.S. Department of Energy, utilities and other companies.
Technical Consulting	CTC has pilot plant and laboratory facilities staffed by personnel skilled in the wide range of coal related research.
Advanced Utilization	CTC markets and/or will license their patented technologies.

Combustion Power Company 1020 Marsh Road, Suite 100 Menlo Park, CA 94025

Telephone:

(415) 324-4744

FAX:

(415) 324-0788

President:

International Sales Manager:

Frank Walton

Robert Vander Molen

Domestic Offices:

7855 Boulevard East, Suite 12A, North Bergen, NJ 07047 TEL. (201) 662-0662, FAX: (201) 662-0755; 210 Interstate North Parkway #700, Atlanta, GA 30339 TEL. (404) 980-6639. FAX: (404) 980-6702

COMBUSTION

Since 1968, Combustion Power Company has been a U.S. industry leader in the development and sales of high performance, low-emission fluidized bed combustion technology. In addition to its patented FI CIRC circulating fluidized bed boiler, which has been setting new industry standards for low emissions, Combustion Power offers fluid bed combustion for sludge incineration, gasifiers and air heaters, and is pioneering in high pressure, high temperature granular bed filter systems for cleaning of hot flue gases in high temperature/pressure applications.

Product/Service

Description

FI CIRC*. Circulating Fluid

Bed Combustor Boiler.

A unique, patented circulating fluidized bed boiler system capable of achieving extremely low emissions: >99% combustion efficiency, sulfur suppression above 98% and NO, suppression efficiency >90%.

Fluid Bed Combustors

Custom engineered fluidized bed combustion systems for low capital cost sludge incineration gasifiers and air

heaters.

Conn-Weld Industries, Inc. P.O. Box 5329

Route 460 & SR 31 Princeton, WV 24740

Telephone:

(304) 487-1421

FAX:

(304) 487-3761

President: **Executive VP:**

Executive VP:

James D. Connolly Michael S. Connolly

Richard L. McCormick

Conn-Weld Industries, established in 1975, has grown to become a major supplier of screening products in the U.S. and Canada. Conn-Weld manufactures equipment and welded profile screening products for the coal industry and others. The Company has state-of-the-art engineering and manufacturing capabilities. All profile wire shapes are manufactured in our own wire mill to rigid specification.



Description

G-MASTER Vibrating Screens

Horizontal and Inclined Vibrators, G-Master Mechanisms (Pat.), E-Z Deck Frames (Pat.); includes parts: Side Plates,

Frames, Suspension Systems, Panelok Modular Screen Systems. Stress Relieved Units.

Sieve Bends

Complete Systems - Patented Feed Box, Screen Holders, Turnarounds, wear resistant linings (ceramics, alloy steels,

etc.), discharge chutes. Pressure feed units and weir feed gravity flow units.

Screens

Welded Profile surfaces for vibration, sieve units, centrifuge screens, flume/chute, urethane screen systems, woven

wire, perforated plate; fine wire screening to 50 micron separation.



CONSOL, Inc., a member of the CONSOL Coal Group Consol Plaza, 1800 Washington Road Pittsburgh, PA 15241

Telephone: (412) 831-4000 Telex:

247-634 CONSLUR

FAX:

(412) 831-4916

Chairman/President/CEO: B.R. Brown Executive V.P.-Marketing: R.B. Atwater

Domestic Offices:

Atlanta, Chicago, Cleveland, Norfolk, Philadelphia, Rochester

International Offices:

Brussels

CONSOL Coal Group consists of Pittsburgh-based Consol Inc. and other related companies, among them Consolidation Coal Company, Consol Pennsylvania Coal Company, Enlow Fork Mining Company, Fairmont Supply Company, and others.

CONSOL Coal Group is the nation's second-largest coal producer, having produced 56.3 million tons of coal in 1992 from 25 mines and related facilities in six states and Alberta, Canada.

Most of that coal -- about 69.1 percent -- went to the electric utility market, while 13 percent was exported overseas. The remaining 17.9 percent found its way into the steel and coke industries and industrial and other applications.

In recent years, the CONSOL Coal Group companies have made extensive capital investments in new mine development and in modernizing existing operations. It is the leading user of modern longwall mining technology in the United States.

Products/Services

Description

Business: Steam and Metallurgical Coal Products; Coal Export Terminal.

S.I.C.: 1221, 1222

R.L. Coolsaet Construction Co. Contractors P.O. Box 279 28800 Goddard Road **Taylor**, MI 48180

R.L. COOLSAET CONSTRUCTION CO.

Telephone: (313) 946-9300

FAX: (313) 946-9303

Chief Executive Officer: International Sales Manager: Jeffrey A. Coolsact Ryan Colonnello

R.L. Coolsact Construction Company has been in the pipeline construction business since 1936, doing various work for major transmission companies such as building oil, natural gas and other cross-country pipelines. We have experienced personnel, equipment, insurance and bonding available for large construction projects.

Product/Service

Description

Facility Construction

Coal Slurry Pipeline Construction

Corhart Refractories Corporation Electrofused Division 1600 West Lee Street P.O. Box 740009 Louisville, KY 40201-7409



Telephone:

(502) 775-7409

Telex: 204281 FAX:

(502) 775-7398

Chief Executive Officer: International Sales Manager:

Robert C. Ayotte Allen D. Davis, Jr.

International Offices:

FRANCE: Jacques Charlet, SEPR, B.P. 25, 84131 Le Pontet Cedex, Tel: 90 32 70 00

FAX: 90 32 72 57, Telex: 431388

CORHART produces CORGUARD, a fusion-cast alumina- zirconia-silica (AIS) ceramic, used in material handling where sliding abrasive wear, heavy impact, severe thermal variations, or combinations of the three occur. CORHART also manufactures CORGUARD PETROCAST, an AZS-grain anti-abrasion vibratory castable. CORHART is a part of the Saint-Gobain Industrial Ceramics Branch. SEPR, sister company in France, produces the same product under the same ZAC.

Product/Service

Description

Mining Equipment

The electrocast process for producing CORGUARD permits large castings in shapes including tiles, pipes, elbows, tees or Y's up to 30" (762mm) in diameter. CORGUARD significantly outperforms metals and most other ceramics in materials handling. Examples include: in a heavy media cyclone, CORGUARD lasted 38-50 months vs. 12-18 months for Ni-hard steel; in an impact pad,

CORGUARD lasted 3-4 years vs. 18 months for white iron.

CQ Inc. **One Quality Center** P.O. Box 280 Homer City, PA 15748

Telephone: (412) 479-3503 FAX: (412) 479-4181

Chief Executive Officer: International Sales Manager:

Mr. Clark D. Harrison Mr. James W. Parkinson

International Offices:

Please contact company headquarters for further information.

CQ Inc. -- a wholly owned subsidiary of the Electric Power Research Institute -- is dedicated to providing coal suppliers and power producers worldwide with products and services that will help them remain within emissions compliance limits; keep prices competitive; reduce risks; and optimize operating performance. CQ Inc. experience includes management of a \$21.7 million project sponsored by DOE and EPRI to develop a software tool that utilities can use to determine the least expensive coal to burn while remaining within emissions limits; O&M contracts for commercial-scale and demonstration coal cleaning plans; production of specialty coals and coal-water fuel in 5000-gallon batches for demonstration testing; comprehensive characterizations of coals of all ranks; demonstrations of advanced coal cleaning technologies; and toxics control studies.

Product/Service

Description

Fabricated Fuels

Supply customized coal in large quantities, including premium-quality coal and coal-water fuel for diesel engines. Also developing alternative fuels mainly composed of waste materials.

Contract O&M Services

Ensure reliable, accurate operation and maintenance of scales, samplers, and on-line analyzers at customer sites. Operate customers' coal cleaning plants, producing consistent-quality compliance coal

at maximum plant efficiency.

Contract Research and Engineering

Studies

Provide commercial-scale coal characteristics; coal cleaning and dewatering equipment performance tests; weighing and sampling equipment selection and troubleshooting; toxics control studies, coal processing simulation studies, and energy-related software support.

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CROSBY

Crosby Valve & Gage Company 43 Kendrick Street Wrentham, MA 02093

Telephone:

(508) 384-3121

Telex: 924443 FAX: (508) 384-8675

President/CEO:

Richard T. Levis

Vice President - Marketing and Sales:

Wallace M. Lueders

Domestic Offices:

EXECUTIVE AND SALES HEADQUARTERS, AND WRENTHAM PLANT: 43 Kendrick Street, P.O. Box 308, Wrentham, MA 02093, TEL. (508) 384-3121, (508) 384-7964, TLX. 924443, FAX (508) 384-8675, Cable: CROSBY ASH-WRAM; SOUTHEASTERN REGIONAL SALES OFFICE: 529 Versailles Drive, Suite 102, Maitland, FL 32751, TEL. (407) 647-1900, FAX (407) 647-3735; NORTHERN REGIONAL SALES OFFICE: 580 Sylvan Avenue, Englewood Cliffs, NJ 07632, TEL. (201) 569-2528, FAX (201) 569-4905; WESTERN REGIONAL SALES OFFICE: 212-A Technology Drive, Irvine, CA 92718, TEL. (714) 753-9088, FAX (714) 753-9188; SOUTH CENTRAL REGIONAL SALES OFFICE: Crosby Valve Corporation, 1467 Brittmoore Road, P.O. Box 19217 (77224), Houston, TX 77043, TEL. (713) 464-0201, TLX. 762618, FAX (713) 984-0224, Cable: CROSVALCGR HOU

International Offices:

CANADIAN OPERATIONS (Headquarters, Sales Office): Crosby Valve Ltd., 975 Fraser Drive, Units 19 & 20, Burlington, Ontario L7L 4X8, Canada, TEL. (416) 681-2310, FAX (416) 681-1884; UK OPERATIONS: ENGLAND (Headquarters, England Sales Office and Market Harborough Plant): Crosby Valve and Engineering Co., Ltd., Crosby Road, Market Harborough, Leics LE 16 9EE, England, TEL. (44) (858) 467281, TLX. (851) 34431 CROSBYG, FAX (44) (858) 434728; SCOTLAND (North Sea Operations): Crosby Services International Ltd., Wellheads Terrace, Wellheads Industrial Estate, Dyce, Aberdeen, AB2 OGF, Scotland, TEL. (44) (224) 722562, TLX. 739766, FAX (44) (224) 770392; ASIA PACIFIC OPERATIONS: SINGAPORE (Asia Pacific Regional Sales Office): Crosby Valve & Gage Company, 510 Thomson Road, #14-03 SLF Building, Singapore 1129, TEL. (65) 353-8879, TLX. RS25621 CROSBY, FAX (65) 353-6092

Crosby Valve & Gage Company has over 120 years of experience in the manufacture of pressure relieving devices. Crosby offers a complete line of products for overpressure protection, meeting the requirements of ASME and other internationally recognized Codes and Standards, as well as the most

rigid quality management requirements of ISO-9001. Crosby Valve serves Original Equipment Manufactures, Architech Engineers and Users.

Products/Service

Description

Boiler Equipment

Complete line of ASME Section I and Section VIII safety valves, and safety-relief valves for use in utility and

industrial steam systems, as well as auxiliary air, steam and liquid applications.

Facility Operations

Crosby offers complete Start-up and Maintenance Capabilities, Contract Management, Valve Repair Centers, Replacement Parts, Valve Testing Facilities, Field Service, and Pressure Relief Valve Maintenance Training Seminars. CRS Sirrine Engineers, Inc. 1041 East Butler Road P.O. Box 5456 Greenville, SC 29607

Telephone: FAX:

(803) 676-6000 (803) 676-5087

Chief Executive Officer:

Socrates Christopher, Greenville, SC

International Sales Manager:

Dave Syphard, Houston, TX



Major cities in the U.S. - Contact Corporate Headquarters for further information - 713/552-2000

CRS Sirrine Engineers, Inc., a design/construction and consulting firm serving the power generation industry with feasibility studies, cost estimating, preliminary and detailed engineering, architectural design, permitting, construction management, turnkey contacting, start-up and plant operations management. Also provides power project development, project financing, and equity investments in projects. Much of our major success in new sales can be attributed to our strategy of improving market share in our strong markets. We've expanded into fields that combine our financial strength with our strong technical knowledge. Utility and industrial power facilities, cogeneration, environmental design and control, and risk management are all areas with which we have an impressive foundation of experience.

Product/Service

Description

Engineering Design and Construction

CRS Sirrine Engineers, Inc. is among the top engineering design and construction firms in the United States, with affiliates in foreign countries. We have current experience in the design, construction, and retrofit of coal-fired utility and industrial power plants, including circulating fluidized combustion boilers, cogeneration units, and independent power production plants.

Alternative Services

As an alternative to conventional owner-engineer-constructor relationship, Sirrine offers equity participation in selected projects through its CRSS Capital affiliate. Inquiries regarding particular project structuring opportunities are invited.

CSX Transportation 500 Water Street - J842 Jacksonville, FL 32202

Telephone:

(904) 359-7561

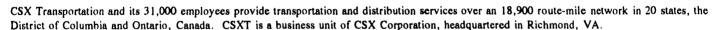
FAX:

(904) 359-3341

A.R. Carpenter

President/CEO: **Director Export Coal:**

Dennis L. Damron



CSX Transportation is part of a family of global transportation companies that include Sea-Land Service Inc. and American Commercial Lines Inc. Sea-Land Service Inc. and American Commercial Lines Inc. Sea-Land is the largest U.S.-flag container-shipping company and a world leader in international intermodal freight transportation and related trade services. Sea-land operates a fleet of 88 container ships and more than 157,000 containers in U.S. and foreign trade and serves 100 ports in 70 countries and territories. American Commercial Lines is the nation's leading inland marine services company operating on the 15,000-mile U.S. inland waterway system.

Products/Service

Description

CSX Transportation's rail lines serve more mines and utilities than any other transportation company in the world. Coal accounts for four of every 10 carloads -- about one-third of the company's revenue base.

CSX Transportation serves regions containing more than 30 billion tons of economically recoverable coal reserves located in West Virginia, Kentucky, Pennsylvania, Illinois, Maryland, Indiana, Ohio, Alabama, Tennessee and Virginia. These reserves contain all types of top-quality compliance coal and high-grade metallurgical coal.

CSXT's rail lines serve coal piers in Alabama, Maryland, South Carolina and Virginia as well as various river terminals for export through New Orleans.



Junnin

Cummins Engine Company, Inc. Box 3005 Columbus, IN 47202-3005

Telephone: (812) 377-5000

Telex: 217410 CUMMINS CMB A

V.P. Worldwide Industrial Business: Bharat Vedak Director-Mining Business:

Director-Industrial Markets:

FAX: (812) 377-3334

Robert F. Carpenter Thomas P. Kieffer

Domestic Offices:

INDIANAPOLIS, IN TEL. (317) 328-3740; MARIETTA, GA TEL. (404) 423-1108; ENGLEWOOD, CO

TEL. (303) 773-2866; OAKVILLE, ONTARIO, CANADA TEL. (415) 842-8070

International Offices:

CUMMINS AMERICAS, INC. - MIRAMAR, FL TEL. (305) 431-5511; CUMMINS DIESEL AUSTRALIA - MELBOURNE, AUSTRALIA TEL. (61-3) 765-3222; CUMMINS DIESEL N.V. - MECHELEN, BELGIUM TEL. (32-15) 20003; CUMMINS BRASIL LTDA. - SAO PAULO, BRAZIL TEL. (55-11) 945-9811; CUMMINS CORPORATION - BEIJING, PEOPLE'S REPUBLIC OF CHINA TEL. (86-1) 505-4209; CUMMINS, S.A. de C.V. - MEXICO CITY, MEXICO TEL. (52-5) 254-3822; CUMMINS DIESEL SALES CORPORATION, SINGAPORE TEL. (65) 265-0155; CUMMINS ENGINE COMPANY

LTD. - NEW MALDEN, ENGLAND TEL. (44-81) 949-6171

Cummins Engine Company, Inc., based in Columbus, IN, designs and manufactures in-line and V-type diesel engines ranging from 76 to 2000 horsepower, as well as related components and power systems. The company was founded in 1919 in Columbus, which remains the site of its corporate headquarters and largest engine manufacturing facility. in addition to North America, Cummins has operations in the United Kingdom, India, Mexico, Canada, Brazil, South Korea, Russia, China, Zimbabwe and Turkey. In 1992, Cummins reported net sales of \$3.7 billion and employed 23,400 people worldwide.

Product/Service

Description

Diesel Engines, In-line and V-type, 76-2000 Horsepower

Coal transport, facilities construction, mining equipment, power generation, and transport equipment.

D'Appolonia Engineering Division Ground Technology, Inc. One Monroeville Center Monroeville, PA 15146-2144

APPOLONIA

Telephone: (412) 856-9440 FAX:

(412) 856-9535

Principal: Principal: Eugene C. Palmer, P.E.G. Robert E. Snow, P.E.

Principal Engineer:

Dan I. Czruola, P.E. Since 1956, D'Appolonia has served the mining industry with projects throughout the United States and in 10 other countries. The firm's multidisciplinary staff have advanced degrees and extensive experience in rock and soil mechanics, mining, civil, geotechnical, hydrological and geological

The firm has designed over 80 impounding mine waste disposal facilities and prepared the "Engineering and Design Manual for Coal Refuse Disposal Facilities," now an industry design standard. D'Appolonia provides feasibility studies and reserve exploration assistance throughout the world, commonly working with our clients' exploration staff to analyze available data and develop cost-effective exploration programs involving drilling,

engineering. The firm provides designs for underground and surface mine development, mine subsidence mitigation, tailings and refuse disposal and mine drainage conveyance and treatment systems. The firm investigates failed and unstable conditions and develops remedial recommendations.

Product/Service

Mining Engineering; Geotechnical Engineering Environmental Engineering, Hydrology Construction Management and Monitoring

geophysics, and laboratory testing.

Description

Reserve Evaluations; Feasibility Studies; Mine Water Treatment; Ground Water Control: Mine Design Services; Dewatering; Tailings Dam Design; Slope Stabilization; Tunnel Design; Subsidence Control; Surface Water Control Systems; Instrumentation; Dams and Reservoirs; Research and Design Manuals; Lechate Control and Collection; Geologic Hazards Analysis; Reclamation.

Denver Equipment Company 621 South Sierra Madre Colorado Springs, CO 80903

Telephone: (719) 471-3463

Telex: 168169 FAX: (719) 471-4469

President: International Sales Manager: Mr. John B. Lundberg Mr. Dennis French

International Sales Offices:

In every country in the world.

Contact F. Marconi for name, address and contact information of local sales representative.

The Denver Equipment Company has been designing and manufacturing mineral processing equipment, worldwide, since 1927.

In addition to the coal processing and sampling equipment detailed below, Denver's engineers design systems to meet your specific application. Denver's worldwide installation list gives a credibility to the years of experience in design and manufacture which have built Denver's reputation.

Product/Service	Designation	Description
Flotation Equipment	DR ^e and Cell-to-Cell Sub A ^e	Cells up to 1500 cu ft increase your recovery, whether direct recirculation or cell-to-cell flotation conditioning.
Filters Heat Exchangers	Tube Press Holo-Flite*	High pressure filters for dryer cakes; belt filters for dewatering coal fines, disc and vacuum filters. Custom designed to your application for dewatering and producing more fine-sized coal than other methods.
Thickeners	BL, RD, CRB, D and H Lamella	Rugged, durable and proven up to 250 ft. in diameter. Center pier or bridge mounted units. For thickening refuse, magnetite and all coal slurries. Also, Lamella parallel plate separators.
Agitators	MIL*	Denver's patented Minimum Induced Loss propellers give high axial flow efficiency. Proven to 22 ft. diameter



Detroit Diesel Corporation 13400 Outer Drive West Detroit, MI 48239

Telephone:

(313) 592-5000

FAX:

(313) 592-5190

CEO:

Roger S. Penske

V.P., Construction & Ind'l Sales:

Jeff Sylvester

Domestic Office

Detroit Diesel Corporation has six North American regional sales offices which are located in California,

Florida, Michigan, New Jersey, Texas, and Ontario, Canada.

International Offices:

Detroit Diesel overseas Corporation is headquartered at 13400 Outer Drive West, Detroit, MI 48239.

Detroit Diesel Corporation is one of the leading U.S. manufacturers of heavy-duty diesel engines. Detroit Diesel Corporation is a joint venture company, owned 80 percent by Penske Transportation Holdings Corporation and 20 percent by General Motors Corporation. Detroit Diesel Corporation designs, manufacturers and sells heavy-duty diesel engines ranging from 5 to 2500 horsepower for the on-highway, industrial, construction, power generation, military and marine industries.

Product/Service

Description

Diesel Engines

Detroit Diesel Engines, ranging from 5 to 2500 horsepower, meet a variety of applications from generator sets,

marine, construction, industrial, on-highway trucking and buses.

Diamond Power Specialty Company 2600 East Main Street Lancaster, OH 43130

Telephone: (614) 687-6500

Telex: 246635 FAX: (614) 687-4304

Chief Executive Officer: International Sales Manager: James S. Kulig David W. Neal

International Offices:

AUSTRALIA: Diamond Power

Australia, 5 Herefort Rd., Berkeley Vale, NSW TEL. 61-43-88-4655; CANADA: Diamond Canapower, 1122 Pioneer Road, Burlington, Ontario TEL. (416) 355-0321; FINLAND: Diamond Superior OY, PL 33, 00701 Helsinki TEL. 358-0-358311; PEOPLES REPUBLIC OF CHINA: Diamond Power Hubei Machine Co., Ltd, 251 Jingyuan Da Dao, Xinshi Zhen, Jingshan County, Hubei TEL. 86 7269 21349; SWEDEN: Diamond Superior AB, P.O. Box 20035, S-161 02 Bromma TEL. 46-8-290440; ENGLAND: Diamond Power Specialty Ltd., Glasgow

Diamond

Specialty |

Road, Dumbarton, Scotland G82 1ES TEL. 44-389-64151.

Diamond Power is the world's largest manufacturer of boiler cleaning systems with special emphasis on the utility, pulp and paper, process industry, industrial, cogeneration and refuse boiler markets. Diamond maintains fourteen service centers worldwide to provide parts distribution and equipment rebuild and maintenance services for its customers. Diamond also maintains an extensive network of service engineers to provide on-site service, consultation, and supervision. The reliability of Diamond's equipment, coupled with its boiler cleaning expertise, provide its customers with a fully integrated package to assist in the efficient operation of their boilers.

Diamond Power Specialty Company is a boiler performance company with vast capabilities in cleaning, combustion monitoring, analysis and diagnostics. We create total systems of integrated products and services to give operators customized control over individual boiler performance. This revolutionary total system and service approach is designed to help plants in the utility, pulp and paper, process industry, industrial, cogeneration and refuse boiler markets improve boiler cleanliness, increase efficiency and enhance overall plant performance.

Product/Service	Designation	Description
Boiler Cleaning Equipment	Sootblowers	Diamond manufacturers a wide range of air, steam, and water sootblowers designed for virtually every market. Included are heavy duty retractable blowers, fixed position rotating blowers, and the waterlance. Many of the blowers incorporate the new selective pattern and partial arc cleaning patterns.
	Controls	Diamond's Boiler control System TM (BOS) controls and monitors boiler cleaning devices. Using industry standard accepted hardware, it operates as a stand-alone or can be integrated with a plants' existing Distributed Control System. Advanced control features give the operator control of boiler cleaning devices by way of variable pressure and variable speed. The BOS control system supports on-demand cleaning and incorporates into Diamond's diagnostics family of products.

Diamond Power Specialty Company (Continued)

Water Level Monitoring Systems

Diamond's boiler drum level equipment covers a full spectrum of monitoring products including port type gauges, support tubes, gauge valves, fiber optic sighting equipment, and electrode based remote level indicators (MERLITM). No matter what your needs, we have the right gauge equipment for you.

Air Port Cleaning Systems Diamond's port cleaning systems are specifically designed for automatic cleaning of the air ports on recovery boilers. A heavy duty air cylinder mounted to each port and operated from a programmable control system keeps the ports open to improve boiler operation.

Maintenance and Rebuild Services

Diamond provides maintenance and rebuild services at the plant site or at one of our U.S. service centers. Our rebuild service ranges from component rebuild to the rebuild of entire sootblowers. All rebuild components use genuine Diamond parts and carry the same warranty as new equipment. Services include maintenance contracts as well as per diem service assistance.

Mirror Insulation

Mirror insulation is a high quality, all metal reflective insulation made for easy removal and reinstallation. It has the capability of providing excellent thermal insulation and at the same time can be cleaned or decontaminated, if necessary, by simple wash down procedures. Mirror is made for the smallest piping right up to and including reactor vessel insulation.

Boiler Cleaning Technology Diagnostics

It is the diagnostic "toolbox" that takes Diamond from just a hardware supplier to a boiler performance company. With products like the Cleaning AdvisorTM, Fireside AdvisorTM, FLAMEVIEWTM, GASTEMPTM, and others, Diamond can help customers solve boiler operation problems before they become critical.

Drilex Corporation 411 Wildwood Court Romeoville, IL 60441

Telephone: (815) 886-0956 FAX: (815) 886-1178 Chief Executive Officer: International Sales Manager:

Holland W. Phillips Charles Fykes, V.P.

Drilex was formed in 1980 and has been serving the mining industry for 11 years with new and re-built hammer bits, claw bits, and roller bits, both carbide and steel. Drilex does its own export packing and freight forwarding.

Product/Service

Description

Mining Equipment for Drilling Blast Hole and Long Hole

Hammer bits, roller bits, as well as down hole air hammers. Bits in sizes 4" to 24". Claw bits to 18"

Duke Energy 400 S. Tryon Street **Suite 1800** Charlotte, NC 28285

Telephone: (704) 382-2520 FAX: (704) 382-9325

President: Vice President:

M. Rhem Wooten, Jr.

Larry N. Frost

Domestic Offices: International Offices:

CHARLOTTE, NORTH CAROLINA, TEL. (704) 382-2520 AUSTRALIA: Duke Australia, Victoria, TEL. (61) 03-867-7599

Duke Energy structures, finances and manages investments in electric power facilities. Duke Energy's primary role is to manage the commercial and other relationships necessary for a given project. This includes siting, licensing, community relations, contract negotiations, construction oversight, and long-term operation management.

Within the U.S., Duke Energy's primary focus has been the greenfield development of advanced coal-fired generation, including pulverized coal, circulating fluidized bed and coal gasification technologies. For international markets, Duke Energy pursues ownership and operation of advanced coal-fueled, hydroelectric and gas-fired generation, as well as transmission and distribution systems.

Duke Energy is a wholly owned affiliate of Duke Power, the seventh-largest investor-owned utility in the U.S.

Products/Services	Description
Advanced Utilization (IGCC)	Duke Energy, in concert with its affiliates and partners, offers the integrated coal gasification combined cycle technology that utilizes the fixed-bed British Gas Lurgi gasifier. Duke Energy, one of five award winners under the U.S. DOE's Clean Coal Technology V Program, also is developing the IGCC technology in the U.S.
Financing/Equity Ownership	Duke Energy pursues advanced coal-fired, hydroelectric and gas-fired generation as well as transmission and distribution systems.
Technical Services	Duke Energy affiliates Duke Engineering & Services and Duke/Fluor Daniel may provide design engineering procurement, construction, start-up, operation and maintenance, and technical services to projects where Duke Energy has an ownership interest.

Dunn-Behre Dolbear, Inc. 1601 Blake Street **Denver, CO 80202**

Telephone: (303) 620-0020

Telex: 640103 FAX: (303) 620-0024

Domestic Offices:

NEW YORK: 275 Madison Avenue, New York, NY 10016; TEL: (212) 684-4150; Additional offices in Albany, NY; Atlanta, GA; Buffalo, NY; Chicago, IL; Concord, NH; Harrisburg, PA; Parsippany, NJ; and Washington, DC.

Dunn-Behre Dolbear has provided top quality geologic, mineral engineering and permitting services to national and international mineral industry clients in all commodities.

Product/Service

Exploration Planning and Deposit Evaluation Ore Reserve Estimation and Audits Mine Planning and Scheduling Mineral Processing

Economic and Financial Analysis

Feasibility Studies and Bankable Documents Market Studies Strategic Planning and Targeting **Valuations** Mine Permitting **Environmental Compliance**

Eavenson, Auchmuty & Greenwald Airport Office Park III 420 Rouser Road Coraopolis, PA 15108

Telephone: (412) 262-5300 FAX:

(412) 262-5303

Chairman of the Board: President:

Executive Vice President:

Edward H. Greenwald, Sr. Richard F. Wesner

Edward H. Greenwald, Jr.

Domestic Offices: DANVILLE, PA: R.D. #4, Box 279, Danville, PA 17821 TEL. (717) 275-4043

For nearly seventy-five years EA&G has performed consulting work concerned with the mining, transportation, and marketing of coal and other minerals. The firm's capabilities encompass both economic and technical analysis over a full spectrum of mining industry tasks and requirements. EA&G's expertise has relevancy at every stage involved in the development of a project -- from original conception through feasibility determination, design, engineering, construction, start-up, and full operation. The firm strongly believes that the economics of a project must be advanced parallel to the solutions to each project's distinct technical problems. The integration of these two inseparable factors underlies EA&G's approach to every task which it undertakes on behalf of its clients.

Product/Service

Architecture/Engineering (A&E) Technical Consultants

Description

- Project design and engineering for surface and underground mining operations, including determination of both technical and economic feasibility;
- Electrical cogeneration, solid fuels sourcing, characterization, blending, storage and handling systems design and engineering

Eavenson, Auchmuty & Greenwald nts To The Mining Industry

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- Marketing, including analysis of existing markets and projections of future consumption trends;
- Transportation of mineral products by rail, water, truck, conveyor, and pipeline;
- Environmental and site planning, including the intricacies of permitting, licensure, and statutory/regulatory conformance;
- Mineral preparation and beneficition, material handling, blending, and other steps and technologies involved in materials handling and treatment;
- Business management services to optimize profitability, identify and eliminate waste or loss factors, and provide knowledgeability concerning state-of-the-art management practices elsewhere in the industry;
- Specialized services in the areas of taxation, forensics, arbitration, and related subjects impacting both planned and existing operations;
- Geological analysis, exploration, and reserve studies;
- Valuations and appraisals of reserves and facilities;
- Technology-intensive computer-assisted research and development, both "project-oriented" and with reference to existing operations.

Ecology and Environment, Inc. Buffalo Corporate Center 368 Pleasantview Drive Lancaster, NY 14086

Telephone: (716) 684-8060 **FAX:** (716) 684-0844



international Specialists in the Environment

EIMCO

A Tampella Tamrock Company

Chief Executive Officer: International Sales Manager: Mr. Gerhard J. Neumaier

Mr. Henry Labalme, Arlington, VA

Domestic Offices:

International Offices:

ARLINGTON, VA: International Operations Office, 1700 North Moore St., Arlington, VA 22209, TEL: (703) 522-6065; FAX: (703) 558-7950; MCI TELEX: 650-267-6032. Additional offices in 23 U.S. cities. GERMANY: E&E UMWELT BERATUNG GmbH, Chemnitzer Strasze 13, Postfach 7, D-09222 Grtha, TEL: (0371) 88-77-33; FAX: (0371) 88-77-07, ATTN: Rolf George. E&E has representatives in 22 other

countries; contact Arlington, VA for additional information.

Founded in 1970, E&E has more than 1,200 environmental specialists, representing over 70 scientific and engineering disciplines. The firm provides solid, hazardous and nuclear waste site remedial investigations and feasibility studies; environmental engineering design, planning and construction management; environmental audits and impact assessments; hazardous materials management and emergency spill response; hazards and risks analyses; hydrogeological studies; air and water pollution control; field monitoring, testing, and analytical laboratory services; asbestos removal management; socioeconomic studies; archaeological and cultural resources programs; and related environmental consulting work.

Product/Service

Description

Environmental Consulting

E&E's complete range of environmental and pollution control consulting services is offered worldwide to organizations mining, transporting and/or utilizing coal and other natural resources.

EIMCO Coal Machinery Incorporated P.O. Box 992 2030 Pleasant Valley Road Fairmont, WV 26554

Telephone: (304) 363-7700

Telex: 62895344 FAX: (304) 363-1141

President: Vice President:

Larry Marteney Danny Coppinger

The rich mining heritage of EIMCO Coal Machinery has been derived from a series of acquisitions, including some well-known mining companies in the U.S.A.: National Mine Service Greensburg FMC, Galis and Elkhorn and WV Mining.

Product/Service

Description

Drum (Ripper) Miners

Radio Remote Crawler driven mining machines which extract ore from the mining face.

- 3612 Seams 1.21m to 3.8m 2810-3 Seams from 1372mm to 3404mm

Boring Machines

Two and four-rotor crawler driven mining machines used for extraction in primarily Trona, Potash, and Salt.

Variety of machines available with cutting heights and widths from 2.4m X 4.2m to 2.4m X 7.8m.

Shuttle Cars

Rubber tired haulage vehicles which transport the mined ore from the face to the section belt.

- 48C - Mid to High Seam with Frame Heights from .91m to 1.4m

Roof Bolters

Rubber tired, single and dual head roof bolting machines.

Seams from 762mm to 3.0m.

(Continued on next page)

EIMCO Coal Machinery, Inc. (Continued)

Battery and Diesel Scoops/Shield Haulers Rubber tired radio controlled vehicles used for clean-up, supply, and long-shield hauling.

Seams from 762mm and above.

Rail

Locomotives - 3 tonnes to 20 tonnes, T.G. from 610mm to 1,219mm

Personnel Carriers - Battery, Trolley, or Combination Rail Vehicles. Up to 24 man capacity.

Electric Fuels Corporation 235 Third Street South P.O. Box 15208 St. Petersburg, FL 33733

Telephone: (813) 892-2700

Telex: 514168 FAX: (813) 892-2702

Chief Executive Officer: Richard D. Keller International Sales Manager: Robert Ramey



Electric Fuels Corporation (EFC) through its many subsidiaries is involved in coal mining, coal transportation, coal transfer facilities, fuel research in the coal area and the development of coal-based alternative fuels. Electric Fuels has developed a coal management system that has proved to be successful and highly competitive in supplying coal from mine site to the customer. This fully-integrated system is composed of five essential groups: coal, operations, marine and terminaling; alternative fuels and international marketing. The integration of these groups under Electric Fuels' management provides the necessary exposure to all phases of the coal industry.

Products/Service	Description
Advance Utilization	With access to experts in virtually every application of coal combustion, Electric Fuels can provide qualified technical know-how in the areas of ash utilization, mineral and metal recovery from ash and in ash disposal. From start to finish, Electric Fuels' customers are assured of experienced assistance with all their coal handling needs. EFC has developed services ranging from field and laboratory functions to advanced computer support.
Coal Derivatives	Electric Fuels' involvement in the development of alternative fuels is through COMCO, a leader in the manufacture of coal-oil mixture (COM), coal-water mixture (CWM) and petroleum coke-oil mixture (PETCOM). Coal-liquid mixtures are produced at COMCO's Port Sutton, Florida facility. REDICOAL, COMCO's new powdered coal product for industrial and utility use, has proved to be an economical replacement for fuel oil and natural gas.
Coal Mining	The coal group is responsible for the mining and preparation of coal from sites containing approximately 300 million tons of reserves located in the states of Virginia, West Virginia and Kentucky. Origin points have capability to load barges, trucks and unit trains.
Coal Transport	Marine Equipment Management Corporation, a wholly-owned subsidiary, handles coal from all inland river origins in either single barge or unit tow lots. Standby loading is available. Covered barges are available. MEMCO also offers switching and fleeting services at various Mississippi River ports.
	Dioxide Fuels Limited offers handling, storing, terminaling and transporting bulk cargo by sea-going marine transportation equipment.
Facility Operations	International Marine Terminals is a bulk materials handling facility strategically located near the mouth of the Mississippi River. The recently expanded terminal consists of modern facilities, ground storage/blending and a coal testing laboratory operated by an independent agent.
	Hatfield Terminals operates transfer facilities in Cincinnati, Ohio, on the Ohio River and near Charleston, West Virginia, on the Kanawha River.

Kentucky May Coal operate a coal transfer facility on the Big Sandy River.

Ellison Consultants 4966 Tall Oaks Drive Monrovia, MD 21770-9316

Telephone: (301) 865-5302 **FAX:** (301) 865-5591

Chief Executive Officer: International Sales Manager: Mr. William Ellison Mrs. Gerd A. Ellison



Formed in 1981, this independent consultancy specializes in assessment and commercial application of SO₂, NO₃ and air toxics control technologies and methods for management of collected wastes. The firm has extensive engineering design and technical marketing experience and background in all worldwide countries that utilize state-of-the-art technology for control of air pollution in the firing of solid fuels including municipal solid wastes. Clients include government agencies, electric utility companies, gas cleaning equipment and gypsum manufacturing companies, law firms, and technical development organizations.

Product/Service

Description

Control Technology

Evaluation

Consulting expertise in evaluation, selection and conceptual design of applicable emission control means for

SO₂, NO, and air toxics.

Management of Collected Gas Cleaning Wastes

Expert technical services in planning and establishment of programs for utilization or environmentally

acceptable disposal of solid and liquid wastes.

EnCoal 105 East 4th Street Cincinnati, OH 45202

Telephone: (513) 621-3733 **FAX:** (513) 621-3734

Chief Executive Officer: International Sales Manager: L. Robert Folan Alan Tweedale

Domestic Offices:

HOT SPRINGS, VA: P.O. Box 826, Hot Springs, VA 24445 TEL. (703) 839-5111

International Offices: ENGLAND: 213 Upper Richmond Road West, London, SW14 8QT England TEL. 011-44-81-878-8355

EnCoal was founded in 1985 as the U.S. partnership between L. Robert Folan and Alan Tweedale. Tweedale has led the British Coal Board's research into clean coal burning technology since World War II. In the 1980's, he took this technology private with Energy Supplies, Ltd., which is very active today throughout the United Kingdom. EnCoal brings this technology into the United States market featuring small fluidized beds. EnCoal's first project will be to rebuild the power plant of The Homestead Hotel in Hot Springs, Virginia with a clean burning, coal fired cogeneration plant.

Product/Service

Description

EnCoal designs, builds, finances, and operates small steam driven power plants. EnCoal contracts with customers to reduce their energy costs by utilizing clean combustion technology to produce steam that in turn produces electricity, process steam, heating, and air conditioning. EnCoal's technology complies with the proposed Clean Air Act of 1990, and is predicated on bottom line savings to the customer through a long term contract with EnCoal.

Energotechnology Corporation 497 Massachusetts Avenue Cambridge, MA 02139

Telephone: (617) 492-3700 **FAX:** (617) 492-3705

Chief Executive Officer: E. Stephen Miliaras
International Sales Manager: Damon W. Lawrence

Energotechnology Corporation was founded in 1975 to provide consulting services in energy and power generation for industry, utilities, business and governmental agencies and to conduct research and development in energy, power generation, pollution abatement, regulatory affairs, and related areas of technology. Energotechnology's engineering staff includes senior men in the mechanical, electrical, civil/structural and chemical/environmental fields who are experienced in power plant design and in related work. Our proximity and contacts with the well-known nearby universities offer us and our clients the opportunity to utilize as consultants various experts in their respective fields should the need arise.

Product/Service Description

Advanced Utilization Energotechnology has developed an innovative and low cost clean coal combustion technology for power generation which combines simple coal cleaning and power cycle modifications and is retrofitable to existing older coal-fired power plants and can result in uprating while reducing emissions. The proprietary technology can also reduce the cost of new power plants.

Technical Consulting Energotechnology has also developed innovative and low cost power generation concepts from the combustion of refuse, the conversion of oil/gas designed boilers to firing coal, and a coal-fired power plant with low cost, built-in peaking capability from coal.

Energy and Environmental Research Corporation 18 Mason Irvine, CA 92718

Telephone: (714) 859-8851 **FAX:** (714) 859-3194

Chief Executive Officer:

Thomas J. Tyson

International Sales Manager: S. Chen

Domestic Offices:

ORRVILLE, OH: 1645 N. Main, Orrville, OH 44667 TEL. (216) 682-4007, FAX (216) 684-2110; DURHAM, NC: 3622 Lyckan Parkway, Durham, NC 27707 TEL. (919) 489-1726, FAX (919) 493-5670; WHITEHOUSE, NJ: P.O.

Energy and
Environmental
Research Corporation

Box 189, Whitehouse, NJ 08889 TEL. (201) 589-1726, FAX (201) 534-9018.

International Offices:

Please contact company headquarters for further information.

EER specializes in combustion and air pollution control for coal. This includes the development and application of advanced combustion systems and emission control equipment. EER also specializes in the turning and optimization of combustion equipment. This includes burner balancing, sootblower optimization and other techniques to produce optimum thermal performance and minimum emissions. EER has experience with all fossil fuels including coal, oil and gas. EER also has experience in the incineration of waste materials including hazardous waste; municipal solid waste and medical waste. Annual sales are approximately \$25,000,000. Employees number about 200, mostly engineers with advanced degrees.

Product/Service	Description
Coal Quality Evaluation	Comparative evaluations of alternate coals including analysis and test burns.
Emissions Compliance	Evaluations of alternate strategies for meeting NO _x , SO ₂ and particulate emission regulations at minimum total cost.
Performance Optimization	Tuning coal combustion systems for maximum efficiency, minimum emissions and minimum total cost.
SO ₂ Control Systems	Several SO ₂ control processes including in furnace and duct sorbent injection systems.
NO _x Control Systems	Several NO, control processes including reburning, ammonia injection, flue gas recirculation, low NO, burners and several new technologies under development.

Energy International Corporation 135 William Pitt Way Pittsburgh, PA 15238

ENERGY INTERNATIONAL CORPORATION

Telephone: (412) 826-5350

Telex: 5106019265 (U-PARC UQ) FAX: (412) 826-5378

President: Dr. Alan H. Singleton

VP, Business Development: Mr. R.K. (Kim) Penland

Energy International Corporation (EI) was formed to develop, license, and market new technologies and services for the advanced utilization of coal, special coal processing services, and the conversion of gas to premium liquid fuels. El provides these services worldwide, including resource evaluation and selection, environmental impact evaluation, market assessments and project development. These services are available from project inception through operational startup and can involve intermediate and final products.

Product/Service	Description
Advanced Utilization	El provides special Mineral Processing Services for grinding, washability studies, and testing of coals.
Power Generation Fuel (Underground Coal Gasification)	El's Underground Coal Gasification technology can supply a range of gas products for industrial fuel use, electrical power generation, or synthesis gas to produce transportation fuels, fertilizers, and plastics from uneconomically minable coal resources.
Coal Derived Products (Coal Water Slurry Fuels)	El develops and supplies specialized Coal Water Fuel slurries containing from 55% to 65% coal solids which can replace heavy fuel oil for electric power generation and for industrial boilers.
Mulled Coal	El provides and licenses technology for solving wet fine coal handling problems; provides economic alternatives to thermal drying and coal water slurries.
Coal Liquefaction	El provides and licenses technology for indirect coal liquefaction via gasification followed by proprietary Fischer Tropsch catalyst and process; the F-T technology is also applicable to natural gas feedstock.
Technical Consultants	El provides resource assessments, coal evaluations, technology transfer, process design, and project development and management services.

ENSR Consulting and Engineering 35 Nagog Park Acton, MA 01720

Telephone: (508) 635-9500 FAX: (508) 635-9180

Chief Executive Officer:

Robert Anderson

International Sales Manager: Kathy Reppucci

Domestic Offices: ANCHORAGE, AK: (907) 561-5700; FLORENCE, AL: (205) 740-8240; LOS ANGELES, CA; (Camarillo)

(805) 388-3775 (Newport Beach) (714) 476-0321; SAN FRANCISCO, CA: (510) 865-1888; FORT COLLINS, CO:

(303) 493-8878; HARTFORD, CT: (203) 657-8910; CHICAGO, IL: (708) 887-1700; BOSTON, MA:

(508) 635-9500; MINNEAPOLIS, MN: (612) 924-0117; MAHWAH, NJ: (201) 818-0900; MOUNT LAUREL, NJ: (609) 234-5520; SOMERSET, NJ: (908) 560-7323; RALEIGH, NC: (919) 571-0669; PITTSBURGH, PA: (412) 261-

2910; DALLAS, TX: (214) 960-6855; HOUSTON, TX: (713) 520-9900; SEATTLE, WA: (206) 881-7700;

International Offices:

SAN JUAN, PR: (809) 753-9509

ENSR Consulting and Engineering is an environmental services firm specializing in solving problems for industry. Areas of expertise include air, water, and hazardous waste management; environmental permitting; risk assessment; environmental management; and occupational health management. For 25 years, ENSR project managers have helped industrial companies solve some of the toughest environmental problems of our times. Most of our projects have been performed for private industry, including 43 of the top 50 Fortune 500 companies. ENSR's staff of more than 1,000 scientists, engineers, and support personnel have specialized expertise in more than 60 disciplines.

Product/Service Description

Emissions Control & Waste Disposal

Systems

In-house resources for permitting, compliance, air toxics engineering, emissions management or risk assessment. Engineers have specialized expertise in wastewater treatment processes and air pollution control, design of landfills, hazardous waste incinerators, and remediation programs.

Technical Consultants

Property transfer/due diligence; cleanup of Superfund sites; environmental permitting of landfills, industrial developments, energy and mineral projects, industrial boilers, cogeneration plants; worker exposure, product liability, toxic torts; dioxin and benzene risk assessment; chemical and oil spills; environmental impact assessments.

The ERM Group 855 Springdale Drive Exton, PA 19341

Telephone:

(800) 544-3117

Telex:

49600537

FAX: (215) 524-7335

Founder:

International Sales Manager:

Paul H. Woodruff Jack C. Newell

Domestic Offices:

SAN FRANCISCO, CA TEL: (510) 946-0455; DENVER, CO TEL: (303) 741-5050 OR (800) 669-7330;

TAMPA, FL TEL: (813) 622-8727; CHICAGO, IL TEL: (708) 940-7200; BOSTON, MA TEL:

(617) 742-8228; LONG ISLAND, NY TEL: (516) 921-4300; COLUMBUS, OH TEL: (614) 433-7900 OR

(800) 966-3766; EXTON, PA TEL: (215) 524-3500; NASHVILLE, TN TEL: (615) 373-3350;

HOUSTON, TX TEL: (713) 579-8999; SEATTLE, WA TEL: (206) 827-9440

(Continued on next page)



The ERM Group (Continued)

International Offices:

AUSTRALIA, Environmental Resources Pty Ltd TEL: (011-61-2) 262-5716; BELGIUM, ERL Bruxelles TEL: (011-32-2) 732-5144; BRAZIL, SEMCO-ERM do Brasil Ltda. TEL: (055-11) 523-0055; CANADA, ERM-Canada, Inc. TEL: (604) 684-4434; ERM-Ontario, Inc. TEL: (416) 507-3343; ENGLAND, Environmental Resources Ltd. TEL: (011-44-71) 465-7200; Four Elements Ltd. TEL: (011-44-71) 973-8041; ERL (North) TEL: (011-44) 207-507254; Environmental Resources Ltd. TEL: (011-44) 604-791551; Environmental Resources Ltd. TEL: (011-44) 865-793004; Buxton Court TEL: (011-44) 865-204994; Enterprise House TEL: (011-44-70) 3-511-711; GERMANY, ERL-Umwelt Consult TEL: (011-49) 6251-76057; ERM Umwelt Consult Rhein-Ruhr TEL: (011-49) 2304-46652; HONG KONG, ERL (Asia), Limited TEL: (011-85-2) 72-20292; INDIA, ERM (India), Private Limited TEL: (011-91-44) 45-0425; IRELAND, ERL Northern Ireland TEL: (011-44) 266-48924; ITALY, ERL Italia S.r.l. TEL: (011-39-2) 295 22275; MEXICO, ERM-Mexico, S.A. de C.V. TEL: (011-525) 286-4625; NETHERLANDS, ERL Nederland B.V. TEL: (011-31) 795-22777; POLAND, ERM Polska Sp.Z.O.O TEL: (011-48) 22-15-35-44; PORTUGAL, Impacto 2000, Lda (ERM Portugal) TEL: (011-351-1) 315-0561; SCOTLAND, ERL North (Scotland) TEL: (011-44) 555-665937; SPAIN, ERL Espana, S.A. TEL: (011-34-1) 522-2750; TAIWAN, ERM-Taiwan TEL: (011-886-2) 516-0495

With 2,500 employees working from more than 75 locations worldwide, the Environmental Resources Management Group (ERM) provides exceptional environmental consulting, construction management, analytical laboratory, and information and data management services to a wide range of private and public sector clients. Specific services include site remediation; management consulting; hazardous/solid waste management; hydrogeology; ground water resources; health, safety and toxicology; risk assessment; biological investigations; industrial/municipal water and wastewater treatment; engineering; air quality management; construction and tank management; computer software; and information management services.

ESCO Corporation World Headquarters 2141 N.W. 25th Avenue Portland, OR 97210



Telephone: (503) 228-2141

Telex: 360590 FAX: (503) 778-6360
Chief Executive Officer: Nick Collins
International Sales Manager: Jim Songer

International Offices:

MEXICO: Guadalajara; BRAZIL: Sao Paulo; FRANCE: Saint Priest; SINGAPORE

ESCO Corporation is a world leader in steel technology, providing innovative products and alloys for the coal mining industry. ESCO was founded in 1913 as Electric Steel Foundry Company in Portland, Oregon. ESCO continues to pioneer technology advances in metallurgy, design and manufacture. ESCO's innovative products and unique casting capabilities have earned a worldwide reputation for excellence. ESCO has manufacturing operations in the United States, Canada and Europe. A global marketing partnership called ESCONET has licensees throughout the world who are qualified manufacturers of ESCO alloys and products within their own markets.

Product/Service

Description

Mining Equipment

High-performance buckets, tooth systems and ground engaging tools resist impact and abrasion in general purpose as well as the most severe applications. Shovel Dippers and dragline buckets, plus rigging and accessories are available for all types and sizes of machines. ESCO also produces dozer- and scraper-mounted rippers, cutting edges and endbits, plus replaceable wearparts for crushers.

ETS. Inc. 1401 Municipal Road, N.W. Roanoke, VA 24012-1309

Telephone: (703) 265-0004 (703) 265-0131 FAX:

President:

Gary P. Greiner

International Sales Manager: John C. Mycock



ETS. Inc. currently has two emission control and monitoring products available for export. The first is the Limestone Emissions Control System (LEC). The LEC is a unique system employing a moving-bed of standard quarry-sized limestone to remove up to 99% SO₂ from coal-fired boiler flue gases. The LEC system enables boiler operators to burn high-sulfur coal in both an economically and environmentally acceptable manner. The economics of using limestone are extremely attractive compared with other systems. The second is the Baghouse Performance Monitor Expert System (BPMES). The BPMES provides the plant engineer with a means of monitoring a baghouse for stable operation and identifying the root cause of problems as they develop. The BPMES consists of an on-line baghouse monitoring and diagnostic package developed by ETS, Inc. under EPRI sponsorship. It is the first such particulate control operations advisor available to the utilities and industry.

ETS. Inc. services also include: contract research and development; air pollution control; consultation; equipment upgrade engineering; environmental engineering; field and laboratory testing. The principals of ETS, Inc. have over 100 years experience in these areas and have been serving the air pollution control industry since 1973.

Product/Service

Limestone Emission Control System (LEC)

Baghouse Performance Monitor Expert System (BPMES)

Contract Research & Development

Engineering

Consulting

Field & Laboratory Testing

John Fabick Tractor Company 1 Fabick Drive Fenton, MO 63026

Telephone: (314) 343-5900

Telex: 044-7325 FAX: (314) 343-4910

Chief Executive Officer:

Harry P. Fabick, President

International Sales Manager:

John Fabick, IV

Domestic Offices:

MARION, IL: Fabick Machinery Company, Old Hwy East, Marion, IL 62959 TEL. (618) 997-1881, FAX (618) 997-4854; SALEM, IL: Fabick Tractor Company, U.S. Hwy 50 West, Salem, IL 62881 TEL. (618) 548-1400, FAX (618) 548-1484; SIKESTON, MO: Fabick Bros. Equipment Company, 912 S. Main Street, Sikeston, MO 63801 TEL. (314) 471-5941, FAX (314) 471-8900; JEFFERSON CITY, MO: Fabick and Company, 2009 Missouri Blvd., Jefferson City. MO 65101 TEL. (314) 636-3184, FAX (314) 634-2883

Caterpillar Dealer in business since 1917, experienced in coal mine operation including facilities for large track-type tractor service, specialized coal mine support personnel. Fabick will customize a maintenance program to meet the needs of a coal mine. Also several complementary lines of equipment including Demag, Grove, CMI Load King and others. Marion, IL location equipped with D11 undercarriage track press, engine dynamometer, large parts inventory on hand for equipment common in coal mines. Company is experienced in economical shipment of heavy equipment and has worldwide network established for location of difficult to find pieces. Company operates under founder's philosophy: "to ever serve our customers better."

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John Fabick Tractor Company (Continued)

Product/Service	Designation	Description
Track type tractors	D3-D11	Caterpillar Tractors, standard and custom built, variety of blades, zippers, winches, 65-770 FWHP.
Motor Graders	120-16G	Caterpillar machines with blades, scarifiers, 125-275 FWHP.
Hydraulic Excavators	204-245	Caterpillar and Demag machines in a variety of configurations and attachments. Demag machines in larger sizes than Cat (15,000 lbs to 144,000 lbs).
Scrapers	613-657	Caterpillar machines in elevating, push load, and push-pull arrangements, 11 to 44 cu.yd.
Off Highway Trucks	769-793 D25-D400	35 to 240 ton. Articulating dump trucks from 25 to 40 Ton.
Other Equipment		Wheel loaders, backhoe-loaders, compaction equipment, Diesel engines, electrical generators, pumps, cranes, trenchers, more.

The Fieldston Company, Inc. 1920 N Street, N.W., Suite 210 Washington, D.C. 20036-1613

Fieldston

Telephone: (20 FAX: (20

(202) 775-0240 (202) 872-8045

President/CEO:

James N. Heller

Fieldston Company, Inc. is a coal market and coal transportation consulting and publishing firm. The company publishes a bi-annual coal transportation reference guide, "The Fieldston Coal Transportation Manual"; a reference guide for exporting coal from the U.S., "The Fieldston U.S. Coal Export Manual", as well as two newsletters, "Coal Transportation Report" and "Compliance Strategies Review." Fieldston's primary area of consulting expertise involve analyzing and coal transportation rates, costs and logistics, and coal markets, for international and domestic clients.

Product/Service	Description	
Fieldston Coal Transportation Manual	The Manual is a reference volume dedicated exclusively to coal transportation, from mine to end- user. The publication contains data on all components of coal transportation, including railroads, river docks, barge companies, foreign and domestic coal terminals, electric utilities and coal producers. The Manual is published biannually.	
Fieldston U.S. Coal Export Manual	A new publication, the Export Manual explains and analyzes the companies involved in exporting coal from the U.S. The Manual discusses in detail major coal suppliers, railroads, barge companies, river docks and ocean terminals participating in U.S. coal exports. Data and information contained in the Manual includes major export contracts, coal prices, rail and transportation rates and more.	
Coal Transportation Report	A bi-weekly newsletter addressing issues pertinent to the coal and coal transportation industries. Areas of coverage include new coal and transportation contracts, transportation regulation, innovations in coal transportation technologies and general coal industry issues having an impact on the nation's coal transportation infrastructure. Coal producers, railroads, barge companies, river docks, and coastal and Great Lakes coal terminals are all covered.	
Compliance Strategies Review	A bi-weekly newsletter covering electric utility compliance with the Clean Air Act Amendments of 1990. Areas of coverage include SO ₂ emission, allowance trading, tax issues, issues affecting low-sulfur coal, the scrubber industry, NO ₃ emissions and other related areas.	

J.H. Fletcher & Company P.O. Box 2187 Huntington, WV 25722

Telephone: (304) 525-7811 Fax:

(304) 525-3770

President/CEO: Sales Manager:

Ray Parks **Bob Stach**

Domestic Offices:

402 Hight Street, Huntington, WV 25705

Manufacturer of underground mining machinery. Roofbolting machines, single and dual boom face drills, self propelled scalers, diesel powered utility vehicles, mobile roof supports.

Fluor Daniel 3333 Michelson Drive Irvine, CA 92730

Chairman and CEO: President and COO:

Les G. McCraw Vince L. Kontny

Sales Manager: Telephone: FAX:

Dick Behrman (803) 281-5959 (803) 281-8157

Sales Manager: Telephone: FAX:

John Bradburne (202) 955-9300 (202) 833-1630

Worldwide Offices:

The Americas: Anchorage, Alaska; Bakersfiled, CA; Calgary, Alberta, Canada; Caracas, Venezuela; Charleston, WV; Chicago, IL; Cincinnati, OH; Corpus Christi, TX; Dallas, TX; Denver, CO; Detroit, MI; Greenville, SC; Houston, TX; Irvine, CA; Kansas City, MO; Kingston, Ontario, Canada; Mexico City, Mexico; New York, NY; Philadelphia, PA; Richmond, VA; San Francisco, CA; San Juan, Puerto Rico; Santiago, Chile; Sudbury, Ontario, Canada; Tulsa, OK; Vancouver, British Columbia, Canada;

FLUOR DANIEL

Asia/Pacific: Bangkok, Thailand; Beijing, China; Brisbane, Australia; Hong Kong; Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; Melbourne, Australia; Perth, Australia; Seoul, Korea; Singapore; Sydney, Australia; Tokyo, Japan

Europe/Africa/Middle East: Asturias, Spain; Bergen op Zoom, Netherlands; Camberley, England; Dhahran, Saudi Arabia; Dubai, U.A.E.; Dusseldorf, Germany; Haarlem, Netherlands; Jeddah, Saudi Arabia; Leipzig, Germany; London, England; Madrid, Spain; Manchester, England; Paris, France; Weisbaden, Germany

Fluor Daniel provides a full range of engineering, construction and related services through over 50 offices worldwide. These services include feasibility studies, conceptual design, project management, engineering, procurement, construction, technical services, project financing, consulting, environmental services, maintenance and plant operations. Our affiliate, AT Massey Coal Company, produces both high-quality low-sulfur coal and metallurgical coal and ranks among the five largest coal marketers in the United States. Massey sells produced coal and markets coal for independent producers. Fluor Daniel, in partnership with Duke Power, designs and constructs or modernizes coal-fired power plants and performs operations and maintenance.

Product/Service

Description

Power Generation System

Fluor Daniel provides design engineering, procurement and construction of integrated coal gasification power generating systems as a part of our work with combustion turbine technology. Duke/Fluor Daniel has engineered or constructed over 75 conventional fossil fuel generating stations ranging from 5Mw to 1080Mw and provided maintenance and operating services in over 150 units.

(Continued on next page)



Fluor Daniel (Continued)

Advanced Utilization (CCT) Fluor Daniel offers engineering, procurement, construction and consulting support to Clean Coal Technology (CCT)

projects. We have performed over 105 coal gasification studies and participated in 14 major projects including Sasol,

the world's largest coal gasification facility, on which Fluor Daniel performed engineering, procurement and

construction.

Coal Through Fluor Corporation's subsidiary, A.T. Massey produces high-quality, low-sulfur steam coal for the electric

generating industry and metallurgical coal for the steel industry. Massey operates through a network of nine operating

companies.

Engineering/Procurement/

Construction

Fluor Daniel's engineering, procurement and construction experience includes coal mines, coal handling and

transport facilities, and plants for utilities and other coal consumers.

FMC Corporation Conveyor Equipment Division P.O. Box 1370 Tupelo, MS 38802



Telephone: (601) 869-5711 **FAX:** (601) 869-7557

Division Manager: E.L. Doty
International Sales Manager: James E. Allen

The Conveyor Equipment Division of FMC Corporation has provided over a century of service to the coal industry. The company's Link-Belt products are known around the world as the standard for quality. Belt conveyors idlers, underground structure, terminal groups, and accessories are made especially for the coal mining industry. We provide a product you can count on through our domestic and international distributor network.

Product/Service	Description
Above Ground Idlers	FMC offers a complete line of Link-Belt Idlers. CEMA B,C,D,E,E+ ratings. Standard belt widths from 18-72 inches. Precision boring and welding insures product quality meets customer requirements for durability.
Underground Belt Conveying Equipment	FMC supplies a complete line of equipment for underground belt conveyors including drive terminals, tail pieces, tail loading sections, discharge sections, wire rope idlers, rigid frame idlers, and intermediate structure. Structure provided in belt widths up to 60 inches.

Foster Wheeler Corporation Perryville Corporate Park Clinton, NJ 08809-4000



Telephone: (201) 730-4000 **FAX:** (201) 730-4360

Chief Executive Officer: Mr. L.E. Azzato

International Sales Manager: Mr. L.G. Lutes, Foster Wheeler Energy International, Inc.

Domestic Offices: ATLANTA, GA; BOSTON, MA; CHARLOTTE, NC; CHICAGO, IL; DENVER, CO; HOUSTON, TX; KANSAS

CITY, MO; LOS ANGELES, CA; NEW ORLEANS, LA; NEW YORK, NY; PHILADELPHIA, PA;

PITTSBURGH, PA; WASHINGTON, D.C.; AND WINTER PARK, FL

International Offices: AUSTRALIA: TELEX 152838 REWOP AA; CANADA: TELEX 055-60042; CHINA: TELEX 210396 REWOP CN;

COLOMBIA: TELEX 396-43254 REWOP CO; ENGLAND: TELEX 851-263984; FRANCE: TELEX 842-210 782;

HONG KONG: TELEX 37512 FWAL HX; ITALY: TELEX 843-310548; JAPAN: TELEX 2323192;

NETHERLANDS: TELEX 844-34264; NIGERIA: TELEX 22365 FOSWLD NG; SINGAPORE: TELEX RS 39292

FWINTL; SPAIN: TELEX 83122275; contact the main office for further information.

Foster Wheeler Corporation is an engineering, manufacturing, construction, plant operations and service organization with 23 subsidiaries operating worldwide. Founded in 1927, it is currently one of the world's largest engineering and construction organizations. International activities are conducted by affiliates in England, France, Italy, Spain, and Canada. U.S. based industrial subsidiaries supply diversified engineering technologies and allied equipment.

Product/Service

Financing

Advanced Utilization Architecture/Engineering Boiler Equipment Coal Derivatives Facility Construction Facility Operation

Description

Foster Wheeler Energy Corporation, a major United States subsidiary, designs, fabricates, maintains, manufactures, and constructs steam generating equipment for electric utilities and industry. This Foster Wheeler subsidiary furnishes condensers, feed water heaters, and other major auxiliary equipment for coal, oil, and gas-fired installations in the United States and abroad. Foster Wheeler's application of alternate energy sources have advanced the state of the art. Current projects involve refuse-to-energy plants, the cogeneration of industrial steam and electric power, a proprietary sludge drying process and high technology heat recovery equipment.

GAI Consultants 570 Beatty Road Monroeville, PA 15146

CONSULTANTS

Telephone: (412) 856-6400 FAX: (412) 856-4970 Chief Executive Officer:

International Sales Manager:

Dr. Anthony M. DiGioia, Jr. Mr. Henry A. Salver

Domestic Offices:

CHARLESTON, WV: 114 West Lee Street, Charleston, WV 25302 TEL. (304) 344-5300,

FAX (304) 344-8174; ORLANDO, FL: 1833 Edgewater Drive, Orlando, FL 32804 TEL. (407) 423-8398, FAX (407) 843-1070; RALEIGH, NC: 401 Glenwood Avenue, Raleigh, NC 27603 TEL. (919) 828-0801, FAX (919) 833-2784; MT. LAUREL, NJ: 300 Birchfield Drive, Suite 301, Mt. Laurel, NJ 08054 TEL. (609) 273-6585, FAX (609) 273-0050; Ft. Wayne, IN: 117 Airport North Office Park, Ft. Wayne, IN 46825

TEL. (219) 489-2900, FAX (219) 489-4159

International Offices:

Please contact Monroeville office for further information.

GAI Consultants professional staff of 450 engineers, geologists, scientists, environmental specialists, planners, economists, and technical and administrative personnel provides a comprehensive range of quality planning, study, and design services in civil, environmental, geotechnical, and structural engineering; energy; mining (including pre-blasting and pre-mining surveys); soil science and agronomy; water resources; industrial/hazardous waste management; transportation; site development; and construction monitoring.

Product/Service	Description
Mine Planning and Design	Full design and planning services for new or expanding mines include drilling, geophysical testing, feasibility studies, mine layouts, permitting, and selection of mining methods and mine access. GAI also provides assistance in planning and siting auxiliary mine facilities and beneficiation and coal gasification facilities.
Waste Disposal and Land Reclamation	Waste disposal and land reclamation services range from overall engineering design and materials handing procedures to environmental studies, and ground-water investigations. GAI provides services for dry refuse disposal areas and slurry impoundments; treatment of acid mine drainage; design of waste disposal dams and ponds; and regrading, revegetation, and reclamation planning.
Environmental and Subsidence Engineering	Environmental services include pollution abatement, reclamation planning, environmental impact statements, waste disposal and permitting studies, ground-water monitoring, and acid mine drainage studies. Subsidence-related services include subsidence plans, mine and surface stabilization, prediction of subsidence and ground movement, subsidence investigation and control plans, and

design of subsidence-resistant structures.

GAMMA-METRICS 5788 Pacific Center Boulevard San Diego, CA 92121

Telephone: (619) 450-9811

Telex: 5101011912 FAX: (619) 452-9250

Chairman, President, and CEO:

Ernesto A. Corte

Director of Sales:

International Offices:

Michael C. Mound, Ph.D.

GAMMA-METRICS is a manufacturer of instrumentation and process control systems tied to the on-line elemental analysis of coal. Coal sorting by grade, coal blending for uniformity, emissions control, prep plant control, and boiler optimization are facilitated by on-line coal analysis. Parameters analyzed: sulfur, ash, moisture, calorific value, SO, emissions, nitrogen, chlorine, and ash constituents.

Product/Service

Description

On-Line Coal Analyzer

Instrument which measures coal quality each minute in coal stream to allow real-time process control.

22 countries, 5 continents (Contact Corporate Headquarters for additional information)

FastLab"

Laboratory device which provides full analysis of coal samples every 15 minutes.

GAR International Corporation 3 Crown Plaza Hazlet, NJ 07730-2441

GAMMA-METRICS

Telex:

Telephone: (908) 264-9100

178380 FAX: (908) 264-0775

Chief Executive Officer: International Sales Manager: Nicholas R. Gallinaro - Chairman

Michael J. Gallinaro - Vice President Marketing

Domestic Offices:

MIAMI, FLA: Mr. George Romani, 7975 N.W. 21 Street, Miami, FL 33122 TEL: (305) 477-3400;

FAX: (305) 477-4044

International Offices:

LIMA, PERU: Mr. Carlos Chocano, Av. Ricardo Palma 836, Miraflores, Lima 18 Peru TEL: (51/14) 468334; FAX: (51/14) 479352; SANTIAGO, CHILE: Mr. Isidro Gomez, Fidel Oteiza 1956, Of. No. 27, Santiago, Chile TEL: (56/2) 2091439; FAX: (56/2) 2743201; MILAN, ITALY, Mr. Bruno Albanesi, CIMAT, S.r.L. Via Larga, 7, 20122, Milan, Italy TEL: (39/2) 58307444; FAX: (39/2) 58307621

GAR International Corporation, incorporated April 3, 1972, has acted as a contractual major account distributor for the equipment manufacturers listed below for the past twenty-one (21) years. In addition, GAR International is distributor for some of these manufacturers in Peru, Chile, Italy, Suriname, Venezuela, Colombia and Caribbean basin. In addition to supplying spare parts for these products, GAR can provide component description exchange programs, used equipment service programs and complete maintenance programs.

Manufacturer

Description

Komatsu Dresser

Off-Highway Trucks up to 200 tons Haulpak

Dresser Crawler Tractors, Wheel Loaders & Hydraulic Excavators

Galion Motor Graders & Compaction Rollers Hydraulic Telescoping Boom Cranes Grove

Manlift Aerial Work Platforms

Truck Mounted Telescoping & Knuckleboom Cranes National

Detroit Diesel Diesel Engines & Generator Sets

Allison Construction, Mining & Industrial Transmissions American Crawler & Truck Cranes, Draglines & Clamshells

Electric Shovels, Draglines & Drills Marion

(Continued on next page)

GAR International, Incorporated (Continued)

Payhauler All Wheel Drive Off-Highway Trucks
Blaw Knox Mobile Asphalt Paving & Screen Equipment
Mantis Hydraulic Telescoping Boom Crawler Cranes

Capacity Trailer Spotting Tractors
Skagit Construction & Offshore Hoists

Amida Portable Lighting Generators & Traffic Direction Equipment

Hotsy Portable Pressure Cleaning Equipment
Volvo GM White-Autocar Trucks On & On-Off Highway

Sandvik Rock Drilling Equipment for Mining, Water Wells & Road Work

Spectron Computerized Maintenance Management Systems
Taylor Container & Industrial Rough Terrain Lift Trucks

The Gates Rubber Company Export Division 990 So. Broadway, P.O. Box 5887 Denver, CO 80217

Telephone: (303) 744-1911

Telex: MCI 6837035 FAX: (303) 744-4000

President: Donald E. Miller

International Sales Manager: Ed Heath, Director, Export Operations

International Offices: AUSTRALIA: Melbourne, FAX 61-37-940690; BELGIUM: Erembodegem, FAX 32-53-773486; BRAZIL:

Sao Paulo, FAX 55-11-933158; CANADA: Ontario, FAX 519-759-4567; ENGLAND: St. Neots, FAX 44-480-215048; HONG KONG, FAX 852-5-8104289; JAPAN: Tokyo, FAX 81-3-4780623; MEXICO:

Tlainepantia, FAX 52-905-361-1813; SCOTLAND: Dumfries, FAX 44-387-68937; SINGAPORE: FAX 65-

8613727; SPAIN: Barcelona, FAX 34-3-3712425; GERMANY: Aachen, FAX 49-241-5108249

The 82-year-old Gates Rubber Company is the world's largest manufacturer of belt and hose products for industrial and automotive applications. Based in Denver, Colorado U.S.A., Gates operates 37 manufacturing plants in 16 countries. Other operations for the privately owned company include seven distribution centers, 11 marketing offices and three joint venture companies. Gates rubber products are marketed in some 117 countries. With sales of over \$1 billion, Gates' 13,000 employees manufacture and market power transmission belts, hose, hydraulic hose and couplings, and molded rubber products to both the original equipment and replacement market segments.

Product/Service	Designation	Description
Hydraulic Hose	Coal Power	High pressure hydraulic hose used on longwall mining and roof-support systems. Accepts petroleum-based or water emulsion fluid. Meets DIN, NCB and USMSHA requirements.
Power Transmission Belt	Poly Chain GT	High horsepower, energy efficient, polyurethane, synchronous belt. Designed to replace chain and gear drives. Resists abrasion, oil and stretching.



GE Environmental Systems 200 North Seventh Street Lebanon, PA 17042

Telephone: (717) 274-7000

Telex: 842-332 FAX: (717) 274-7103

Senior Vice President Marketing: Mr. Thomas A. Abramczyk

Vice President Sales: Mr. David G. Olson

International Offices: Please contact company headquarters for further information

GE Environmental Systems is a leading supplier in the design, fabrication, and construction of turnkey air pollution control systems for power plants, industrial boilers, waste incinerators, and chemical plants. Products include Flue Gas Desulfurization Systems of limestone/gypsum, MgO/sulfuric acid and semi-dry types, electrostatic precipitators, fabric filter systems, dry acid gas scrubbers, cyclones, and classifiers.

Product/Service Description The most efficient and reliable advanced process in the world offering single absorber vessels for boilers up to 700 Flue Gas Desulfurization MW, availability records exceeding 99%, SO₂ removal efficiencies of 95+%, and up to 30% capital cost savings over conventional designs. Advanced FGD technologies include ammonia scrubbing for the production of high-value ammonium sulfate by-product. **Electrostatic Precipitators** State-of-the-art design including rigid frame electrodes, pulse powering, and advanced controls. Units serve virtually all particulate removal applications; GE experience includes over 74,000 MW of power generation capacity. Reverse gas or pulse jet design available in various filter media applicable to utility and industrial boilers and Fabric Filters industrial process applications for the removal of flyash, dust, and fine particles. Patented dust/particulate collection units which are rugged and efficient. The leading choice for use in all types of Mechanical Collectors fluid bed process. Classifiers Particle separation units for feeds of 10 mesh to 15 microns, no moving parts, low energy requirements, low capital cost, and easily adjusted for changes in product requirements.

GeoResearch, Inc. 115 N. Broadway Billings, MT 59101

GRI GeoResearch, Inc.

Telephone: (406) 248-6771 **FAX:** (406) 248-6770

Chief Executive Officer: Douglas Richardson, Ph.D. International Sales Manager: Douglas Richardson, Ph.D.

International Offices: Please contact company headquarters for further information.

GeoResearch, Inc., provides comprehensive environmental consulting services to coal mining, coal processing, and coal burning industries.

GeoResearch is an experienced multidisciplinary firm, with staff including expert hydrogeologists, meteorologists, air quality specialists, analytical chemists, environmental engineers, and computer programmers. GeoResearch has extensive experience in issues pertaining to acid rain. GeoResearch is currently conducting a two year study in conjunction with the Government of Italy to assess the occurrence and potential for acid rain there.

GeoResearch also offers Global Positioning Satellite (GPS) survey services integrated with computer based Geographic Information Systems (GIS) to produce surveys, maps, and to effectively manage geographic data of all types.

(Continued on next page)

GeoResearch, Inc. (Continued)

Product/Services

Monitoring system design and computer dispersion modeling of all relevant parameters including: meteorology, SO₂, NO₂, O₃, H₂S, odor, total and respirable particulates, etc. Acid rain studies. Source apportionment.

Water/Ground Water Services

Hydrogeologic analysis, aquifer testing, ground water monitoring, water supply, mine dewatering, mine drainage, water quality, hydrochemistry, flow measurements, aquifer remediation.

Computer Mapping Services

State-of-the-art computer based survey and mapping capabilities utilizing Global Positioning Satellite technology integrated with ARC/INFO and other GIS software. Positional and topographic tolerances to ± 2 cm. Developer and distributor of the GeoLink Mapping System, which combines GPS and GIS.

Gilbert/Commonwealth, Inc. Green Hills Corporate Center P.O. Box 1498 Reading, PA 19603-1498



Telephone: (215) 775-2600

Telex: 173-228 FAX: (215) 775-2670

Chief Executive Officer: Alexander F. Smith, III

International Sales Manager: Dennis J. Vito

International Offices: ENGLAND: Keith Millard, Gilbert Europe, Fraser House, London Road, Twickenham, Middlesex, TWI-3ST

TEL. 44 81 891-4383. TELEX 266-951 GILBT G; ENGLAND: Halcrow Gilbert Associates, Ltd., Burderop Park, Swindon, Wiltshire SN4 OQD TEL. 44 79 381-4756 TELEX 44844 HALWIL G; EGYPT: Vincent W. Condrath, Jr., Gilbert International, Road 282, Villa No. 78, New Maadi (Port 3) Cairo TEL. 20 2 353-2771 TELEX 21157

GAMEL UN. Contact: Halcrow Gilbert Associates - Terrence Tovey.

Gilbert/Commonwealth (G/C) provides consulting engineering and allied capabilities to a wide variety of industrial, utility and governmental clients around the world. Our extensive experience with fossil fuels and fossil fueled power plants encompasses the full range of consulting engineering services, including feasibility studies, engineering analyses, trade-off studies, independent engineers reports, conceptual and final design, cost estimates, planning and scheduling, specifications, quality assurance, construction management, and startup and test. Gilbert/Commonwealth's commitment to and experience with advanced energy technologies is well-known, with many assignments for industry and government agencies, including the design and operation of the High Sulphur Center for the Electric Power Research Institute. Further, G/C's engineering and applications experience with acid rain and greenhouse effect problems has put the company at the leading edge of research on these important issues. Gilbert/Commonwealth has been the prime contractor on several Department of Energy advanced energy projects which focused on technologies such as duct injection, fluidized bed combustion, gas stream clean-up, and magnetohydrodynamics. G/C is one of the operators of DOE's Pittsburgh Energy Technology Center and is the A/E services contractor for DOE's Morgantown Energy Technology Center, both of which are coal research facilities.

Product/Service	Description

Architecture/Engineering Complete consulting engineering services, including feasibility studies, engineering analyses, trade-off studies, independent engineers reports, conceptual and final design, cost estimates, planning and scheduling, specifications,

quality assurance, construction management, startup and test.

Global Associates, Inc. 4515 Poplar Avenue Suite 426 Memphis, TN 38117

Telephone: FAX:

(901) 685-6835 (901) 685-6906

President/CEO:

William H. Morris

Sales Manager:

J.R. Noonan

Domestic Offices:

4515 Poplar Avenue, Suite 426, Memphis, TN 38117

International business consultants with a special focus on serving as international coal brokers for clients in Europe and the Far East.

Products/Service

Description

International Coal Brokers

Serve as intermediary for coal exporters and importers.

Global Energy USA 1500 Chiquita Center 250 East Fifth Street Cincinnati, OH 45202



Telephone:

FAX:

(513) 621-0077 (513) 621-5947

President/CEO:

H.H. Graves

Domestic Offices:

Global Energy de Mexico SAdeCV

3773 Cherry Creek North Drive, Suite 1001

Denver, CO 80209 Phone: (303) 321-8811 FAX: (303) 321-7690

International Offices:

UK: Global Energy Europe Limited

c/o Fife Energy Limited
Westfield Development Centre
Cardenden, Fife KY5 0HP
Phone: 0592-860293
FAX: 0592-860193

Global Energy USA serves as technology supplier and project developer for a new class of environmentally superior Power Stations. These Power Stations utilize Global Energy's patented Advanced Fuel Technology (AFT) and Integrated Gasification Combined Cycle (IGCC) based on the highly acclaimed British Gas/Lurgi slagging gasifier. This technology combination yields a Fuel Island, Gas Island and Power Island as major Power Station components. The AFT Fuel Island produces fuel briquettes comprised of coal and organic waste that serve as a low cost feedstock for the IGCC. The net result is low cost power generation and low cost waste elimination all from an environmentally superior Clean Coal Technology Power Station.

Global Energy USA is developing domestic and international projects through its subsidiaries in conjunction with specific project partners.

Description of Products/Services

Global Energy USA offers environmental technology supply and project developer services for AFT-IGCC Power Stations. These power stations are designed to serve Major Metro areas with low cost power generation and low cost waste elimination within an environmentally superior Clean Coal Technology package. IGCC is well regarded as the power station technology of the future with emission levels at less than 10% of the US EPA New Source Standard. This ultra clean technology becomes available today via the economic boost provided by the AFT Fuel Island in the way of low cost feedstock.

(Continued on next page)

GPS Technologies, Inc.

Global Energy USA (Continued)

Global Energy USA is committed to helping major metro areas achieve low cost power generation and low cost waste elimination with Environmental Technology.

GPS Technologies, Inc. 6700 Alexander Bell Drive Columbia, MD 21046

Telephone:

(410) 290-2700

Telex:

7108622878 FAX: (410) 290-2660

Vice President Fossil Services:

Herman P. Stone II

International Sales Manager:

Sheryl Lash

Domestic Offices:

Amherst, NY; Craig, CO; Atlanta, GA

International Offices:

SINGAPORE: GP Asia, Pte, Ltd., 80 Marine Parade Road, #11-01 Parkway Parade, Singapore 1544, TEL. 65-3453363, FAX 65-3457938; MALAYSIA: GP Malaysia Sdn. Bhd., B-2-2, Block B, Bangunan SPPK, 46

Jalan Dungun, Daman Sara Heights, Kuala Lumpur, 50490, Malaysia, TEL: 603-254-9888

GPS Technologies is a mature and established company that provides diverse technical services to industries and government. GPS employs over 1,000 people and had over \$70 million in annual sales in 1992. We are a high-technology company organized to respond to individual client needs. GPS has a well-qualified staff of former power plant supervisors, managers, and operators. They understand the problems and concerns of the coal industry and clean coal technologies. We have developed a methodology that has been proven effective in solving plant problems. The key to our performance has been enthusiasm, imagination, and performance.

Product	/Service
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Description

Operations Support Services

The services available in operations support include: Audits of Coal Sampling Equipment and Sample Preparation; Combustion Technology Improvement Programs; Coal Handling System Descriptions; Coal Handling Operating Procedures; Alarm/Abnormal Response Procedures; Start Up Procedures and Support; Coal Handler Qualification Programs; Operations Audit; Human Factors Assessments; and Thermal Performance Monitors.

Training Services

GPS is also involved in all aspects of training plant personnel with particular emphasis on developing training programs based upon specific client needs. These include: Training Program Needs Analysis; Coal Handler Training Program Design and Development; Development of Classroom, Self-Taught, Laboratory, In-Plant, Simulator and On-the-Job Training Programs for any plant system; Preparing Training Materials; Conducting Training Programs; Developing Operations and Maintenance Qualification and Requalification Programs: Administration Materials; Coal Handling

Maintenance Qualification and Requalification Programs; Administration Materials; Coal Handling Systems Training; Advanced Operator Training (Combustion Efficiency); and Simulator Training.

Maintenance Services

GPS has been involved in providing maintenance services since 1971. These maintenance support and maintenance training services include: Preventive/Corrective Maintenance Procedures; Coal Unloaders; Stacker Reclaimers; Crushers; Conveyor Belts; Coal Silos; Feeders; Other Equipment; Mechanical Maintenance Training of Coal Equipment; Electrical Maintenance Training of Coal Equipment; Instrument Maintenance Training of Coal Equipment; Technical Repair Specifications; Maintenance Planning Support; Outage Management and Support; Diagnostic Testing and Inspection; Preventive Maintenance Programs; Reliability Centered Maintenance Programs; Maintenance Audits; Preventive Maintenance Procedures; Inspection and Repair Procedures; and Spare Parts Program.

GRAY STAR™ Division EAMarketing Inc. 5010 Mayfield Rd. Cleveland, OH 44124

Telephone:

(216) 291-2840

FAX:

(216) 291-3422

Chief Executive Officer:

Mr. Edmund F. Avolio

GRAY STAR™ offers design and site selection for volume metallurgical coke drying plants of 20 to 50 metric tons per hour or more.

GRAY STAR™ has been operating a Met coke drying plant in Birmingham, Alabama since 1985.

EAMarketing, the parent of ORAY STAR™ has been a broker and trader of metallurgical coke and coal since 1975.

1990 saw development of "RAPID FOAM"". This is a specially developed and designed product for use as a slag foamer in high voltage electric furnaces.

Product

Design of volume metallurgical coke drying plants in the 20 to 50 ton per hour range. This service can include site and equipment selection.

Greater Cincinnati Marine Services, Inc. Affiliate of Carlisle Equipment Company P.O. Box 308 Newport, KY 41072

Telephone:

(606) 441-7400

FAX:

(606) 441-7400 Ext. 392

Chief:

Griffin Carlisle

Tow boats and barges for rent: Daily, Weekly, Monthly on the Ohio River. Pittsburgh to St. Louis.

Greenhorne & O'Mara, Inc. 9001 Edmonston Road Greenbelt, MD 20770

Telephone:

(301) 982-2800

FAX:

(301) 220-2483

Chief Executive Officer:

A. James O'Mara, P.E., P.L.S. William A. Caruthers, Jr., P.E.

Vice President, Corporate Marketing: David A. Denne

Domestic Offices:

Greenhorne & O'Mara has 16 offices in the United States, primarily located along the Eastern seaboard and in

Greenhorne & O'Mara, Inc., is an engineering, environmental, scientific, architectural, and surveying consulting firm, offering multidisciplinary services to public and private clients. Services include: civil and site engineering, site planning, architecture, facilities design, landscape architecture, environmental studies and permitting, wetland delineation and mitigation design, cultural resources (archeology and historic preservation), structural engineering, environmental/sanitary engineering, manual and digital surveying, automated information services, Computer-Aided Design and Drafting (CADD), Computer-Aided Mapping (CAM), geographic information systems (GIS), photogrammetric mapping, transportation engineering and traffic planning, water resources engineering, hazardous waste site assessments, and constructions services.

Greenhorne & O'Mare, Inc. (Continued)

G&O has extensive experience in surveying on mining and mine reclamation projects. This work involves aerial photography, photo control, monumental control, photo enlargements, and topographic mapping at scales of 1" - 100' and 1" - 200' with 2' and 5' contours. Additional services included digitizing and volumetric measuring of coal stockpiles, as well as cross-section plotting. We have provided mapping services for private mining companies on hundreds of thousands of acres of land in coal fields.

Greenley Energy Holdings of PA, Inc. 101 N. Main Street Greensburg, PA 15601

Telephone: (412) 834-7555

FAX:

(412) 837-9241

Chief Executive Officer: International Sales Manager:

Mr. Joseph Ciarimboli Mr. Joseph Ciarimooli

International Offices:

Please contact company headquarters for further information

Greenley Energy Holdings of PA, Inc. is an active coal processing company reclaiming waste refuse bituminous coal without beneficiation for use in fluidized bed furnace for power generation. The company has developed the first coal processing system for such applications and has developed novel reclamation techniques for vegetation directly onto coal surfaces, avoiding the need for top soils. The latter effort was developed jointly with Pennsylvania State University. The company has unique talents in the determination of mining plans of refuse coals.

Product/Service Designation Description

"Greenley" Coal Waste Processing

Greenley offers unique capabilities in the utilization and processing of waste refuse bituminous coals and in the development of inexpensive reclamation programs for environmental requirements for waste coal piles and surface coal mining.

T. J. Gundlach Machine Company One Freedom Drive P.O. Box 385 Belleville, IL 62222

Telephone: (618) 233-7208

Telex:

910-756-2081 FAX: (314) 436-5221 T. F. Gundlach

VP/General Manager:

President:

Michael F. Barron

International Customer Service:

Fran Black

International Offices:

ENGLAND: Jenkins of Retford, Trumpton Ln., Retford, Nottinghamshire N22 7AN, TEL. 777-706777; FAX 777-08141; AUSTRALIA: ANI Ruwolt, P.O. Box 327, Ipswich, Queensland 4305, TEL. 280-7222; FAX 202-1928; INDIA: Larsen & Toubro, 3B Shakespeare Sarani, Calcutta 700 071, TEL. 261-8181; FAX 291323/447587; MEXICO: LYUSA, Fuente de Piramides 182, Suite 4, Tecamachalco, Estado de Mexico,

CP 53970, TEL. 294-84-69 & 294-25-09; FAX 294-45-58

T.J. Gundlach Machine Company (Continued)

T. J. Gundlach Machine Company manufactures crushing, comminution and mixing equipment, for mining, chemicals, minerals beneficiation, steel industries and Industrial Application. Hot materials crushed to 1000°C. Custom Crushers are a specialty.

Product/Service

Description

Crushers

Single-Stage (2 roll) and Two-Stage (4 roll) Roll Crushers and Cage Mill Impact Crushers for size reduction of materials, including high temperature applications. Capacities of equipment from 1 TPH to over 3,000 TPH Run-of-

Mine Feed Size capabilities.

Grizzly Breaker

A breaker mounted on rails, which traverses back and forth across the top of a truck dump grizzly, and reduces oversize lumps on an automatic or semi-automatic basis.

Hawley Fuel Coal, Inc. eliance Building P.O. Box 188 Altoona, PA 16603

Hawley

SINCE 1879

Telephone: FAX:

(814) 944-1730 (814) 944-9756

President/CEO: Sales Manager:

Jean-Paul Ruff Theodore Sohnen

Domestic Offices:

Reliance Building, Altoona, PA 16603

International Offices:

Empire State Building, Suite 8004, New York, NY 10118

Hawley Fuel was founded in 1879 and is currently engaged in supplying coal to the domestic utility markets as well as utility and metallurgical markets worldwide. Hawley Fuel is one of the largest and oldest independent coal exporters from the U.S. Besides dealing in coal for counter-trade purposes, Hawley has also become involved in steel, pig iron, coke, petroleum coke and cement business. Hawley's main sphere of international trade is to the major utilities of Western Europe and to the steel mills in Eastern Europe and Japan.

Products/Service

Description

On coal exports, Hawley provides full service including shipment by rail or barge, transloading at either East Coast or Gulf Coast piers, ocean freight chartering, ocean freight, insurance and financing and/or barter trade where necessary.

Hays Republic Corporation 3695 Interstate Park Way Riviera Beach, FL 33404

Telephone: (407) 842-1900 **FAX:** (407) 842-0742

President: J. F. McMahon, Jr.

Sales Director: Charles M. Rowan, Jr.



Since 1901, Hays Republic is a leading international supplier of boiler controls and instrumentation including electronic and micro-processor control systems; vacuum, pressure and level indicators; electric & pneumatic actuators; recorders; 0₂ analyzers; slide valve positioners; and control panels with factory start-up, training and engineering services.

Product/Service	Description
0, Analyzers	Three lines of 0 ₂ Analyzers, field-repairable probes, single-calibration gases, zirconium oxide cells, flue gas temperatures to 650° C used for coal, gas, oil fired boilers, incinerators, and cement kilns applied worldwide for industrial boilers, and power generating plants.
Vertical Scale Indicators	The industrial standard for direct measurement without transmitters of pressure and vacuum; electronic input models for indication of process variables, 5 inch and 10 inch models.
Valve/Damper Actuators	Electric and pneumatic actuators available to 800 ft/lb torque, complete with control auxiliaries.
Recorders	12 Inch Circular Chart Recorders
Slide-Valve Positioners	Hydraulic position regulator for slide valves employed by chemical and petro-chemical facilities.

HDR, Inc. 8404 Indian Hills Drive Omaha, NE 68114-4049

Telephone: (402) 399-1000 **FAX:** (402) 399-1238

Chief Operating Officer, HDR, Inc.: Francis Jelensperger President, HDR Engineering, Inc.: Richard R. Bell

Domestic Offices: Albuquerque, NM; Alexandria, VA; Anchorage, AK; Austin, TX; Charlotte, NC; Chicago, IL; Dallas, TX;

Denver, CO; Fresno, CA; Irvine, CA; Kansas City, KS; Minneapolis, MN; Omaha, NE; Phoenix, AZ; Pittsburgh, PA; Portland, OR; Sacramento, CA; Seattle, WA; Tampa, FL; Virginia Beach, VA; and White Plains, NY; Atlanta, GA; Boston, MA; Las Vegas, NV; Orlando, FL; Sioux Falls, SD; Washington, DC;

Boise, IA; Olympia, WA; Winston-Salem, NC.

HDR, Inc. is a nationally recognized, full-service corporation in engineering and architectural design, and facilities management. HDR, Inc. is the holding company for three operating companies: HDR Engineering, Inc., Henningson, Durham & Richardson, Inc., and HDR Information Technologies, Inc.

HDR was founded in 1917 in Omaha, Nebraska. Today, the corporation has over 30 offices nationwide and employs more than 1,250 people, including nearly 850 engineers, architects, and other professionals. HDR is a wholly owned subsidiary of Bouygues, S.A., one of the largest design/build companies in the world.

Dec 4 4/C 1	D
Product/Service	Description

Architecture/Engineering (A&E)

HDR Engineering provides full-service waste/energy, water/wastewater, and transportation engineering services. Henningson, Durham & Richardson specializes in architectural design of health

care, justice, and corporate facilities. HDR Information Technologies, Inc. offers integrated facilities

management services.



HDR, Inc. (Continued)

Power Generation Systems

HDR Engineering provides full professional engineering services for power generation systems, including cogeneration plants, power plant rehabilitation systems, retrofitting, hydropower, district heating and cooling, transmission and distribution, alternative fuels utilization and fluidized bed combustion. We are experienced in the utilization of such fuels as solid waste, coal, oil, wood waste, black liquor, industrial and wastewater sludges, methane gas, digester gas, and others.

Utilities HDR Engineering's work for utilities includes projects for more than 100 energy utilities in 20 states,

as well as water and wastewater clients throughout the United States.

Emissions Control and Waste Disposal

Systems

Our firm designs state-of-the-art facilities which satisfy all Clean Air Act requirements. HDR Engineering is recognized as an industry leader in providing engineering services for solid waste

collection and disposal systems.

Technical Consultants HDR provides complete technical consultation in all areas related to waste management and energy recovery, water and wastewater projects, environmental issues, transportation systems and bridges;

health care, justice, and corporate facilities; and facilities management.

Hebden, Schilbe & Smith, Inc. 3025 Washington Road McMurray, PA 15317

Telephone: (412) 942-5858 **FAX:** (412) 941-5799

Chief Executive Officer: International Sales Manager: Paul F. Riederer Joe Hareza

International Offices:

Please contact Company Headquarters for further information.

HSS is a 29 year old organization with a strong background in coal handling and processing equipment. HSS Sampling Systems are being used in the United States, South America and China by both the coal producers and coal fired utilities. Presently we've got systems operating at Consol's Baltimore Dock export facility as well as Dominion Terminal's export facility in Newport News, VA.

HSS custom designs sampling systems to retrofit existing facilities or for installation in new facilities.

Product/Service	Designation	Description
Conventional Samplers	TE or VE	HSS manufactures a full line of conventional baffle plate C-Type cutters for use in 3-Stage or 2-Stage systems. Systems are available with hydraulic or mechanical drives.
Sweep Samplers	RSDL	HSS manufactures rotary sweep samplers for each retrofit along existing conveyor stringers. These units are available with either electric motor or hydraulic motor drives.
Crushing/Sampling Module	CSS-1	HSS' "CSS" module is both an economical and compact sampling device capable of crushing, sampling and dividing the primary sample stream.

Henkels & McCoy, Inc. 985 Jolly Road, P.O. Box 950 Blue Bell, PA 19422-0900

Telephone: (215) 283-7600 **FAX:** (215) 283-7587

Chief Executive Officer: Paul M. Henkels
President/Chief Operating Officer: Dr. Kenneth L. Rose

International Sales Manager: Mr. Ian H. Sargent, Division Manager, Engineering Division

Domestic Offices: Oreland, PA; Rising Sun, MD; New Castle, DE; Burlington, NJ; Portland, OR; York, PA; Aurora, CO;

Lewisville, TX; Elkhart, IN; Oxford, MA; Newington, VA; Richmond, VA; Tampa, FL; Fontana, CA

International Offices: Please contact International Operations Division for further information.

Henkels & McCoy is an international engineering, construction and support services company. Services include most engineering disciplines, project support services, construction or construction management, and training. Applications include industrial and commercial facilities and transmission and distribution systems for electric power, telecommunications and data, and energy products. We provide design/build turnkey construction. We act as either prime contractor or subcontractor to manufacturers, utilities, government agencies, or other contractors. We have served client organizations in Canada, South America, Africa, the Middle East and Asia. Responsiveness, flexibility and product quality characterize our customer service philosophy: "PERFORMANCE has built our business...."

Product/Service

Description

Architecture/Engineering

Our Engineering Division is a multi-disciplined organization serving the industrial, utility, and communications markets for over 60 years. We have engineered major new plants and facilities and have rehabilitated others for a variety of applications. Each client's needs are addressed on a specific project basis. While developing the project's plans and specifications we design all pertinent systems, select appropriate equipment and incorporate operating considerations. Typical projects include the electrical, mechanical, civil/structural, and general site engineering disciplines supported by our architectural capabilities, as needed, for offices, laboratories, warehouses, etc.

Corrosion Control

The Corrosion Control Department within the Engineering Division provides comprehensive services for underground, above ground and marine structures, tanks and pipelines. We perform corrosion surveys and stray current analysis, monitor existing systems, audit corrosion control programs, design cathodic protection systems, evaluate reinforced concrete, and evaluate/design protective coating systems.

Heyl & Patterson, Inc. P.O. Box 36 Pittsburgh, PA 15230



Telephone: (412) 788-6900

Telex: 5106974017 FAX: (412) 788-6913

Chairman and CEO: Mr. H.R. Edelman III

International Sales Manager: Mr. Robert M. Turbeville, President

Product/Service Description

Coal Transport Equipment Continuous barge unloaders, railcar unloading systems, stacker-reclaimers for loading and unloading of coal and other

bulk materials.

HNTB Corporation 600 - 108th Ave. N.E., Suite 405 Bellevue, WA 98004



Telephone: (206) 455-3555

Telex: 298007 HNTB UR FAX: (206) 453-9179
President, West Division: Hugh E. Schall, PE

Domestic Offices: KANSAS CITY, MO: 9200 Ward Parkway, Kansas City, MO 64114 TEL. (816) 333-4800

HNTB, established in 1914, is a multidisciplinary design firm with a network of over 30 offices and over 2,000 employees throughout the United States. HNTB provides comprehensive services in architecture, engineering, and planning. HNTB currently ranks eleventh among U.S. leading architectural and engineering firms according to Building Design and Construction magazine.

Product/Service Description

Architecture/Engineering HNTB offers key services to the mining industry and to government agencies. Our services to both public and private

sector clients include: regulatory compliance; professional witness services; reclamation design; abandoned mine land

reclamation design and construction supervision.

Honeywell Incorporated Industrial Automation and Control 16404 N. Black Canyon Highway Phoenix, AZ 85023

Telephone: (602) 863-5000 FAX: (602) 863-5692 General Manager: Ed Hurd International Sales Manager: Sam Hawkins

International Offices: HONG KONG: Asia Pacific Inc., Suite 3408, One Exchange Square, Central TEL. (85205) 8445566, TELEX 81302

HAPG HX; SINGAPORE: Southeast Asia Ltd. Head Office, 1 Maritime Square #02-70, World Trade Center,

Singapore 0409 TEL. (65) 278-4555, TELEX RS 34763 HNYWEL

Honeywell's Industrial Automation Systems Division, with headquarters in Phoenix, is the world's leading supplier of industrial process and control systems. Honeywell's systems are designed to increase plant productivity, improve operating efficiency and reduce energy consumption in an industrial setting. The division serves the process and manufacturing industries with emphasis on power generation, refining, bulk chemicals, oil and gas, fine chemicals, plant paper, and consumer goods.

Product/Service	Designation	Description
Coal Management	TDC3000	Control system for management of coal from receipt until entry into combustion. Accounting of received coal at un-loading facilities, automatic control and accounting of storage at the stacker-reclaimer, control of tripper car feed to coal silo. Monitor and control of conveyors and emergency shutdown. Integration of weigh scales and coal analyzers.
Power Plant Coal/Fuel System	TDC3000	Control of Coal Feed to Power Plant Boilers via mills, feeders, etc. Proportional feed vs. demand, with optimization capability. Monitor of emissions, and plant performance.
Fluidized Bed Boiler Control System	TDC3000	Control Systems for control of fluidized bed boilers. Complete boiler and turbine controls systems for power generation. Monitor of emissions and plant performance.
Coal Gasification Control Systems	TDC3000	Control of coal gasifiers, programmable for use with many processes. Complete management systems from unloader to gas out.

HRI, Inc. 100 Overlook Center, Suite 400 Princeton, NJ 08540

Telephone: (609) 243-8700 **FAX:** (609) 987-0204

Chief Executive Officer: James MacArthur

Product/Service

Description

Engineering

Since its inception in 1943, HRI has developed basic technology and processing schemes associated with the petroleum, steel, coal, petrochemicals, cryogenics and shale oil industries. HRI has admnistered projects from conception to large-scale pilot plant tests. When analyzing processing systems, thorough evaluations are made on the treatment, clean up and/or disposal of ancillary streams which constitute a source of environmental concern.

HRI has worked as a contractor to various agencies of the United States Government. One such project was the H-Coal Pilot Plant in Catlettsburg, Kentucky, whose engineering and design began in 1974. HRI provided the process data base, the plant design, detailed engineering and operational support. Approximately 800,000 manhours over a six-year period were devoted to this effort. HRI was responsible for procuring approximately \$35 million in plant equipment and also materials for the pilot plant.

HRI engineering provides detailed process & equipment design for high pressure hydrocracking processes for the Liquefaction of Coal and can provide experienced engineering and operational start-up training & support services.

H-Coal

The H-Coal* Process is a single stage coal liquefaction process based on the catalytic ebullated bed reactor that produces 2.8 to 3.5 barrels of liquids per ton of dry coal. Products from H-Coal* can be upgraded to gasoline, aromatics, diesel & turbine fuels and heating oils. Most lignites, sub-bituminous and bituminous coals can be easily converted to liquids using hydrogen from partial oxidation of the bottoms produced from the process.

Plant size: 2,000 to 10,000 tons coal/day

Operating Pressure: 1500 - 3000 psig Operating Temperatures: 700 - 900°F

Co-Processing

The HRI Co-Processing process for the conversion of coal and residual petroleum derived oils is based on the single or two-stage ebullated bed conversion of the coal and resid to distillates and heavy oil products. Distillate yields average 5 bbs/ton of feed with demetalization over 90%.

Feedstocks

Coal: Lignite, Sub-Bituminous and Bituminous

Crudes: Maya, Hondo, Lloydminster, Cold Lake, Venezuelan and Most others.

Plant Size: 15,000 to 60,000 bbls/day

Pressure: 1500 - 3000 psig Temperatures: 700 - 900°F

CTSL™

The CTSL, Catalytic Two-Stage Liquefaction process consists of two close-coupled ebullated bed reactors in series that converts sub-bituminous and bituminous coals to distillate transportation fuels. Distillate yields are 4.3 to 5.0 barrels per ton of MAF coal with extinction recycle of the residual oils, with on-line hydrotreating clean distillates with less than 10 ppn nitrogen and sulfur are produced. Products range from gasoline, diesel, jet fuel, turbine fuels and chemicals.

Feedstocks

Coals: Lignite, Sub-Bituminous and Bituminous

Plant Size: 2,000 - 10,000 tons coal/day

Pressures: 1500 - 3000 psig
Temperature: 700 - 900°F

HWS Consulting Group, Inc. 825 J Street, Box 80358 Lincoln, NE 68501

Telephone: (402) 479-2200 FAX: (402) 479-2276

Chief Executive Officer: International Sales Manager: James L. Linderholm

James L. Linderholm

Domestic Offices: OMAHA, NE: 10844 Old Mill Road, Suite 1, Omaha, NE 68154; TEL: (402) 496-0333; DENVER, CO:

9101 East Kenyon Avenue, Suite 1600, Denver, CO 80237; TEL: (303) 771-6868; WICHITA, KS: 924

Consulting Group Inc.

North Water Street, Box 48130, Wichita, KS 67203; TEL: (316) 264-4328

HWS is a full service civil and environmental engineering firm founded in 1944. Currently ranked 286th of the top 500 engineering and architectural firms in the U.S. by ENR (Engineering News Record), HWS offers clients more than 45 years of project experience.

Product/Service

Description

Environmental Studies

Asbestos Consulting, Environmental Site Assessments/Audits, Environmental Engineering, Hydrogeology, Contaminant Studies, Remediation Design, RCRA/CERCLA Compliance, Underground Storage Tanks.

Civil Engineering

Airports, Highways, Railroads, Site Engineering, Telecommunications, Water/Wastewater Systems.

Geotechnical Engineering

Foundations Engineering, Engineering Geology.

ICE Export Sales Corp. P.O. Box 11 Manhasset, NY 11030

ICE EXPORT SALES

FAX:

Telephone: (516) 767-1100 (516) 944-6707

Chief Executive Officer:

C.G. Cannam

International Offices:

Please contact company Headquarters for further information.

ICE Export Sales is a dedicated procurement service operating exclusively for the benefit of worldwide mining concerns in obtaining U.S. requirements. As an international consolidating expeditor with twenty years experience, our vast contacts with U.S. manufacturers is diverse and well established enabling us to provide our customers with true "one-stop-service": Competitive Prices; Accurate Procurement; Prompt Delivery; Shipment Consolidation; Thorough Documentation; and Economical Transportation. Our total commitment to complete service enables our clients to entrust us with their valued business. Quotations dispatched upon receipt of detailed inquiries.

Product/Service

Description

Quality Equipment, Spare Parts & Supplies from Prime

U.S. Manufacturers

Extracting Equipment & Spare Parts; Crushing Equipment & Spare Parts; Conveyor Systems & Spare Parts; Boiler Equipment & Spare Parts; Power Generation Systems & Spare Parts; Transportation Equipment & Spare Parts; Cranes & Spare Parts; General Equipment & Spare Parts; Operating & Support Materials & Supplies; Laboratory Supplies, Equipment & Spare Parts.

ICF Kaiser Engineers 1800 Harrison Street Oakland, CA 94612

ICF KAISER ENGINEERS

Telephone: (510) 419-6000

Telex: 335326 FAX: (510) 419-5355

Chief Executive Officer: James Edwards, Chairman

Raymond List, Chairman

Domestic Offices: PITTSBURGH, PA: Four Gateway Center, 12th Floor, Pittsburgh, PA 15222 TEL. (412) 281-8121.

FAX (412) 281-8145

International Offices: AUSTRALIA: IBM Building, Level 4, 1060 Wasy Street, West Perth, Western Australia 6005 TEL. 61-9 327-5211,

TELEX AA 94559; PORTUGAL: Edificio Monumental, Avenida Fontes Pereira de Melo, 51-2D, 1000 Lisbon,

TEL. 011-351-1-315-5681, FAX 011-351-1-315-5466

ICF Kaiser Engineers is an international engineering and construction firm, headquartered in Oakland, California. The company provides services to private and public sector clients involved with transportation, advanced technology, environmental, industrial and other infrastructure projects. The firm employs 4,000 professionals.

Product/Service

Architecture/Engineering

Facility Construction

Technical Consultants

IGR Enterprises, Inc. 11000 Cedar Road Cleveland, OH 44106

Telephone: (216) 721-5511 **FAX:** (216) 229-3236

President/CEO: Dr. Arnold Z. Gordon Sales Manager: Dr. Arnold Z. Gordon



IGR Enterprises, Inc. is a closely held technology development company with principal offices in Ohio. IGR has three part-time and three full-time employees. IGR was founded in 1985 as a technology-based start-up company. IGR specializes in the development of its proprietary flexible, ductile ceramic-metal composite materials. These materials represent an enabling technology for a large number of applications. IGR has over \$2,000,000 in contracts for the commercial and military development of different aspects of our ductile ceramic compounds. IGR is currently funded by DOD, DOE and the Ohio Coal Development Office, for work involving the development of devices and materials for oxygen generation, electricity generation, superconducting cable, high temperature structural materials, and coal fired power plant emissions control for acid rain reduction.

Products/Service	Description
NO _x and SO _x Simultaneous Emissions Control	The IGR simultaneous NO_x and SO_x emissions control technology is based on a solid-state, flow-through, ceramic composite, electrochemical cell. There are no moving parts, liquids or consumables. The only material output is non-toxic commodity sulfur. NO_x and SO_x are directly converted into elemental nitrogen, oxygen, and sulfur.
NO _x Emissions Control	The IGR simultaneous NO _x emissions control technology is based on a solid-state, flow-through, ceramic composite, electrochemical cell. There are no moving parts, liquids or consumables. The only material output is non-toxic commodity sulfur. NO _x and SO _x are directly converted into elemental nitrogen, oxygen and sulfur.

IGR Enterprises, Inc. (Continued)

SO, Emissions Control

The IGR simultaneous SO_x emissions control technology is based on a solid-state, flow-through, ceramic composite, electrochemical cell. There are no moving parts, liquids or consumables. The only material output is non-toxic commodity sulfur. NO_x and SO_x are directly converted into elemental nitrogen, oxygen and sulfur.

Illinois Department of

Energy and Natural Resources

Illinois Department of Energy and Natural Resources Office of Coal Development and Marketing 325 W. Adams, Room 300 Springfield, IL 62704-1892

Telephone: (217) 782-6370 **FAX:** (217) 524-4177

President/CEO: Kim Underwood Sales Manager: Kim Underwood

Domestic Offices: Springfield, IL: 325 W. Adams Street, Room 300

The Illinois Department of Energy and Natural Resources' Office of Coal Development and Marketing (ODCM) seeks to ensure the continued and expanded use of Illinois' coal resources in environmentally safe and economically viable ways. The OCDM is committed to assisting the Illinois coal and utility industries to improve the image and utilization of high-sulfur Illinois coal. This commitment will be achieved by developing research agendas responsive to current and anticipated needs, increasing research and development productivity, demonstrating promising clean coal technologies, expanding and enhancing the quality of current programs and heightening the effectiveness of energy-related products and services offered statewide to the coal industry, utility companies and the general public.

Product/Service	Description
Research and Development	The Coal Research and Development Program works toward increasing extraction and utilization of Illinois coal. This is accomplished by prioritizing the basic and applied research agenda and selecting those projects based on technical merit that will best serve constantly changing energy patterns. Research is presently being conducted in areas of resource extraction, fuel utilization and environmental protection.
Marketing	The Coal Marketing Program is committed to assisting the coal industry in improving the marketability of high-sulfur Illinois coal. The Marketing Program will assist the industry by identifying Illinois coal sales opportunities on national and international levels. The Coal Marketing Program also seeks to promote the application of new technologies compatible with high-sulfur coal.
Demonstration and Planning	The Coal Demonstration and Planning Section is committed to identifying innovative clean coal technologies and providing financial assistance for selected demonstration projects through the Coal Demonstration Program. The program assists the technology developer by identifying potential hosts for the demonstration project, providing guidance in securing the required permits (state and local) and suggesting funding sources for the project. Most recently, the efforts of the Coal Demonstration and Planning Section have been directed at providing support for respondents to the U.S. Department of Energy's Clean Coal Technology Program.

International Software Co. 213 Franklin Street Paterson, NJ 07524

INTERNATIONAL SOFTWARE CO.

Commitment To International Trade

Telephone: (201) 523-5588

BBS: (201) 478-1016 FAX: (201) 523-9520

President: Mr. C.D. Florescu

International Software runs a free Electronic Bulletin Board for the International Trade Community (exporters, importers, banks, freight forwarders, etc.). Our bulletin board provides Daily Trade Leads for exporters, and can be accessed at (201) 478-1016.

Interstate Equipment Corporation 929 Park Avenue Pittsburgh, PA 15234

Telephone: (412) 563-5556 **FAX:** (412) 563-6741

President/CEO: James F. Vogel Sales Manager: Joseph L. Vogel

International Offices:

India: c/o Hans Plaza, 15 Barakhamba Road, New Delhi, INDIA 110001

Interstate Equipment Corporation is now in its 90th successful year of worldwide operations. Completely engineered bulk material handling systems have been providing the mining, electrical power and river industries with proven cost effective handling solutions tailored to the operator's unique requirement. Project specifications are analyzed and bulk material handling recommendations made based on the company's broad experience with Aerial Tramways/Ropeways Systems, Conveyor Systems and Port and River Barge Handling Systems. Interstate Equipment can design, manufacture and install a system to support the particular customer's total bulk material handling system requirement from project start-up to completion.

Product/Service	Description
Aerial Tramways/Ropeways	The company offers complete turnkey services of all types of Aerial Tramway Systems, including units to convey coal and mine refuse. The range of service includes feasibility studies, design, manufacturing and installation on a worldwide basis. Aerial Tramways have proven themselves over the years a low cost form of transportation, particularly in rough terrain.
Conveyor Systems	Complete Conveyor System, design, equipment supply and construction is offered to handle coal from the mine overland to the plant or from the plant overland to the refuse area. In addition, specialty feeders are available.

ITT Flygt Corporation 35 Nutmeg Drive Trumbull, CT 06611

Telephone: (203) 380-4700 FAX: (203) 380-4705 President: K.I. Ericson International Manager:

Domestic Offices:

E.A. Pirro

International Offices: Austria, Belgium, Denmark, France, England, Ireland, Netherlands, Italy, Norway, Sweden, Germany, Hungary,

Poland, Canada, Australia, Japan.

Manufacturer of submersible pumps and mixers. A world leader in a submersible concept providing product, service, training and engineering support. Pump horsepower range to 1000 HP and mixers to 30 HP. ITT Flygt produces over 70,000 pumps in 12,000 versions. Since 1948, with its first drainage pump that could operate completely underwater, ITT Flygt has refined the equipment and increased the sophistication, size and number of models. The mid-50's saw the ITT Flygt submersible pump designed to handle municipal wastewater. This innovation changed the basic design of pumping stations around the world. In 1975 ITT Flygt introduced the submersible mixer and in 1976 a submersible axial-flow propeller pump. The submersible grinder pump and the submersible hydroturbine generator followed. The future holds new explorations and technologies--such has been the dynamic history of ITT Flygt.

Products/Service Description

Submersible Pumps Permissible mine approved. Complete service is available. Training for use and local repair is available if required.

Submersible Mixers For mixers, blending, aeration, circulation in tanks, lagoons. Available in various materials, horsepower. Can be

angled in various degrees. Design and placement engineering support is available. Complete service is available.

Trumbull, CT; Woburn, MA; Rochester, NY; Pewaukee, WI; San Francisco, CA; Addison, TX; Suwanne, GA.

Jeffrey Division, Indresco Inc. 274 E. 1st Avenue Columbus, OH 43201

Telephone: (614) 297-3111 FAX: (614) 297-3036

President/CEO: Larry A. Thaxton Roderick D. Scott Sales Manager:

Domestic Offices: Columbus, OH; Norris City, IL; Harlan, KY; Norton, VA; Woodruff, SC; Morgantown, WV; Indiana, PA;

Beckley, WV

International Offices: Wakefield, UK; Toronto, NSW, Australia; Wadeville, South Africa

Manufacturer of underground mining equipment for coal, potash, trona and other non-coal minerals, as well as for processing and handling of bulk materials for mining, quarrying and wood and trash processing. Equipment includes continuous miners, haulage vehicles, continuous haulage systems, ventilation fans, locomotives, longwall shearers, SRD motors, crushers, shredders, vibrating feeders, dryers and coal washing jigs.

Product/Service Description Continuous Miners Miners for coal, potash and other mineral seams ranging from 28" up to 15', with capacities up to 25 tons per minute; capable of mounting on-board roof drills for roof bolting while mining. Diesel RAMCAR vehicles with capacity up to 14 tons for face haulage; bridge-type continuous haulage systems for Haulage Systems

seams 36" up to 8', capacity up to 20 tons per minute.

Crushers Full line of crushers for coal and rock processing in coal mines, rock quarries and other bulk mineral applications.



ITT Flygt

Jenike & Johanson

Jenike & Johanson, Inc. One Technology Park Drive Westford, MA 01886

(508) 392-0300 Telephone: FAX: (508) 392-9980

President: Vice President (east coast):

Domestic Offices:

Vice President (west coast): International Sales Manager: John W. Carson, Ph.D. Mr. T. Anthony Royal

Mr. David Stuart-Dick Mr. Roderick J. Hossfeld

SAN LUIS OBISPO, CA: 3485 Empresa Drive, San Luis Obispo, CA 93401 TEL: (805) 541-0901 FAX:

(805) 541-4680

International Offices: CANADA: 400 Carlingview Drive, Etobicoke ON M9W 5X9 TEL: (416) 674-8595 FAX: (416) 674-8520

Specializing in the storage and flow of bulk solids. Originated the scientific approach to the measurement of flow properties of bulk solids and to the design of storage vessels for controlled flow of bulk solids. Developed equipment to measure these flow properties; measured them for over 3,000 materials. Method stresses the importance of the bin and feeder, acting in unison, in obtaining reliable flow. Recognized as the leaders in the field of solids flow. Drs. Andrew W. Jenike and Jerry R. Johanson founded the firm in 1966. Dr. John W. Carson, President, joined the firm in 1970 after receiving his Ph.D. from M.I.T. Twenty-five additional employees including twelve professionals.

Product/Service Description

Flow properties tests in controlled environment to determine: mass flow hopper angles, minimum hopper openings, **Bulk Solids Testing**

compressibility, permeability, segregation potential, attrition, abrasive wear, pneumatic conveying characteristics.

Recommendations or detailed design for storage hoppers and feeders and related systems; structural design; on-site Design Services

consultation.

Custom Equipment Retrofits to convert funne! flow bins to mass flow; new mass flow bins and feeders; BINSERT system; solids pump.

Education In-house courses on Solids Flow in Bins and Feeders.

Joy Environmental Technologies, Inc. 10700 North Freeway Houston, TX 77037

Telephone: FAX:

(713) 878-1000 (713) 591-2295

President: Sales Manager: **Brian Watt** John Valkiunas

Domestic Offices:

1 Country View Road Malvern, PA 19355

Phone (713) 647-9900, FAX (713) 648-8679

International Offices:

7-4 Floor, CTCI Tower 77 Tung Hwa South Road

Section 2 Taipei, Taiwan

Phone [886]-2-703-8062

Yanshan Hotel, Room 1702 No. 138A, Haidian Road Beijing, PRC 100086 Phone [86] 1-256-3388 FAX [86] 1-256-4849



Joy Environmental Technologies, Inc. (Continued)

Provider of air pollution and materials handling solutions in support of power, Waste to Energy and other industrial applications. Specifically, Joy Environmental offers particulate control equipment: Electronic Precipitators; Baghouses; and Mechanical collectors. Acid gas control equipment; WFGD; DFGD; and SCR DeNOx. Materials handling equipment designed primarily to convey bottom and fly ash.

Products/Service	Description
Particulate Control Systems	Design and engineer custom and modules electrostatic precipitators, baghouses and mechanical collectors.
Acid Gas Control Systems	Design and engineer wet and dry flue gas desulphurization systems and selective catalytic reduction systems for NO _x removal.
Materials Handling Systems	Design and engineer ash and lime handling systems for utility and industrial power stations.

Joy Technologies, Inc.
One Oxford Centre, 39th Floor
301 Grant Street
Pittsburgh, PA 15219-1490

Telephone: FAX:

(412) 562-4500 (412) 562-5570

President/CEO:

Mining Machinery Div. President:

Marc F. Wray John N. Hanson

Domestic Offices:

U.S. MANUFACTURING OPERATIONS: Franklin, PA 16323, 120 Liberty St., Tel: (814) 437-5731;

JOY TECHNOLOGIES INC.

Mining Machinery Division

Claremont, NH 03743, Foundry Division, Grissom Lane, Tel. (603) 543-1228;

Cleveland, OH 44142, Smith & Harris Division, 5170 W. 130th St., Tel. (216) 267-3366;

Solon, OH 44139, Bedford Gear Division, 6160 Cochran Road, Tel: (216) 248-7970

U.S. REGIONAL SALES OFFICES & SERVICE CENTER-WAREHOUSES: Mt. Vernon, IL 62864, Industrial Park, P.O.B. 1269, Tel. (618) 242-3650; Homer City, PA 15748, 350 Lucerne Road, Tel. (412) 479-3555; Houston, PA 15342, 2101 W. Pike St., MeadowLands Service Cent, Tel: (412) 873-4300; Price UT 84501, 1556 East 100 South, P.O. Box 757, Tel. (801) 637-6161;

Bluefield, VA 24605, State Route 720, Route 2, Box 157, Tel. (703) 322-5454; Duffield, VA 24244,

State Route 772, P.O.B. 256, Tel. (703) 431-2821

International Offices:

Joy Manufacturing Company (Pty.) Limited - Tel. 011-61-48-682011, Moss Vale, NSW 2577 Australia Vale Road, P.O.B. 314; Joy Manufacturing Company (Africa) (Pty.) Limited - Tel. 011-27-11-613-6831, Johannesburg, South Africa 2000, Steel St., Steeledale, P.O.B. 4070; Joy Manufacturing (U.K.) Limited -

Tel. 011-44-3552-39121, East Kilbride, G745LN, Scotland, United Kingdom, Peel Park Place

Joy Technologies Inc. is a full service supplier that designs, manufactures, markets and services mining equipment worldwide for the underground extraction of coal and other bedded materials. The Company maintains an extensive global network of service and distribution centers to service, rebuild and update equipment and to provide parts and services to its customers.

Products/Service

Continuous Miners
Longwall Shearers
Shuttle Cars
Continuous Haulage Systems
Highwall Miner Systems

Description

The Company's Mining Machinery Division designs, manufactures and distributes continuous miners, longwall shearers, shuttle cars and continuous haulage systems for use in underground mining, and highwall mining systems for applications in surface mining operations. It maintains an extensive network of service and spare parts distribution centers to rebuild and service equipment and sell spare parts. This network includes six service centers in the U.S. and four abroad. The Mining Machinery Division also manufactures conventional underground mining machinery and equipment, consisting principally of drills, loaders, cutters and related equipment.

JTM Industries, Inc. 1000 Cobb Place Boulevard Building 400 Kennesaw, GA 30144

JTM JTM INDUSTRIES, INC.

Telephone:

(404) 424-1900

FAX:

(404) 424-9290

CEO:

Bill G. Fletcher

Executive V.P., Sales and Marketing:

Dennis L. Kinder

Domestic Offices (Regional Offices):

MID CENTRAL REGION: 2278 Grange Hall Road, Beavercreek, OH 45431

TELEPHONE (513) 426-7711, FAX (513) 426-1511;

NORTH CENTRAL REGION: 5665 Flatiron Parkway, Boulder, CO 80301

TELEPHONE (303) 938-5500, FAX (303) 938-5520;

SOUTH CENTRAL REGION: 4800 Sugar Grove Boulevard, #410, Stafford, TX 77477

TELEPHONE (713) 240-4082, FAX (713) 240-4173;

NORTHEAST REGION: Commerce Plaza, 5100 Tilghman Street, Bldg. 2, Suite 255, Allentown, PA 18104

TELEPHONE (215) 366-1959, FAX (215) 366-1968

SOUTHEAST REGION: 1000 Cobb Place Boulevard, Building 400, Kennesaw, GA 30144

TELEPHONE (404) 424-1900, FAX (404) 499-9219

ENGINEERING SUBSIDIARY: KBK ENTERPRISES, INC., 1000 Cobb Place Boulevard, Building 400,

Kennesaw, GA 30144

TELEPHONE (404) 426-5944, FAX (404) 499-9219

JTM Industries, Inc. (JTM), a wholly-owned subsidiary of USPCI and Union Pacific Corporation (UP), is a full service coal combustion by-product management headquartered north of Atlanta, Georgia. With substantial financial strength as part of UP and over 15 years of experience, JTM remains a stable force in a rapidly changing environmental field and currently manages over seven million tons of by-products each year. JTM provides total by-product management programs to the generators of coal combustion by: (1) developing and implementing proprietary processes which generate higher market value products from coal combustion residue; and (2) developing proprietary processes to accommodate reuse and/or disposal of more highly regulated non-hazardous ash streams. JTM has five regions, each concentrating on by-product management while drawing upon expertise available throughout the corporation.

Products/Service

Description

Total Coal Combustion

By-Products Management To provide a comprehensive coal combustion by-product management program, including all activities related to utilization, marketing or disposal as well as engineering, permitting, design and construction of material

handling systems and disposal cells.

K-Fuel, Inc. 1999 Broadway-Suite 2505 Denver, CO 80202

K-FUEL®, INC.

Telephone:

(303) 293-2992

FAX:

(303) 293-8430

President and Chief Executive Officer: Ted Venners

Domestic Offices:

Corporate:

1999 Broadway-Suite 2505/Denver, Colorado 80202 Telephone: (303) 293-2992/FAX: (303) 293-8430

Government Affairs/International:

901 North Stuart Street-Suite 750/Arlington, VA 22203

K-Fuel Processing Facility and Laboratory:

P.O. Box 1777/Gillette, Wyoming 82717 Telephone: (307) 687-1013/FAX: (307) 687-1635

K-Fuel, Inc., successor to K-Fuel Partnership which was formed in 1984, markets and licenses the K-Fuel technology worldwide. Partnership-funded research and development has taken the technology from benchtop, pilot plant, and full-scale demonstration facility phases, to commercialization at Fort Union Coal Mine near Gillette, Wyoming. The Gillette facility includes a state-of-the-art laboratory, where feedstock, process, and product analyses allow optimum plant operation and a custom-made end product.

Product/Service

Description

Advanced Utilization Coal Technology Coal Industry

Low-rank, carbonaceous feedstocks (i.e., subbituminous coals and lignites, biomass, woodwaste, municipal solid waste, peat, bagasse) require derating of capacity or costly equipment modifications in order to meet utility and industrial boiler requirements and environmental restrictions. These feedstocks are difficult to handle and expensive to transport because of high moisture content and combustibility. K-Fuel, is a proven, patented, advanced beneficiation technology that economically upgrades low-rank feedstocks, to high-Btu, low sulfur, low moisture environmentally acceptable product that addresses these problems. This technology is available for licensing worldwide.

Coal Exporters

K-Fuel produced using a proven, patented, advanced coal beneficiation technology that economically upgrades a variety of low-rank feedstocks, is a viable, high-Btu, low sulfur, low moisture energy source for utility and industrial users. Produced to meet the user's boiler specifications and having stable handling and storage characteristics, K-Fuel is competitively priced in the solid fuels market.

Kaskaskia Valley Scale Company 2154 Beckmann Road Lenzburg, IL 62257

Telephone: (618) 295-3331 **FAX:** (618) 295-3331

President: Ron Dietrich



The M. W. Kellogg Company

Kaskaskia Valley Scale Co. is a small family owned and operated scale service organization. We specialize in In-Motion weighing applications from conveyor belt scales to in-motion track scales. We manufacture and remanufacture calibration testchains for conveyor belt scales. We are an authorized service representative of Ramsey Technologies, Inc. Ron has been in the scale industry since 1961.

Product/Service Description

Material Testing, Conveyor Consultant and impartial third party services

Conveyor scale service Authorized services representative of Ramsey Technologies

Track scales Specialized in In-motion weighing systems

Test chains Custom manufacturer of calibration test chains

Rebuilt Test chains Remanufacturer of existing test chains

Mechanical retrofit Electronic retrofit of most mechanical scales

The M.W. Kellogg Company 601 Jefferson Avenue Houston, TX 77210-4557

Telephone: (713) 753-2000

Telex: 166385 MWKHOC FAX: (713) 753-5353

Internatoinal Sales Manager: Doy F. Cole, Senior Vice President

Other Domestic Offices: WASHINGTON, DC, Tel. (202) 639-8870

International Offices: ENGLAND, Tel. 44-71-487-5333; CANADA, Tel. (403) 269-8232; SINGAPORE, Tel. 65-734-0715;

PEOPLES REPUBLIC OF CHINA, Tel. 86-1-500-2255 INDONESIA, Tel. 6221-33-3659; MALAYSIA,

Tel. 603-261-2099; NIGERIA, Tel. 234-1-2618699; JAPAN, Tel. 81-78-822-6399

The M.W. Kellogg Company, an international, technology-based subsidiary of Dresser Industries, Inc. is a world leader on the engineering, procurement, construction and commissioning of chemical, petrochemical, fertilizer, gas processing, refining and computer integrated manufacturing projects. Additionally, Kellogg provides plant operation and maintenance capabilities. Kellogg is on the forefront of clean fuels technology with the acquisition of the KRW coal gasification process and the development of other Clean Coal Technologies. The company has completed more than 3000 major projects and many smaller projects worldwide.

Product/Service Description

Coal Gasification

Kellogg's KRW coal gasification process is capable of operating at high conversion on a wide range of coals. Feeds ranging from lignites and brown coals to high and low volatile bituminous coals have been tested at the Waltz Mill, PA, 24-ton-per-day Process Development Unit. Both air and oxygen were used as oxidant and both limestone and dolomite were tested as sorbents for sulfur.

The process can be used to produce low-BTU or medium-BTU gas for synfuels or power generation. Hot gas cleanup using zinc ferrite to yield low SO₂ emissions was tested. Bench-scale tests on other sorbents have also been carried out. Particulate removal using metal and ceramic candle filters and ceramic crossflow filters was tested. The first commercial plant using this technology is currently in

design.



The M.W. Kellogg Company (Continued)

Coal Combustion

Kellogg's Pressurized Circulating Fluid Bed Combustor (PCFBC) processes pulverized coal and limestone or dolomite in a high velocity reactor which completely combusts the coal yielding very low SO₂ and NOx emissions. The pressurized flue gas is expanded to produce power and steam is generated and expanded in a turbogenerator in combined cycle mode. The sorbent is fully oxidized in the reactor, eliminating subsequent treatment of the ash and spent sorbent before disposal. The technology is a low-cost alternative for cogeneration and power applications.

Transport Reactors

Kellogg is currently developing a high velocity reactor similar to the PCFBC in which pulverized coal and limestone feeds are gasified to produce low-BTU or medium-BTU gas. The Transport reactor is expected to materially reduce the capital cost of the coal conversion process. In a second generation power cycle both a gasifier and combustor are used, each partially converting the coal feed and together resulting in complete combustion. In combination with advanced gas turbines this technology yields higher cycle efficiency and lower cost than conventional IGCC or PFBC technologies. A 2.4 TPD test unit is under construction; a 38 TPD test unit is in design.

Full EPC Services

Kellogg offers engineering, procurement and construction services as well as plant operation and maintenance services on a worldwide basis.

R&D Services

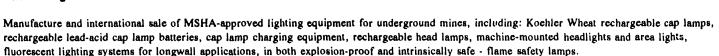
Kellogg's Research and Development Center has bench-scale, pilot plant and laboratory facilities for testing of coal in gasification, combustion and pyrolysis modes. Kellogg's coal lab offers the analysis of coal and ash properties. The company prepares design studies for a wide range of process and power applications based upon specific client requirements.

Koehler Manufacturing Company 123 Felton Street Marlborough, MA 01752

Telephone:

(508) 485-1000 (508) 485-1004

FAX: President/CEO: Richard L. Mitchell J. Eric Gulliksen Sales Manager:



Products/Service Description

Wheat miners' cap lamps, Koehler flame safety lamps, lighting systems for underground mining machinery. Portable Rechargeable lights for industrial safety and fire fighting applications.

Rechargeable head lamps, machine mounted head lights and area lights, fluorescent lighting systems for longwall applications (LX1200 DD) in both explosion proof and intrinsically safe.

Komatsu Dresser Company 200 Tri-State International Lincolnshire, IL 60049-1422

Telephone:

(708) 831-6700

Telex: 6714757 FAX: (708) 831-7203
CEO and Chairman: Arlie Tucker
President and COO: Masahiro Sikane



Komatsu Dresser Company is solidly positioned as the No. 2 supplier of Construction and Mining Equipment in the western Hemisphere with sales of over one billion dollars. KDC employes over 2,500 people, has over 2 million square feet of manufacturing capacity and 850,000 square feet of service parts distribution capacity.

Product/Service

Description

Dave Grzelak

Coal Mining Equipment

Vice Pres. Marketing:

Komatsu Dresser Company manufactures and markets one of the world's broadest lines of Mining and Construction equipment including crawler tractors, crawler loaders, hydraulic excavators, cranes, wheel loaders, off-highway trucks, motorized scrapers, graders and compactors.

Lamarche Manufacturing Company 106 Bradrock Drive Des Plaines, IL 60018

Telephone: (708) 299-1188

President/CEO: Sales Manager:

John Walsh John Pawula



Lamarche, founded in 1945, has and continues to manufacture battery-chargers and power supplies. We service the mining industry with various size and model battery-chargers for scoops, shuttles, etc. Lamarche does all of it's own engineering, manufacturing and assembly. Besides mining, Lamarche services telecommunications, aviation, engine starting, automatic guided utilities, materials handling (motive power), mapping, railroad, computer back-up, UPS, utilities and others.

Product/Service

Description

A45M

Mag-AMP series of battery chargers for above ground and in mine use.

A35M

Ferro resonant series of battery chargers for mine use.

A70B

SCR series of battery chargers for above ground use.

Leas Industrial Assoc. 122 N. 34th St. 10-C Richmond, IN 47374

LEAS INDUSTRIAL ASSOCIATES

Telephone: (317) 935-2856

Chief Executive Officer:

Arnold M. Leas

Twenty-three years of aggressive bench, pilot plant, semi-demonstration plant with clean coal patented process development, full scale plant designs, client-vendor consultations, economic-environmental-evaluations have been made with all private capital. Full scale plant hardware vendor working legal agreements for shop assembly-line fabrication of standardized module units and field erection on precured foundations for expediting start-up and commercial operations. Experienced construction and start-up crews from petroleum chemical refining and coal processing industries assure accelerated commercialization.

Product/Service	Designation	Description
LIA Process, Stage One	Coal-limestone	Coal 175 psig air-steam CO ₂ gasifier without the use of manufactured oxygen, products, 225 BTU gas, syn-coal and lime. Minor separated products of gypsum, heavy metal concentrates, agricultural soil erosion preventative. Process thermal efficiency equals 89% plus 5 year payout on capital and EPA compliance.
LIA Process, Stage Two	225 BTU gas	Coal gas without manufactured oxygen via LIA circulating fluidized bed reactor. Process thermal efficiency equal to overall 4% to electric and EPA compliance.
IGCC	Electric	Higher efficiency electric production via gas improved turbines at 1/2 production cost.

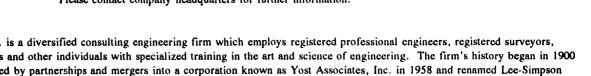
Lee-Simpson Associates, Inc. 203 W. Weber Avenue P.O. Box 504 DuBois, PA 15801

Telephone: (814) 371-7750 FAX: (814) 371-8864

Chief Executive Officer: Edward S. Nasuti, President

International Sales Manager: Duane L. Berry

International Offices: Please contact company headquarters for further information.



Lee-Simpson Associates, Inc. is a diversified consulting engineering firm which employs registered professional engineers, registered surveyors, certified technicians, planners and other individuals with specialized training in the art and science of engineering. The firm's history began in 1900 with a proprietorship, followed by partnerships and mergers into a corporation known as Yost Associates, Inc. in 1958 and renamed Lee-Simpson Associates, Inc. in 1971. Our firm provides professional assistance to individuals, private enterprise and all levels of government in the fields of civil, electrical, communications, environmental, mining engineering and planning. The firm has available a fully equipped laboratory for water and soil testing.

Product/Service	Description
Technical Consultants	Lee-Simpson Associates, Inc. provides engineering, planning and evaluation services to coal and non-coal mining companies. The services provided consist of mapping mineral reserve evaluation, permit application preparation, water analysis, slope stability analysis, preparation of erosion and sedimentation control plans, geologic and hydrologic studies, and the design of buildings and structures for coal handling.

Lehigh Valley Coal Sales Co. P.O. Box 450 Pittston, PA 18640

Telephone: (717) 654-3355

Telex: 510-658-3453 FAX: (717) 654-1422

President: Joseph R. Pagnotti, Sr.

Lehigh Valley Coal Sales is a leading producer, shipper and exporter of industrial quality anthracite. Our mines produce metallurgical grade coal that has high carbon content, low volatility, low sulphur content, and is low in phosphorus. Lehigh Valley exports through the Port of Baltimore, MD.

Long-Airdox Company 227 West Maple Avenue Oak Hill, WV 25901



Telephone: (304) 469-3301 **FAX:** (304) 469-4178

President/CEO: William E. Meador

Sales Manager: Calvin R. Kidd, Vice President - Sales

Long-Airdox Company is a major manufacturer and supplier of equipment for both underground and surface mining applications - from the face to the unit train loadout. In over 50 years of developing highly efficient mining machinery, Long-Airdox has made major, lasting contributions to the mining industry.

Long-Airdox products include: Belt Conveyor Systems and components (Long-Airdox produces over 50% of all underground conveyor systems); Full Dimension Continuous Haulage Systems - introduced by Long-Airdox in the late 50's, modern day versions are responsible for production increases of 25% and more. Long-Airdox supplies over 75% of all such systems in use today. Feeder-Breakers, another Long-Airdox development introduced in 1958, sizes a variety of mined materials for underground and surface applications. Other products available include: Belt Storage and Take-up Units, Roof Bolting Machines, Longwall Shearers, Colmils for Shortwall mining, Stage Loaders, Mobile Tailpieces and LADCO pneumatic Bulkbreaking Systems.

John B. Long Co. 1504 Proctor Street P.O. Box 50608 Knoxville, TN 37950-0608

Telephone: (615) 522-8686 **FAX:** (615) 523-4996

President & International Sales Manager: Armistead M. Long

JBLCo is a full service engineering, manufacturing and sales company, producing and selling equipment to the mining and materials handling industry. Formed in 1984, it has over 50 employees, operating from its 35,000 square foot manufacturing facility in Knoxville, TN with branch sales and service offices in Kentucky, West Virginia and Alabama. JBLCo produces and markets bulk material samplers and related equipment, underground personnel carriers, underground rockdusting equipment and related components.

Product/Service

Description

Mechanical Sampling Systems

Technology leader in modular automated sampling systems for sampling coal and other bulk materials from belt conveyor flows 100 tph to 10,000 tph built to ASTM, ISO, etc. standards. Holder of 8 patents in sweep sampler design with additional pending.

Sampling System Components

Crushers, Transfer Conveyors, Laboratory Dividers.

John B. Long Company (Continued

Mantrip Vehicles Battery operated and rubber tires for transportation of personnel in limited headroom situations, MSHA certified

design.

For distribution of rockdusts in underground coal use. MSHA certified design. Rock Dusters

Patented dual beam Long-Lite II and single beam Long-Lite. MSHA certified mine headlights. Mine Headlights

LSR Technologies, Inc. 898 Main Street Acton, MA 01720

LSR Technologies, Inc.

Telephone:

(508) 635-0123

FAX: President/CEO: (508) 635-0058 S. Ronald Wysk

Technical Director:

Dr. Leo A. Smolensky

Domestic Offices:

ACTON, MA: 898 Main Street

International Offices:

International Operations - Please contact company Headquarters for further information.

LSR performs research and development in the area of coal combustion, energy conversion, and air pollution control. The company also offers design and engineering services, and supplies dust collection equipment to industry. Other capabilities include complete source testing services for particulate and gaseous emissions.

Products/Service

Description

Emissions Control

Provide particulate control equipment for removal of fine dust from flue gas.

Research & Development

Development of advanced systems to control air toxics, particulates, and gaseous emissions.

Compliance Testing

Complete source testing capability for air emissions with EPA Methods 1-25.

Marietta Structures Corporation County Road 4, P.O. Box 653 Marietta, OH 45750

STRUCTURES

Telephone: (614) 373-2400 FAX:

(614) 373-5678

Executive Vice President:

Dennis A. Blauser

Sales Manager (Silo Division):

Joseph R. Tucker, P.E.

Designs and Builds:

- 1) Concrete stave silos
- 2) Poured-in-place concrete silos
- 3) Steel silos
- 4) Repair of all types of material storage silos

McGraw Hill Inc./Coal Week 1200 G Street, N. W., #1100 Washington, D.C. 20005

Telephone: (202) 383-2190 **FAX:** (202) 383-2125

Editorial Director: John K. Higgins

Domestic Offices: 1200 G Street, N. W., Washington, D.C. 20005

Subscription Information: Energy and Business Newsletters, New York, NY (212) 512-6410.

International Offices: 34 Dover Street, London WIX 4BR England

McGraw-Hill Inc.'s Coal Publications Group is a part of the company's Energy and Business Newsletter Division. Publications cover a wide range of energy activities in coal, natural gas, electric power generation, nuclear power, and federal energy policy.

Products/Service

Description

A weekly newsletter covering coal markets in the U.S. Provides weekly market news of transactions and prices in the U.S. steam coal trade. Includes some coverage of policy issues, and business developments such as mergers and acquisitions in the coal industry.

COAL WEEK INTERNATIONAL

A weekly newsletter covering international steam and metallurgical coal markets, including market transactions, purchases, offers to purchase and regular coverage of current prices. Also includes policy and business news related to the world coal trade.

McNally Wellman 4800 Grand Avenue Pittsburgh, PA 15225

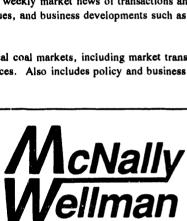
Telephone: (412) 269-5000

Telex: 199211 WELL UT FAX: (412) 269-5030 Chief Executive Officer: Raymond M. Koper

International Offices: Please contact company headquarters for further information.

McNally Wellman has enjoyed over 100 years of providing a variety of services and products to the coal industry. With extensive experience in bulk material handling and storage, McNally Wellman can design and supply equipment and systems tailored to the requirements of mining operations, electric power plants, or other transportation situations. A recognized leader in coal preparation, McNally Wellman can provide efficient and reliable "modular" plant coal cleaning facilities incorporating the latest in cleaning technology. In addition, McNally Wellman offers a wide range of coal sizing, cleaning and dewatering equipment that has been proven dependable in the coal industry.

Product/Service	Description
"Modular" Coal Preparation Plants	McNally Wellman "modular" preparation plants are designed to recover the best possible product from a seam of coal utilizing water or dense media cleaning circuits. Our "Modular" plants offer a flexible as well as economical alternative to conventionally designed plants.
Coal Handling Systems & Equipment	McNally Wellman provides efficient and practical handling systems to move coal effectively. Our belt conveyor systems provide the link between the mine mouth and the preparation plant or the railroad car and the barge. Equipment includes rail car and barge/ship unloading and loading devices.
Coal Storage Systems	McNally Wellman will design a system to satisfy any coal storage requirement. Our systems have included traveling trippers, radial stackers, stacking tubes and stacker/reclaimers. In cases where enclosed storage is required, McNally Wellman offers various types of storage systems.
Coal Processing Equipment	McNally Wellman features a wide variety of specialized processing equipment to size, clean, and dewater coal. Processing equipment available from McNally include reciprocating feeders, roll crushers, rotary breakers, baum jigs, heavy medium vessels, water-only cyclones, curved sieves, and centrifugal dryers.



Membrane Technology and Research, Inc. 1360 Willow Road, Suite 103 Menlo Park, CA 94025

Telephone: (415) 328-2228 **FAX:** (415) 328-6580

President: Director of Marketing: Dr. Richard Baker Vicki Simmons



MEMBRANE TECHNOLOGY

A RESEARCH, INC.

Membrane Technology and Research Inc. (MTR) has eleven years of experience in the membrane separation area and is equipped with state-of-the-art equipment in this specialized field. Membrane modules and systems from laboratory to industrial scale are produced at the facility. The company has developed, both through government sponsorship and through industrial partnerships, a number of pilot- and demonstration-scale membrane separation systems for a variety of applications, related to environmental issues. Membrane technology is a low-cost, energy-efficient solution to many industrial separation problems.

Product/Service Description

Flue Gas Treatment Membrane separation process to remove sulfur dioxide from flue gas (laboratory scale).

Sulfur Dioxide Fractionation Membrane system for producing marketable, liquid sulfur dioxide from flue gas treatment streams containing 5-90% sulfur dioxide (pilot scale).

Applied Research Development of membrane separation systems for the treatment of gas and liquid effluent streams containing trace organic compounds. Pilot-scale systems available.

Mettler-Toledo, Inc. 6600 Huntley Road Columbus, OH 43229

Telephone: FAX: President/CEO: (614) 841-7300 (614) 841-7295 Ben Dillon Ken Peters

Sales Manager:

Domestic Offices:

350 W. Wilson Bridge Road, Worthington, OH 43085 (U.S. Headquarters)

International Offices:

Mettler-Toledo, AG, Griefensee, Switzerland

Manufacturer of weighing equipment and systems.

Products/Service Description

Truck Scales Concrete and steel deck versions available with lengths of 10-120 feet. A wide range of widths and capacities are available to

accommodate a variety of vehicles, from over the road trucks to off road Rear Dump Vehicles.

Rail Road Scales A complete line of rail scales are offered from STATIC multidraft to coupled-in-motion and combination railroad/truck scales to

meet the rail weighing needs of coal related industries.

Hopper/Loadout Scales Custom Design Hopper and loadout scales are available for increased productivity and accountability for unit train loadout

systems.

MicroFuel Department Fuller Power Corporation 2040 Avenue C Bethlehem, PA 18017-2188

Telephone: (215) 264-6900 **FAX:** (215) 264-6441

Chief Executive Officer: Mr. John C. Welling International Sales Manager: Mr. John C. Welling





Domestic Offices:

Marietta, GA; Hinsdale, IL; San Rafael, CA; Houston, TX

International Offices:

Offices and subsidiaries in all major countries; contact Bethlehem headquarters for information.

The power industry has long recognized the economic and environmental benefits of firing micronized coal to replace the use of oil and gas. The primary constraint has been the energy input required for the micronization of the fuel. MicroFuel has developed a centrifugal-pneumatic (CP) MicroMill[™] which provides micronized coal (80% < 44 microns) with an energy input of only 20% > conventional coal pulverizers. The MicroFuel MicroMill is applicable to any process fired by either oil, gas, or pulverized coal, as well as micronization for coal beneficiation. The MicroFuel CP MicroMill also processes a wide variety of other products such as limestone, sodium bicarbonate, and other materials used as reagents and sorbents in air quality control systems. The micronization of sorbents greatly improves their utilization in most processes. The markets for the MicroFuel CP MicroMill are replacement of natural gas and oil for any direct- or indirect-fired, chemical and sorbent preparation for air quality control systems and specialty products and chemicals requiring very fine consistent particle sizing.

Product/Service	Designation	Description	
MicroFuel MicroMill	Coal	The CP MicroMill produces micronized coal with a consistent particle size distribution of 100% < 177 microns, 80% < 44 microns with an average particle size of 20 microns at an energy consumption level of 25 KW/ton. The micronized coal is suitable for direct firing in most applications utilizing oil or natural gas.	
MicroFuel MicroMill	Special Products	The CP MicroMill is also capable of micronizing many products such as limestone, sodium bicarbonate, and other chemicals. Energy requirements and product fineness vary depending on the application and product. A full-scale demonstration unit is available at the home office R&D facility to evaluate product applicability and design parameters.	

J. W. Miller & Associates, Inc. (A Family Held Company)
Miller Building
No. 2 Hale Street
Charleston, WV 25301

Telephone: (304) 343-9524 **FAX:** (304) 343-9530

President: Mr. James W. Miller Vice President: Mr. David S. Miller Vice President: Mr. Gary J. Miller

Incorporated since 1964.

Product/Service

Geological Exploration; Coal Mining, Underground, Surface, Auger; Coal Preparation; Coal Exploration; Coal Transportation; Port Facilities; Efficiency and Productivity Studies; Appraisals; Coal Analysis; Financing; Complete Feasibility Studies; Economic Evaluations; Market Studies; Management/Operations Research; Design Contracting; Exploration, Drilling, Preparation Plant Construction, Mine and Plant Management, Beehive Coke Oven Construction, RR Loading and Unloading.

Modern Refractories Service Corp. 747 Erie Avenue North Tonawanda, NY 14120

Telephone: (716) 693-8076 FAX: (716) 693-5736

CEO: Vice President: Project Manager:

Robert J. Kish Donna Kish Jerome Kowalski

Description

Modern Refractories Service Corp. was founded in 1973. The company has been an entrepreneur in downtime saving procedure for refractory repairs. The Hot Suit System allows video inspections and repair work to be done in an operation facility. A videotape can be made of the inside refractory of a furnace, oven, or kiln at its operating or near operating temperature. It can be evaluated to determine the material needs prior to a scheduled downtime. Material arrival can coincide with the maintenance schedule. Call Modern for consultation in maintenance inspections, downtime savings repairs, emergency inspections, and your special material needs.

Product/Service	Description	
Inspections	The Hot Suit System developed and patented by Modern is used in conjunction with modified video equipment which can provide videotape of high temperature areas. Videotape inspections done in emergency situations give decisionmakers the opportunity to review problems with more detail, subsequently providing information for more effective solutions.	
Cost-Effective Repairs	The Hot Suit System can be used to make repairs. Rebuilds, guniting, cleaning scale, and rodding regenerators are made possible with minimized downtime.	
Custom-Brick Manufacture	Bricks and shapes can be made to specification. Special material capabilities include a negligible expansion characteristic used for high temperature repairs.	
Advanced Application Processes	Sales and/or service of modified pump and pumpable ceramic fiber are used to increase shell insulation or fill leaks and joints. Treated ceramic tubes are used to repair gasoline leaks. Both of these applications save downtime, increase equipment life, and are more cost-effective than alternative methods.	

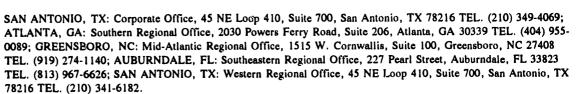
Monex Resources 45 NE Loop 410 Suite 700 San Antonio, TX 78216

(210) 349-4069 Telephone:

Chief Executive Officer: Gerry L. Gordon International Sales Manager: W.E. Ellis, Jr.

FAX: (210) 349-8512





MONEX

RESOURCES INC

Monex Resources, Inc. is an American corporation headquartered in San Antonio, Texas with over one million tons of fly ash and bottom ash sold annually. Currently nearing the beginning of its fourth decade of operations, Monex Resources has become a national leader in fly ash marketing and handling by providing a fly ash distribution system including over fifteen power plants in ten states reaching from Virginia through the Carolinas, Georgia, Florida to Texas. The Company also operates admixture manufacturing facilities in Florida, North Carolina and Texas and ash landfills throughout the southern and southeastern states.

Monex Resources, Inc. (Continued)

Product/Service	Description
Fly Ash	Through selective collection and classification at the power station, Monex is able to produce only the highest quality, consistent fly ash, featuring lower loss on ignition (carbon content) and the highest performance characteristics in concrete. In addition to its utilization in the production of concrete and concrete products, fly ash is also provided for use as a mineral filler in asphaltic concretes and other industrial uses, as an additive for the stabilization of chemical wastes and sludges, as an effective pozzolanic cementing agent in grouts and controlled density fills, and in the production of road base and roller compacted concretes.
Bottom Ash	Monex bottom ash is a valuable additional by-product of the coal combustion process. In its processed form, Monex pyrite-free bottom ash is an attractive, cost-effective alternative to manufactured lightweight aggregates in the manufacture of concrete products. While the characteristics of the bottom ash vary by source, significant savings in the cost of aggregates are possible, while producing a concrete unit of desirable texture, weight, absorption characteristics, and shrinkage. Bottom ash is also extensively utilized as a correcting material, in the manufacture of Portland cement providing a source of alumina and iron compounds required for cement clinker production.
Ash Disposal	Through its Utility Services division, Monex performs ash management services for the electricity generating industries. Utility Services is responsible for the management, transportation, placement, compaction, and reclamation of fly ash, bottom ash, and ponded ash in environmentally acceptable landfills. This division managed some 1.5 million tons of ash disposal in the year ended June 1988.

Montague Systems, Inc. P.O. Box 5428 Greenville, SC 29606

Telephone: (803) 297-9080 **FAX:** (803) 297-0150

Chief Executive Officer: Bert L. Montague II International Sales Manager: Richard M. Sickinger

International Sales Manager: Richard M. Si

Domestic Offices: GREENVILLE, SC: Suite 200, 201 Brookfield Parkway, Greenville, SC 29607 TEL. (803) 297-9080; SUMTER, SC: 303 East Liberty Street, Sumter, SC 29150 TEL. (803) 775-1102

Montague Systems, Inc. was founded in 1914 as a provider of equipment and services to the sawmill industry. Since that time, Montague Systems has evolved into a major provider of bulk materials handling systems to the industrial, mining, utility and pulp & paper industries. The company designs, engineers, fabricates (from its own 375,000 sq. ft. fabrication facility) and installs/erects the systems it provides. The company is highly rated by Dun and Bradstreet and has provided single systems valued at \$40,000,000.

Product/Service	Description	
Architecture/Engineering	Design, engineering and detailing of bulk materials handling systems for industrial, mining, utility and pulp & paper industries.	
Coal Exporters	Design, engineer, fabricate and install conveying systems for load out onto barges/ships.	
Coal Mining	Design, engineer, fabricate and install conveying systems from mine mouth to load out.	
Facility Construction	Installation/erection of coal conveying systems at mines, coal terminals, industrial or power plant sites.	

Morrison Knudsen Corporation One Erieview Plaza Cleveland, OH 44114



Telephone: (216) 523-3706 **FAX:** (216) 523-5539

Chairman/Chief Executive Officer: V.P. - International Operations:

Tom Zarges
Darryl G. Moffett

Domestic Offices: International Offices: Los Angeles, CA; Boise, ID; St. Louis, MO; San Francisco, CA; Washington, DC Manila, Philippines; Warsaw, Poland; Singapore; London, England; Cairo, Egypt

Product/Service

Description

Architecture/Engineering

Facilities Construction

Morrison Knudsen Corporation, is an international firm engaged in design, construction, and program management in energy, industrial, and government markets. It has proven capability for construction of totally integrated grassroot facilities, plant expansion, and modernization and retrofit programs. MK services range from feasibility studies through design, procurement, construction, and startup. The company has extensive experience in power and steam generation and related environmental control facilities, having completed over 150 such major projects in the past 10 years. Recent projects include: flue gas cleaning systems for Ontario Hydro, Sunflower Electric, Cleveland Electric Illuminating Co., and Tucson Electric Power Co.; coal-fired power plants for Utah Power & Light and Central and Southwest Services; wood-fired power plant for Washington Water Power Co.; and two NOXSO power plants for U.S. DOE.

Neundorfer, Inc. 4590 Hamann Parkway Willoughby, OH 44094

Telephone:

(216) 942-8990

FAX:

(216) 942-6824

President/CEO: Sales Manager:

Michael Neundorfer Steven Ostanek



Neundorfer provides products and services related to air pollution abatement, using electrostatic precipitation. Electric power generation, metals processing, rock products (cement) and paper industries are the major types of businesses served since the early 1970s. Products include system upgrades, rebuilding, microprocessor controls for voltage and rapping, discharge electrodes, plate alignment systems, pneumatic and electric rappers, voltage isolation and stabilizing components, feedwater heater level controls, coal sampling devices and boiler tube deslagging systems. Services include consulting, field service, training, and performance diagnosis of electrostatic precipitator operations. Neundorfer is associated with the National Air Vibrator Company (NAVCO) of Houston, Texas, producers of pneumatic equipment.

Product/Service	Designation	Description
NAVCO Rappers EMR Rappers	R2, R3, R4 EMR 20110, EMR 20220	Pneumatic Impact Rappers, Pin Plates, Anvil Beam Sockets Magnetic Impulse Rappers
Discharge Wires Plate Alignment Hopper Evacuation MVCII MicroRap PS90	DE Electrodes Straighteners R3, PP3 Voltage Control Rapper Control Purge Stabilizer	Discharge Electrode Wires, spring & solid shroud Plate Realignment System Hopper Evacuation Systems Microprocessor-based Voltage Control System Microprocessor-based Rapper Control System Hopper-mounted lower wire frame air-purged insulating stabilizer
COAL LANTZ Mdc2000	Coal Sampler Feedwater Control	Automatically extracts sample of coal on as-burned basis Microprocessor-based or software algorithm to optimize levels of feedwater heaters

Non Recovery Coke Associates William Penn Plaza 2790 Mosside Blvd. Monroeville, PA 15146

FAX:

Telephone: (412) 373-8020 (412) 373-7065

Chief Executive Officer:

Mr. Raymond Sturgulewski

International Sales Manager:

Mr. Joseph P. Ciarimboli (Greensburg, PA office)

Domestic Offices: International Offices: GREENSBURG, PA: 101 N. Main Street, Greensburg, PA 15601 TEL. (412) 834-7555 ENGLAND: James O'Malley, 18 Berkeley Street, London WIX 5AE TEL. 01-408-0589

TELEX 28868 Argusr; MEXICO: Vidal Muhech, Baja California 200, 06760 Mexico, D.F. TEL. 564-70-66

TELEX 017-74-315

Non Recovery Coke Associates (NCRA) is an association consisting of Pennsylvania Coke Technology, Inc., and Roberts and Schaefer Corp., that provide engineering and construction services for the installation and operations of the patented PACTI non-recovery and/or energy recovery cokemaking production system. Roberts and Schaefer has over 13 years engineering support to the development of the PACTI systems. This association is prepared to install such facilities worldwide. Presently, NRCA is operating a PACTI cokemaking facility in Mexico under a joint development with Industrial Minera de Mexico, S.A.

Product/Service	Designation	Description
Coke Production Engineering and Construction	NRCA	NCRA provides engineering and construction services for the installation of the patented "PACTI" cokemaking system. Services range from initial feasibility studies and environmental impact studies to engineering, construction and operational technical support to coke and coke/energy production systems.

Nordberg Inc. P.O. Box 383 Milwaukee, WI 53201

Telephone: (800) 558-6818 FAX: (414) 747-1766

President/CEO: Mr. Thys de Beer Sales Manager: Mr. Frank Banholzer



International Offices:

Parent Company: Nordberg Group, Helsinki, Finland, with major manufacturing companies in the U.S., France, Finland, U.K. and subsidiaries worldwide.

Nordberg has a leading reputation throughout the mining industry for the manufacture of quality mineral processing equipment. From the Symons* Cone, the state-of-the-art Omnicone to today's patented HP Series and MP1000 high performance cone crushers, Nordberg has been at the forefront of new technology, serving customers for over 100 years. WaterFlush, a recent innovation, is a patented size reduction system for processing ores and is changing the way the mining industry liberates minerals. As a member of the Nordberg Group, Nordberg Americas is part of the largest crushing equipment manufacturer in the world.

Products/Service

Description

Nordberg banana-deck Screens

Nordberg banana-deck Screens have multiple deck slopes with the angle of inclination reducing progressively toward the discharge end. In a custom designed application, they can operate at up to 50% more capacity than conventional screens with similar screen area.

Nordberg, Inc. (Continued)

Nordberg MP1000 Cone Crusher

The Nordberg MP1000 Cone Crusher is a high capacity crusher designed to produce about double the capacity of conventional cone crushers of similar size. Also capable of producing a finer mill feed thus reducing milling costs and overall cost per ton of processed ore.

Nordberg HP Series Cone Crushers The Nordberg HP (High Performance) Series of cone crushers is the result of new, patented design parameters to increase crusher productivity without a corresponding increase in size. The HP700 provides the additional crushing force needed for extremely tough mining applications, is compact, crushes finer, and operates economically.

Nordberg WaterFlush Technology

Nordberg's latest innovation, WaterFlush, is a patented size reduction system for processed ores in the mining industry. WaterFlush liberates minerals and is designed to provide lower capital and operating costs. Hydraulic setting adjustment, hydraulic clearing and multiple lubrication systems on the WaterFlush Cone minimize maintenance.

Norton Chemical Process Products Corporation P.O. Box 350 Akron, OH 44309-0350

Telephone:

(216) 673-5860

Telex: 433-8012 (ITT) FAX: (216) 677-7245

Chief Executive Officer:

Robert C. Ayotte

Chief Operating Officer: General Manager Environmental Products: James F. Kraynak Larry R. Fordham

International Offices:

GERMANY: Fred Jansen, Norton Chemical Process Products, Theodor-Heuss-Platz 11, Postfach 10 11 51, D-4040

Neuss 1, Germany TEL: 02131-21048 FAX: 02131-275669

HOLLAND: Simon Prins, Norton Chemical Process Products, Bredewater 26, 2715 CA Zoetermeer, Netherlands

TEL: 079-517200 FAX: 079-513964

Product/Service

Description

NOx Removal Catalyst

NC-300(R) catalyst, a unique homogeneous zeolite composition ensures maximum NOx removal over a wide range of temperatures. With its high efficiency and excellent thermostability, the NC-300 catalyst offers the highest level of NOx removal available - 90 percent or better for most applications. This zeolite-based catalyst and entire support systems are used to convert industrial emissios of nitric oxide into nitrogen and water, thereby reducing air pollution and acid rain. The non-hazardous zeolite material also minimizes disposal concerns.

NRG Energy, Inc. 1221 Nicollet Mall Suite 700 Minneapolis, MN 55403



N7G Energy, Inc.

Telephone:

(612) 373-5300

FAX: CEO: (612) 373-5312

President and COO:

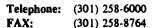
Roland Jensen **David Peterson**

VP - Business Development & Marketing: Carl Carreca

NRG Energy, Inc. is an independent power producer (IPP) which designs, constructs, owns, finances and operates fossil fueled power plants. NRG is a wholly owned subsidiary of Northern States Power Company (NSP). Headquartered in Minneapolis, Minnesota, NRG is an umbrella corporation for unregulated energy related businesses on a worldwide basis and consists of the following core businesses:

- Independent power producer
- Full service material and energy recovery from solid waste.
- Production of steam energy and related services.
- Coal enhancement technologies
- Nuclear fuel enrichment

NUS 910 Clopper Rd. Gaithersburg, MD 20878-1399



President: James W. Vaughan, Jr.



Headquartered in Gaithersburg, MD, NUS is a global provider of engineering, consulting, construction management, operations and maintenance services for nuclear power generating and government entities. With more than 1,000 employees NUS provides a broad range of services from conceptual studies, consulting and siting and environmental assessments, through engineering, operations and maintenance, to dismantling, repowering, and site restoration.

Product/Service	Description
Architect/Engineer	NUS provides a broad range of services to worldwide nuclear power generating and government entities that need safe, cost-effective and environmentally acceptable new facilities; need to operate and maintain their present facilities
Facility Operations	in an efficient, environmentally acceptable manner, and require disposition of excess and retired facilities. NUS also provides computer services such as system integration, software development and customization and a variety of
Facility Maintenance	Class 1E and non-1E instrumentation and control equipment. Other services include: plant betterment, modifications, monitoring, security issues, risk assessments, training, design work, regulatory assistance, and
Facility Construction	environmental consulting.

H.C. Nutting Company 4120 Airport Road P.O. Box C Cincinnati, OH 45226



Telephone: (513) 321-5816 **FAX:** (513) 321-0294

President/CEO: Jack Scott
Sales Manager: Boyd Graves

Domestic Offices: Charleston, WV; Erlanger, KY; Columbus, OH; Cincinnati, OH

The H.C. Nutting Company is a geotechnical, environmental and construction materials engineering and testing firm, serving thousands of clients in the Midwest and Eastern United States. Clients include governments, private industries, developers, contractors, public utilities, other engineers and architects. In-house support includes a fleet of drill rigs for subsurface exploration, coring and sampling and laboratory for all routine physical tests of all subsurface materials and construction materials.

Products/Service	Description	
Geotechnical	Provide geotechnical engineering studies including test borings, laboratory testing and engineering reports.	
Environmental	Perform a variety of assessments and studies relating to definition and design relative to contamination of surface and subsurface materials.	
Materials	Perform materials engineering on a variety of natural and man made materials, especially construction materials.	

O'Brien Industries, Inc. 10574 Ravenna Road Twinsburg, OH 44087

Telephone: (216) 487-1500 **FAX:** (216) 425-8202

Chief Executive Officer: K.J. Zinkan International Sales Manager: K.J. Zinkan



O'Brien Industries, Inc., a subsidiary of Zinkan Enterprises, Inc., was founded in 1940 and markets specialty chemicals used in mining and utilities throughout the U.S.A. and in other countries. Currently, O'Brien is looking to develop a working partner in Europe and Australia.

Product/Service	Designation	Description
Dust Control for Coal or Mineral Handling and Crushing Systems	DT-16	A patented polymer based product which is safe to use and is very low in cost.
Dust Control for Roadways	DT-350	A resin-based, safe to use long lasting product which provides a low cost, long term dust control solution.
Binder for Dry or Fine Coal	DT-100A	A patented polymer based product that is safe and easy to use to bind fine particles together and make the end product waterproof and dust free.

Ohio Central Steel Company dba "The Screen Machine"^{*} 7001 Americana Parkway Reynoldsburg, OH 43068

Telephone: (614) 866-0112 FAX: (614) 866-1181 President/CEO: Bernard Cohen Sales Manager: Steven Cohen



Designers and manufacturers of portable screening plants for the coal industry as well as all mining industries. Developed "The Screen Machine" in small, medium and large sizes to meet the needs of any size users. Utilizes a high speed screening technique which includes harp screening for fines. Also develops and manufactures various sizes of portable conveyors.

Products/Service Description

Screening Plants Manufactures a complete line of portable screening plants.

Conveyors Manufactures a complete line of portable stacking conveyors.

Ohio Coal Development Office (OCDO)
Ohio Department of Development (ODOD)
77 S. High Street, 25th Floor
P.O. Box 1001
Columbus, OH 43266-0101

Telephone: (614) 466-3465 FAX: (614) 466-6532 OCDO Director: Jacqueline F. Bird

CCT Technologies Manager: Howard J. Johnson, P.E.

International Offices: See listings for the Ohio Department of Development, International Trade Division (ODOD/ITD). ODOD/ITD has offices in Tokyo, Brussels, Toronto and Hong Kong.

The Ohio Coal Development Office within the Ohio Department of Development oversees the State of Ohio's Clean Coal Technology Research and Development program. Ohio and its river valley have more on-going pilot and demonstration/development clean coal technology projects underway than any other state, and is known as the "clean coal technology corridor." These projects have a high degree of public and private participation, many of them with U.S. Department of Energy co-sponsorship. OCDO's funding is limited to entities doing business in Ohio or educational or scientific institutions located in Ohio.

Products/Service Description

OCDO co-funds promising technologies and processes that can use high-sulfur coal in an environmentally-sound, economic manner. In addition, OCDO assists in displaying those technologies that have just become available for commercialization and sale domestically or overseas.

OCDO can assist in arranging tours of the project sites and discussions with the technology developers. (However, ODCO cannot underwrite the cost of the tours.) OCDO can also assist in locating Ohio-based companies engaged in coal mining and sale of Ohio coal, production and sale of mining equipment, and related environmental control equipment.



BURN OHIO COAL

Ohmart Corporation 4241 Allendorf Drive Cincinnati, OH 45209

ohmart®
The Process lost of generalities

Telephone: (513) 272-0131 **FAX:** (513) 272-0133

Chief Executive Officer: International Sales Manager: Tom Dewey
Paul Holzschuher

International Offices:

ENGLAND: Able Instruments & Controls, Ltd., Cutbush Park, Danehill, Lower Early, Reading, Berkshire RG6 4UT, England; ITALY: Terry Ferraris & Co., Vaile Ortles, 10, 1-20139 Milan, Italy; JAPAN: Yashima

Export and Import Co., Ltd., 9-1 Akasaka 3 Chome, Minato-Ku, Tokyo, Japan 107; MEXICO:

Instrumentation Tecnica Digital S.A. de C.U., 5 de Mayo 973-D Ote., Monterrey, N.L. C.P. 64000, Mexico

Ohmart is a 40 year veteran manufacturer of precision non-contact gauging equipment for the processing industries. High tech sensor designs include devices to measure on-line density or specific gravity of liquids or slurries in process pipes, liquid or bulk solids level in storage tanks or chutes and hoppers, weight of bulk solids on screw and belt conveyors, and percent or volumetric moisture content in bulk solids on moving conveyor belts. Other specialized gauge equipment is designed to measure on-line thickness or profile data as it applies to a moving web in order to allow the processor to maintain consistent quality. Primary target audience of Ohmart gauges are process instrumentation engineers on a supervisory level. Primary industries served include the chemical, petro-chemical, forestry, mining, utilities, pipeline, plastics, paper, plastics and food processing industries.

Product/Service	Designation	Description
Density Gauges	Densart™ Model 3400 Clamp-on	SpG and mass flow indication in pipes
Level Gauges	Levelart™ Model 1000 Model 2000	Continuous level point level in tanks and vessels
Weigh Scales	Weighart™ Model 4000 Model 4200 Model 4600	Continuous weighing and/or totalizing on belt or screw conveyors
Moisture Gauges	Moistart™ 5000	Continuous moisture indication of bulk materials on belt conveyors
Web Profile Gauges	Webart™ 9000 Webart™ 1000 Concept One	Continuous thickness measurement of web process materials

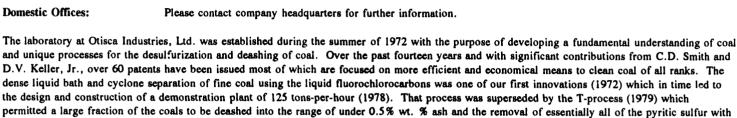
OTISCA

Otisca Industries, Ltd. 501 Butternut Street Syracuse, NY 13208

Telephone: (315) 475-5543 **FAX:** (315) 437-5296

Chief Executive Officer: Clay D. Smith International Sales Manager: Clay D. Smith

Clay D. Smith



a BTU yield usually exceeding 97%. The latter has been demonstrated in a two ton-per-day pilot plant (1983) which up to date has produced over

Product/Service Description

300 tons of dry product in coal water slurry form.

Advanced Utilization

Otisca Industries, Ltd. of Syracuse, NY has developed a patented coal beneficiation technology (the Otisca T-Process which will remove virtually all of the pyritic and sulfatic sulfur and a significant quantity of mineral matter (ash) from virtually any coal. The T-Process, which is the core of a coal-water slurry manufacturing pilot plant, consists of first milling raw coal to very fine sizes (30 um or finer) followed by an agglomeration step, using pentane, to recover the ultra-clean coal. The coal-water slurry manufacturing pilot plant, which has been operational since 1983, has

produced over 800 tons (dry) of coal-water slurry fuel (Otisca Fuel) with an average ash and sulfur content of 0.7 weight percent and 0.7 weight percent respectively. A 15 ton-per-hour Otisca Fuel manufacturing plant has been constructed and started up in 1989. It produced product coal with 1% ash and virtually no pyritic sulfur.

Oxbow Carbon International, Inc. 1601 Forum Place, Suite 1202 West Palm Beach, FL 33401

Telephone: (407) 640-8800 **FAX:** (407) 697-1876

President/CEO: Hans H. Fleskes
Executive Vice President: Patrick E. Valentine

Manager European Sales: Christopher C. MacEachern

From OCI headquarters in West Palm Beach, FL, OCI conducts trading and marketing activities in petroleum coke, coal, alumina, fly ash, and other products; develops new marketing opportunities, especially in regards to petroleum coke and fly ash consumption; evaluates potential projects and acquisitions; and sources fuels for cogeneration projects in the United States.

Louisiana Carbon Company is a joint venture with Conoco Carbon & Minerals, Inc. which markets fuel grade petroleum coke produced by Conoco, Inc. and other refineries. Annually, LCC ships over 2,500,000 tons to overseas customers and over 500,000 tons in the North American Market. Oxbow/LCC manufactures preblended fuels consisting of coal and petcoke for consumption in the utility industry.

Products/Service	Description
Solid Fuels	OCI is a privately held company whose primary business is marketing and trading solid fuels such as petroleum coke, coal and other bulk solids including fly ash, cement, bauxite and other aggregates. OCI is active in marketing, blending, brokerage and other value-added business on both an export and import basis. Product is transported via truck, rail, barge and vessel to serve OCI's domestic and overseas suppliers and customers.
Ash Separation	OCI has formed a Joint Venture with International Separations Systems, Inc. (iSSI) to separate carbon from fly ash.

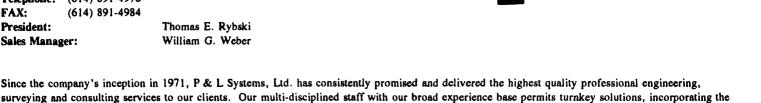


P & L Systems, Ltd. 4970 Cleveland Avenue Columbus, OH 43231

Telephone: (614) 891-4970 (614) 891-4984 FAX:

President: Sales Manager: Thomas E. Rybski William G. Weber

design and drafting is employed for increased efficiency and accuracy.



ENGINEERS ULTANTS

Products/Service

Engineering Mine Consulting

Parsons Brinckerhoff Inc. One Penn Plaza New York, NY 10119

Telephone: (212) 465-5000

Telex: WU 12-5441, RCA 232117

FAX: (212) 465-5096 (USA)/(212) 465-5028 (Int'l)

Chief Executive Officer: James L. Lammie **Director of Corporate Development:** Robert Prieto

Domestic Offices:

Over 100 offices in the U.S. and abroad. SAN FRANCISCO, CA: Mining Division Headquarters, 303 Second Street, Suite 700 North, San Francisco, CA 94107-1317 TEL. (415) 243-4600 FAX (415) 243-9501; DENVER, CO: Environmental Engineering & Services Corp. (a PB Affiliate) 1660 Lincoln Street, Suite 2000, Denver, CO 80264 TEL. (303) 832-9091 FAX (303) 832-9095; HOUSTON, TX: PB/KBB Subsidiary, 11767 Katy Freeway, Suite 810, Houston, TX 77079 TEL. (713) 496-5590 FAX (713) 496-5658; SAN FRANCISCO, CA: Energy Systems Group, 303 Second Street, Suite 850 North, San Francisco, CA 94107-1317 TEL. (415) 281-8700 FAX (415) 281-8707

International Offices:

Woodrow W. Hitchcock

President

Parsons Brinckerhoff International, Inc. 700 Eleventh Street, N.W., Suite 710

client's vision in a soundly engineered, practical manner. The professional staff at P & L Systems, Ltd. includes registered engineers and surveyors; geologists/hydrologists; resource development and environmental specialists, backed by a full complement of support personnel and equipment. The company has technicians and field crews which facilitate complete service, quicker response and greater quality control. In-house computer added

Washington, D.C. 20001

(703) 709-1170

AUSTRALIA: Brisbane, TEL. +61-7-371-4533 FAX +61-7-371-4262; Sydney, TEL. +61-2-957-4465, FAX +61-7-957-6046; AUSTRIA: Vienna, TEL. +43-1-534-39510 FAX +43-1-534-39511; EGYPT: Cairo, +20-2-705-800, FAX +20-2-710-439; TAIWAN: Taipei, TEL. +882-2-778-0850, FAX +886-2-771-0322; ENGLAND: London, TEL. +44-81-891-3217, FAX +44-81-891-5027; HONG KONG, TEL. +852-884-7488, FAX +852-885-5931; JAPAN: Tokyo, TEL. +81-3-3503-5075, FAX +81-3-3595-6335; SINGAPORE, TEL. +652-293-7777, FAX +652-943-383; THAILAND: Bangkok, TEL. +66-2-231-0614,

FAX +66-2-231-0448.

Parsons Brinckerhoff Inc. (Continued)

Parsons Brinckerhoff (PB) is a 108-year-old multidisciplinary consulting engineering, planning, architecture and construction management firm providing services to public and private clients throughout the world. Preeminent in the planning and design of transportation systems and facilities, the firm is also a leader in the design and engineering of power generation systems, advanced energy conversion technologies, fluidized bed combustion, cogeneration systems; compressed air/gas storage systems for peaking power; diverse underground structures and systems; tunnels and water resources systems; nuclear waste repositories; storage of petroleum resources, natural gas, and compressed air in caverns and wells. It specializes in mine planning and design that incorporates geotechnical and environmental engineering, and project and construction management. Mine services range from technical and environmental audit to complete feasibility study, mine planning and design, and detailed design of shafts and hoists. Our mining experience includes various types of mediums including coal and industrial minerals, oil shale, uranium, base metals, and precious metals. The firms' international arm, Parsons Brinkerhoff International, Inc., is utilizing project experience gained in the U.S. and abroad for highways, transit, infrastructure, public works and private developments in over a dozen international offices on six continents.

Consulting Services

Description

The Energy Systems Group of PB has specialized expertise in the study, evaluation and design of cogeneration plants; waste-to-energy and waste incineration facilities; hydroelectric facilities; industrial utility systems; heat transfer; electrical power generation and distribution systems; and fluidized bed combustion and gas/compressed air storage systems.

Environmental Engineering & Services Corporation, a PB affiliate provides a full range of services in the hazardous waste industry from initial investigations and negotiations to remedial design, construction management and facility closure. Services provided include regulatory compliance services; permitting; site characterization/remediation; property assessment and site investigation.

The Mining Division of PS provides engineering services for underground and surface mines; mine drainage treatment; mine cleaning; clean-up of hydrocarbons; mine surface facilities; preparation plant; land reclamation; railroad loading/unloading; and tidewater/river/lake/dock facilities.

PB-KBB a subsidiary of PB specializes in the engineering, design, construction, and operation of solution-mined storage facilities; conventionally mined storage facilities, solution mining mineral recovery systems; underground disposal wells and handling systems; compressed air energy storage caverns; surface systems storage facilities; compressor stations, tank farms, platforms, pipelines, and terminals.

Relevant Projects

Central Heating/ Power Generation Mielec, Poland

El Cerrejon Coal Mining and Transportation Project Bogota, Colombia

Yangpu Power Plant Management (Stage 1A) Yangpu, Hainan, PRC Red River Army Depot Waste Fuel Burning Steam Plant Fort Worth, TX

Sewells Point Naval Complex Coal Gasification/Combined Cycle Power Plant Feasibility Norfol, VA

Coal Transshipment Terminal Superior, WI

Parsons Main, Inc. 101 Huntington Avenue Boston, MA 02199

Telephone: (617) 262-3200

Telex: 4430035/CTMAIN FAX: (617) 859-2576

Chief Executive Officer:

James T. Callahan, President

Charles L. Holland

Vice President:

Domestic Offices:

CHARLOTTE, NC: 4701 Hedgemore Drive, Charlotte, NC 28209 TEL. (704) 529-6246; PASADENA,

CA: 100 West Walnut Street, Pasadena, CA 91124 TEL. (800) 362-6304

A subsidiary of The Parsons Corporation, Parsons Main, Inc. (Parsons Main) (formerly Chas. T. Main, Inc.), established in 1893, is a major international engineering and construction firm with over 1,000 people representing all engineering disciplines, process engineering, architecture, project management, construction management, procurement, quality assurance, and project controls functions. Parsons Main serves electric utilities and other energy producers; pulp and paper producers; the chemical process industry; high-technology manufacturers; the printing industry; commercial enterprises and institutions; and government agencies. Services provided range from feasibility studies, consultant services, to turnkey supply of complete operating facilities.

Product/Service

Description

Services to the Power Industry

Over 4,200 public and private sector clients throughout the world have been served by our specialists in Thermal Power, Industrial Power, Hydroelectrical Power, and Power Delivery. Projects have included power generation and delivery services to over 100 utilities in the United States and to clients in over 60 countries worldwide. Parsons Main's power generation experience includes engineering design and construction management services for over 56,000 megawatts of installed capacity, including oil-fired, combined cycle gas/turbine, hydroelectric, coal/lignite, and cogeneration. Additionally, Parsons Main has extensive experience with transmission lines, substations, and numerous distribution, switchyard, communication, and load management systems.

The Ralph M. Parsons Company 100 West Walnut Street Pasadena, CA 91124

Telephone: (818) 440-2000

Telex: 4720569 FAX: (818) 440-2630

President:

Mr. William E. Hall

International Sales Manager:

Mr. Paul J. Riedl

International Offices:

ENGLAND:

Derrick Hedley, Parsons House, Kew Bridge Road, Brentford, Middlesex, TW8 OEH,

PARSONS

England, U.K., Telephone: 44-81-742-1200 FAX: 44-81-995-1760

PHILIPPINES:

Jung Mok, 5th Floor, Exchange Corner Building; 107 Herrera Street, Legaspi Village,

Makati, Metro Manila, Philippines 1200, Telephone: 63-2-812-3058 FAX: 63-2-818-1137

SAUDI ARABIA: Jaafar Al-Hillawi, Khashoogi Building, Dhahran Road, Al-Khobar, Kingdom of Saudi Arabia,

Telephone: 966-3-899-2300 FAX: 966-3-899-1955

VENEZUELA:

Juan Cebrian, Torre La Noria - 9th Floor, Paseo Enrique Eraso, Las Mercedes,

Apartado 60632, Telephone: 58-2-915-421 FAX: 58-2-915-232

The Ralph M. Parsons Company (Continued)

The Ralph M. Parsons Company is a major international engineering-construction firm providing planning, study, economic assessments, design, engineering, procurement, construction and operation services worldwide. It offers expertise/experience in synfuels, process industries, flue gas cleanup (FGC), crude oil recovery/refining, gas processing, sulfur management and infrastructure. Proprietary technology includes coal-fired power plant FGC, sulfur control systems to serve the petroleum/gas processing/other industries, sulfuric acid, and SNG manufacture. Through its parent company, The Parsons Corporation, it offers a full range of A&E/construction services including power plants, transportation, roads, water supply, environmental including wastewater/hazardous/nuclear waste management, urban/regional planning.

Product/Service	Description
Coal-Fired Flue Gas Cleanup	Concept Assessment, Feasibility Study, Design, Engineering, Procurement, Construction (EPC)
Sulfur Management	Sulfur Control/Recovery from Coal-Based Process Units, e.g., Power Plants, Gasification or Liquefaction Plants. Production of Elemental Sulfur or Sulfuric Acid Product, EPC
Coal Gasification	Feasibility Study, Technology Selection, Design, EPC. Also for Integrated Coal Gasification Combined Cycle Plants.
Coal Liquefaction	Feasibility Study, Technology Selection, Design, EPC
Environmental Control	Consulting, Feasibility Study, EPC
Synthesis Processes	Feasibility Study, Technology Selection, Desing, EPC for Methanol, Fischer-Tropsch, Mobil Methanol to Gasoline, etc.

Passamaquoddy Technology One Monument Way P.O. Box 7412 Portland, ME 04112

Telephone: (207) 773-3151 **FAX:** (207) 773-3651

Chief Executive Officer: Mr. Garrett L. Morrison, Ph.D.

Vice President, International: Dr. Phillip A. Alsop

THOMASTON, ME: Office of Research & Development, U.S. Route One, P.O. Box 350, Thomaston, ME 04861

Passamaquoddy Technology is dedicated to developing cost effective solutions to complex environmental problems that confront heavy industry. Passamaquoddy Technology is currently demonstrating its Recovery Scrubber at commercial scale.

Product/Service

Domestic Offices:

Description

Recovery Scrubber

The Recovery Scrubber is a flue gas desulfurization technology (90% + SO₂ scrubbing efficiency, significant NO₂ and CO₂ scrubbing) that utilizes a waste product as scrubbing reagent, produces marketable byproducts (fertilizer, distilled water, and cement kiln feed), and is applicable to fossil-fired boilers in the utility, cement, paper and waste-to-energy industries. The Recovery Scrubber is unique in its use of a waste stream as scrubbing reagent, its production of byproducts with proven markets, and its potential to defray operating and capital costs through reagent tipping fees and byproduct sales revenue. The Recovery Scrubber is currently being demonstrated at commercial scale. Inquiries regarding performance characteristics and cost estimates for specific sites are welcome.

Passamaquoddy Technology, L.P.

Peabody Engineering Corp. 39 Maple Tree Avenue Stamford, CT 06906

Telephone: (203) 327-7000

Telex: 96-5911 PEABODY ENG STD FAX: (203) 978-1358 Chief Executive Officer: Mr. Peter B. Miller

International Sales Manager:

Mr. Harold Althen

International Offices:

CANADA: Frank Morrison, Peabody Engineering Canada, 530 Otto Road, Unit #14, Mississauga, Ontario LST 2L5 TEL. (416) 795-1550 FAX (416) 795-1030; MEXICO: Jerry Schermer, Ingenieria Peabody, Lope

de Vega 117-4 Piso, Mexico DFN 11560 TEL. (525) 254-3099 FAX (525) 254-6364

Peabody Engineering products are used worldwide to satisfy combustion requirements at utilities and industrial plants. Products include several types of burners, ignitors, flame detectors, burner management systems, and specialized combustion equipment such as air heaters. Peabody coal burners and coal preparation equipment are used in a variety of applications. With more than 70 years of combustion experience, Peabody is qualified to handle individual combustion requirements.

Product/Service

Description

Coal Burners

Peabody scroll-type tertiary solid fuel burners efficiently fire pulverized coal with low unburned carbon and particulate emissions. Burners are designed for three separate, controllable combustion air streams, have the capability of firing supplementary fuels - oil or gas - separately or simultaneously, and are available in

capacities from 10-million Btu/hr and up.

Ignitors

A complete range of ignition equipment is available including electric, gas-electric, and oil-electric models.

Flame Scanners

A family of flame scanning equipment is available to sense the presence and condition of coal flames. Scanners include ultraviolet and infrared models plus the new SmartScanth microcomputer controlled flame scanner.

Burner Management

Complete systems are available to supervise all the steps for safe combustion including burner start-up,

operation, and shut-down.

Pulverizers

Coal pulverizers handle all grades for a variety of fineness, offer full control of the grinding atmosphere, and provide thorough disintegration and homogenization of pulverized material.

Pedco Incorporated 11464 Lippelman Road Cincinnati, OH 45246

Telephone: (513) 771-2570 FAX: (513) 782-4950

President/CEO: E.E. McCracken Sales Manager: W.H. Long

Domestic Offices:

11464 Lippelman Road, Cincinnati, OH 45246

International Offices:

Contact Company Headquarters

Pedco is actively engaged in the development and promotion of its proprietary and patented Rotary Cascading Bed Combustion Technology for the economical and environmentally safe burning of high sulfur and waste coals, as well as certain industrial and municipal wastes, to produce steam for process uses and electrical power generation. This technology has been demonstrated on a wide variety of fuel materials including industrial and municipal wastes, either fired alone or co-fired with high sulfur and/or waste coals. This technology forms the basis for several proposals to provide inexpensive industrial energy while helping industries and/or communities beneficially dispose of otherwise unmarketable combustible wastes.

(Continued on next page)



PEDCO INCORPORATED

Pedco Incorporated (Continued)

Products/Service

Description

The Pedco Rotary Cascading Bed Combustion System is patented in the United States, Canada, Europe, Asia and South America. It offers industry a means of using otherwise unusable fuels to provide inexpensive energy in an environmentally acceptable manner. Boilers using this technology are not dependent of size-graded fuels and can fire almost any combustible non-hazardous waste, with coals or alone and can change fuels on-the-fly.

Pennsylvania Coke Technology, Inc. 101 North Main Street Greensburg, PA 15601

Telephone: (412) 834-7555

FAX:

(412) 837-9241

Chief Executive Officer: International Sales Manager:

Mr. Joseph P. Ciarimboli Mr. Joseph P. Ciarimboli

International Offices:

Please contact headquarters for further information

Pennsylvania Coke Technology, Inc. (PACTI) has developed patented non-recovery cokemaking process technology over the past 18 years. The process technology provides an inexpensive solution to the escalating costs of quality coke production meeting stringent environmental regulations. The proven PACTI coke production system represents the most advanced environmentally accepted process for non-recovery cokemaking, having received the first and only USA EPA approval for "Greenfield" coke production. The process is able to inexpensively convert a wide range of met coals to high quality met coke. By-pro duct recoveries in form of energy co-generation systems were jointly developed with Westinghouse Electric Corp. The PACTI coking system is presently being installed in Mexico. Both the PACTI cokemaking process technology and PACTI/Westinghouse energy cogeneration systems technology are available for licensing worldwide.

Product/Service	Designation	Description
Cokemaking Technology	PACTI	Cokemaking technology with environmentally accepted emissions controls; proven system represents a cost savings of over 60% less capital and 50% less operational costs. Unique process technology features environmental controls and capabilities to capture and destroy hydrocarbon emissions, and convert process energies to commercial energy forms.

Pennsylvania Crusher Corporation 600 Abbott Drive P.O. Box 100 **Broomall, PA 19008-0100**



Telephone:

(215) 544-7200

Telex:

83-1451

FAX: (215) 543-0190

Chief Executive Officer: International Sales Manager: John D. Whalen Leo F. Doyer, Jr.

International Offices:

Please contact company headquarters for further information

Pennsylvania Crusher Corporation (PCC) has designed and built crushers since 1904 and has originated many crusher designs and innovations which have been adopted by the entire industry. PCC crushers are used for such applications as coal, limestone, ores, chemicals, solid waste, glass cullet, and aluminum scrap. PCC designs and manufactures units that are ideal for reducing the fuels and sorbents used in many fluidized bed combustion systems. It has a 70,000 square foot manufacturing plant located in Cuyahoga Falls, Ohio.

Product/Service

Manufacturer of "Pennsylvania" Crushers, Bradford Breakers, Hammermills, Fluid Bed Crushers, Single Roll Crushers, Non-Reversible Impactors, Reversible and Twin Rotor Impactors, Ring Type Granulators, Jaw Crushers, Scrap Aluminum Shredders, and Industrial Waste Shredders

Philippi-Hagenbuch, Inc. 7424 West Plank Road Peoria, IL 61604-5295

Telephone:

(800) 477-6464

FAX:

(309) 697-2400

President:

Leroy G. Hagenbuch

Philippi-Hagenbuch, Inc. is a firm that designs and sells off-highway

truck accessories. The Phil® Autogate® tailgate was the first product developed by Phil. This gate is an automatic, hydraulic-free tailgate installed on the rear of off-highway trucks. Other products manufactured by Phil. include Hivol® bodies, bodies that are application specific such as lightweight coal or flyash truck bodies, and the OBDAS® truck management system, a system that allows accurate tracking of production. Additional off-highway truck options manufactured range from sideboards to hot slag liners to topcovers for dust haulage as well as load ejectors for standard bodies. Each product made by Philippi-Hagenbuch, Inc. is specifically designed to the application for which it will be used and is available for use on any make or model of truck.



Description

Autogate® Tailgate

An automatic, hydraulic-free tailgate for the rear of off-highway trucks.

Hivol® Bodies

Application specific bodies for off-highway trucks.

OBDAS® Truck Management

(On board data acquisition system) A system that allows for accurate tracking of production.

System

Consist of a series of overlapping, jointed plates that are attached to the top of the front slope plate and extend down

Load Ejectors

the body of the floor. It helps dislodge sticky material which clings or sticks to the truck body.

Bottom Dump Trailers

Specifically designed for businesses that spread material. The bottom dump trailer is designed for even dumping allowing for even compaction (flyash).

Pincock, Allen & Holt, Inc. 274 Union Boulevard, Suite 200 Lakewood, CO 80228

Telephone: (303) 986-6950

Telex: 666457 KAPIN Fax: (303) 987-8907

President: Manager-Coal Services:

John J. Antony, P. Eng.

K.M. Kolin, P.E.

Domestic Offices:

Denver, Colorado: Telephone (303)

986-6950

15 Valley Drive, Greenwich, C[∞] 06830: Telephone (203) 661-4411

Pincock, Allen & Holt, Inc. (PAH) is an international consulting engineering firm specializing in the evaluation, planning, design and management of mining industry projects. Since its founding in 1968, PAH has completed over 1600 assignments related to precious and base metals, industrial minerals and coal. Through its Geology, Mine Engineering, Mineral Processing, and Mineral Economics Departments, PAH serves the mining, financial and governmental communities.

Products/Service

Mineral Industry Consulting Services

Description

- Geologic investigations
- Manual and computer-based reserve estimation
- Property appraisals
- Surface and underground mine planning
- Capital and operating cost estimates
- Economic and financial analysis
- Commodity and market studies
- Conceptual and detailed process design and engineering
- Bankable documents
- Environmental audits, mitigation and permitting

Process Technology, Inc.

Headquarters: 1122 Calumet Avenue Calument, MI 49913

Telephone: (906) 337-0020 FAX: (906) 337-0023

Sales & Service Office 2767-69 East Fourth Avenue Columbus, OH 43219

(614) 252-9583 Telephone:

Chief Executive Officer: International Sales Manager: Mel J. Laurila

FAX: (614) 252-9562

Mel J. Laurila



PTI was incorporated in early 1986 to assist the coal industry in improving preparation plant efficiency and control. PTI has designed a line of on-line analyzers, enabling the instantaneous monitoring of ash and moisture (or solids) on any belt or pipe in a preparation facility. Current development work includes the addition of a sulfur measurement to PTI's ash analyzers. A series of software packages have been developed that utilize this information in real-time control that employs the latest in Fuzzy Logic Controls technology. Our Preparation Plant Simulator has been used by many equipment manufacturers to evaluate and predict the performance of their equipment in preparation plants. PTI continues to perform contract research both as a contractor and subcontractor for Department of Energy projects through the Pittsburgh Energy Technology Center (PETC) and Small Business Innovative Research program (SBIR). PTI also conducts contract research and performs engineering services for many of the major coal producers in the United States and Canada. We also serve as an analytical laboratory, particularly for the fine particle/particle separations. PTI is currently the worldwide exclusive licensee of the KEN-FLOTE™ Column flotation technology, developed by the University of Kentucky's Center for Applied Energy Research (CAER).

Process Technology, Inc. (Continued

Products/ Services

Description

PTI Ash Monitor Coarse Ash Monitor Nuclear, in-plant, automated slurry ash and solids analyzer

Nuclear, in-plant, automated coarse coal ash monitor

Microwave Moisture Meter

Nuclear, in-plant, automated moisture meter to determine moisture content of the coal on the belt.

KEN-FLOTE™ Flotation Column

Software Packages

PTI Preparation Plant Simulator and Fuzzy Logic Control

Advanced Coal Cleaning Technology Development Development of new coal cleaning technologies, pyritic sulfur removal, and super clean coals.

Progress Materials, Inc. **One Progress Plaza** Box 15208 St. Petersburg, FL 33613

Telephone:

(813) 824-6693 (813) 824-6601

FAX: President/CEO:

Peter D. Hay

Sales Manager:

Peter D. Hay

Domestic Offices:

St. Petersburg, FL

PMI develops and commercializes economical and efficient processes for the beneficial utilization of coal by-products such as fly ash.

Products/Service

Description

Carbon Burnout Technology

This technology combusts residual carbon in fly ash. The resulting low-carbon fly ash is then suitable for use as a pozzolan in concrete. This process avoids disposal of ash and beneficiates it for an economically valuable use. Additionally, the heat produced during combustion of the carbon is returned to the power station, thereby improving the station's heat rate.

Prox Company, Inc. 1201 S. First Street P.O. Box 1484 Terre Haute, IN 47808

Telephone:

(812) 232-4324

FAX:

(812) 232-4325

President:

Robert F. Prox, Jr.

Prox Company, Inc. designs and manufactures mining equipment replacement parts. Prox currently markets ripper chains, trim chains, conveyor chains and flites, and assorted bit blocks for various continuous miners as well as cutter bars and chains for conventional mining equipment. At our facility in Terre Haute, Indiana we have the capability to custom machine parts as well as welding and heat treating.



Description

Continuous Miner Parts

We currently have ripper chains, conveyor chains and flites, and trim chains for various continuous mining equipment.

Conventional Mining Parts

Cutter bars, cutter chains, and drive sprockets for conventional mining equipment.

Bit Blocks

Assorted bit blocks for cutting drums, boring machines, longwall shearers, and cobs.

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PSI Technology Company A Division of Physical Sciences, Inc. 20 New England Business Center Andover, MA 01810

Telephone: FAX:

(508) 689-0003 (508) 689-3232

President:

Principal Point of Contact:

Anthony N. Pirri Stephen A. Johnson



PSIT is a privately held business providing products and services to the power generation and waste technologies sector. Our engineers apply their fundamental understanding of coal combustion phenomena to provide innovative, practical solutions to real-world coal utilization/emission control problems. Current customers include electric utility companies, power plant equipment suppliers, and coal companies.

Product/Service

Description

Applied R&D

Development of advanced systems to control NO₂, SO₂, toxic metals and organics during coal combustion/gasification.

Coal Quality Consulting

Specialized lab-scale and full-scale coal testing to determine effects of coal blending/switching on boiler operation.

Emission Control Systems

Engineering

Application of combustion and post-combustion NO, controls to coal-fired boilers and coal-based combined-cycle

power plants. Also sorbent injection for SO₂, alkali and toxic metal control.

Measurement/Control Equipment Optical temperature monitor for controlling sootblower operation and optimizing boiler performance.

Pure Air 7540 Windsor Drive Allentown, PA 18195

²ure Air

Telephone:

FAX: President/CEO: (215) 481-5362 (215) 481-2762

Sales Manager:

Robert D. Conley Paul M. Ashline

Pure Air, a general partnership of Air Products and Chemicals, Inc. and Mitsubishi Heavy Industries America, Inc. offers the coal-fired electric utility industry a unique way to reduce sulfur dioxide and other air emissions. Pure Air's multi-strategy approach combines advanced technology, flexible project structuring and commercial gypsum production and sale. In this way Pure Air can help a utility achieve environ nental compliance for the least cost.

Pure Air's advanced flue gas treatment technology has been proven in 95 installations worldwide. Although available on a turnkey basis, a utility will want to consider alternative project structures, such as "own and operate", where Pure Air will construct, finance, own, operate and maintain a facility under long term contract, guaranteeing, among other things, emission reduction and operational availability (Pure Air's parent, Air Products, currently owns and operates over 200 large process plants worldwide). An own/operate facility for Northern Indiana Public Service Company began operation in summer 1992, and has since posted 99.9% availability and the ability to remove over 95% sulfur dioxide.

Description

Flue Gas Desulfurization

The Pure Air™ advanced FGD process is a co-current flow, in situ oxidation system where quenching, particulate removal and SO₂ removal occur simultaneously. A prescrubber is not necessary to produce a wallboard grade gypsum by-product. A high-velocity (15-20 ft/sec) open absorption grid provides a high gas/liquid contact area and uniform distribution of flue gas flow. The co-current flow and the scrubbing liquid reduces mist carryover by as much as 95%, and increases flue gas velocity by almost 100% over current designs. The sump is agitated and oxidized simultaneously with the use of Pure Air's air rotary sparger.

Flue Gas Treatment

Pure Air offers a full complement of flue gas treatment systems for SO,, NO, and particulate control.

Own and Operate Services

While an electric utility may choose a turnkey system from Pure Air, there are many benefits to the "own and operate" approach to flue gas treatment. Under this arrangement, Pure Air will construct, finance, own, operate and maintain a facility under a long term contract, thus guaranteeing long-term, reliable performance, reducing risk, and providing the least cost solution to environmental control.

Quad Three Group, Inc. 37 North Washington Street Wilkes-Barre, PA 18701

Telephone: (717) 829-4200 **FAX:** (717) 829-0302 **Chief Executive Officer:**

John L. Churnetski, P.E.



Quad Three Group, Inc. is located in Northeastern Pennsylvania in the center of a major anthracite coal region. We are a full service architectural and engineering firm consisting of 85 professionals and providing such services as land use planning, space utilization studies, building and building systems designs, utility systems engineering, bridge and roadway design, surveying and environmental assessment, management and remediation design.

The company has substantial experience in the design of coal handling system and coal combustion projects for steam generation and steam/electric power projects, serving district heat applications and cogeneration systems.

The firm uses state-of-the-art CADD systems for all work and is a leader in the A/E industry in computer applications in design and drafting. All architectural and engineering disciplines necessary for the projects undertaken are represented on staff.

Raytheon Engineers & Constructors, Inc. 141 Spring Street Lexington, MA 02173

RaytheonEngineers & Constructors

Telephone: (215) 422-3000 (Philadelphia)
Telex: 83-4203 (Philadelphia)
EAV. (215) 422 4648 (Philadelphia)

FAX: (215) 422-4648 (Philadelphia)

Chief Executive Officer: Charles Q. Miller, Lexington, MA International Sales Manager: V.J. Berry, Cambridge, MA

Domestic Offices: BOSTON, MA: One Broadway, Cambridge, MA 02142, TEL. (617) 494-7000

PHILADELPHIA, PA: 30 S. 27th St., Philadelphia, PA 19101, TEL. (215) 422-3000 DENVER, CO: 5555 Greenwood Plaza Blvd., Englewood, CO 80111, TEL. (303) 843-2000 CHICAGO, IL: 1333 Butterfield Road, Downers Grove, IL 60515, TEL. (708) 829-3000 TAMPA, FL: 1401 N. Westshore Blvd., Tampa, FL 33607, TEL. (813) 289-1991

International Offices: LONDON: C.I. Tower St., Georges Square, High Street, New Malden, Surrey KT3 4HH, TEL. 44/81/942-0055

THE HAGUE: Binckhorstlaan 117, 2516 BA, The Hague Netherlands, TEL. 31/70/349-4004

Raytheon Engineers & Constructors is a worldwide engineering and construction firm whose 8,000 people are serving corporations and government clients in more than 20 countries on five continents. The organization represents the consolidation of a number of engineering and construction organizations that have been meeting the needs of the mining, metallurgical, petroleum and gas, power, process, chemical and biotechnology industries since 1885. The company's coal experience ranges from conceptual engineering studies to coal mining and handling facilities design; coal processing, beneficiation and gasification projects; and construction and operation of coal conversion projects.

Product/Service	Description
Architectural/Engineering	Complete services from conceptual studies through detailed design. All phases of engineering of coal-fired power generation plants including fluid bed combustion, environmental engineering licensing, and waste management.
Facility Construction	Every type of construction arrangement from direct hire to complete subcontract. We can provide all construction services including field engineering, labor relations, safety programs, quality assurance, project controls, expediting, cost management, and inspection.
Facility Operations	Operation and maintenance activities of fossil-fueled plants including plant life extension, modifications, retrofits, testing and startup, operation training, and energy economics.

REICHdrill, Inc. P.O. Box 361 Philipsburg, PA 16866

Telephone: (814) 342-5500

Telex: 857223 REICHdrill FAX: (814) 342-1135

President: Robert F. Valli
International Sales Manager: Robert F. Valli

At REICHdrill, we build our drilling rigs with two basic criteria in mind: an unyielding commitment to quality and an undivided attention to customer satisfaction. Every REICHdrill is designed and manufactured to meet the most rigid of quality control standards. Yet, each rig we make is custom made to the particular specifications of the individual customer. As a result, our products are as varied as the customers we serve. REICHdrill customers have come to appreciate the low operating cost, superior construction, rugged dependability and long lasting value of all REICHdrill models.

Product/Service	Designation		Description
Rotary Drilling Equip.	Crawler <u>Mounted</u> C-450-C C-550-D C-650-D C-700-D C-725-D C-750-D	Truck <u>Mounted</u> T-600-D T-650-D T-700-D T-750-D	Truck and Crawler Mounted Top Head Drive DTH Hammer and Rotary Blasthole Drilling Rigs. Hole Size Range from 4" to 12 1/4". Down Pressures from 30,000 lbs. to 75,000 lbs. Compressor sizes for low pressure rotary drilling range from 600 to 1500 CFM and high pressures ranging from 600 to 1160 CFM for DTH hammer applications.

Reiss Viking One Paragon Centre 2525 Harrodburg Road, Suite 501 Lexington, KY 40504



Telephone: (606) 224-0779 **FAX:** (606) 224-0782

General Manager: Michael Burton Howard (Parent Company - Koch Industries)

Domestic Offices: FAIRMONT, WV: P.O. Box 407, Fairmont, WV 26554, TEL. (304) 534-3358; GAULEY, WV: Box 86,

Camden-on-Gauley, WV 26208, TEL. (304) 226-5226; TAZEWELL, VA: Route 6, Box 88, Tazewell, VA 24651, TEL. (703) 988-6564; WOODSTOCK, AL: P.O. Box 187, Woodstock, AL 35188, TEL. (205) 938-

7887; WEST FRANKFORT, IL: P.O. Box 448, West Frankfort, IL 62896, TEL. (618) 937-1132;

ELKHORN CITY, KY: P.O. Box 1300, Elkhorn City, KY 41522, TEL. (606) 754-5040.

Reiss Viking, a division of the C. Reiss Coal Company, a subsidiary of Koch Carbon, is North America's largest supplier of magnetite to the heavy media industry. The statistical processing control program at each of six locations insures our customers and Reiss Viking that our magnetite sizing is consistent and meets specifications. With our twenty-four hour service, customers are insured that product is available any time of the day or night. With our 25 years of experience, commitment to quality and a stable market presence, our customers are assured of long-term magnetite service and supply.

Product/Service	Description
Heavy Media Magnetite	A black, crystalline iron oxide used to alter the specific gravity of separation slurries in those coal or scrap cleaning plants set up to use any of the various heavy-media preparation processes.
Black Ox	High purity, pulverized, material black iron oxide sand additive for use in ferrous and non-ferrous metal applications within the foundry industry.

Resource Data International, Inc. 1320 Pearl Street, Suite 300 Boulder, Colorado 80302

RDI M

Resource Data International, Inc.

Telephone: (303) 444-7788 **FAX:** (303) 444-1286

Chief Executive Officer:

Ronald L. McMahan, PhD

Michael J. Minkel

Director of Sales: Domestic Offices:

1320 Pearl Street, Suite 300, Boulder CO 80302

kesource Data International, Inc., (RDI), is the authoritative data company in the energy information field. Many of the world's largest mineral energy resource companies, as well as railroads,, financial institutions and electric utilities are among its client base. RDI focuses on all fuels in the energy industry -- covering all United States sources and users of energy, the transportation systems that serve them, the macro and micro economic linkages that tie them together -- as well as the macro and micro study of electric utilities: Detailed financial competitor and bulk power supply-demand analysis. The Company provides customized reports and expert consulting services, and distributes regularly published data reports to subscribers via PC, mainframe, or hard copy delivery.

Product/Service

Description

COALDAT^e

is a coal mine and market analysis system used by coal companies, utilities, railroads and other industries involved in the coal business. The coal chain - SUPPLY-DEMAND/TRANSACTION-DEMAND - is the basis for COALDAT's design. COALDAT links a fully developed base of information on all coal mines to an equally detailed base of information on all coal-burning utility plants via their monthly contract and spot transactions. COALDAT also includes detailed market information on over 1,900 coal-fired industrial plants, as well as U.S. export and Great Lakes shipments. Additionally RDI provides complete transportation rates for all utility coal shipments in the U.S. and F.O.B. mine prices for all operating mines. Leg level detail for all utility coal movements is supplied and includes carrier name, dollars per ton, mileage and cents per tone per mile for each leg.

FUELDAT*

encompasses all of COALDAT[®] and goes beyond it. The System includes all U.S. utilities and their consumption, generation and supply for all fuels. It combines the depth of the COALDAT[®] supply-side with the all-fuels breadth of the FUELDAT[®] transaction, supply and demand sides.

POWERDAT*

encompasses all of COALDAT and FUELDAT and, in general, is a database designed to analyze and monitor, on a yearly as well as monthly basis, a utility's competitive position as well as the potential markets for power sales. Monthly information on generation, fuel consumption, power sales and power purchases will be provided. In addition, the POWERDAT system will provide, on an annual basis, detailed information concerning power contracts, financial performance, energy balances, transmission capabilities, plant production costs, monthly breakouts of peak loads and load forecasts.

Resource Dynamics Corporation 8605 Westwood Center Drive Vienna, VA 22182

Telephone:

(703) 356-1300

FAX:

(703) 356-2230

President: Chairman: Jeffrey P. Price N. Richard Friedman

Domestic Office:

Palo Alto, CA: (415) 494-2850

Product/Service

Description

Technology Evaluation

The Resource Dynamics Corporation provides expert services in assessing the economics, reliability, and commercialization prospects of advanced technology for coal processing, power generation, and emissions control. Clients rely on RDC technology evaluations for feasibility studies, research and development program reviews, and

technology acquisition.

Market Research

RDC performs market research to assess opportunities in coal utilization and other energy markets. RDC analyzes international markets for fuels, chemical by-products, power generation equipment, and emissions control equipment.

These market analyses help companies plan their energy sector business.

Coal Economics

RDC assesses the economics of energy production and utilization through resource appraisal and market research. The firm also analyzes and forecasts changes in the coal, oil and natural gas markets and analyzes interfuel competition.

Riley Stoker Corporation P.O. Box 15040 Worcester, MA 01615-0040

Telephone: (508) 852-7100

Telex: 920428 FAX: (508) 852-7548, (508) 852-7558 Chief Executive Officer: H. Kerner Smith International Sales Manager: Dr. Dietmar J. Kestner



Riley Stoker Corporation

International Representatives:

AUSTRALIA: Deutsche Babcock International, Suite 4, 355 Mann Street, Gosford, N.S.W., 2250, Australia, TEL: (0061-43) 236926, FAX: (0061-43) 236929, AUSTRIA: Babcock Industrieanlagen Vertriebsgesellschaft, Sudbahnstrasse. 28, A-2544 Leobesdorf Nord, TEL: 2256-2002, FAX: 2256-2005, TELEX: 14-212; CANADA: Deutsche Babcock-Riley (Canada) Inc., Plaza 4, Suite 303, 2000 Argentia Road, Mississauga, Ontario, Canada L5N 1W1, TEL: (416) 821-3750, FAX: (416) 821-3867, Ancaster Place, Suite 44, 201 Brownlow Avenue, Dartmouth, Nova Scotia, Canada B3B 1W2, TEL: (902) 468-4811, FAX: (902) 468-3912; CHINA: Deutsche Babcock International, C-502 Office Building, Beijing Lufthausa Center, 50 Liangmaqiaolu, Chaoyang, Beijing 100016, P.R. China, TEL: (0086-1) 465-1514, FAX: (0086-1) 465-1954, TELEX: 222510; COLOMBIA: Representaciones Internacionales Ltda, P.O. Box 949, Medellin, TEL: 248-51-89 or 246-56-94; Latin American Consultants Ltda., Carrera 12 No. 13-40, Piso 6, Apartado 14521, Bogata, Colombia (South America) TEL: (57-1) 342 49 18, (57-1) 243 16 42, FAX: (57-1) 281 20 10; ENGLAND: Borsig-Balcke-Durr (UK) Ltd., Challenger House, 125, Gunnersbury Lane, London, W 3 8 LH, England, TEL: (0044-81) 9926952, FAX: (0044-81) 9929113, TELEX: 934117; EGYPT: Deutsche Babcock International, Cairo Office, 54, Mohi El Din Abul Ezz St., Mohandessin -Cairo, Egypt, TEL: (0020-2) 3612342, FAX: (0020-2) 3491039, TELEX: 92494, HONG KONG: Deutsche Babcock International, Hong Kong Liaison Office, 3401 One Exchange Square, 8, Connaught Place, Central G.P.O. Box 5395, Hong Kong, TEL: (00852) 8104848, FAX: (00852) 8106548, TELEX: 60764, PAKISTAN: Qamar Traders, P.O. Box 1014, Ikram Building, Outside Akberi Gate, Lahor TEL. 62336 or 56936; POLAND: Deutsche Babcock International, Warsaw Office, INTRACO - Stawki 2, 00193 Warsaw, Poland, TEL: (0048-2) 6351759, FAX: (0048-2) 6350636, TELEX: 814410, RUSSIA: Deutsche Babcock International, Moscow Office, Sadovskikh Pereulok 6, Pom. 7, 103001 Moskva, Russia, TEL: (007-095) 2096678, FAX: (007-095) 2000222, TELEX: 413226; SINGAPORE: Deutsche Babcock International, ASEAN Representative Office, 16-01 Shaw Centre, 1 Scotts Road, Singapore, 0922, Republic of Singapore, TEL: (0065) 7345039, FAX: (0065) 7327793, TELEX: 26870; VENEZUELA: Eduardo Calcano & Cia., Centr. Plaza, Torre B-Penthouse, Avenida Francisco de Miranda, Apartado de Corredos 613071 Chaca, Caracas 1060-A

Riley Stoker Corporation (Continued)

Riley Stoker Corporation was founded in 1913. Since 1990 the company has been a subsidiary of Deutsche Babcock, Oberhausen, Germany. Riley designs, manufactures and constructs traditionally-fired boilers, fluidized bed combustion boilers, and waste-to-energy systems in capacities from 222,675 to 2,086,188 kg/steam (50,000 to 4,600,000 pounds of steam per hour).

Products/Services

Description

Boilers Stokers **Pulverizers** Construction Riley manufactures a line of coal pulverizers, low NO, burners for coal, gas and oil, and stokers for all types of coal, cellulose fuels and waste. The company provides a range of services for boiler and fuel burning equipment, including inspections, repairs and maintenance. It has its own construction capabilities for complete boiler erection as well as modifications and rebuilds. Riley operates a center for fuel burning research in Worcester, MA and a manufacturing plant in Erie, PA with easy access to water, rail, truck, and air shipping.

Roberts & Schaefer Company 120 S. Riverside Plaza Chicago, IL 60606

Telephone: (312) 236-7292

Telex:

(628) 57960

FAX:

(312) 726-2872

President: Sales Manager: Earl C. Antonson

Robert L. Williams, Jr.

Roberts & Schaefer Company, a full service engineering and construction organization, has served the power, coal, and mineral industries for more than ninety years. R&S specializes in sole responsibility - turn key bulk handling systems for new, upgraded, or retrofit projects and mineral beneficiation facilities.

Products/Service

Description

Our engineered products group manufactures cyclones, ceramic and ni-hard, thermal dryers, sieve bends, skirtboards, stacker/reclaimers, ship loaders, ship unloaders and belt feeders.

Sargent & Lundy 55 East Monroe Street Chicago, IL 60603



Telephone:

(312) 269-2000

FAX:

(312) 269-3680

Chief Executive Officer:

Mr. Eugene V. Abraham

International Sales Manager:

Mr. Steve R. Trenholm

International Offices:

KOREA: 98, Nonhyeon-dong, Kangnam-Ku, Seoul, 135-010 TEL: 82-2-547-3396 FAX: 82-2-549-6111;

INDONESIA: Umawar Centre, 5th Floor, 28, Kapten P. Tendean, Jakarta 12710 TEL: 62-21-

520-4230 FAX: 62-21-520-4232.

Sargent & Lundy (Continued)

Sargent & Lundy is a full-service firm that has specialized in power projects since 1891. Services provided by the firm's 2,500 person staff include preproject planning, project management, detailed design, specification preparing, procurement, construction management, and start up. Overall, Sargent & Lundy has designed more than 700 steam-electric generating units worldwide. Many of Sargent & Lundy's international projects include a comprehensive transfer-of-technology program. Thermal power project experience and expertise includes large and small pulverized coal units, including supercritical and mine-mouth stations; fluidized bed combustion; cogeneration; coal gasification; and combined cycle plants. Expertise also includes a full-scope of retrofit projects, including flue gas desulfurization installations and other air quality control technologies, fuel switching, life extension, and repowering.

Product/Service Description

New Unit Engineering Full-scope consulting, engineering and project management for all types of coal-fired power facilities based on 100

years of experience.

Emissions Control and Retrofit Full-scope of consulting and engineering services for new and operating units.

Savage Industries, Inc. 5250 South 300 West, Suite 200 Salt Lake City, UT 84107

Telephone: (801) 263-9400 **FAX:** (801) 261-8766

Chief Executive Officer: Mr. Allen B. Alexander
Executive V.P., Development: Mr. David G. Wolach
V.P., Development: Mr. Fred Busch

No. Allen B. Alexander
Mr. David G. Wolach
Mr. Fred Busch
Mr. Fred Busch

Director, Marketing Services: Mr. James B. Emery

Savage Industries, Inc., in business since 1946, is a specialized transportation and material handling company specializing in the performance of innovative truck transportation services and loading, unloading, transloading, screening, crushing, weighing and storage systems for coal and other bulk materials. The company provides services throughout the entire bulk commodity transportation and handling infrastructure from mine to ultimate end user. The company handles over 60,000 tons of coal daily. The company has current operations in Colorado, Utah, Wyoming, California, West Virginia, Nevada, Oregon, Washington, New Mexico, Pennsylvania and South Dakota. Savage specializes in the utilization of the total transportation and handling concept.

Schnabel Engineering Associates, Inc. 10215 Fernwood Road, Suite 250 Bethesda, MD 20817

Telephone: (301) 564-9355 **FAX:** (301) 530-6370

Chief Executive Officer: Mr. James J. Schnahel, P.E. International Sales Manager: Mr. Victor Omelchenko, P.E.

International Offices: Please contact company headquarters for further information.

SCHNABEL ENGINEERING ASSOCIATES

Schnabel Engineering Associates is a 160 person multi-disciplinary consulting firm specializing in geotechnical, mining, and environmental engineering. They are one of the oldest engineering firms in the United States that specialize in geotechnical, geological, and environmental engineering. The Schnabel staff has a wide range of coal, metallic, and non-metallic mining experience. Their design services include design of slopes and underground openings, mine dewatering, evaluation of groundwater contamination, mine subsidence studies, design of tailing dams and spoil piles, and design of building foundations. Their facilities include complete CAD capabilities and a wide range of geotechnical, mining, and geohydrology software. Their staff includes individuals fluent in many languages including Spanish, French, Korean, Hungarian, German, Chinese, and Russian.

Schnabel Engineering (Continued)

Product/Service Description

Technical Consultants

Schnabel Engineering provides geotechnical, mining, and environmental consulting services. They can provide assistance in mineral exploration studies, design of slopes and underground openings, mine dewatering, mine subsidence, design of building foundations, design of tailing dams, and contamination

problems.

Architecture/Engineering (A&E) Schnabel Engineering provides engineering design of tunnels mines, tailings, dams, slopes, and

contamination containment and cleanup. They have complete CAD capabilities and a wide range of

An Employee-Owned Company

geotechnical, mining, and geohydrology software.

Science Applications International Corporation Fossil Energy Technology Division 1710 Goodridge Drive, Mail Stop 2-2-1 McLean, VA 22102

Telephone: (703) 749-8675

FAX: (703) 827-9514 or (703) 827-7390

Division Manager: Dr. James T. Bartis

(703) 442-5691

Principal Point of Contact: Dr. Anton Dilo Paul (703) 442-5697

Domestic Offices: 39 offices in key geographical locations nationwide.

International Offices: 5 international offices

Science Applications International Corporation (SAIC), established in 1969, is one of the foremost R&D companies in the U.S. At the leading edge of new technology developments, the Fossil Energy Technology Division concentrates on concept development, technology transfer, and systems engineering in the areas of coal preparation, coal-based alternate fuels, advanced power generation systems, and environmental compliance strategies. The Division's in-depth analyses and assessments on technical, economic, and regulatory issues has led to the success of several energy-related R&D projects and business ventures.

The Division provides technical and management support for the U.S. Department of Energy (DOE) to formulate, evaluate, and execute R&D projects in advanced systems for coal preparation and combustion. Our analyses have led to the development and commercialization of advanced coal preparation technologies as a viable environmental compliance strategy. DOE's Combustion 2000 Program, a major research and demonstration program to build coal-fired, high-efficiency power systems with extremely low emissions, was established using conceptual designs, analyses, and costings developed by models for a Coal Market Module within the National Energy Modeling System under the Energy Information Agency. Our expertise is also extending overseas with coal-based energy projects in the Ukraine, Eastern Europe, and India.

Products/Services	Description
Technology Assessments	Concept development, definition, and evaluation for energy projects. Technical opportunities and risk associated with conventional and advanced coal preparation, combustion and synthetic fuel applications.
Economic Analyses	Market potential of energy technologies under varying economic conditions. Rate of return and cost/benefit evaluations and sensitivities.
Policy & Regulatory Analysis	Impacts of environmental legislation/regulation. Identification and analysis of alternative regulatory structures.
Energy Resources	Technical evaluations of potential energy sources, including prices projections and price stability analyses. Development and analysis of utility and industrial fuel procurement, transportation strategies, and contracts.
Scientific Research	Fluid dynamics of multiphase systems. Thermodynamics and kinetic phenomena associated with coal, coal processing, and coal utilization.

Science Applications International Corporation Physical Sciences Group 14062 Denver West Parkway, Suite 200 Golden, CO 80401



Telephone: (303) 279-7242 **FAX:** (303) 279-5525

Group Manager: Howard R. Pratt

Domestic Offices: SAN DIEGO, CA: (corporate headquarters) 10210 Campus Point Drive, San Diego, CA 92121, TEL. (619)

546-6000.

Founded in 1969 by a small group of research scientists, SAIC has grown into a large, diversified, high-technology corporation. SAIC's revenues exceed \$1.5 billion and the company employs over 14,500 people in more than 200 locations. A selected listing of products and services that SAIC provides to the coal industry is given below. For further information please contact Dermot Ross-Brown or Bill Thompson in the Golden office.

Product/Service	Description
Engineering Services	Areas of specialization include resource evaluation; exploration and development; mine planning; drilling and blasting; analysis of pillar stability, ground support, and use of backfill; subsidence investigations; stability and design of excavated mine slopes, spoil piles, and waste ponds; and hydrological investigations.
Environmental Services	With over 1,500 environmental professionals the company is able to provide scientific, engineering and management skills to solve a wide variety of environmental problems.
Coal Processing	SAIC manufactures on-line coal analyzers to meet a variety of process control and quality control needs. These include the Model 200 Sulfur Meter, the Model 400 Ashmeter TM , and the Model 600 Moisture Meter. The company is also experienced in the development and application of clean coal technologies.
Laboratory Testing Services	Laboratory services include the Rock Mechanics Laboratory which is fully equipped to perform routine and special tests on rocks and soils. Most mechanical, thermal and permeability tests can be carried out at up to 60,000 psi confining pressure, 20,000 psi pore pressure and 150°C temperature. Complex behaviors and processes can be simulated. The laboratory also designs and manufactures a wide variety of specialized test equipment.
Field Testing & Instrumentation	The company manufactures electronic equipment for monitoring high explosive tests, as well as downhole pressure probes, and microseismic monitoring systems. A full range of geotechnical field testing services is offered.
Data Acquisition & Analysis	SAIC has extensive experience in developing data acquisition systems, and providing on-line analysis of the data.

Silo International, Inc. 30 East 42nd Street New York, NY 10017

Telephone: (212) 682-4331

Telex: 224467 RGMC FAX: (212) 983-7074
Chief Executive Officer: George G. Varsa
International Sales Manager: John P. Allen



International Offices:

CHILE: Casilla 487, Punta Arenas TEL: 211155; ENGLAND: Spridlington Hall, Spridlington Lincoln TEL: 673-61985; PERU: Av. Huaylas No. 1023, Chorrillos, Lima TEL: 671967; SINGAPORE: Block 207 Henderson Rd.

01/02-07 TEL: 2733344; SPAIN: Apartado de correos 332, La Coruna TEL. 610950

Silo International, Inc. established in 1969, is one of the most important and diversified international trading organizations on the East Coast of the U.S.A. Active in procuring, consolidating and shipping practically all American made products offering door-to-door service from manufacturing plant to overseas port of entry.

Product/Service

Description

All USA Made equipment and parts such as CATERPILLAR, GENERAL MOTORS, WESTINGHOUSE CUMMINS, GENERAL ELECTRIC and many others.

Mining Equipment

All USA made equipment and parts such as TEREX, CATERPILLAR, ALLIS FIAT, CUMMINS and many others.

Transport Equipment

All USA made equipment and parts such as GENERAL MOTORS, CHRYSLER, FORD and many others.

Simmons-Rand Company 4201 Lee Highway Bristol, VA 24201

Telephone: (703) 669-9171 **FAX:** (703) 669-8699

Chief Executive Officer: International Sales Manager: Mr. Frank A. DelleCave Mr. Mike R. Smith

Domestic Offices:

Carmichaels, PA; Cedar Bluff, VA; Harlan, KY; Hueytown, AL; Indiana, PA; Marion, IL; Norton, VA;

Pikeville, KY; Price, UT; Sophia, WV; Henderson, KY

International Offices:

ENGLAND: Ingersoll-Rand United Kingdom, John Fortune, Swan Lane, Hindley Green, Nr. Wigan, Lancashire, WN2 4EZ TEL. 44-942-523417; HONG KONG: Ingersoll-Rand Hong Kong, Charles Yeung, 19th Floor Malaysia Building, 50 Gloucester Road, Hong Kong TEL. 011-852-701-83; INDIA: Ingersoll-Rand India, Rajen Khoda, Maybaker House, S.K. Ahire Marg., P.O. Box 9138, Bombay India 400024 TEL. 011-91-22-493-6765; SOUTH AFRICA: Ingersoll-Rand South Africa, Mike Lund, P.O. Box 3720, Alrode,

1451 South Africa TEL. 011-864-3930

Simmons-Rand was incorporated October 1, 1987, as a joint association between brothers Bernard and Jack Simmons and the Ingersoll-Rand Company. It was established with the assets of Ingersoll-Rand's mining machinery group, which was created by a merger in 1983 of S&S Corporation, Lee Norse Company, and IR's split set division. In April 1992, Ingersoll-Rand acquired the interest held by Bernard Simmons, making Simmons-Rand a wholly-owned I-R subsidiary company. The company operates 12 facilities in seven states and serves customers from more than 12 acres of modern office, manufacturing, and service warehouse space under roof. Simmons-Rand Headquarters, and Product Testing Operations are located in Washington County, Virginia. Its two manufacturing plants are located in Virginia, one at Bristol, the other at Cedar Bluff.

Product/Service	Designation	Description
Continuous Miners	SR500	Miner suitable for seams 24.5" to 85"
	SR700	Miner suitable for seams 28" to 120"
	LN800 /	Miner suitable for seams 42.5" to 140"

Simmons-Rand Company (Continued)

Roof Bolters	SR100 LB SR200 AL SR250 TD2-43	Single swinging arm, skid steer bolter suitable for 30" to 48" seams Twin arm, articulated steering bolter suitable for 25" to 72" seams Twin arm, articulated steering bolter suitable for 38" to 100" seams Twin arm, orbital steering bolter suitable for 60" to 120" seams
Haulage Equipment	820 828 848	Battery powered coal hauler, capacity to 10 tons, seam height as low as 48" Battery powered coal hauler, capacity to 10 tons, seam height as low as 40" Battery powered coal hauler, capacity to 15 tons, seam height as low as 64"
Load-Haul-Dump Tractor	482 488	Battery powered scoop, seam height as low as 33" Battery powered scoop, seam height as low as 42"

Slurrytech, Inc. 7027 S.W. 148th Terrace Miami, FL 33158

SLURRYTECH, INC. A SUBSIDIARY OF FUELS MANAGEMENT INC.

Telephone: (305) 253-4560 **FAX:** (202) 333-0474

Chief Executive Officer: International Sales Manager: Donald D. Dunlop Donald D. Dunlop

Domestic Offices:

WASHINGTON, DC: 1425 44th Street, N.W., Washington, DC 20007

Slurrytech, Inc. is the licensing entity for Co-AL, the patent protected coal water fuel technology originally developed at Alfred University. Since 1980, the technology has led the coal water fuel development field in process, scale-up, and combustion advancement. Slurrytech has worked with development partners around the world to complete the commercial development of Co-AL.

Product/Service

Description

Coal Water Fuel

Coal Water Fuel, marketed under the name Co-AL, developed originally at Alfred University and patent protected worldwide. Co-AL is unique in the use of particle size distribution to realize a high solids loading (up to 75%) with a low viscosity (1000 cps). Because of this particle size distinction, Co-AL is a stable fuel and does not require costly stabilizing chemicals. Slurrytech has this technology available for license and, alternatively, will supply slurry product through its parent corporation, Fuels Management, Inc.

Licensee of the National Research Council of Canada (NRC): Low Oil Agglomeration Coal Cleaning Process.

Exclusive licensor of a patent jointly held with NRC of a coal fines drying process

Licensor of a new CoProcessing technology to simultaneously upgrade heavy oil and dry high moisture coals.

Soros Associates 485 Fifth Avenue New York, NY 10017

Telephone:

(212) 972-5800

FAX:

(212) 972-5848

President:

Leonard Sugin

CEO/Vice Chairman: Assistant Vice President: Sergio Terzani Nathan Frawert

Domestic Offices:

Jack Hinrichs, Regional Manager, 74 Neron Place, New Orleans, LA 70118 James Newman, 3800 N. Fairfax Drive, Apt. 609, Arlington, VA 22203

c/o Snamprogetti USA, 2950 N. Loop West #290, Houston, TX 77092

International Offices:

Soros Insip, c/o Snamprogetti, Terzo Palazzo Uffici, Viale A. De Gasperi 16, 20097 San Donato, Milano, Italy

Soros Associates is an international consulting engineering firm specializing in the planning, design and construction management of ports and material handling and transportation systems. The great majority of the firm's assignments have involved a combination of these two fields, bulk handling and ports. Soros Associates has played a prominent and innovative role in the advances in the "state of art" of bulk terminals in the last thirty years.

Soros Associates was founded specifically to provide a complete range of system's capability and integrated engineering services for bulk port projects, requiring a high level of expertise in material handling, mechanical, electrical, civil, structural and marine engineering. A permanent staff of engineers in all of these disciplines is maintained at the firm's New York City executive offices. Field offices are established at project locations as the need arises.

Consulting engineering services on a worldwide basis are offered for projects that entail:

- Economic and Financial Analysis
- Transportation Studies
- Terminal Port, and Transportation System Simulation
- Bulk Material Handling and Terminals
- Site Investigations
- Feasibility Studies
- Master Planning
- Operations Research and Computer Simulations
- Environmental Services
- Conceptual Engineering
- Detailed Engineering and Design
- Procurement
- Construction Management
- Acceptance Testing and Start-Up
- Operation Evaluation and Assistance

Spire Corporation **One Patriots Park** Bedford, MA 01730



Telephone: (617) 275-6000

Telex: 951072 FAX: (617) 275-7470

Chief Executive Officer: SPI-WEAR™ Contact:

Roger G. Little

Charles C. Blatchley, Ph.D.

Ion Implantation Contact:

Raymond Bricault

Spire offers two major technologies for coal-based systems: (1) SPI-WEARTM for precisely measuring wear, erosion, and corrosion in mechanical rystems; and (2) ion implantation treatments to enhance wear and corrosion resistance. SPI-WEARTM is a powerful method for in-situ wear measurement and on-line diagnostic monitoring which is based on radionuclides induced in wearing surfaces by energetic ion beams. Gamma rays from the activated surface are easily detected outside allowing precise measurement of surface loss from inaccessible locations. Extremely accurate, flexible, and unaffected by local conditions such as temperature or pressure, it is an ideal solution to wear measurement problems in many components of power generation systems. Extreme precision reduces testing time and allows resolution of subtle tribological phenomena such as break-in or lubricant additive depletion.

Spire is a leader in surface modification by ion implantation and other vacuum technologies for improving wear and corrosion resistance without dimensional changes. Spire is a diversified research firm with four main business areas: surface engineering, biomaterials, optoelectronics, and photovoltaics. Approximately 45 technical personnel are devoted to ion implantation, sputtering, and other ion beam processes. In-house facilities include six mass-analyzed ion implanters, two sputtering machines, and two ion beam enhanced deposition systems. Evaporators, electron beam annealing accelerators, and extensive materials characterization equipment are also available.

Product/Service	Description
SPI-WEAR™ 200 Analyzer	System for on-line diagnostic monitoring of surface loss due to wear, erosion, or corrosion. Includes: multichannel analyzer with internal HV supply, timing control, dead-time corrections, pulse shaping pre-amplifier. Controlled by PC operating in parallel using menu driven software package. Includes all cables and NaI detector.
SPI-WEAR™ Support Services	Accelerator activations, customized selection of beam parameters, depth profile calibrations, on-site technical support, data analysis.
Ion Implantation Services	lon implantation consists of directing ions of a desired chemical species through an accelerating electric field to implant them into a target material. Ions are electrically extracted from plasma, focused by magnetic and electrostatic lenses, and accelerated to high energies. Advanced implanters use magnetic analysis to separate desired ions by their mass/charge ratio prior to implantation.

SSR Engineers, Inc. 2234 Lewis Avenue P.O. Box 20876 Billings, MT 59104

SST ENGINEERS, inc.

Telephone: (406) 656-8100 **FAX:** (406) 652-2758

Chief Executive Officer: International Sales Manager:

J.R. Rush, P.E. Craig Jardine, P.E.

SSR Engineers, Inc. is a medium size consulting firm with 35 years of experience in power system design for substations, transmission, distribution, and utility system studies. In addition to planning and design, SSR Engineers offers a wide variety of testing and technical services. We provide a full range of power engineering services to over 50 utilities, many of which depend on SSR Engineers for all of their power engineering requirements.

Product/Service

Description

Electric Power System Design

EUH transmissions structural design and analysis; overhead/underground distribution planning and design; substation planning and protective relay design; construction management; co-generation; load management; combustion turbine/diesel generation systems; motor control centers; rate and short circuit studies.

Mechanical Design

Mechanical/electrical design for commercial and institutional buildings, high pressure steam boiler plants thermal storage, energy conservation audits, economic and feasibility studies.

Technical/testing Services

System commissioning and equipment acceptance testing for relay and control systems, large power transformers, power factor, insulation, high voltage cable.

Steam Turbine Alternative Resources 116 Latourette Street Marion, OH 43302

Telephone: (614) 387-5535 **FAX:** (614) 383-2089

Chief Executive Officer: Sue A. Flaherty
International Sales Manager: Jerry W. Johnson

Domestic Offices:

Regional Offices in U.S.A. only



The operating offices of the company are all ex-General Electric factory managers or Field Service Engineers. We manufacture turbine parts used during overhauls to increase efficiency and safety. The company is geared to quick turn around on the average of 3 weeks for all products. The quality and material will meet or exceed the OEM's. You will be pleasantly surprised with our prices. Customer references are available. Financial references are also available.

Product/Service Description

Turbine Parts Packing ring, gland rings, dummy rings, spill strips, spring back seal segments, springs, pins, plugs, screws, keys,

rivets, studs, nuts, bolts, washers, valve stems, valve seats, valve disks, valve plugs, valve pins, valve bushings, bypass valves, seal strips, buckets, blades, pins, erosion shields, bucket covers, gas turbine compressor blades, shroad

bucket band covers, gaskets, bearings.

Stickney, Dufour & Associates, Inc. P.O. Box 15650 New Orleans, LA 70175-5650

Telephone:

(504) 891-3764

FAX:

(504) 891-3775

President:

Mr. Norman J. Dufour Jr.

Contact:

Mr. Norman F. Laskay

Domestic Offices:

100 Nashville Avenue, New Orleans, LA 70115

International Offices:

Please contact above office for details

Stickney, Dufour & Assoc. Inc. is a firm of professional marine surveyors primarily engaged in hull and machinery surveys of commercial vessels. The Company was formed in 1968 as Stickney Marine Surveying, Inc., and became Stickney, Dufour & Assoc. on January 1, 1988. We provide worldwide services of marine surveyors, appraisers and consultants for hull, machinery, tows, charters, loading and securing of cargoes, valuations for lending institutions, insurance and P&I. Additionally, we are experienced in supervision of salvage and repair.

Surveyors

Brief Qualifications

Norman J. Dufour Jr.

1971 Graduate USCG Academy - Ex-Licensed 2nd Assistant (motor), 3rd Assistant (steam) - 16 years

surveying experience

Norman F. Laskay

1962 Graduate Maine Maritime Academy - Ex-Licensed Deck Officer - 18 years surveying experience

J. Leo Weisgerber

Licensed Unlimited Chief Engineer - 25 years marine surveying experience

Stock Equipment Company General Signal Corp. 16490 Chillicothe Road Chagrin Falls, OH 44023-4398



Telephone: (216) 543-6000

FAX: (216) 543-6678

Chief Executive Officer: International Sales Manager:

Mr. A. Neil Small Mr. David R. Brown

Domestic Offices:

ST. LOUIS, MO: 12015 Manchester Road, St. Louis, MO 63131-4417, TEL. (314) 966-5685

International Offices:

JAPAN: Stock Japan, Ltd., 1719-1, Aza Kasashi-Mae, Ohata, Niihari-Mura, Niihari-Gun, Ibaraki Prefecture,

300-41 Japan TEL. (81)(298) 62-5162

Since it's founding in 1929, Stock has become the standard of quality by which all others who produce products for the power industry have been measured. Stock has a major commitment to scientific and engineering development of electronic controls and bulk material handling technology, backed by extensive testing facilities. Stock Equipment Company serves a worldwide market with their own manufacturing facilities plus work in concert with other international companies which share their commitment to engineering excellence. The result is a broad-based engineering and manufacturing company; one that blends extensive experience with design innovation and a commitment to quality and customer satisfaction.

Stock Equipment Company (Continued)

Product/Service

Description

Coal Feed Systems for Bunker-to-Pulverizer Fluidized Bed Boilers Stoker

Applications

Stock has been the design leader in developing gravimetric feeders for pulverized feed system and for replacement of older volumetric models for better efficiency. Stock has also developed a lowpressure gravimetric feeder to meet the rapid growth of fluidized bed boiler technology. These feeders are available in varying lengths and sizes to meet the necessary applications.

Bulk Material Valves

The STOCK Bulk Material Valve is designed for material handling applications which involve harsh environments, wide temperature ranges, pressure differentials, or unusual flow characteristics. These valves have been applied successfully in thousands of worldwide installations and adapted as the industry standard.

Batch Weighing Scales

Stock offers a complete line of process batching, platform, and continuous weighing equipment. All stock scales are built around a universal weighing and a microprocessor-based control system which assures cost effective operation.

Sampling Equipment

Stock has developed a complete line of manual and automatic "as-fired" coal sampling equipment. The same technology is applicable for sampling other bulk material at conveyor discharge points.

A Stone & Webster

Stone & Webster Engineering Corporation 245 Summer Street Boston, MA 02210

Telephone: (617) 589-5111

Telex: W.U. 94-0001 FAX: (617) 589-2156 or (617) 589-8071

President/CEO:

Ben Charlson

Vice President:

Albert M. Ferrer (617) 589-6627

Domestic Offices:

Anchorage, AK; Boston, MA;

Chattanooga, TN; Cherry Hill, NJ; Denver, CO; Fort Lauderdale FL; Houston, TX; San Francisco, CA; New York,

NY; Washington, D.C.

International Offices:

United Kingdom: Milton Keynes; Canada: Toronto; Saudi Arabia: Damman. Stone & Webster also maintains offices in the following cities: Abu Dhabi, Bangkok, Kuala Lumpur, Seoul and Taipei. Please contact headquarters in Boston for

further information.

Stone & Webster Management Consultants supports utilities, coal companies and others such as financial institutions and cogeneration/independent power producers with their operation in the challenging marketplace of today. Services are offered in the areas of: market analysis-competition and pricing, economics and feasibility studies, coal supply and demand, infrastructure review, coal contract review, coal procurement strategy and coal selection economic analysis.

Products/Service

Description

Technical Consulting

The company has an outstanding of domestic and international coal markets. Services can be provided in the areas of market assessment for supply and demand and competitive economics.

Evaluate economics of alternative modes of coal transportation.

We have the computerized capability for evaluating the life cycle busbar cost of electricity for powerplants burning all ranges of fuel from peat to anthracite coal.

Power Generation Systems

Studies, Conceptual Design; Engineering; Procurement; Construction; Startup and Testing; Operations & Maintenance; and Project Management for new facilities, conversions, retrofits and life extension work.

Emissions Control and Waste Disposal

Systems

Complete environmental technology and services for FGD systems, particulate control, NO, control, CEMS, compliance planning, and other air quality related work. Waste disposal systems for solid and liquid wastes. Consulting, site selection, permitting, engineering, procurement, construction and project management for new and retrofit projects.

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STV/Sanders & Thomas Engineers Architects Planners 11 Robinson Street Pottstown, PA 19464

Telephone: (215) 326-4600

Telex: 84-6430 FAX: (215) 326-3833

Chief Executive Officer: Mr. Michael Haratunian, P.E.

Principal Point-of-Contact: Mr. Edward E. Gilvey, P.E., President (Pottstown, PA)

Domestic Offices: JACKSON, NJ; HUNTINGDON VALLEY, PA; ARLINGTON, VA

Founded in 1945, STV/Sanders & Thomas (S&T) is a full-service, multi-discipline architectural/engineering firm providing complete in-house services for all project phases from initial feasibility studies and concept design through final design and construction management. The firm is a subsidiary of STV Group, an international engineering firm employing more than 1,000 persons in 19 offices nationwide and abroad.

Product/Service Description

Architectural/Engineering and Construction Management Services

S&T has extensive experience in a variety of power generating technologies, including coal gasification, waste-to-energy, gas turbine, combined cycle, and fossil-fired steam electric using standard or fluid-bed boilers. We also have expertise in coal/ash handling systems. The firm has designed plants ranging from \$10 million to over \$350 million in cost. S&T also provides environmental licensing/permitting services, site selection, and

to over \$350 million in cost. S&T also provides environmental licensing/permitting services, site selection, and

construction management support services.

TAMS Consultants, Inc. The TAMS Building 655 Third Avenue New York, NY 10017

Telephone: (212) 867-1777

Telex: ITT 422188 FAX: (212) 697-6354

President: Dana E. Low

International Sales Manager: Mario Asin, Corporate Vice President

Domestic Offices: NEW YORK, NY: (212) 867-1777; AMHERST, NY: (716) 831-8084; CLIFTON PARK, NY:

(518) 371-9102; CONCORD, CA: (510) 682-3533; FRESNO, CA: (209) 453-7071; BELLEVILLE, IL: (618) 233-2556; CHICAGO, IL: (312) 819-4949; BOSTON, MA: (617) 482-4835; BLOOMFIELD, NJ: (201) 338-

6680; ARLINGTON, VA: (703) 243-8000; SEATTLE, WA: (206) 296-0700.

International Offices: ABU DHABI, UNITED ARAB EMIRATES: (971) (2) 393682; LA PAZ, BOLIVIA: (591) 329277; RIO DE

JANEIRO, BRAZIL: (5521) 262-7222; BOGATA, COLOMBIA: (571) 257-2800; SANTO DOMINGO, DOMINICAN REPUBLIC: (809) 565-8857 or (809) 565-8858; GUAYAQUIL, ECUADOR: (5934) 396959;

DOKKI, CAIRO, EGYPT: (20) (2) 348-4835/349-2835; BANJUL, THE GAMBIA: (220) 28860; GUATEMALA CITY, GUATEMALA: (5022) 68-22-04; MASERU 100, LESOTHO: (266) 311-369; MACAU (via HONG KONG): (853) 860-125; CAPITAL CITY, LILONGWE 3, MALAWI: (265) 723557; FREETOWN, SIERRA LEONE: (232) (22) 30961; CARACAS 1060, VENEZUELA (582) 951-1811;

LUSAKA, ZAMBIA.

TAMS Consultants, Inc. is a multidisciplinary consulting firm providing professional services throughout the United States and overseas in the fields of engineering, architecture, planning, and environmental science. Established in 1942, TAMS Consultants, Inc. serves a wide range of public and private sector clients and has branch offices located worldwide.





TAMS Consultants, Inc. (Continued)

Product/Service

Description

Coal Transport
Technical Consultants
Architecture/Engineering
Facilities Construction

Analysis, planning and design of multi-modal transportation systems involving waterborne transportation; channels and harbors; marine terminals; railroads; roadways; conveyors; and transfer systems. TAMS also provides construction phase services including inspections and reports.

Techno-Economic Consulting, Inc. Park Avenue Atrium 237 Park Avenue, 21st Floor New York, NY 10017

Telephone: (212) 362-4446

Telex: 425170 FAX: (212) 697-8486

President:

Mr. A.S. "Art" Aktar, P.E.

Senior Advisor:

Professor Emeritus Stefan Boshkov

Senior Advisor:

Mr. Roger Hulette, P.E.

Domestic Offices:

RIDGEWOOD, NJ: 76 North Maple Avenue, Ridgewood, NJ 07450 Tel: (201) 447-3447 FAX: (201) 445-7857

TEC is a management and engineering consulting firm. It provides services in coal geology, reserve calculations, project economics, project planning and development, project financing, open pit and underground mining management, shipping, and operations review, to both domestic and international clients. TEC was formed in 1977 and has 28 Senior Associates. Mr. Aktar's specialty is project management and economics. Mr. Hulette is one of the foremost authorities on engineering, design and construction of major material-handling systems and operations.

Product/Service

Technical Consultants; Financing and Resource Packaging; and Architecture/Engineering.

Thunderbird Pacific Corporation 17090 Avondale Way N.E. Redmond, WA 98052-4409

Telephone:

(206) 869-2727

FAX:

(206) 869-2735

President/CEO:

John F. Vynne

Thunderbird Pacific manufactures drilling information systems for use on blasthole and exploration drills in the surface coal mining industry. The products include operator displays, dataloggers, communications systems, and office software to analyze the recorded data. The systems are modular and expandable. This allows a mine to start with a basic system and upgrade to more sophisticated systems as their needs change. These products have been in production since 1982, and today hundreds of systems are operating in surface coal mines throughout the world.

The displays show the operator information on depth, rate of penetration, and other drilling parameters. The management reports provide detailed information on drill, drill bit and operator performance; operational delays; and data on the geology. The geology data can be used to identify the location of the coal seams and waste rock. Thunderbird's products will help to increase drilling productivity, reduce drilling and blasting costs, and provide management with more accurate information.

Thunderbird Pacific Corporation (Continued)

Products	Description
Drilling Efficiency Indicator	An operator display which provides continuous readouts on "Hole Depth", "Rate of Penetration", "Accumulated Depth", and "Distance From Bottom". This information allows the operator to drill to the specified depth and to optimize his drilling productivity.
Stratalogger	Dataloggers which record information from the Drilling Efficiency Indicator, drilling parameter sensors, and an operator terminal. The data is stored on-board the drill and then transferred to the office with a laptop computer, RAM card, or data radio.
Stratalogger Software	Office software which generates a number of standard reports from the data recorded by the Stratalogger datalogger. Custom reports can also be produced to meet a mine's specific requirements. The reports include Hole Summary, Shift/Period Summary, Drill Fleet Summary, Operational Delays, Operator, Bit, and Pseudo Sensor.

Tippett & Gee, Inc. 502 North Willis Abilene, TX 79603

Telephone:

(915) 673-8291

FAX: **Chief Executive Officer:**

(915) 672-5251

Louis S. Gee

International Sales Manager: Robert S. Gee, President

Tippett & Gee was organized in 1954 to serve the electric utility industry. The Company offers complete engineering/architectural services. The Company's specialty is the design of fossil fuel fired central power stations. The Company has dealt extensively with both steam electric and combustion turbine generation and combined cycles. The Company's designs have received national recognition for innovative features; high availability and low \$/KW installed costs. Project capabilities include initial load studies, siting studies, environmental permitting, design, procurement, construction management and startup services.

Product/Service

Description

Architecture/Engineering

During the past decade Tippett & Gee has designed and placed in service three major power stations firing solid fuel. The first was a 450 MW mine mouth plant in South Texas utilizing 5000 Btu/lb lignite. This high sulfur fuel has 32% ash, a moisture content of 28% and has an extremely high slagging and fouling tendency. The second plant was a 450 MW mine mouth plant in East Texas utilizing 4300 Btu/lb lignite. This high sulfur fuel has 28% ash, a moisture content of 35% and has an extremely high fouling potential. The Company's latest design was a 700 MW plant in North Texas utilizing western sub-bituminous coal from Exxon's Rawhide mine in Wyoming. Each of these plants had electrostatic precipitators and wet scrubbers.

TODD Combustion, Inc. **61 Taylor Reed Place** Stamford, CT 06906

Telephone: (203) 359-1320 FAX: (203) 359-9317

Chief Executive Officer: International Sales Manager: Mr. J. Robert Rizza

Mr. Paul A. Savoy

Domestic Offices: OXNARD, CA: Mr. Dan Smolens, 1954 Jamestown Way, Oxnard, CA 93035 TEL. (805) 985-3366, FAX (805)

985-3367; SAN FRANCISCO, CA: Mr. Michael Gamburg, 750 17th Ave., Suite 102, San Francisco, CA 94121

TEL. (415) 221-6177, FAX (415) 221-6178

International Offices: CANADA: Mr. Howard Brooks, 585 Cure Boivin Blvd, Boisbriand, Quebec J7G 2A8 TEL. (514) 435-1961,

FAX (514) 435-3160; ENGLAND: Mr. Peter Goldring, Forest Road, Denmead, Waterlooville Hampshire, UK

PO7 6TJ TEL. (0705) 257411, FAX (0705) 241259

TODD Combustion is a rapidly growing company specializing in advanced low Nox burner systems. Founded in 1916, TODD has over 50,000 proven burner installations worldwide, including virtually every Fortune 500 company, the largest utilities, and 75% of the U.S. Navy's conventional fleet.

Product/Service

Description

Boiler Equipment

In addition to its own line of gas/oil burners and coal light-up burners, TODD offers North American coal-fired utilities the Low NOx Axial Swirl Coal Burner developed and proven worldwide by Babcock Energy Limited. The burner has demonstrated NOx reductions of over 50% without affecting boiler performance.

Trinity Industries, Inc. P.O. Box 568887 2525 Stemmons Freeway Dallas, TX 75356-8887

Telephone: (214) 631-4420 FAX: (214) 689-1171

Chief Executive Officer: Chairman, Railcar Division:

Vice President, Freight Car Sales:

W. Ray Wallace Tim Wallace W.C. Newby

International Offices:

Please contact the company for further information.

Trinity Industries, Inc. is a large manufacturer of heavy metal products that has manufacturing and fabrication operations in six business segments: railcars, marine products, structural products, containers, metal components and leasing. Trinity is the nation's leading producer of railcars.

Trinity provides a full line of equipment for coal service. Included are traditional steel open hoppers, rotary-dump gondolas and rapid discharge hoppers. These cars are available in steel or aluminum.

Trinity also is a leading supplier of railcar parts and components.



TRINITY INDUSTRIES, INC. Rail Car Division

Trinity Marine Group P.O. Box 3029 13085 Industrial Seaway Road Gulfport, MS 39505

Telephone: (601) 869-0029

Telex:

Chief Executive Officer:

Vice President International Sales:

Vice President of Domestic Sales:

Vice President of Inland Operations: Vice President of Inland Sales:

6821246 HALMAR FAX: (601) 897-1666

Mr. John Dane III Mr. James G. Rivers, Jr.

Mr. Sid Mizell Mr. Robert Kenny Mr. Anthony Tobin

Shipyards:

BROWNSVILLE, PA: HBC Barge; NEW ORLEANS, LA: Equitable/Halter; MADISONVILLE, LA: Equitable Shipyard; MOSS POINT, MS: Halter Moss Point; LOCKPORT, LA: Halter Lockport; ESCATAWPA, MS: Moss Point Marine; BEAUMONT, TX: Trinity Beaumont; HARVEY, LA: Gretna Machine & Iron Works; CROWN POINT, LA: Aluminum Boats

The Trinity Marine Group consists of nine shipyards on the East and Gulf Coasts. TMG shipyards, especially HBC Barge (Ex-Hillman Barge), Equitable Shipyard and Gretna Machine & Iron Works, supply the coal transport industry with sturdy barges of all sizes and types. TMG shipyards also build high-quality, extremely maneuverable tugs and towboats to proven designs, and Integrated Tug/Barge Combinations which offer the ultimate in efficiency and performance.

Product/Service	Description
Barges	Any size/type, inland or oceangoing deck barges, hopper barges, tank barges, lash barges, seabee barges, jumbo barges, box barges, etc.
Towboats	Proven existing designs from 41' to 146'
Tugboats, oceangoing and harbor	Proven existing designs from 45' to 150'
Integrated Tug/Barge Combinations	Various patented ITB Combinations for reliable integrated towing and pushing



TUTHILL CORPORATION - Coppus Murray Group P.O. Box 8000 Millbury Industrial Park Millbury, MA 01527-8000



Telephone: (508) 756-8391

Telex: 200046 FAX: (508) 798-3853

President: International Sales Manager:

Domestic Offices:

William F. Jones John C. Barkley

MILLBURY, MA: Tuthill Corporation - Coppus Murray Group, P.O. Box 8000, Millbury, MA 01527-8000 TEL: (508) 756-8391, Coppus Portable Ventilation Divison FAX: (508) 799-9531, Coppus Turbine Division

FAX: (508) 798-3131, TELEX: 200046; BURLINGTON, IA: Tuthill Corporation - Murray Turbomachinery Division, P.O. Box 967, 1106 Washington Street, Burlington, IA 52601 TEL: (319) 753-5431,

FAX: (319) 752-1616

International Offices: SOUTHEAST ASIAN REGIONAL SALES: Michael Whiston, Regional Manager, 5 Pandan Valley 05-703,

Singapore 2159 TEL: 011-65-468-0216, FAX: 011-65-466-1568; EUROPE/MIDDLE EAST/AFRICA SALES: Heinz Lauterer, Regional Manager, Tuthill Corporation - Coppus Murray Group, Zurich Branch, P.O. Box 21, 8915 Hausen/Zurich, Switzerland TEL: 011-411-764-0975, FAX: 011-411-764-1874, TELEX

827016 COPP CH

In 1909, Frans Coppus, a Dutch-born engineer, founded the company to manufacture steam turbine-driven fans. Presently, the business is headquartered in Millbury, Massachusetts, with a strong manufacturing management team and an equally strong marketing arm with a charter to focus on manufacturing and marketing a specific line of engineered products. These products are sold and serviced throughout the world, with exports exceeding 40% of sales.

Today, Coppus is: TUTHILL CORPORATION - COPPUS MURRAY GROUP, which consists of the COPPUS TURBINE DIVISION, manufacturers of single stage turbines and turbine generators; the COPPUS PORTABLE VENTILATION DIVISION, manufacturers of portable ventilation equipment, headquartered in Milbury, MA; MURRAY TURBOMACHINERY DIVISION, manufacturers of multi-stage turbines and turbine generators, headquartered in Burlington, IA.

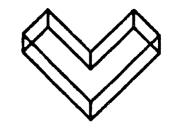
Coppus' large complement of skilled factory and professional employees utilize a wide variety of computers, highly specialized equipment and machine tools, in more than 208,000 square feet of manufacturing space.

Product/Service	Designation	Description
Mechanical Drive Single Stage Turbines	RLA/RLHA	The broadest range of reliable mechanical drive single stage steam turbines from 1/2 to 4000KW.
Mechanical Drive Multi-Stage Turbines	K/U/R	The most cost-effective range of multi-stage turbines up to 15,000 HP.
Steam Turbine Generator Sets		A broad range of single and multi-stage turbine generator sets up to 10,000 KW for cogeneration and prime power.
Portable Ventilation Equipment		Broad line used for portable ventilation of confined space, spot cooling, gas freeing and fume removal.

Valley Forge Laboratories, Inc. 6 Berkeley Road Devon, PA 19333

Telephone: (215) 688-8517 **FAX:** (215) 688-8143

President: Dr. James J. Schuster, P.E. Vice President: Mr. Michael Boyle Vice President: Mr. Michael Wong



Valley Forge Laboratories, Inc. was founded in 1967. As an engineering consulting firm, our services have expanded through the years and include the following: geotechnical engineering, transportation and traffic engineering, construction quality control, laboratory testing, non-destructive testing, environmental engineering and research and special studies.

Product/Service	Description	
Geotechnical Engineering	Complete engineering services including subsurface investigations, geotechnical evaluations and remediations, soil and rock mechanics, slope stability analysis, soil stabilization, ground modifications and designing with geosynthetics such as geogrid retaining walls.	
Transportation and Traffic Engineering	Comprehensive planning and operational studies including site developments, zoning and permitting applications, safety studies, accident investigation, parking studies, highway and signalized intersection design.	
Construction Quality Control	Inspection services on all phases of construction, with assurance of current and acceptable construction practices in accordance with specifications and contract drawings. Non-Destructive Testing (NDT) of in-place concrete, welded connections and related services.	
Laboratory Testing	Physical testing services to support our engineering services.	
Environmental Engineering	Analysis of environmental effects including noise, air, water quality, wetlands delineation, mitigation and permit applications.	
Research and Special Studies	Planning and execution of various research and testing programs including the utilization of non-hazardous wastes. U.S. DOE/SBIR Phases I and II project on the development of a lightweight synthetic aggregate (Patent Pending).	

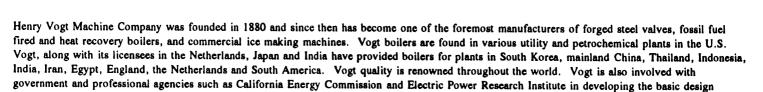
Henry Vogt Machine Co., Inc. P.O. Box 1918
Louisville, KY 40201

Telephone: (502) 634-1500 **FAX:** (502) 634-0549

Chief Executive Officer: Mr. Henry Heuser Jr.

International Sales Manager: Mr. Dennis Hunt, Mr. James Davis

Domestic Offices: LOUISVILLE, KY: 1000 West Ormsby Avenue, Louisville, KY 40210



(Continued on next page)

concept for new utilization of product.

Henry Vogt Machine Co., Inc. (Continued)

Product/Service	Designation	Description
Field Erected Boilers	Class VS Boilers	Vogt stoker fired, field erected boilers range in capacity from 50,000 lbs/hr to 120,000 lbs/hr. Pressure/Temperatures range from 150 psig, sat to 750 psig, 750 F. Gas and/or oil firing capability can be provided. Other pertinent equipment such as FD Fans, Soot Blowers, Air Heaters and Deaerators can be included. Vogt can also supervise the Erection and Commissioning of the Boilers.
Heat Recovery Boilers	Class MSG Boilers	Boilers range from 50,000 to 500,000 lbs/hr of steam with pressure/Temp. ratings from 150 psig sat. to 1600 psig, 1000 F superheat. Steam can be produced at various levels and can include Resuperheaters. Exhaust gasses from Coal Gasification processes, Coal Gas fired Gas Turbines and Fluidized Bed Combustors can also be used in the Heat Recovery Boilers.

Vortec Corporation 3770 Ridge Pike Collegeville, PA 19426-3158

Telephone:

(215) 489-2255 (215) 489-3185

FAX: President:

Dr. James G. Hnat

Pilot Plant:

Harmarville, PA

International Offices:

Please contact company Headquarters for further information.

Vortec Corporation provides high temperature process equipment, research-development services and engineering-consulting services for the hazardous waste, utility, chemical, aluminum, steel, and glass industries, as well as other high temperature process industries. Mechanical design, I&C design, furnace and combustion modeling, and systems engineering services are a strong part of Vortec's engineering/consulting service capabilities. Vortec's industrial process research has focused on innovative approaches to advanced coal combustion, glass melting, glass refining, heat recovery, primary metals smelting, hazardous waste incineration and vitrification, and radioactive waste vitrification.

Product/Service

Description

Combustion & Melting System (CMS)

Vortec's multi-fuel capable CMS effectively vitrifies and recycles various hazardous and non-hazardous waste materials. The vitrified material can be disposed of in a non-hazardous landfill, recycled as a feedstock to selected processes or further processed on-site to be sold as a value added product. Organics contained in waste materials are also effectively oxidized. Applications of the CMS vitrification process include: Post Consumer Waste Glass, Waste Insulation Fiberglass, Utility Flyash, Municipal Incinerator Flyash, Aluminum Processing Flyash & Dust, Incinerator Flyash, Asbestos, Electric Arc Furnace Dust, Foundry Sand, Low Level Radioactive Waste, Contaminated Soils & Sludges, Hospital & Medical Wastes, Filter Cakes, and Heavy Metals Containing Wastes.

ortec Corporation

Ⅲ WAHLCO, INC.

Wahlco, Inc. 3600 West Segerstrom Avenue Santa Ana, CA 92704

Telephone: (714) 979-7300

Telex: 295522 WAHLCO SNA FAX: (714) 850-0775
Chief Executive Officer: Mr. Vincent F. Middleton
International Sales Manager: Mr. Barry J. Southam

Domestic Offices: LEAWOOD, KS: 4707 College Boulevard, Suite 201, Leawood, KS 66206 TEL. (913) 491-9292, FAX (913)

491-6627; THORNTON, IL: 470 W. 172 St., Thornton, IL 60476 TEL. (312) 877-5300, FAX (312) 877-5315

International Offices: Please contact company headquarters for further information.

Coals, with low sulphur and/or high ash content, produce fly ash which is collected at relatively low efficiencies by electrostatic precipitator; flue gas conditioning systems markedly enhance precipitator performance in such cases. Wahlco, Inc. is the pioneer and the leading manufacturer of flue gas conditioning systems worldwide. Wahlco sulfur trioxide (SO₃) and ammonia (NH₃) flue gas conditioning systems have solved problems of collecting fly ash in electrostatic precipitators for over 350 boilers worldwide...at a cost less than one-half that of other alternatives. Since its founding in 1972, Wahlco, Inc. has accumulated and maintained the leading body of theoretical and practical flue gas conditioning knowledge anywhere.

Product/Service	Description
Sulfur Trioxide Flue Gas Conditioning	A Wahlco Flue Gas Conditioning System, either by sulfur burning or sulfur dioxide vaporization, injects trace amounts of SO ₃ into the flue gas before it reaches the precipitator. The SO ₃ reduces fly ash resistivity, allowing the precipitator to function at optimum efficiency. This in turn, allows coal fired plants to run at maximum output while meeting air pollution standards for both SO ₂ and particulates.
Ammonia Flue Gas Conditioning	Wahleo ammonia based systems are often utilized to neutralize excessive amounts of sulfur resulting from combustion of medium to high sulfur coal or oil. Reduction of precipitator rapping losses as well as, in some cases, precipitator operation enhancement can also result.
Combined SO ₃ /NH ₃ Conditioning	When sulfur trioxide and ammonia are combined in a single Wahlco Flue Gas Conditioning System, the effect is to create an almost ideal ash for electrostatic precipitation through optimization of the surface conductivity of the particle. This system can be utilized when "worse case" coals are encountered.

Wedge Wire Division of W.S. Tyler, Inc. 22069 Fairgrounds Road P.O. Box 157
Wellington, OH 44090

Telephone: (216) 647-3341 **Telex:** 501744

FAX: (216) 647-5887

President/CEO: Jim Cappio
Sales Manager: Felix Dunaway

Manufacturer of profile wire screens for coal preparation.

Products/Service Description

Vibration Screen Panels Rubber edge Stainless Steel Profile Wire Screens. For all makes of Vibratory Machines. Any Slot opening.

Cross Flow Sieve Panels Curved Stainless Steel Profile wire sieves for any make. Wire as small as 1/32". Any slot opening.

Centrifuge Baskets For all makes of Centrifugal Dryers. Standard openings in stock.



Western Branch Diesel, Inc. 3504 Shipwright Street (23703) P.O. Box 7788 Portsmouth, VA 23707-0788

Telephone: (804) 484-6230 FAX:

(804) 484-4937

Chief Executive Officer: Vice Pres./General Sales Manager: Mr. Herbert A. Haneman, Jr.

Mr. Charles T. Gould

Domestic Offices:

RICHMOND, VA: 195 at Atlee Rd., P.O. Box 9730, Richmond, VA 23228, TEL. (804) 550-2816, FAX (804) 550-2677; SPRINGFIELD, VA: 8102 Alban Road, Springfield, VA 22150, TEL. (703) 569-5650, FAX (703) 569-8647; ROANOKE, VA: 4546 Thirland Road, N.W., Roanoke, VA 24019, TEL. (703) 362-1608, FAX (703) 362-7183; S. CHARLESTON, WV: 3100 MacCorkle Avenue, SW, P.O. Box 8245, S. Charleston, WV 25303, TEL. (304) 744-1511, FAX (304) 744-3584; STRASBURG, OH: 301 S. Wooster, P.O. Box 167, Strasburg, OH 44680, TEL. (216) 878-5516, FAX (216) 878-7737; LOST CREEK, KY: 14701 Highway 15 South, Lost Creek, KY 41348, TEL. (606) 666-4981, FAX (606) 666-2474; WINTERSVILLE, OH: 286 Luray Dr., P.O. Box 2069, Wintersville, OH 43952, TEL. (614) 264-7121,

Western Branch Diesel, Inc.

FAX (614) 264-4712; PORTSMOUTH, VA: 3504 Shipwright Street (23703), P.O. Box 7788, Portsmouth,

VA 23707-0788, TEL. (804) 484-6230, FAX (804) 484-4937

Western Branch Diesel, Inc. is a franchised distributor for Detroit Diesel Corporation and the Allison Transmission Division of G.M. The company was established in 1947 and has grown to eight total branches covering all or part of five states. Full sales, parts and service capabilities are available at all locations. The company has been in the electric power generation business for over twenty years. Current facilities include the ability to provide complete engineering, manufacturing, sales, rental and service of electric generator sets from 20 KW to 1600 KW.

Product/Service	Designation	Description
Diesel Electric Generator Sets	Detroit Diesel Corp. Products	20 KW to 1600 KW ratings with automatic transfer switches and a full complement of controls are available. All units may be containerized or supplied with base fuel tanks. Sound attenuated containers are also available.

Wheelabrator Air Pollution Control, Inc. 441 Smithfield Street Pittsburgh, PA 15222



Telephone: (412) 562-7300

Telex: 866288 FAX: (412) 562-7254

President: International Sales Manager: Paul J. Feira Delmar Doyle

International Offices:

Please contact Headquarters for information

Wheelahrator Air Pollution Control Inc. has been designing and supplying air pollution control equipment and systems since 1913. As a single-source supplier, Wheelahrator provides complete design engineering, erection, start-up, testing, servicing and financing of small and large-scale facilities.

Product/Service	Description
Cartridge Collectors	The WCC cartridge dust collector is compact, versatile and cost-effective. The heart of the system is a simple cylindrical cartridge of pleated filter media that controls airborne dust from industrial processes. It can be shipped pre-assembled to the job site, ready to set in place.
Jet III Pulse Collector	Jet III offers flexible sizing, space-saving installation, high performance and low operating cost. On-line bag cleaning capability allows the collector to remain in continuous operation while the bags are cleaned.
Electrostatic Precipitators	Custom and pre-engineered precipitators clean gases from utility and industrial processes ranging from 50,000 to 5 million AFCM. The HaRDE® Precipitator combines the reliable performance of rigid discharge electrodes with superior tumbling hammer rapping.
Wet and Dry FGD Systems	Wet scrubbers, spray dryer scrubbers, and dry injection systems are designed to control SO ₂ and acid gas emissions from utility and industrial coal-fired boilers, waste-to-energy plants, and other industrial processes.
NO _x Control Systems	The NO _x Out [®] Process can significantly reduce nitrogen oxides from combustion sources. It is well suited to boilers of all sizes, from small industrial units to the largest utility installations. Operation is simple and reliable and offers high NO _x reduction at low cost-per-ton removal.
Aftermarket Services	Retrofit/rebuild of all types of systems, parts, technical support and service, operator training, and equipment inspection.

Williams Technologies, Inc. 320 South Boston, Suite 831 Tulsa, OK 74103

Telephone: (918) 582-5811 **FAX:** (918) 584-0474

Chief Executive Officer: David R. Williams, Jr.

International Sales Manager: H.J. Brolick

International Offices: Please contact the company headquarters for further information.

Principal business is project assessment, development, and management from initiation of concept through commercial implementation, including financial sourcing. Williams Technologies, Inc. is an equity owner of The Black Mesa Pipeline, Inc. coal slurry pipeline and provides executive management, technical, administrative and accounting support services for the operation and maintenance of the pipeline system. Provides consulting with regard to economic feasibility or technical evaluation of energy or resource projects. Manages operating facilities and technology development for others. Special expertise in development of coal slurry pipeline projects through past worldwide experience and ongoing operations management of Black Mesa Pipeline.

Product/Service	Description
Coal Transport	Provides development, management, financial packaging and operation management of coal slurry pipeline systems.
Architectural/Engineering	Provides consulting services in planning and feasibility study, as well as management of design, construction, and operations for coal slurry pipeline and oil and gas pipeline systems. Provides similar services for cogeneration plants and alternative energy projects.

Zinkan Enterprises, Inc. 10574 Ravenna Road Twinsburg, OH 44087

Telephone: (216) 487-1500 FAX: (216) 425-8202

Chief Executive Officer: K.J. Zinkan International Sales Manager: K.J. Zinkan



Zinkan Enterprises, Inc. markets commodities in the Midwest and Northeastern U.S.A. Founded in 1982, we are a distributor for Dupont and manufacture products developed by our own R&D staff. Beyond the commodities sold, Zinkan Enterprises also holds or has filed patents in the specialty chemical area of corrosion inhibition, dust control and cooling water treatment. This technology is marketed by a wholly owned subsidiary, O'Brien Industries, Inc.

Product/Service	Designation	Description
Waste Acid Stream Neutralization	Magnesium Hydroxide Slurry	A 57% active slurry which is shipped in drums, totes, or bulk. Useful in AMD application or with any low pH neutralization.
Iron Bacteria Control Agent	Bacteria Control	A liquid biological control product used to control iron bacteria which cause acid mine drainage problems.

IV. SUPPORT SERVICES

Coal Transport: Firms providing transportation services between mine-mouth and

ultimate consumer.

Facilities Operations: Firms providing plant operation and management (O&M)

services on a contract basis.

Freight Forwarders: Firms providing brokerage services in domestic and international

transport services.

Sampling Services and

Equipment:

Firms dedicated to assuring coal quality through independent

laboratory analysis services and/or equipment.

Technical Consultants: Firms providing engineering, scientific and other technical

services in any area related to coal and coal technologies.

Company Name	Coal Transport	Facility Operations	Freight Forwarders
ABSCO Scales	•	•	
Acurex Environmental Corporation		•	
AFC International Forwarders, Inc.			•
Alabama State Docks Department	•	•	
The American Coal Sales Co.	•		
American Commercial Barge Line Company	•		
American Electric Power-Fuel Supply	•		
The American Gulf Company			•
Arch Coal Sales Company, Inc.	•		
ARCO Mineral Corporation	•		
B & N Coal, Inc.	•		
Bechtel Corporation		•	
Bessemer & Lack Erie Railroad Co.	•		

Company Name	Coal Transport	Facility Operations	Freight Forwarders
E.N. Bisso & Son, Inc.	•		
Black Gem Coal Company	•		
Black & Veatch	•		
Brandywine International, Inc.			•
The Irwin Brown Company			•
Buckeye-Industrial Mining Co.	•		
Burlington Northern Railroad	•		
W.J. Byrnes & Co./BYrnesAIR	•		•
Canal Barge Company, Inc.	•		
Carnot		•	
Centralia Coal Sales Co.	•		
Chicago & Illinois Midland Railway	•		
Chicago and North Western Transportation Company	•		
Coastal Coal Sales, Inc.	•	•	
CONSOL, Inc.	•	•	•
Consolidated Rail Corporation	•		•
CP Rail System (Soo Line Railroad)	•		
Crosby Valve & Gage Company		•	
CSX Transportation, Inc.	•		
Dames & Moore	•		
Diamond Power Specialty Company		•	
Dixie Carriers, Inc.	•		
Duke Energy		•	
Electric Fuels Corporation	•		
Ellis & Watts		•	
EnCoal		•	
Energy Trading Corporation	•	•	
Farrell-Cooper Mining Company	•		
Franklin Coal Sales Company	•	•	
General Maritime Transportation Services, Inc.	•		•

Company Name	Coal Transport	Facility Operations	Freight Forwarders
Global Energy USA		•	
GPS Technologies, Inc.		•	
GRAY STAR TM Division - EAMarketing Inc.		•	
Hawley Fuel	•	•	•
Heyl & Patterson, Inc.	•		
Illinois Department of Energy and Natural Resources	•		
International Consolidated Exchange Corp.			•
International Marine Terminals	•	•	
Interstate Equipment Corporation	•		
John S. James Company	•		•
Joy Technologies Inc.		•	•
JTM Industries, Inc.		•	
Lehigh Valley Coal Sales Co.	•	•	•
Levin-Richmond Terminal Corporation		•	
A.T. Massey		•	
мемсо	•		
Midland Enterprises, Inc.	•		
J.W. Miller & Associates, Inc.		•	
Morrison Knudsen Corporation		•	
National Marine, Inc.	•		
NEDRAC, Inc.			•
Norfolk Southern Corporation	•		
NRG Energy, Inc.		•	
The Ohio Valley Coal Company	•	•	
Oxbow Carbon International, Inc.	•	•	
Pier IX Terminal Company	•		
Pincock, Allen & Holt, Inc.		•	
Port of Long Beach	•	•	
Sheppard T. Powell Associates			
Radix Group International, Inc.			_

Company Name	Coal Transport	Facility Operations	Freight Forwarders
Raytheon Engineers & Constructors Inc.		•	
Savage Industries, Inc.	•		
Seamodal Transport Corporation			•
Shipyard River Coal Terminal		•	
Soros Associates	•	•	
Stinnes Hansen Coal Company, Inc.	•		
Stone & Webster Engineering Corporation	•	•	
TAMS Consultants, Inc.	•		
TECO Transport & Trade Corporation	•	•	
Warrior & Gulf Navigation	•	•	
Welded Construction Co.		•	
Williams Technologies, Inc.		•	
W.R. Zanes & Co. of LA, Inc.			•

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
Acurex Environmental Corporation	•	•	
AEM Incorporated		•	
AirPol, Inc.	•	•	
American Standards Testing Bureau, Inc.	•	•	
Ankerman and Smith		•	
Applied Power Associates, Inc.		•	
Arch Coal Sales Company, Inc.	•		
ARCO Coal Company		•	
Armstrong, Teasdale, Schlafly & Davis		•	
Aspen Systems Corporation		•	
B & N Coal, Inc.	•	•	
Battelle		•	
Bechtel Corporation		•	
Black & Veatch		•	

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
Boston Sciencia, Inc. (BOSTON)		•	
Bowser-Morner Associates, Inc.	•	•	
John T. Boyd Company		•	
Brechbuhler Scales, Inc. (Coal Weighing)		•	
Brinjac, Kambic & Associates, Inc.		•	
Burns & McDonnell		•	
Carnot		•	
Caterpillar Inc.		•	
Challenge Engineering Consultants, Inc.		•	
Chatterjee and Associates, Inc.		•	
CH2M Hill International Ltd.		•	
Coal Extraction and Utilization Research Center		•	
Coal Petrographic Associates, Inc.		•	
Coal Tech Corporation		•	
Coal Technology Corporation		•	
Coastal Coal Sales, Inc.	•		
Commercial Testing & Engineering Co.	•	•	
Commodity Analysis Technologies		•	
Conti Testing Laboratories, Inc.	•		
Crosby Valve & Gage Company	,	•	
CSA Energy Consultants (CSA)		•	
Dames & Moore		•	
Denver Equipment Company	•		
Diamond Power Specialty Company		•	
Duke Energy		•	
East-West Center		•	•
Eavenson, Auchmuty & Greenwald		•	
Ecology and Environment, Inc.		•	
Electric Fuels Corporation	•		
Ellison Consultants		•	

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
E. Tu Associates, Inc.	•	•	
Energy and Environmental Research Corporation		•	
Energy International Corporation		•	
ENSR Consulting and Engineering		•	
The ERM Group		•	
Exxon Coal and Minerals Company		•	
Fieldston Company, Inc.		•	
Fluor Daniel Inc.		•	
GAI Consultants		•	
General Maritime Transportation Services, Inc.		•	
Geochemical Testing	•		
GeoResearch, Inc.	•	•	
Gilbert/Commonwealth, Inc.		•	
Global Energy USA		•	
Greenhorne & O'Mara, Inc.		•	
GRAY STAR™ Division - EAMarketing Inc.		•	
T.J. Gundlach Machine Company	•		
Hawley Fuel	•	•	
Hazen Research, Inc.	•	•	
Huffman Laboratories, Inc.	•	•	
ICF Kaiser Engineers		•	
Illinois Department of Energy and Natural Resources		•	
Inspectorate Griffith USA, Inc.	•	•	
International Coal Testing Conference	•	•	
International Marine Terminals	•		
Interstate Equipment Corporation		•	
Jenike & Johanson, Inc.		•	
Joy Technologies, Inc.		•	
JTM Industries, Inc.		•	
Kaskaskia Valley Scale Company	•		

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
Lee-Simpson Associates, Inc.		•	
Lehigh Valley Coal Sales Co.	•	•	•
Lignite Energy Council		•	
John B. Long Co.	•		
LSR Technologies, Inc.	•		
McNally Wellman		•	
J.W. Miller & Associates, Inc.		•	
Morrison Knudsen Corporation		•	
MVTL Laboratories	•	•	
Neundorfer, Inc.	•	•	
Norfolk Testing Laboratories, Inc.	•		
NUS		•	
H.C. Nutting Company		•	
Ohio Department of Development/International Trade Division		•	
The Ohio Valley Coal Company		•	
Oxbow Carbon International, Inc.		•	
P & L Systems, Ltd.	•		
Parr Instrument Company	•		
Parsons Behle & Latimer		•	
Parsons Brinckerhoff	•	•	
Parsons Main, Inc.		•	
PCT Technical Services, Inc.		•	
Preiser Scientific, Inc.	•		
Process Technology, Inc.	•	•	
Progress Materials, Inc.		•	
Prox Company, Inc.		•	
PSI Technology Company		•	
Radiar Corporation		•	
Raytheon Engineers & Constructors Inc.	•	•	

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
Resource Data International, Inc.		•	
Resource Dynamics Corporation		•	
Resource Economics Corporation		•	
Roberts & Schaefer Company		•	
Sargent & Lundy		•	
Savage Industries, Inc.		•	
Schnabel Engineering Associates, Inc.		•	
Science Applications International Corporation Fossil Energy Technology Division		•	
Science Applications International Corporation Instrumentation and Testing	•	•	
Science Applications International Corporation Physical Sciences Group	•	•	
Skelly and Loy, Inc.		•	
Soble & Associates		•	
Soros Associates		•	
Spire Corporation	•		
SSR Engineers, Inc.		•	
Stagg Engineering Services, Inc.		•	
Standard Laboratories, Inc.	•	•	
Stock Equipment Company	•		
Stone & Webster Engineering Corporation		•	
Stone & Webster Management Consultants		•	
TAMS Consultants, Inc.		•	
Tidewater Coal Inspection Bureau, Inc.	•	•	
Tippett and Gee, Inc.		•	
Trade Development Corporation of Chicago		•	
Union Pacific Railroad		•	
Union Railroad		•	
Valley Forge Laboratories, Inc.		•	
Virginia Port Authority		•	

Company Name	Sampling Services and Equipment	Technical Consultants	Coal Policy Analysis
Vortec Corporation		•	
WAL, Inc.	•		
Western Research Institute		•	
Williams Technologies, Inc.		•	
Wyoming Analytical Laboratories, Inc.	•		

ABSCO Scales 9807 Johnstown Road New Albany, OH 43054

Telephone: (614) 855-9500 **FAX:** (614) 855-2993

President: Mark A. Stoj

Domestic Offices:

Main - Columbus, OH

Branch - Ashland, Canton, Cleveland, Dayton and Toledo, OH

Design and manufacture legal regular and heavy duty vehicle scales. Standard and custom design of load cell mounting hardware to convert non-weighing material handling equipment into weighing devices. Design and manufacturing of floor scale platforms to a capacity of 100K. Custom computerized systems for data acquisition and material control.

Products/Service	Description
Vehicle Scales	Regular and heavy duty electronic truck scales. NTEP approved from 30' to 90' long. Capacities 300,000 lbs.
Load Cells & Mounts	Hardware to instrument bins, tanks and hoppers for weighing applications. Conversion kits to convert mechanical scales to electronic weighing devices.
Data Processing	Complete hardware and software packages for truck scale in/out weighing, bulk load out systems and process control systems.

Acurex Environmental Corporation 555 Clyde Avenue P.O. Box 7044 Mountain View, CA 94039

Telephone: (415) 961-5700

Telex: 325961 FAX: (415) 964-6523

President:

Howard L. Morse

International Sales Manager: John W. Schaefer

Acurex Environmental A Geraghty & Miller Company

Domestic Offices:

Eastern Region: P.O. Box 13109, Research Triangle Park, NC 27709; Incineration Research Facility:

NCTR - Building #45, Jefferson, AR 72709; Southwest Region: 4879 E. La Palma Ave., Ste. 201, Anaheim, CA 92807

International Offices:

Please contact headquarters for information

Acurex Environmental Corporation is a full-service energy and environmental engineering and consulting firm. The company specializes in air and multimedia environmental compliance and technologies with emphasis on combustion systems. They provide services to industrial and utility clients and public jurisdictions in compliance with federal, state, and district regulations. These services include emission and combustion systems monitoring process and emissions characterization and controls, environmental and energy facilities operation, clean alternative fuels demonstration and implementation in mobile and stationary applications, and incineration technology and monitoring. Acurex Environmental has a staff of over 200, and is a wholly-owned subsidiary of Geraghty & Miller, Inc.

Product/Service	Description
Coal Derivatives	Technology development, application engineering, and introduction to use of coal-derived methanol and environmentally-clean coal briquettes
Advanced Utilization	Technology development in emission controls for IGCC powerplants, in combustion and emission controls, including low NO, burners, for industrial and utility combustion equipment, and in coal briquetting for low emissions, high efficiency combustion
Architect & Engineers	Design, fabrication, and installation of research and prototype coal combustion equipment including boilers, furnaces, gasifiers, and fluidized bed combustors
Boiler Equipment	Technology development, testing, application engineering, and implementation of combustion and emission controls, hazardous waste cofiring, and natural gas reburning for industrial and utility boilers
Emissions Control and Waste Disposal Systems	Technology development, testing, application engineering, and implementation of NO, and SO ₂ , air toxics, PM10, and CO ₂ controls for utility and industrial combustion equipment
Facility Construction	Construction management and installation of research and prototype coal combustion equipment
Power Generation Systems	Technology development, testing, application engineering, and implementation of emission and combustion control systems, burner systems, and boiler modifications
Facility Operations	Operate and perform research and development in advanced combustion equipment
Sampling Services and Equipment	Emission sampling and analysis (testing as used above) of all emissions, and measurement of all combustion parameters, including mass and energy balances; design and fabrication of specialized test equipment
Technical Consultants	Consulting and engineering in all services described above

AEM Incorporated 30 Federal Street Salem, MA 01970

Telephone: (508) 744-5923 **FAX:** (508) 741-0334

Chief Executive Officer: International Sales Manager: Edward Cloutier Sherman Orun



American Executive Management, Inc. (AEM) is one of the world's leading executive search firms serving the coal industry. The company has completed over 600 international search assignments. Typical searches include such positions as: company presidents/managing directors, sales and marketing management, technical and engineering management, as well as project and construction managers. Representative assignments included work for Exxon Columbian Coal, Ebasco, Gates Engineering, ARCO Coal, Bechtel, Eastern Gas & Fuel, Coastal, Dravo, and numerous joint venture groups and unique situations such as shale oil and tar sands projects.

AEM, Inc. has been recognized as one of the top 20 International Search Firms in 1990.

AFC International Forwarders, Inc. P.O. Box 1394 Clifton, NJ 07015



Telephone:

(201) 523-5588

FAX:

(201) 523-9327

President:

Mr. C.D. Florescu

AFC was founded in 1983 by the current President, and offers a full range of ocean and air freight services for exporters and importers.

Product/Service

Description

Freight Forwarders

AFC offers a full range of freight forwarding services to the coal and coal technology industries.

AirPol, Inc. 30 Henry Street Teterboro, NJ 07608

Telephone: (201) 288-7070 **FAX:** (201) 288-6441

President/CEO: Sales Manager:

Willard L. Goss Jorgen G. Hedenhag

Domestic Offices:

30 Henry Street, Teterboro, NJ 07608

2572 S. Union Avenue, Bakersfield, CA 93307



AirPol, Inc. is a wholly owned subsidiary of FLS miljo, which is part of FLS Industries (F.L. Smith), a worldwide organization with corporate headquarters in Copenhagen, Denmark. The annual sales of the group exceed \$2 billion and it employs more than 10,000 people.

(Continued on next page)

AirPol, Inc. (Continued)

AirPol has been a leader in the U.S. for over 25 years in furnishing air pollution control systems to a broad base of customers and has established a network of offices throughout the United States and Canada to offer our clients quality service and direct communication.

Among AirPol's unique achievement:

Over 1000 gas scrubbing installations;

Over 1200 precipitators and 200 FGD boiler systems on stream;

Supply and construction of major gas scrubbing processes, including sodium, lime, limestone, Thiosorbic lime, magnesium oxide, and dual alkali;

Designers of systems utilizing the enhanced Thiosorbic lime process. This process is installed on over 8500 MW of utility generating capacity.

Installation of dry scrubber (GSA) demonstration plant, at TVA Shawnee Power Station in Paducah, KY as part of the DOE Clean Coal Technology Program.

Products/Service

Description

Products and Services provided by AirPol include systems for particulate control flue gas desulphurization and absorption of gaseous pollutants. The pollution control equipment comprises electrostatic precipitators, fabric filters, dry scrubbers and wet scrubbers and absorbers. The systems are supplied on an equipment only or on a turnkey basis. Erection advisory services as well as installation with start-up and operator training are also part of the AirPol scope of supplies.

Alabama State Docks P.O. Box 1588 Mobile, AL 36633

Telephone: (205) 441-7670 **FAX:** (205) 441-7674

Director: John B. Dutton
General Manager, Bulk Operations: Terence M. May

Domestic Offices:

Kenneth A. Kisko - Coal and Bulk Cargo Marketing

7 Jill Drive, Lawrenceville, NJ 08648 TEL: (609) 275-4455 FAX: (609) 275-4638

Alabama State Docks, Port of Mobile, operates the McDuffie Export Coal Terminal, the largest export coal facility on the U.S. Gulf. Coal mined in Alabama as well as the Appalachian, Illinois, and Powder River coal basins regularly move through McDuffie. Service by four major railroads - Burlington Northern, CSX, Illinois Central, and Norfolk Southern - and all major barge lines provide a transportation infrastructure unmatched by any other U.S. export coal terminal.

Products/Service

Description

Facility Operations

McDuffie Terminal provides the highest level of services on the U.S. Gulf:

- Two rotary railcar unloaders
- Three continuous barge unloaders
- Two deepwater shiploading berths (45 foot draft) capable of handling vessels up to 150,000 DWT.
- Six storage yards capable of storing two million tons and serviced by three long boom stacker/reclaimers.
- Mechanical sampling systems at both ship berths
- High speed vessel loading (up to 7000 tons per hour).

The American Coal Sales Co. 29525 Chagrin Boulevard, Suite 111 Pepper Pike, OH 44122

Telephone:

(216) 765-1240

FAX:

(216) 765-2654

President/Chief Executive Officer:

Mr. Robert E. Murray

Vice President:

Mr. Richard S. Rice, 56854 Pleasant Ridge Road, Alledonia, OH 43902; TEL (614) 926-1351;

FAX (614) 926-1615

American Coal Sales is a buyer and seller of coal for affiliates in Ohio, Pennsylvania and West Virginia. The company also owns and operates a harbor facility on the Ohio River at M.P. 110.8. This new facility can tranship coal truck to barge, rail to barge, barge to truck, or barge to rail. Ground storage and blending options are also available. This facility is also located on the Conrail system and can load unit trains.

Product/Service

Designation

Description

Coal Transport

American Commercial Barge Line Company 1701 East Market Street Jeffersonville, IN 47130

Telephone: (812) 288-0100 **FAX:** (812) 288-0256

Chief Executive Officer: Mr. Michael C. Hagan Director Coal Sales: Mr. Larry W. Downey

Domestic Offices:

Jeffersonville, IN



American Commercial Barge Line Company, known as ACBL, has been offering coal transportation on America's inland waterways for over 50 years. ACBL has more than 3,400 barges and 100 towboats available for loading and moving coal. In 1992, ACBL alone hauled more than 27 million tons of coal. ACBL, a subsidiary of American Commercial Lines, Inc. (ACL), is headquartered in Jeffersonville, Indiana. ACL has other subsidiaries in marine construction and repair, terminal services and marine communications.

Product/Service

Description

Marine Transportation

ACBL is a carrier of coal through the use of towboats and barges on over 9,000 miles of inland waterways. This encompasses the Ohio, Missouri, Illinois and Upper and Lower Mississippi river systems as well as the intracoastal canals. As a result of interfacing with rail and truck carriers, ACBL is able to offer fast, dependable and economic service for handling, storing and hauling coal.

American Electric Power-Fuel Supply One Memorial Drive P.O. Box 700 Lancaster, OH 43130-0700

Telephone: (614) 687-1440

Telex: 62893633 AEP LATR FAX: (614) 687-3295 Senior Vice President: J.E. Katlic VP Fuel Procurement and Transportation: C.A. Ebetino, Jr. W.D. Ditman Director Marketing and Transportation:



American Electric Power (AEP) provides project management and transportation services, rail, barge, and terminal, for moving coal from the eastern coal fields, the Illinois Basin, and the Powder River Basin to the Port of New Orleans. The Cook Coal Terminal, located on the Ohio River near the confluence with the Mississippi River, is served by three railroads, the Burlington Northern, the Illinois Central, and the Union Pacific. AEP can provide open hopper cars to move the coal to terminal and barges for the move to the Port of New Orleans.

The American Gulf Company P.O. Box 721494 Houston, TX 77272-1492

Telephone: (713) 561-6273

Telex: 287233 AMEGU UR FAX: (713) 495-9645 Chief Executive Officer: Mr. Manuel Araya International Sales Manager: Mr. Manuel Araya

Domestic Offices:

6218 Highway 6 South, Houston, TX 77083

International Offices:

Please contact Company's Headquarters for further information.

The American Gulf Co. is a Procurement and Export Service company. It was established in 1974 to serve the Mining Industry. Our export line includes:

Product/Service

Description

Electric Equipment

Laboratory Equipment

Mining Equipment Boiler Equipment Transport Equipment

Extracting, crushing, conveying.

Including freight consolidation at any U.S. port. Freight Forwarders

American Standards Testing Bureau, Inc. 40 Water Street New York, NY 10004

Telephone: (212) 943-3156

FAX:

(212) 825-2250

Technical Director:

V. Morfopoulos, Eng. Sc.D. J.L. Zimmerman, Ph.D.

Director of International Division: Director of Technical Services:

C. Coleman, Ph.D.

Domestic Offices:

Offices in all major cities nationwide; Toll Free Information (800) 221-5170



American Standards Testing Bureau, Inc. (ASTB) is an acknowledged independent scientific organization serving industry, government and professionals worldwide for over 75 years. Employing the most suitable techniques, ASTB undertakes a wide range of R&D, Testing, Consulting and Design assignments. With an experienced scientific staff of high professional caliber and its own diversified laboratory facilities, ASTB can handle any technical problem regardless of its complexity. Through continuous contact with technological innovation as well as the problems facing producers and customers alike, ASTB offers an awareness of practical requirements and, combining this with its unique technical capability, provides workable solutions to costly problems in engineering and environmental/life sciences.

Product/Service

Description

Sampling/Testing

Consulting

Research & Development

Design

Risk Management Regulatory Compliance The scope of ASTB's services offered to the coal industry ranges from single standard tests, performed by the testing division, to long term projects conducted by the research division. Process development, operations research, production control, systems reliability, environmental and regulatory compliance studies are available to assist management in providing the most cost-efficient product.

Ankerman and Smith Attorneys at Law P.O. Box 270684 West Hartford, CT 06127-0684

Telephone:

(203) 677-9393

FAX:

(203) 674-1435

Partners:

William Lewis Ankerman David Christopher Smith

This law firm represents a variety of clients in domestic and international business areas. Such areas as contracting, Uniform Commercial Code, Business Torts, U.S. Government Contracting, and Commercial Real Estate transactions are some of the capabilities that the firm offers. Partners are licensed to practice in the States of Connecticut and Ohio, as well as represent their clients in a number of Federal Courts.

Product/Service

Description

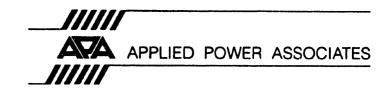
Legal Advice & Counseling Representation in Courts and Government Agencies

Legal advice and counseling in domestic and international business matters.

Applied Power Associates, Inc. 9330 Underwood Avenue, Suite 400 Omaha, NE 68114

Telephone: (402) 390-9300 **FAX:** (402) 390-2005

Chief Executive Officer: Spencer C. Stevens, P.E. International Sales Manager: Richard E. Holloway, P.E.



Applied Power Associates, Inc. (APA) is a multi-discipline engineering and architectural firm. APA provides mechanical, civil/structural, chemical, electrical and instrumentation and control consulting services to a wide range of electrical power generation clients including public, private and independent power producers. Project capabilities include: siting studies, facility layout, system design, specification development, construction management, and plant startup and operation services.

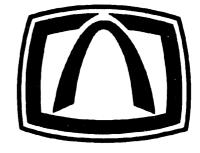
Product/Service	Description
Architecture/Engineering	Full services for coal-fired power generation facilities including conceptual design, environmental analyses, licensing/permit development, economic analysis, energy conservation, planning, scheduling and procurement.
Mechanical	HVAC, piping and plumbing design, pipe stress analysis, thermal analysis design services.
Civil/Structural	Building and equipment support structural design services, seismic analysis.
Chemical	Sludge handling, water and waste water treatment systems, chemical feed systems, protective coating, sampling and analysis design services.
Electrical/I&C	Electrical distribution development, substation development, protective device coordination, cathodic protection, AC/DC system analysis, PLC design services.

Arch Coal Sales Company, Inc. CityPlace One, Suite 350 St. Louis, MO 63141

Telephone: (314) 994-2850 **FAX:** (314) 994-2719

President/CEO: Patrick J. Panzarino Vice President-Sales: John W. Eaves

Domestic Offices: Same as above.



Arch Coal Sales Company, Inc. is the principal sales agent for Arch Mineral Corporation. Arch Mineral and its subsidiaries is one of the 15th largest coal mining and marketing companies in the United States. Arch Mineral, through its mining subsidiaries, produced in excess of 20 million tons of high quality steam and metallurgical coal in 1992. Arch Coal Sales actively markets Arch's high quality products to customers in Europe, Asia and South America. Arch Coal Sales is a full service exporter providing many low cost options to the buyer including a choice of export terminals on both the East or Gulf Coasts of the United States.

Product/Service	Description
Arch of West Virginia	High volatile, low sulfur, low ash, high calorific
Arch of Kentucky	High volatile, low sulfur, low ash, high calorific
Kingston Metallurgical	High volatile, low sulfur, low ash, high calorific, high fluidity, high DDPM
Medicine Bow	High volatile, low sulfur, low ash, medium calorific
Pilot Butte	High volatile, medium sulfur, low ash, medium calorific

Arch Mineral Corporation CityPlace One City Place Drive St. Louis, MO 63141

Telephone: (314) 994-2700

Telex: 5106011393 FAX: (314) 994-2719

Chief Executive Officer: International Sales Manager: Mr. Steven F. Leer Mr. P.J. Panzarino

Domestic Offices:

CityPlace One, City Place Drive, St. Louis, MO 63141

Arch Mineral Corporation is a major full-service coal mining and sales company. It was formed in 1969 and has over 2,200 employees. The company currently sells in excess of 20 million tons annually of high quality steam and metallurgical coal from mines in Illinois, Kentucky, West Virginia and Wyoming. In addition, Arch owns dock facilities on various rivers. Arch Mineral has the capability of exporting coal from port facilities in: Newport News and Norfolk, VA; New Orleans, LA; Charleston, SC; Mobile, AL; and Los Angeles/Long Beach, CA.

Product/Service

Designation

Description

Coal Mining

Coal Exporters

Coal Transport

ARCO Coal Company 555 Seventeenth Street Denver, CO 80202

ARCO Coal Company <>



Telephone: (303) 293-4000

Telex: 454545 (ATL-RICH-DVR) FAX: (303) 293-4186

President/CEO:

Anthony G. Fernandes

Sales Manager:

Casey J. Kaptur

Director, Marketing and Transportation

Domestic Offices:

Headquarters: ARCO Coal Company, 555 Seventeenth Street, Denver, CO 80202

Mountain Coal Company, Somerset, CO Thunder Basin Coal Company, Wright, WY

International Offices: ARCO Coal Australia, Inc., Brisbane, Queensland, Australia

ARCO Coal Company is a leading producer and marketer of high-quality coals worldwide, and is one of the largest coal producers in the United States and Australia. ARCO Coal is a division of Atlantic Richfield Company, an international energy company based in Los Angeles, California.

With headquarters in Denver, Colorado, ARCO Coal Company produces coal from the Powder River Basin in northeastern Wyoming; the Uinta Basin in western Colorado; and in and around the Bowen Basin in Queensland, Australia. From its mines in these regions, ARCO supplies a large number of electric utilities, steel mills, and industrial users across the United States, around the Pacific Rim, and in Europe and South America. ARCO Coal's reserves are among the highest quality in each of these regions.

Products/Service Description

ARCO Coal Company is one of the largest coal producers with operation mines in Colorado and Wyoming as well as in Australia. Its Black Thunder Mine in Wyoming is the largest producer of coal in the Western Hemisphere, helping to provide the nation with low-cost electricity produced from clean, low-sulfur sub-bituminous coal. ARCO Coal's underground West Elk Mine utilizes one of the world's largest longwall mining units in the U.S. to produce some of the lowest sulfur and highest-BTU coal in the western United States.

Armstrong, Teasdale, Schlafly & Davis One Metropolitan Square, Suite 2600 St. Louis, MO 63102-2740

ARMSTRONG, TEASDALE, SCHLAFLY & DAVIS

ATTORNEYS AND COUNSELORS

Telephone: (314) 621-5070

TWX: 9107612246 FAX: (314) 621-5065

Chief Executive Officer: International Sales Manager: Thomas R. Remington Thomas H. Bottini

Domestic Offices:

KANSAS CITY, MO: 1100 Main Street, Kansas City, MO (816) 221-3420

Armstrong, Teasdale, Schlafly & Davis conducts a comprehensive international civil law practice with a clearly established regional presence. The firm has over 150 lawyers with offices throughout Missouri.

Product/Service

Description

Legal Services

As an international legal consultant, Armstrong, Teasdale assesses investment and licensing opportunities in other countries and is familiar with all U.S. export and import regulations. The firm prepares patent, trademark, and copyright applications, both in the United States and in foreign countries and negotiates licensing and trade secret agreements in a broad range of technologies. The firm's environmental lawyers counsel clients in transactions involving hazardous waste and energy problems and is involved in all phases of environmental and occupational health matters. Oil, gas, coal and energy clients include Shell Pipeline, Ethyl Corporation, the Doe Run Companies, Big River Minerals Corporation and Anschutz Mining.

Aspen Systems Corporation 962 Wayne Avenue Suite 701 Silver Spring, MD 20910 **

Aspen Systems Corporation

Telephone: (301) 585-8181

Telex: 405708 FAX: (301) 495-8655
Chief Executive Officer: Harvey Byrd
International Sales Manager: Patrick M. McCarthy

Domestic Offices:

OAKRIDGE, TN; NEWPORT NEWS, VA; CRYSTAL CITY, VA; PORTSMOUTH, NH; SAN DIEGO, CA

International Offices: Please contact company headquarters for further information.

The Applied Management Sciences Division of Aspen Systems Corporation, a private professional services research firm, was established in 1970 on the premise that leaders and managers in government and industry require timely, objective, and thorough information to make better short-term and long-term decisions. Aspen Systems has over 1000 employees; the Applied Management Sciences Division professional staff numbers over 100 economists, engineers and energy analysts. Over the years, Applied Management Sciences has applied state-of-the-art methodological techniques to a wide range of analytical management problems. Refinement of our techniques and approaches has enabled us to offer proven, cost-effective solutions to client problems and to make valuable contributions to several fields of specializations. More recently, Applied Management Sciences has begun offering conference support for technical symposia on energy-related specialty subjects. Applied Management Sciences' fields of specialization include market forecasting, marketing studies, market surveys, quality control program designs, price modeling, and management information systems.

(Continued on next page)

Aspen Systems Corporation (Continued)

Product/Service

Description

Marketing Research Services

Collects market data using surveys, elite interviewing, public document review. Prepares market reports on general or specific subjects related to fuel use and energy. Prepares status reports of technology usage and state-of-the-art. Evaluates technologies' potential in specific markets. Identifies markets for fuels and energy technologies. Prepares market overviews. Analyzes economic benefits of programs designed to influence customer energy usage.

Quality Control

Provides customized sample designs for fuel sampling and product quality control.

Conference Support

Creates and manages conferences, seminars and workshops on specialized energy subjects. Services include calls for papers, invitations, agendas, hotel and travel logistics, meals, audio and visual aids. Provides travel and related logistic services for technical and market exchange visits with other countries. Prepares and publishes formal proceedings. Recent international experience has been with U.K. and U.S.S.R.

Management Information

Systems

Develops specialized PC or mainframe management information systems for tracking project costs, progress, budget, and schedule. Collects and creates associated databases. Develops information systems in a variety of

commonly used software.

B & N Coal, Inc. P.O. Box 100 Dexter City, OH 45727

Telephone: (614) 673-3575

President/CEO:

(614) 783-5455 FAX:

Carl Baker, Jr. Sales Manager: Carl Baker, Jr.

local plant where they use it to generate electricity.

made readily available for other markets.

Our company surface mines coal in Southeastern Ohio. We presently produce approximately 750,000 tons per year. This coal is hauled by truck to a

Our company has received many awards in the State of Ohio and has received two National Awards for our outstanding reclamation after remining of predominantly previously mined and unreclaimed strip mined land. We are capable of mining much more coal than we are presently. The coal can be

Products/Service

Description

Coal

Our coal is high in sulfur content; however, it is high in BTU's.

Limestone

Our limestone is produced by our subsidiary company - Sharon Stone Company. It is used locally for road surface materials and riprap.

Reclamation and Construction

We reclaim many acres of previously unreclaimed strip mine spoils. We also bid on jobs which are contracted by abandoned mine lands and RAMP Programs. We also do site development and

construction.

Battelle 505 King Avenue Columbus, OH 43201, U.S.A.

Telephone: (614) 424-6424

Telex: 24-5454 FAX: (614) 424-5263

Chief Executive Officer:

Dr. Douglas E. Olesen

International Sales Manager: Mr. John S. Christie

Domestic Offices:

(Same as above)

International Offices: Am Romerhof 35, Frankfurt Germany; Tel: 49-69-79080, 7, route de Drize, Carouge-Gneva;

Tel: 41-22-270270

Battelle assists industry and government in developing, commercializing, and managing technology. With a wide range of scientific and technical capabilities, Battelle solves problems, develops and improves products and processes, provides on-site technical assistance, and manages large, complex technology programs. Its 8,400 staff serve clients in more than 30 countries with other offices in many of the largest cities in the world. Battelle was founded by Ohio industrialist Gordon Battelle, who recognized that a constantly changing world can be improved through advances in technology and education.

. . . Putting Technology To Work

Product/Service	Description
Coal Utilization Technologies	A multiclient effort to identify and assess new coal utilization technology is now in its ninth year of operation. There are no significant penalties for late participants.
Fluidized-Bed Technology	Extensive experiences with multisolid fluidized-bed technology is available for use in various applications including combustion, gasification, desulfurization, etc. Some uses are now available only through licenses.
New Materials	As in most applications, the performance of materials eventually becomes the primary factor limiting usage. Battelle has numerous ongoing programs to assist in problem definition and materials selection with regard to various coal utilization technologies.
Coal Beneficiation	Processes for advanced treatment of coal is an area of much current activity with substantial patent protection now being developed. Use of combined fields and application of genetic manipulation of biological agents are under study.
Emissions Control	The research area still receiving much attention is the development of improved technology for the control of emissions, including hydrothermal treatment, means to optimize cleaning plants, high temperature combustion systems, fiber filters, use of additives, improved wet-scrubbing processes, and waste utilization and disposal. A 20 year-old international multiclient stack gas coordination center also continues to provide implementation information.
Process Optimization	One of the key aspects of any new tect nology is proper modeling of the system before construction and installation of the full scale system. Battelle has pro ided pioneering of this service in this area over the years.

Bechtel Corporation
Fifty Beale Street
P.O. Box 193965
San Francisco, CA 94105-1895

Telephone: (415) 768-1234

Telex: 184907 BECHTEL SFA FAX: (415) 768-9038

President/CEO: Riley Bechtel

Domestic Offices: Athens, AL; Boston, MA; Charlotte, NC; Gaithersburg, MD; Houston, TX; Kingsport, TN; Los Angeles, CA;

Louisville, KY; New York, NY; Oak Ridge, TN; Paim Beach Gardens, FL; Pottstown, PA; San Francisco, CA;

Savanna River, SC; Washington, DC

International Offices: Aberdeen, Scotland; Abu Dhabi, UAE; Bangkok, Thailand; Beijing, PRC; Caracas, Venezuela; Melbourne, Australia;

Manila, Philippines; Montreal, Canada; Moscow, Russia; Rio De Janeiro, Brazil; Riyadh, Saudi Arabia; Santiago, Chile; Seoul, Korea; Singapore; Tokyo, Japan; Toronto, Canada. Besides these there are several joint venture offices

in various parts of the world.

Since its establishment in 1898, Bechtel has developed into one of the world's largest, most experienced engineering and construction firms. In the past 95 years, Bechtel has been engaged around the world to perform studies, engineering, procurement, construction, and plant operation services. Bechtel has specialized in many areas including fossil-fired and nuclear power generation, refineries and chemical plants, mining and metals facilities, all types of pipelines, and hydro and community facilities.

Bechtel has engineered and constructed facilities for coal mining, handling, storage and transportation, electric power generation, coal conversion, and pollution control. Bechtel maintains a long-term involvement in federal, state, and local governments' clean coal development programs, and works with various industries to expand clean coal technology commercial applications.

Engineering, Procurement, and Construction in the following major business

areas:

Petroleum, Chemical &

Industrial Bechtel has earned a reputation as one of the finest builders of petroleum, gas, pipeline and chemical projects in the

world

Power Bechtel's share of the U.S. fossil market is approximately 25%

Civil Major construction (national as well as international) in the area of airports, tunnels, roads and bridges

Environmental Bechtel is the largest environmental contractor in the world with experience in all phases of the environmental

business.

Mining & Metals Bechtel, as the market leader, is actively involved internationally in a variety of mining projects.



Bessemer & Lake Erie Railroad Co. 135 Jamison Lane P.O. Box 68 Monroeville, PA 15146

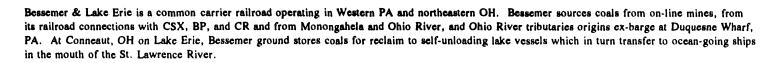
Telephone: (412) 829-3465 FAX: (412) 829-6603

Chief Executive Officer:

International Sales Manager:

Mr. Donald H. Hoffman Mr. Thomas J. Siegel

Domestic Offices: International Offices: Centralized in Monroeville, PA Centralized in Monroeville, PA



Product/Service Description Railroad Transportation A substantial hopper car fleet complements access to a variety of coal qualities. Ground Storage/Blending A 4 million ton ground storage capacity is stocked from rail cars and reclaimed to vessels in various blends.

Shiploading Dual conveyor loaders dispatch 30,000 ton lake vessels in approximately 8 hours.

E.N. Bisso & Son, Inc. P.O. Box 4370 New Orleans, LA 70178-4370

Telephone: (504) 866-3296; Fleet Office: (504) 861-3551

TLX: WU 784097 FAX: (504) 865-9802 General Manager: Capt. Ralph Diaz

International Offices: LONDON: James A. McLaren & Co., Ltd., Baltic Exchange Chambers, 28 St. Mary Axe., London EC3A8DE, England,

TEL: 011-44-71-623-6801; FAX: 011-44-71-626-1726

OSLO: Krogstads Shipping, Rosenkrantzgate 22, Oslo 1, Norway, TEL: 011-472-426790, FAX: 011-472-428915

The company has been in business over 100 years and is engaged primarily in docking and undocking ships in the Mississippi River. Customers are usually coal vessel owners, managers or charters. The company operates thirteen ship harbor and offshore ABS classed tug boats (2000-4200 HP) and two floating derricks with a capacity of 100 tons each. Besides the Mississippi River, towage is offered in the U.S. Gulf, Caribbean Sea, East and West Coast of North, Central and South America. The fleet office of the company is located at Mile 101 left descending bank of the Lower Mississippi River. The company has experienced crews and specializes in the movement of large floating vessels in confined areas.

Product/Service Description

Ship Docking Derricks Ocean Towing 13 harbor tugs 2000-4200 HP; lifts up to 100 tons; U.S. Gulf, Caribbean Sea, East/West Coast of North, Floating

Over 100 Years of Service

Central and South America

Marine Contracting Salvage Construction; Salvage and diving; Support vessels



Black & Veatch 8400 Ward Parkway Kansas City, MO 64114

Telephone: (913) 339-2000

Telex: 42-6263 FAX: (913) 339-2934 CEO and Chairman: Senior Vice President, BVI:

P.J. Adam J.P. Hover



Domestic Offices: International Offices: More than 33 throughout the U.S.

Bangkok, Thailand; Buckinghamshire, United Kingdom; Singapore, Singapore; Sydney, NSW, Australia; Tokyo, Japan; Leipzig, Germany; Wolverhampton, United Kingdom; New Delhi, India; Taipei, Taiwan;

Jakarta, Indonesia; Cairo, Egypt

Black & Veatch, founded in 1915, is one of the largest engineering firms in the United States, as well as being one of the oldest and most experienced. The firm is a partnership with headquarters in Kansas City, Missouri, and offices in more than 30 cities around the world. Black & Veatch is directed by a chairman and six managing partners. All major disciplines are represented. More than 50 percent of the 4,000 employees have college degrees. These include professional civil, electrical, mechanical, nuclear, chemical, sanitary, architectural, and structural engineers. Associated with them are architects, planners, economic and financial specialists, hydrologists, chemists, biologists, and administrative personnel.

Product/Service	Description
Engineering Services for Fossil Power Plants	The firm engages in engineering services for the generation, transmission, and distribution of electric power; and collection, treatment, and disposal of wastewater. Comprehensive licensing, permitting and environmental consultation on mining, transportation and power plant projects. Mine engineering and mine reclamation consultation.
Coal Handling Systems	Black & Veatch designs the bituminous, subbituminous and lignite terminating and handling facilities which are integral to coal fueled power plants. These facilities include systems for unloading (ocean-going ships, barges, railcars and on/off highway trucks), storing, reclaiming, crushing and weighing of coal to annual throughput capacities in excess of 9 million tons per year. Coal procurement and transportation consultation in areas of strategic planning and contracting. Heavy-haul railroad consultation including new and rehabilitated rail lines, motive power and railcar acquisitions, and equipment maintenance facilities.
Coal Quality Analysis	The Utilization Cost Program (UCP) is a rapid evaluation tool developed by Black & Veatch that takes you from coal quality data to total bushar costs on both new and existing units. It provides the capability to determine the impact of coal quality on unit design, unit performance, capital costs, and operating costs.
Port Facilities	The complete design of dock and cargo handling facilities has been accomplished by Black & Veatch in connecting with a number of projects. These design engagements have included facilities for the unloading, storage, and loading of various fuels and general cargo as well as ancillary facilities, including railroad sidings, warehousing, and bulk storage.

Black Gem Coal Company P.O. Box 931 Cincinnati, OH 45239-0931

BLACKGEM

Telephone: (513) 931-1426

Chief Executive Officer: International Sales Director: H.M. Vonderheide H.M. Vonderheide

Domestic Offices:

All business conducted through the Cincinnati, Ohio USA office.

Company has been in existence since 1976. Product line consists of steam, stoker, and metallurgical coals available from USA coal areas of southern West Virginia, southwest Virginia, southeastern Kentucky, eastern Tennessee.

Product/Service

Coal Mining, transportation by truck, rail, USA river system to ports for export. Coal brokers/finders/sales. Mining equipment both deep and surface (as commonly utilized in USA coal mines).

Boston Sciencia, Inc. (BOSTON) P.O. Box 6298 1401 Timken Place, S.W. Canton, OH 44706

Boston SCIENCIA, INC.

Telephone: FAX:

(216) 452-3383 (216) 452-7337

Chief Executive Officer:

Raymond C. DesMarais, Jr. International Sales Manager: James Peavler - (410) 832-7444

Boston Sciencia, Inc. (BOSTON) is an Ohio-based corporation which performs chemical research and catalyst development via a unique technology, which it has termed "Catalysis Prediction." Catalysis Prediction is a method of conducting a catalyst search based on fundamental principles of matching the energies or vibrational frequencies of the exact chemical reactants. The vibrational frequency match is computed for the most effective catalyst (lowest temperature) and exact oxidation state of that catalyst. The metal required to conduct the reactions by definition, will modulate the vibrational energy of the reactants to enable a very high efficiency reaction. Through the use of this proprietary computerized technology, an optimized catalyst discovery can be accomplished in the most expedient and cost-effective manner with the very high certainty of results. BOSTON enters into contractual arrangements to apply this technology to a specific area of interest. Since research and development is performed essentially at cost, commercially viable projects conclude with a negotiable license or sale of the process.

Product/Service

Description

Catalytic Flue Gas Treatment

The prediction of catalysts for use in systems to remove harmful effluents (NO,, SO,, etc.) from flue gas, decompose harmful chemical species and reform known chemical compounds much more efficiently.

Bowser-Morner 4518 Taylorsville Road P.O. Box 51 Dayton, OH 45401-0051



Telephone: FAX:

(513) 236-8805 (513) 233-2016

President/CEO:

Steven M. Bowser

Sales Manager:

William M. Treasure

Domestic Offices:

Lexington, Kentucky; Toledo, Ohio; Indianapolis, Indiana; Dayton, Ohio.

A consulting engineering and independent commercial testing laboratory serving industry, business and government with geotechnical engineering, geo-environmental consulting, subsurface exploration, construction observation and field testing, analytical chemistry, product evaluation and material testing, metallurgical testing, construction materials and geotechnical testing. Specific services include design of dams, refuse disposal systems, surface and deep mines, permit applications, foundation exploration and design, hydrologic studies, environmental studies, feasibility studies, coal stockpile inventories, site assessments, groundwater/soil sampling, installation of groundwater monitoring wells, testing of concrete, asphalt, masonry and mineral aggregates (lab & field), chemical analysis, corrosion studies, and product testing (humidity, vibration, corrosion).

Products/Service

Description

Consulting

Environmental Assessments, Coal Analysis, Coal Exploration, Coal Mining Exploration, Feasibility Studies,

Geological, Geophysical, Land Reclamation.

Engineering & Contracting

Mine Subsidence Monitoring, Exploration Drilling, Ground Geophysics, Coal Refuse Disposal, Land Reclamation, Mine Drainage Treatment, Coal Slurry Pumping and Transport, Coal Refuse Embankment Design and Permitting.

John T. Boyd Company 400 Oliver Building 535 Smithfield Street Pittsburgh, PA 15222-2384

Telephone: (412) 562-1770 FAX: (412) 562-1953

President/CEO:
Assistant to the President:
Senior Vice President:

James W. Boyd
Bradley Charles Lewis
Ronald L. Lewis

Domestic Offices:

DENVER, CO: 1400 South Tower - Denver Place, 999 18th Street, Denver, CO 80202-2414

TEL: (303) 293-8988 FAX: (303) 293-2232

John T. Boyd Company (BOYD) is an international mining and geological engineering consulting firm serving the world's mining, mineral, and utility industries. Services include mine design, planning, closure, and monitoring; due diligence; asset appraisals; contract negotiations; equipment selection; environmental compliance; and geological/geotechnical investigations. BOYD reports are accepted by the Securities and Exchange Commission for reserve certification; utilized by financial institutions for project financing; submitted in arbitration, litigation and regulatory hearings on numerous mining related issues; and provided to energy producing and consuming companies relative to development of strategic plans for marketing or purchasing fuel including potential major sales or acquisitions of energy resources.

BOYD is recognized internationally for its expertise in assisting local and national governments to plan and implement privatization efforts inclusive of providing short- and long-term technical advice, in-country training, and supporting publicity of privatization.

(Continued on next page)

John T. Boyd Company (Continued)

Product/Service

Description

Mining/Geological Engineering

Mine planning, monitoring, due diligence, and feasibility studies; valuations; ventilation; reserve quantity and quality estimates; reserve classification; exploration drilling, geologic and geophysical logging, and analytical testing; asset appraisals; equipment selection; contract negotiations; bid solicitations; supplier reviews; transportation alternatives; market forecasts and analyses; health and safety; training; sales brochures; strategic planning; computer modeling and database maintenance. Mining, reclamation and environmental issues. Evaluations on reliability and consistency of potential suppliers; quantity, quality, price, contract terms and transportation options.

Architecture/Engineering

Technical Consulting

BOYD manages and supervises geological and exploration programs; develops mine plans and performs mine and preparation plant feasibility studies; designs material handling systems; performs geotechnical and rock mechanic studies; obtains mining permits; certifies quality and quantity of reserves; prepares environmental impact statements; evaluates fuel economics; develops forecasts of costs, production, and financial returns; appraises and evaluates mining properties, plants, and equipment; provides expert witness testimony and litigation support; analyzes fuel supplies and haulage and transportation methods; assists in contract negotiations; and identifies and forecasts markets.

Brandywine International, Inc. 31 Austin Circle Wilmington, DE 19810

FAX:

Telephone: (302) 479-9650 (302) 478-6812

Executive Officer: International Manager: John Pastor John Pastor

Domestic Offices:

ESSINGTON, PA: 101A Ericson Avenue, Essington, PA 19029 TEL: (215) 521-5706

FAX: (215) 521-5716

International Offices:

We maintain a comprehensive network of agents and representatives worldwide.

Brandywine International, Inc. is an international transportation and logistics management consulting firm, providing a wide range of special services. Our primary objective is to increase U.S. exports by providing hands-on services to U.S. companies who are entering or seeking to enhance international sales. Emphasis is directed toward assisting companies who produce energy and environmental related products.

Product/Service

Description

Transportation Services

International Transportation and Logistics consulting, planning, and implementation.

Brechbuhler Scales Inc. 1424 Scale Street, S.W. Canton, OH 44706-3096

Telephone:

(216) 453-2424

FAX:

(216) 453-5322

President/CEO: Sales Manager:

Kraig F. Brechbuhler

David B. Markle

BRECHBUHLER SCALES, INC.

Domestic Offices:

Canton, Cleveland, Columbus, Cincinnati, Dayton, Mansfield, Youngstown, Lima, Charleston, Parkersburg

Brechbuhler Scales, Inc. is an independent distributor and specialized manufacturer of custom weighing systems and scales. Scale sales, service, rentals and systems are available through a network of eleven branch locations. In-house fabrication facilities allow for replacement weighbridges, drip pits and custom design weldments to meet specific applications. State certified technicians are available 24 hours a day, 7 days a week for your convenience. Our test trucks carry weights traceable to National Bureau of Standards to ensure scale accuracy.

Products/Service

Description

Truck Scales

Provide, install and service truck scales including heavy duty units used in pit operations.

Belt Scales

Belt scales used to load barges, monitor production and blending of coal.

Lab Scales

Analytical scales used in coal analysis and testing.

Brinjac, Kambic & Associates, Inc. 114 North Second Street Harrisburg, PA 17101

Telephone: (717) 233-4502

FAX: (717) 233-0833

President: John M. Brinjac, P.E., C.E.M.
Marketing Director: Thomas J. Finnerty

AC KANDICA ASSOCIATION

BRINJAC, KAMBIC & ASSOCIATES, INC CONSULTING ENGINEERS

Brinjac, Kambic is a multi-discipline consulting engineering firm offering a comprehensive package of mechanical, electrical, plumbing, fire protection, structural, civil, environmental and construction administration services. The firm has provided quality, timely and budget sensitive engineering design and analysis to governmental, industrial, commercial and institutional clients for over 38 years.

The firm has provided primary design and engineering for facilities such as: industrial plants; office buildings and residential complexes; cogeneration plants and resource recovery facilities; laboratory and research facilities; hospitals and medical buildings; correctional facilities; computer centers; wastewater collection systems and treatment plants; water distribution systems; solid waste facilities and all types of educational facilities.

Product/Service

Description

Consulting Engineering

Mechanical, electrical, plumbing, fire protection, structural, civil, environmental and construction administration engineering associated with coal fired boilers, coal storage and handling systems; ash management systems; cogeneration systems and comprehensive energy technical assistance studies.

The Irwin Brown Company 212 Chartres Street New Orleans, LA 70130

Telephone:

(504) 586-0378

Telex: 584287 (BROWNCO NLN) FAX: (504) 525-8527

Sheldon Bernstein

President:

Vice President:

John T. Hyatt

Virginia West

Export Manager: John T. Hyatt Traffic Manager:

We are a medium sized Customs Broker/International Freight Forwarder, dedicated to giving personalized service and working toward the betterment of the industry and the community. We are members of the National Customs Brokers and Forwarders Association of America, Inc. and the American Importers and Exporters Association. We are very active with our local association, The International Freight Forwarders and Customs Brokers Association of New Orleans, Inc. Our president, Sheldon Bernstein, is the current president of the Association.

Buckeye-Industrial Mining Co. P.O.Box 389 4719 Industrial Road Lisbon, OH 44432

Telephone: (216) 337-9511 or (216) 424-7281

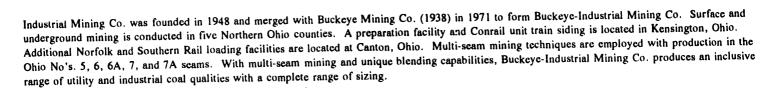
FAX:

(216) 337-3730)

Chief Executive Officer: Industrial Sales Manager: John C. Grisham Jack M. Grinwis

International Offices:

Please contact Corporate Headquarters for further information.





Description

Coal Mining

Coal qualities currently produced range from 1% sulphur at 13,000 BTUs to 3% sulphur at 12,000 BTUs with both high and low fusion characteristics. Within the reserve portfolio, the company controls a significant amount of less than 1% sulphur 13,000 BTU coal.

Burlington Northern Railroad 3700 Continental Plaza 777 Main Street Fort Worth, TX 76102

Telephone: (817) 878-2001

Easylink: 62871208 FAX: (817) 878-1595 Chief Executive Officer: Gerald Grinstein Exec. V.P. Marketing & Sales: John Q. Anderson

Burlington Northern Railroad operates 23,476 miles of track encompassing 25 states and 2 Canadian provinces. Coal transportation represents approximately 48% of Burlington Northern Railroad's revenue ton miles.

Product/Service

Description

Coal Transport

Burlington Northern Railroad serves 41 coal mines, many among the largest producers in the world and, through interchange with other carriers, accesses additional mines for coal transportation. Most of the mines that Burlington Northern serves have huge reserves of coal below the 1.2 lb standard for sulfur dioxide emissions. In 1992, Burlington Northern transported 150 million short tons of unit train coal for utility customers at over 75 different destinations in 21 states. On a typical day, Burlington Northern operates over 600 locomotives transporting over 16,000 cars in coal service, with an average round trip mileage of 1,600 miles on our system.

Burns & McDonnell 4800 E. 63rd Street Kansas City, MO 64130

Telephone: (816) 333-4375

FAX:

(816) 333-3690

Walter C. Womack

Chief Executive Officer: Newton A. Campbell International Sales Manager:



Founded in 1898, Burns & McDonnell is a full-service architectural/engineering firm. Employee-owned since January 1986, Burns & McDonnell is a leader in electric power design, and has provided comprehensive engineering for coal-fired units ranging in size up to 670 megawatts. The firm has also engineered more than 35 fluidized-bed boiler projects. Burns & McDonnell has designed and specified air pollution control systems for utility and industrial clients since the early 1950's. Expertise includes wiring equipment specifications, detail process design, construction and start-up services, and emission compliance and performance testing.

Product/Service

Description

Architecture/Engineering

Burns & McDonnell's involvement in electric power generation began in 1900 with the design of a coal-fired electric power plant. The firm's experience includes a wide range of unit sizes and plant features, including wet and dry FGD systems, electrostatic precipitators and baghouses. Burns & McDonnell also has experience with a variety of coals. Each power plant is designed to include the features needed to meet siting, operational, environmental and other requirements.

W.J. Byrnes & Co./BYrnesAIR 100 Rollins Road Millbrae, CA 94030

Telephone: (415) 692-1142

Telex:

314417 FAX: (415) 692-5726

Chief Executive Officer:

Mr. John A. Leitner

International Sales Manager:

Mr. James P. Cesped

Domestic Offices:

SAN FRANCISCO, CA: P.O. Box 280205, San Francisco, CA 94128 TEL. (415) 692-1142; PHOENIX, AZ: 2302 E. Magnolia Street, Phoenix, AZ 85034 TEL. (602) 244-1752; TUCSON, AZ: 2700 E. Bilby,

Tucson, AZ 85706 TEL. (602) 889-2275; DENVER, CO: 4195 Oneida Street, Denver, CO 80216 TEL. (303) 320-5921; MILWAUKEE, WI: 4369 S. Howell Avenue, Milwaukee, WI 53207

TEL. (414) 769-7222

International Offices:

Service provided by agents worldwide, contact headquarters for further information.

W.J. Byrnes & Co. is a full service international transportation facilitator; providing service by both ocean and air, inbound and outbound, by direct or consolidation, NVOCC service, insurance, crating, containerization, and all of the logistics to move cargo professionally. Since 1907, the firm has developed the experience to handle everything from a small emergency to a major project. Awarded in 1981 the "E" award for Excellence in Export Service by the President of the United States. There is a difference, and we are proud of it.

Canal Barge Company, Inc. 835 Union Street New Orleans, LA 70112

Telephone:

(504) 581-2424

FAX:

(504) 584-1508

President:

Mr. Joseph M. Jones, Jr.

Vice President:

Mr. H. Merritt Lane, III

Assistant V.P., Dry Bulk Sales:

Mr. Lawrence A. Barbish

Canal Barge Company is a contract carrier operating on all navigable inland waterways of the Mississippi River system and offshore for over 50 years.

Product/Service

Description

Marine Transportation

Canal Barge is a carrier of coal through the use of towboats and barges on the inland waterways which include the Ohio, Illinois, Lower Mississippi, Green, Tennessee, Arkansas, Cumberland, Kanawha, Monongahela, and

Allegheny Rivers, and the Gulf Coast.



Carnot 15991 Red Hill Avenue Suite 110 Tustin, CA 92680

Telephone: (714) 259-9520 **FAX:** (714) 259-0372

Chief Executive Officer:
International Sales Manager:
Mank D. McDannel
Manager, Utilities Systems:
Director of Testing Services:
Robert A. Finken



Carnot is an engineering services and consulting organization specializing in fuels, fuels utilization, combustion and combustion-generated air pollution emissions, emissions control, emissions testing, and regulatory affairs. The organization possesses technical expertise for a variety of stationary combustion device types including utility and industrial boilers; municipal solid waste and other refuse-fueled boilers; as well as medical and hazardous waste incinerators, fluidized-bed boilers; and simple-cycle, combined-cycle, and cogeneration gas turbines and a variety of specialized process equipment.

Product/Service	Description
Emissions Control, Process Improvement	Carnot offers unbiased expertise in the selection of appropriate control technologies (many of which its people helped pioneer). Carnot's philosophy is that combustion-generated air pollutant emissions should and can be controlled using the most-effective available technique with the least impact upon unit operating flexibility and thermal performance. Carnot has experience with devices burning conventional fuels (i.e., coal, natural gas, fuel oil, etc.), as well as less-common fuels such as petroleum coke, refinery gas, wood and agricultural wastes, coal-water slurries and coal-oil mixtures, oil-water emulsions, municipal solid waste, landfill gas, and methanol. Carnot's emissions expertise covers a wide variety of species including NO _x , SO _x , CO, particulates of all types, metals, organics, and other toxics.
Research, Development, and Design	Carnot uses its combustion and process expertise to design investigative programs to solve many different real-world process and emissions problems. The company has conducted many successful technology demonstrations and aided in their development. Our expertise includes advanced burner and combustor design, post combustor controls, reagent injection for emissions reduction, and emissions control planning. When appropriate, Carnot designs small scale experimental simulators and laboratory investigations for novel problems.
Emissions Testing	Carnot provides a full range of in-house testing and process equipment including mobile laboratories, continuous emission monitors, and sampling methodologies for virtually any industrial pollutant of concern in liquid, solid, and gaseous streams.
Regulatory Engineering	Carnot's regulatory staff keeps abreast of domestic and international affairs and offers assistance in permitting and siting projects, especially those of a unique nature. Carnot has helped its clients meet some of the most demanding emissions regulations in the world.

Caterpillar, Inc. 100 N.E. Adams Street Peoria, IL 61554

Telephone: (309) 675-1000

President/CEO: Donald V. Fites

Sales Manager: Local Caterpiliar Dealer (over 200 worldwide)



Caterpillar Inc. manufactures machines and products used in highway, dam, pipeline, building and other construction; and in logging, mining, agricultural, waste disposal, industrial, warehousing, material handling, stevedoring, and maintenance activities.

Machines included track-type tractors; pipelayers; hydraulic excavators; off-highway trucks and tractors; articulated dump trucks; wheel leaders; integrated toolcarriers; wheel tractors; soil compactors; landfill compactors; track-type loaders; backhoe loaders; pavement profilers; asphalt pavers; road reclaimers/soil stabilizers; diesel and spark ignited engines; generator sets; turbines; lift trucks; self-guided vehicle systems; and container handlers.

Caterpillar engines are used in earthmoving and construction machines; on-highway trucks; marine, petroleum, locomotive, agricultural and industrial applications, and electric power generation systems. Diesel and spark-ignited engines meet power needs from 42 to 7,300 horsepower (31 to 5 400 kilowatts) and, in generator set configurations, from 40 to 4 910 kilowatts. Turbines range from 1,340 to 12,600 horsepower (100 to 9 400 kilowatts) and, in generator set configurations, from 1 080 to 8 840 kilowatts.

Caterpillar products are sold primarily through a world-wide organization of 216 independently-owned dealers and one company-owned dealership. Caterpillar Inc. is a multinational company, incorporated in 1925 and headquartered in Peoria, Illinois.

Centralia Coal Sales Company P.O. Box 478 Wilkes-Barre, PA 18703

Telephone: (717) 822-4135 FAX: (717) 824-1884

Chief Executive Officer: Joseph A. Frank International Sales Manager: Joseph A. Frank, Jr. Domestic Sales Manager: Michael J. Costanza



Founded in 1947, Centralia Coal Sales Company is headquartered in Wilkes-Barre, in the heart of the Pennsylvania Anthracite Fields and well within reach of all the eastern coal reserves. Centralia Coal Sales Company is the exclusive sales agent for several large producers and represents a total of more than 30 producing companies in Pennsylvania, West Virginia, and Kentucky. It is undoubtedly, the largest independent coal marketing company in the Anthracite industry. Multiple supply sources assure customers of a reliable, continuous source of high-grade coal that fully meets their specifications. Years of experience and the growing promise of coal insure that Centralia will be here to serve its customers for many years to come.

Product/Service

Description

Anthracite Coal

Anthracite coal has unique physical and chemical properties which make it valuable in the broad range of processes and applications including: A clean, slow burning, low sulfur fuel for heating and generating electric power, a low cost substitute for foundry and blast furnace coke, a reducing agent in the refining of metal ores, a raw material in the manufacture of cathode block, and carbon electrodes, source material for briquetting, an effective, long lasting filter media, a source for advanced synthetic fuels through gasification and liquefaction and for light oil and chemicals.

CH2M HILL

INTERNATIONAL, LTD.

CH2M Hill International Ltd. 6060 S. Willow Drive P.O. Box 24548 **Denver, CO 80222**

Telephone: (303) 796-9001

Telex: 4742047 CH2M PTL FAX: (303) 796-8710

President and CEO:

Howard Schirmer, Jr., PE

Domestic Offices: International Offices: CH2M HILL, Inc. includes nearly 60 offices in North America

AUSTRALIA: Sydney, Australia; EGYPT: Alexandria and Cairo, Egypt; ENGLAND: Bracknell and London,

England; FRANCE; Paris, France; HUNGARY: Budapest, Hungary, TAIWAN: Taipei, Taiwan

CH2M HILL International Ltd. is a wholly-owned subsidiary of CH2M HILL Ltd., a firm of engineers, planners, economists, and scientists with more than 25 years experience in international projects in 63 countries. CH2M Hill provides comprehensive planning, study, design, and construction management services for clients with interests in: industrial plants and processes, geotechnical services, solid and hazardous waste management and disposal, water supply and wastewater, water resources, irrigation, city and regional planning, economics, and program management.

Product/Service

Description

Consulting Engineering

Pre-project planning and project support services include feasibility studies and assessments; earth sciences; environmental impact studies; regional/urban/rural planning and site evaluation. Among project preparation services are detailed designs, technical appraisals, funding and procurement advice, tender documents, and bid evaluation. Additional services include construction implementation and post-construction services.

Industrial Facility Engineering

Specialized services include site environmental audits, industrial site selection, permitting and development, plus hydroelectric, thermal, solar, bio-energy, geothermal, and cogeneration systems. Industrial wastes management

and control services are also provided.

Challenge Engineering Consultants, Inc. 301 East Main Street, Suite 650 Lexington, KY 40507

Telephone: (606) 233-2215 FAX:

(606) 255-9138

Chief Executive Officer:

Dean K. Hunt, Esq. P.E.

International Sales Manager: Dean K. Hunt

Domestic Offices:

Jackson, KY: P.O. Box 233, Jackson, KY 41339 (606) 666-4318

team and staff. Former managers of several national and local firms including D'Appolonia Consulting Engineering, United States Office of Surface Mining, and Skelly and Loy Engineering Consultants make up the professional staff of Challenge Engineering Consultants, Inc. The Challenge organization provides Engineering and Consultants services to coal, natural resources, waste management industries and government agencies. Challenge's multi-disciplinary staff includes the full range of engineers, geologists, computer scientists, and environmental specialists necessary to address most engineering and natural resources issues.

Challenge Engineering Consultants, Inc. was organized in 1984 to provide industry and government clients with a nationally experienced management

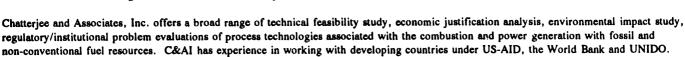


Product/Service	Description
Mining Engineering	Environmental studies, mine waste disposal, mine design, planning and permitting, mines fires, acid mine drainage and subsidence control.
Computer Consulting	Needs Assessment, application generation and training, research for vertical markets.
Geotechnical Engineering	Geotechnical studies for underground mines, reservoir designs and mine waste embankment designs.
Abandoned Mine Land Reclamation	Design and implementation of Abandoned Mine Land (AML) reclamation plans, revegetation assessments and land reconstructions.

Chatterjee and Associates, Inc. **4883** Windermere Drive Newark, CA 94560-1462

Telephone: (510) 795-5436 FAX: (510) 792-0693

Chief Executive Officer: International Sales Manager: Anil K. Chatterjee, P.E. Anil K. Chatterjee, P.E.

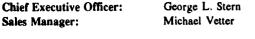


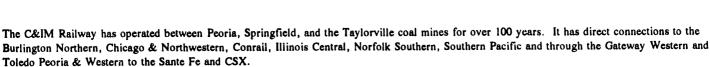
Product/Service	Description
Advanced Fuel Conversion Technologies	C&AI provides technical, economic, and environmental evaluation studies of conventional and non-conventional fuels densification, combustion and gasification process technologies, including AFBC/PFBC, and CSFs.
Environmental Pollution Control System Study	C&Al evaluates plant and fuel specific appropriate pollution control measures and performs comparative cost estimates (investment and O&M) and specifications.
Field Testing and On-site Monitoring	C&AI will perform ASME code power plant and environmental pollution control equipment performance testing and on-site monitoring of plant operation.
Data Acquisition and Analysis	C&Al has experienced staff in developing on-site data acquisition systems & rendering on-line data analysis service.

Chicago and Illinois Midland Railway P.O. Box 139 Springfield, IL 62705

Telephone: (217) 788-8633 FAX: (217) 788-8630

Chief Executive Officer:





Product/Service	Description

Havana Coal Dock Category:

Coal Transport

Located at mile post 120.8 on the Illinois River, this railcar to barge transfer facility is capable of handling 3,000 tons per hour, 10 million tons per year, from either gondola or hopper railcars. 140,000 tons of ground storage is available. Belt scale.



C&AI

Chicago and North Western Transportation Company 165 North Canal Street Chicago, IL 60606

Telephone: (312) 559-6938 **FAX:** (312) 559-6495

Chairman, President, and CEO: Mr. Robert W. Schmiege V.P. Sales & Marketing - Energy: Mr. David G. Weishaar



Chicago and North Western Holdings Corp. (NYSE:CNW) is the holding company for the Chicago and North Western Transportation Company, the nation's eighth largest freight railroad in terms of revenue, and its subsidiary Western Railroad Properties Inc., a line specializing in transporting low-sulfur coal mined in the southern Powder River Basin of Wyoming.

The Chicago and North Western Transportation Company (C&NW) was chartered in 1836. The railroad operates approximately 5,600 miles of track in nine midwestern and western states. In 1992, the company moved roughly 40 billion ton-miles of coal, grain, automobiles, steel, chemicals, lumber, paper, food and consumer products. Its customers fall into five major business groups: Energy (coal); Agricultural Commodities, Automotive, Steel and Chemicals; Intermodal; and Consumer Products.

Western Railroad Properties, Inc. (WRPI), the company's coal-hauling subsidiary, began operating in August of 1984. In just eight years, WRPI has increased its coal loadings to nearly 60 million tons a year. With an operating ratio of approximately 52 percent, WRPI is one of the most profitable and efficient railroads in the country.

Product/Service

Chicago and North Western Transportation Company

Description

Chicago and North Western Transportation Company operates a 5,600 mile rail network in the central United States. CNW is a major transporter of coal, grain, automobiles and intermodal double-stack containers. Western Railroad Properties, Incorporated (WRPI), CNW's coal-hauling unit, operates a 200-mile railroad in the southern Power River Basin of Wyoming. WRPI is a leading originating carrier of low-sulfur coal from western mines to the Midwest, South and East.

Coal Extraction and Utilization Research Center Southern Illinois University at Carbondale Carbondale, IL 62901

Telephone: (618) 536-5521 **FAX:** (618) 453-7346

Chief Executive Officer: John S. Mead International Sales Manager: David G. Arey

Domestic Offices: CARBONDALE, IL: 315 W. Grand St., Carbondale, IL 62901



The Coal Research Center at Southern Illinois University-Carbondale was established in 1974 to coordinate the coal related research activities of more than 100 faculty and 200 graduate students. Coal research at SIUC has been broad in scope, covering nearly all aspects of coal extraction, preparation, transportation, combustion, pollution control, and reclamation. The Center works closely with the Illinois Department of Energy and Natural Resources' Office of Coal Development and Marketing and its Illinois Clean Coal Institute. SIUC operates a unique link-trainer dragline simulator which provides hands-on experience for operators and management personnel.

Coal Extraction and Utilization Research Center (Continued)

Product/Service

Description

Dragline Training Program

The Dragline Training Program is a comprehensive and progressive training program designed to increase dragline productivity and reduce operating costs. It provides participants with an efficient and cost effective method of increasing their knowledge about dragline operations and operator skills. Two courses are offered. The supervisor training course is tailored to supervisors, engineers, mine management, experienced dragline crews, and support personnel. The operator training course is primarily for dragline foremen and dragline crew members. Each course simulates the client's specific application of the dragline.

Illinois Coal Development Park

The Coal Research Center in cooperation with the Illinois Department of Energy and Natural Resources operates the Illinois Coal Development Park. In addition to the laboratory/testing services described below, the Park is the site of a high bay building with overhead crane and up to 6000 square feet of space for product development and testing.

Mining & Reclamation Technical Assistance

The Illinois Mining and Minerals Resources Research Institute and the National Mine Land Reclamation Center Midwestern Region are located at SIUC. Technical reports concerning mining and reclamation are published. SIUC's Cooperative Wildlife Research Laboratory is a world leader in technical aspects of mine land reclamation by way of wetland habitat creation.

Laboratory/Testing Services

A G/C Mass Spectrometer Laboratory having a Kratos MS-80 high mass, medium resolution mass spectrometer with fast magnet. There are three ionization sources: electron impact, chemical ionization, and fast atom bombardment. A Coal Testing Laboratory having the capability of performing elemental analysis, total sulfur, proximate analysis, ash fusion temperature, and Btu content. A coal grinding facility consisting of various grinders and crushers and a micronizer capable of grinding to micron size. The micronizer has on-line sampling capability which feed into a Leeds Northrup Microtrak particle size analyzer which can measure particle size down to 0.75 um. A thermo-gravimetric analysis capability centered around Perkin-Elmer TGA-7. A combustion capability centered around two instrumented fluidized bed combustors: one capability of 1,000,000 Btu/hr which can operate in either the bubbling or circulating mode and the other with a capability of about 100,000 Btu/hour.

> 451 Davidson Boad Pittsburgh, Pennsylvania 15239

phone: (412) 795-4510 Fax: (412) 795-4643

COAL PETROGRAPHIC ASSOCIATES, INC.

Coal Petrographic Associates, Inc. 451 Davidson Road Pittsburgh, PA 15239

Telephone: (412) 795-4510 FAX: (412) 795-4643

Senior Consultant:

O.C. Barbarino R.J. Gray

President: R.M. Patalsky **Director Analytical Services:**

Coal Petrographic Associates, Inc. (CPA) is a major independent supplier of petrographic services to the coal and steel industries. The staff has over 20 years of experience in the metallurgical coal and coke industry. The clients consist of major coal producers for domestic, as well as export markets. CPA offers a complete line of petrographic and analytical services, as well as consulting services, for a wide variety of related materials. The most valuable features of the organization are its vast areas of expertise, as well as the interpretation and rapid turn-around of information. Professional affiliations include ASTM, Iron and Steel Society, TSOP, ICCP, Illinois Mining Institute, Eastern States Coke Oven & Blast Furnace Association and Mississippi Valley Coal Exporters Association.

Product/Service

Description

Petrographic Analysis of Coal, Coke and Carbon

Microscopic reflectance and maceral analysis of coal, as well as the microscopic analysis of carbon microstructures and microtextures in coke and specialty carbon products. Additional carbon related materials include tars, pitches, pitch mesophase, carbon electrodes, dust, combustion residues, activated carbon, etc.

Coal Petrographic Associates, Inc. (Continued)

Coal & Coke Chemical & Physical Testing

Complete line of chemical/analytical services including proximate analysis, sulfur, ultimate analysis, ash mineral, etc. Rheologic tests include Gieseler plastometer, Arnu dilatometer and free-swelling index. In addition, carbonization testing for cokemaking, which includes coke strength, pressure, volume change, reactivity, etc.

Market Survey of Cokemaking

Review compatibility, blend formulations and market potential of commercially available coals for domestic and foreign coking industries using information from a large coal database.

Coal Characterization for Exploration and Development

Determine experimental washability characteristics and coking potential from drill core and exploration samples for property evaluations.

Coal Technology Corporation 103 Thomas Road Bristol, VA 24201

Telephone: FAX:

(703) 669-6515 (703) 669-2161

President/CEO:

Richard A. Wolfe, Ph.D.



Coal Technology Corporation (CTC) specializes in the research and

development of advanced coal cleaning, fine coal recovery and dewatering, and new methods of coal utilization using advanced technologies. CTC holds four (4) patents for a fine coal dewatering centrifuge and one (1) patent for their coal liquids, char and coke (CLCC) process. Currently, CTC is developing a cyclone process for advanced fine coal cleaning and an advanced continuous process to manufacture a char for ferroalloy industries or domestic use as a "smokeless fuel," and/or a metallurgical coke for steel industries with recovery of coal liquids for further refining as a by-product (process patent pending). CTC is investigating formation of a joint venture for construction of a commercial plant using the CTC/CLCC process.

Products/Service	Description
Contract Research	CTC has been involved in the successful completion of many coal related research projects, both as prime contractor and as a sub-contractor, for the U.S. Department of Energy, utilities and other companies.
Technical Consulting	CTC has pilot plant and laboratory facilities staffed by personnel skilled in the wide range of coal related research.
Advanced Utilization	CTC markets and/or will license their patented technologies.

Coastal Coal Sales, Inc. P.O. Box 1871
Roanoke, VA 24008

Telephone: (703) 983-0222, USA (except VA): (800) 336-5722

Telex: 888415 FAX: (703) 983-0267

Chief Executive Officer: Robert A. Feilner International Sales Manager: Robert A. Feilner



Coastal Coal Sales, Inc. is responsible for the marketing of over 17 million tons of coal and petroleum coke produced by other units of The Coastal Corporation as well as independent high quality producers. Its principal affiliates are ANR Coal Company, Brooks Run Coal Company, Enterprise Coal Company, Virginia Iron, Coal and Coke Co., Coastal States Energy Co., Southern Utah Fuel Co. and Utah Fuel Co. Coastal Coal Sales also represents several independent operators. Coastal Coal Sales, Inc. is a financially stable company that is an integral part of the Coastal Corporation, an \$8 billion, diversified energy company.

Product/Service Description Coal Exporters Exporters of thermal and metallurgical grade coals through the Ports of Hampton Roads, VA; Los Angeles, CA; San Francisco, CA; New Orleans, LA; Mobile, AL; Baltimore, MD, and Philadelphia, PA. Coal Mining A solid reserve base with major blocks in Kentucky, Utah, Virginia and West Virginia. Flexibility with modern mining facilities and state-of-the-art preparation plants.

Commercial Testing and Engineering Co. 1919 S. Highland Avenue, Suite 210-B Lombard, IL 60148

Telephone: (708) 953-9300

Telex: 285951 COMTECO LMB UR FAX: (708) 953-9306

President/CEO: Sales Manager: Michael A. Hildon, PhD William E. Katterhenry

Domestic Offices:

DENVER, CO TEL. (303) 373-4772; GOLDEN, CO (Instrumental Analysis Division) TEL. (303) 278-9521; TAMPA, FL TEL. (813) 248-6566; SOUTH HOLLAND, IL TEL. (708) 331-2900; HENDERSON, KY TEL. (502) 827-1187; MIDDLESBORO, KY TEL. (606) 248-4205; PIKEVILLE, KY TEL. (606) 432-2511; ST. ROSE, LA TEL. (504) 467-5522; BALTIMORE, MD TEL. (410) 255-8688; CONNEAUT, OH TEL. (216) 224-2261; TOLEDO, OH TEL. (419) 698-8049; CHARLEROI, PA TEL. (412) 483-3549; NEW BETHLEHEM, PA TEL. (814) 275-4515; NORTH CHARLESTON, SC TEL. (803) 744-7240; DEER PARK, TX TEL. (713) 478-8228; NORFOLK, VA TEL. (804) 626-0006; CEREDO, WV TEL. (304) 453-6682; CHARLESTON, WV TEL. (304) 925-6631; ANCHORAGE, AK (Ankorage Environmental Division) TEL. (907) 562-2343; BECKLEY, WV TEL. (304) 255-0422; BILLINGS, MT (406) 252-5818; CLARKSBURG, WV TEL. (304) 623-3319; COLLEGE STATION, TX TEL. (409) 693-1045; ELKO, NV TEL. (702) 753-8462; FAIRBANKS, AK (Anchorage Environmental Division) TEL. (907) 474-8656; ISOM, KY TE. (606) 633-1082; LOMBARD, IL TEL. (708) 953-9300; ST. LOUIS, MO TEL. (314) 429-6659; ST. ROSE, LA TEL. (504) 467-5522; SANDUSKY, OH TEL. (419) 627-2027; SAN PEDRO, CA TEL. (310) 831-1331; SEATTLE, WA TEL. (206) 340-0755; SOMERSET, CO TEL. (303) 929-5022; SOUTH HOLLAND, IL TEL. (708) 331-3249; VILLA PARK, IL TEL. (708) 279-4770; WEST CREEK, NJ (Environmental Drilling Division) TEL. (908) 286-3232; BALTIMORE, MD (Technical Testing Laboratory Division) TEL. (410) 247-7400; BALTIMORE, MD (Environmental Drilling Division) TEL. (410) 563-6018; CHARLESTON, WV (Technical Testing Laboratory Division) TEL. (304) 346-0725; CINCINNATI, OH (Technical Testing Laboratory Division) TEL. (513) 752-9696; GOLDEN, CO (XRAL Laboratories) TEL. (303) 277-1377;

BIRMINGHAM, AL TEL. (205) 942-3120; MOBILE, AL TEL. (205) 432-2781; KENAI, AK TEL. (907) 283-2211;

International Offices: CT&E is owned by SGS Societe Generale de Surveillance, headquartered in Geneva, Switzerland. SGS has prescense in 140

countries with 265 laboratories world wide.

Commercial Testing and Engineering Co. (Continued)

CT&E, founded in 1908, has become America's largest independent coal testing and consulting company based on our on-going drive for professional excellence and integrity. We continue to expand and upgrade our staff and services to meet ever increasing demands of the rapidly changing coal industry.

CT&E has over 50 laboratories and 30 sampling locations, strategically located in principal coal mining areas, Great Lakes and tidewater ports, river loading facilities, and major consumption areas, processing plants, domestic and international shipping ports, and is part of the world-wide SGS Group.

CT&E provides worldwide management, training, inspection, sampling, and analytical services for coal, coke, RDF, minerals, chemicals, ferro-alloy, and environmental properties. We conduct inspections, sampling, and analysis of shipments of loading, in transit, and at destination. Our laboratories perform routine chemical and physical analyses on materials from reserve evaluation through utilization. We perform plant evaluation and personnel training for coal consumers.

Products/Service	Description
Laboratory and Field Services	Coal Core logging and evaluation. Inspection, sampling and analysis of coal, coke, RDF, and environmental parameters.
Technical Services	Sampling system performance testing; weighing system and certification, stockpile inventories, coal quality evaluation; inter-laboratory performance evaluations; power plant performance, evaluation, start-up, operator training, combustion and emission studies; laboratory audits, ISO 9000 programs.
Equipment and Product Sales	Crushers, pulverizers, rotary sample dividers, coal testing equipment and non-toxic heavy liquids.

Commodity Analysis Technologies 2004 S. Wright Street Urbana, IL 61801

Telephone: (217) 244-7144

FAX: (212) 244-7757

Product/Service

President/CEO: Youngwhan Lee Charles Kolstad Sales Manager:

Description

Commodity Analysis Technologies

Commodity Analysis Technologies offers short- and medium-term demand, supply and price forecasting software applications for the steam coal industry. Customized software packages can also be developed for clients with specialized needs. The software runs on PCs and PC-compatible computers. The applications and application authoring tool are completely reconfigurable. The original software was developed by Dr. Charles Kolstad, energy economist.

	•
ICMMS	International Coal Market Modelling System forecasts world coal prices.
USCEMMS	United States Coal and Electric Modelling System forecasts United States coal and electricity prices.
BFMMS	British Fuel Market Modelling System forecasts British fuel demand.

CONSOL, Inc., a member of the CONSOL Coal Group Consol Plaza, 1800 Washington Road Pittsburgh, PA 15241

Telephone: (412) 831-4000 Telex: 247-634 CONSLUR FAX: (412) 831-4916

Chairman/President/CEO: B.R. Brown Executive V.P.-Marketing: R.B. Atwater

Domestic Offices: Atlanta, Chicago, Cleveland, Norfolk, Philadelphia,

Rochester

International Offices: Brussels

CONSOL Coal Group consists of Pittsburgh-based Consol Inc. and other related companies, among them Consolidation Coal Company, Consol Pennsylvania Coal Company, Enlow Fork Mining Company, Fairmont Supply Company, and others.

CONSOL Coal Group is the nation's second-largest coal producer, having produced 56.3 million tons of coal in 1992 from 25 mines and related facilities in six states and Alberta, Canada.

Most of that coal -- about 69.1 percent -- went to the electric utility market, while 13 percent was exported overseas. The remaining 17.9 percent found its way into the steel and coke industries and industrial and other applications.

In recent years, the CONSOL Coal Group companies have made extensive capital investments in new mine development and in modernizing existing operations. It is the leading user of modern longwall mining technology in the United States.

Products/Services Description

Business: Steam and Metallurgical Coal Products; Coal Export Terminal.

S.I.C.: 1221: 1222

Consolidated Rail Corporation 2001 Market Street Philadelphia, PA 19101-1420

Telephone: (215) 209-7480 **FAX:** (215) 209-7448

Chief Executive Officer: Mr. J. A. Hagen, Chairman, President, and CEO Assistant Vice President: Mr. R. W. Lynch, Coal Coke and Iron Ore

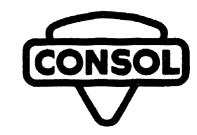
Mgr - Coal Mktg/Sales Export: Mr. R. B. Schurr

Sales Office-Domestic/International: PHILADELPHIA, PA, TEL. (215) 209-7480

With rail lines in 14 Eastern and Midwestern states in the United States, Conrail offers direct rail transportation links between coal producing regions, shippers, and international coal buyers. The diverse characteristics of coal accessible by Conrail are well-suited to the energy needs of the world economy, providing premium energy required to generate electrical power and coking coals for metallurgical applications. Reserves in excess of 25 billion tons of bituminous and anthracite coal for steam and metallurgical use are located within Conrail's operating areas and are readily available for the export market. Conrail is committed to continue its partner relationship with coal producers, traders, and international coal buyers.

Product/Service Description

Provide seamless transportation service and price for transportation of coal into the export market. Conrail offers a full range of routing and shipping options combined with state-of-the-art transfer, blending, and storage capabilities; along with the ability to load 7,000 tons of coal per hour and up to 15 million tons per year. Conrail has direct access to The Consolidation Coal Sales Terminal at the Port of Baltimore. Conrail, through its modern, high-capacity transfer operations located on Lake Erie at Ashtabula, Ohio, is strategically positioned for export coal movement through the Great Lakes/St. Lawrence Seaway. Also, through interchange with other railroads, Conrail can deliver to any port in the U.S.A.



Conti Testing Laboratories, Inc. P.O. Box 174 Pittsburgh, PA 15102

Telephone: (412) 854-3751,

(412) 833-7766

FAX: (412) 854-0373

Chief Executive Officer:

Timothy G. Otroba

Conti Testing Laboratories (CTL) is an analytical laboratory with expertise in Coal (analysis, sampling, and Float/Sink Testing). CTL specializes in 24 hour results for routine analysis and is capable of "same day" analysis for "rush" samples. Conti Testing is the first commercial laboratory approved by DOE/PETC to perform micronized Float/Sink Testing via centrifuge for advanced clean coal technologies. DOD and DOE have approved CTL for coal sampling and analysis for federal government coal contracts. In addition, CTL has expanded to include the behavior in fire analysis of combustion and pyrolysis gases.

Product/Service	Description
Routine Coal Analysis	All routine analysis necessary to determine the quality of coal/coke/petroleum coke for shipment is completed within 24 hours.
Float/Sink Testing	Float/Sink Testing of coal from 2" top size through 400 mesh x 0. Centrifuge separation is used for all coal sizes less that 28 mesh x 0.
Technical Consulting	Laboratory data generated for any type of coal analysis.
Toxic Gases	Laboratory scale quantification of toxic gases emitted from burning components of transportation vehicles and building materials.

Corporate Strategies, Inc. 5415-A Backlick Road Springfield, VA 22151

Telephone: (703) 941-0560

(800) 969-0560

FAX: (703) 642-8998

Chief Executive Officer: Robert H. Leilich International Sales Manager: Robert H. Leilich



The company specializes in total coal logistics, primarily rail oriented. The firm was founded in 1979 and has over 40 domestic and foreign clients involved in coal logistics and transportation. Resources include over 15 staff and contract specialists covering all aspects of coal transportation operations, equipment, facilities, and contracts. The company has provided consulting services through the World Bank, the Inter-American Development Bank, and the United Nations Development Program. CSI clients include utilities, engineering firms, transportation companies, and governments.

Product/Service	Designation	Description
Transportation Planning	Train Performance Calculator Train Dispatch Simulation	Using a variety of models, service and operating strategies can be developed for specific needs
Transport, Equipment and Facilities Economic Evaluation	Costing/Trade-Off Models	Development of component costs, present values, and economic trade offs.
Transport Equipment		Design specifications, maintenance evaluation, strategic planning.
Transportation Contracts		Negotiations, preparations
Strategic Planning		Total coal logistics planning and evaluation facilities, equipment, operations, materials handling.

CP Rail System (Soo Line Railroad) 105 S. 5th Street, Box 530 Minneapolis, MN 55440

Telephone: (612) 337-8683 (612) 337-8645 FAX:

President/CEO: Sales Manager:

Edwin V. Dodge John A. Rickoff

Domestic Offices:

Minneapolis, MN Terre Haute, IN

International Offices:

Vancouver, B.C. Canada

Soo Line Railroad is a Class I carrier operating in the Midwest. It is a wholly owned subsidiary of Canadian Pacific, Lt. and part of CP Rail System, a North American transcontinental railroad comprised of CP Rail, Delaware and Hudson, and Soo line.

Soo Line handled 16 million tons of coal last year and is capable of moving coal to KCBX Terminal in Chicago and Jefferson County Riverport in Louisville, KY for export markets.

Products/Service

Description

Rail Transportation

Movement of coal by rail in shipment sizes varying from single cars to unit trains.

CQ Inc. **One Quality Center** P.O. Box 280 Homer City, PA 15748

Telephone: FAX:

(412) 479-3503 (412) 479-4181

Chief Executive Officer: International Sales Manager: Mr. Clark D. Harrison Mr. James W. Parkinson

International Offices:

Please contact company headquarters for further information.

CQ Inc. -- a wholly owned subsidiary of the Electric Power Research Institute -- is dedicated to providing coal suppliers and power producers worldwide with products and services that will help them remain within emissions compliance limits; keep prices competitive; reduce risks; and optimize operating performance. CQ Inc. experience includes management of a \$21.7 million project sponsored by DOE and EPRI to develop a software tool that utilities can use to determine the least expensive coal to burn while remaining within emissions limits; O&M contracts for commercial-scale and demonstration coal cleaning plans; production of specialty coals and coal-water fuel in 5000-gallon batches for demonstration testing; comprehensive characterizations of coals of all ranks; demonstrations of advanced coal cleaning technologies; and toxics control studies.

Product/Service	Description
Fabricated Fuels	Supply customized coal in large quantities, including premium-quality coal and coal-water fuel for diesel engines. Also developing alternative fuels mainly composed of waste materials.
Contract O&M Services	Ensure reliable, accurate operation and maintenance of scales, samplers, and on-line analyzers at customer sites. Operate customers' coal cleaning plants, producing consistent-quality compliance coal at maximum plant efficiency.
Contract Research and Engineering Studies	Provide commercial-scale coal characteristics; coal cleaning and dewatering equipment performance tests; weighing and sampling equipment selection and troubleshooting; toxics control studies, coal

processing simulation studies, and energy-related software support.

Crosby Valve & Gage Company 43 Kendrick Street Wrentham, MA 02093

Telephone: (508) 384-3121

Telex: 924443 FAX: (508) 384-8675

President/CEO: Richard T. Levis
Vice President - Marketing and Sales: Wallace M. Lueders



Domestic Offices:

EXECUTIVE AND SALES HEADQUARTERS, AND WRENTHAM PLANT: 43 Kendrick Street, P.O. Box 308, Wrentham, MA 02093, TEL. (508) 384-3121, (508) 384-7964, TLX. 924443, FAX (508) 384-8675, Cable: CROSBY ASH-WRAM; SOUTHEASTERN REGIONAL SALES OFFICE: 529 Versailles Drive, Suite 102, Maitland, FL 32751, TEL. (407) 647-1900, FAX (407) 647-3735; NORTHERN REGIONAL SALES OFFICE: 580 Sylvan Avenue, Englewood Cliffs, NJ 07632, TEL. (201) 569-2528, FAX (201) 569-4905; WESTERN REGIONAL SALES OFFICE: 212-A Technology Drive, Irvine, CA 92718, TEL. (714) 753-9088, FAX (714) 753-9188; SOUTH CENTRAL REGIONAL SALES OFFICE: Crosby Valve Corporation, 1467 Brittmoore Road, P.O. Box 19217 (77224), Houston, TX 77043, TEL. (713) 464-0201, TLX. 762618, FAX (713) 984-0224, Cable: CROSVALCGR HOU

International Offices:

CANADIAN OPERATIONS (Headquarters, Sales Office): Crosby Valve Ltd., 975 Fraser Drive, Units 19 & 20, Burlington, Ontario L7L 4X8, Canada, TEL. (416) 681-2310, FAX (416) 681-1884; UK OPERATIONS: ENGLAND (Headquarters, England Sales Office and Market Harborough Plant): Crosby Valve and Engineering Co., Ltd., Crosby Road, Market Harborough, Leics LE 16 9EE, England, TEL. (44) (858) 467281, TLX. (851) 34431 CROSBYG, FAX (44) (858) 434728; SCOTLAND (North Sea Operations): Crosby Services International Ltd., Wellheads Terrace, Wellheads Industrial Estate, Dyce, Aberdeen, AB2 0GF, Scotland, TEL. (44) (224) 722562, TLX. 739766, FAX (44) (224) 770392; ASIA PACIFIC OPERATIONS: SINGAPORE (Asia Pacific Regional Sales Office): Crosby Valve & Gage Company, 510 Thomson Road, #14-03 SLF Building, Singapore 1129, TEL. (65) 353-8879, TLX. RS252621 CROSBY, FAX (65) 353-6092

Crosby Valve & Gage Company has over 120 years of experience in the manufacture of pressure relieving devices. Crosby offers a complete line of products for overpressure protection, meeting the requirements of ASME and other internationally recognized Codes and Standards, as well as the most rigid quality management requirements of ISO-9001. Crosby Valve serves Original Equipment Manufacturers, Architect Engineers and Users.

Products/Service	Description
Boiler Equipment	Complete line of ASME Section I and Section VIII safety valves, and safety-relief valves for use in utility and industrial steam systems, as well as auxiliary air, steam and liquid applications.
Facility Operations	Crosby offers complete Start-up and Maintenance Capabilities, Contract Management, Valve Repair Centers, Replacement Parts, Valve Testing Facilities, Field Service, and Pressure Relief Valve Maintenance Training Seminars.

CSA Energy Consultants (CSA) 1901 North Fort Myer Drive, Suite 503 Arlington, VA 22209

Telephone: (703) 841-9644 **FAX:** (703) 841-9649

Chief Executive Officer: Richard A. Wakefield, Ph.D., President International Sales Manager: P. Jeffrey Palermo, Senior Vice President

Domestic Offices: CRUGERS, NY: P.O. Box 407, Crugers, NY 10521 TEL. (914) 271-8582

CSA specializes in solutions to the technical, regulatory, economic, and institutional problems of electric and gas energy systems, and is able to assist clients with local, national, and international energy issues. An important strength of the company is its ability to provide an interdisciplinary approach, integrating the technical, economic, regulatory, and management-related aspects of each job. Through this approach, CSA develops efficient, cost-effective solutions to complex problems. CSA's key personnel have had extensive international experience in Canada, South America, Europe, and

Product/Service	Description
Electric System Services	Generation and transmission planning; demand side planning and load management; load forecasting; and cogeneration investment.
Gas System Services	Rate comparisons; cogeneration investment; and district heating and cooling.
Rate, Regulatory, and Legal Services	Rate making - policies, procedures, and setting rates; interutility competition and coordination; operating incentives - system and plant; transmission rates; transmission access; rate cases; and regulatory changes.
Management Services	Strategic planning; non-utility generator bid evaluation; resource allocation; non-technical impediments to utility planning and operation; cogeneration feasibility; and district heating feasibility.
Informational and Statistical Services	Rate data comparison and analysis for electric and gas systems; power system database specification and development.
Educational Courses	Transmission, Competition, Coordination and Contracts; Electric System Interconnections, Coordination, Contracts and Deregulation; Transmission Systems - How They Really Work; Electric Power Systems - How They Really Work; Independent Power Resources: Bidding, Evaluation, and Contracts; An Introduction to Electric Utility Economics, Finance, and Rate Making; and Electric Power System Planning in the Real World.

TRANSPORTATION

CSX Transportation, Inc. 500 Water Street, J842 Jacksonville, FL 32202

Telephone: (904) 359-7561 **FAX:** (904) 359-3341

Chief Executive Officer: A.R. "I

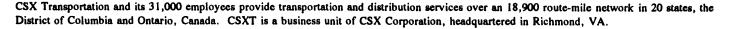
International Sales Mgr:

A.R. "Pete" Carpenter

Dennis L. Damron, Director Export Coal

Domestic Offices:

500 Water Street, J842 Jacksonville, FL 32202



CSX Transportation is part of a family of global transportation companies that include Sea-Land Service Inc. and American Commercial Lines Inc. Sea-Land is the largest U.S.-flag container-shipping company and a world leader in international intermodal freight transportation and related trade services. Sea-Land operates a fleet of 88 container ships and more than 157,000 containers in U.S. and foreign trade and serves 100 ports in 70 countries and territories. American Commercial Lines is the nation's leading inland marine services company operating on the 15,000 mile U.S. inland waterway system.

Products/Service

Description

CSX Transportation's rail lines serve more mines and utilities than any other transportation company in the world. Coal accounts for four of every 10 carloads -- about one-third of the company's revenue base.

CSX Transportation serves regions containing more than 30 billion tons of economically recoverable coal reserves located in West Virginia, Kentucky, Pennsylvania, Illinois, Maryland, Indiana, Ohio, Alabama, Tennessee and Virginia. These reserves contain all types of top-quality compliance coal and high-grade metallurgical coal.

CSXT's rail lines serve coal piers in Alabama, Maryland, South Carolina and Virginia as well as various river terminals for export through New Orleans.

Dames & Moore **Executive Headquarters** 911 Wilshire Boulevard, Suite 700 Los Angeles, CA 90017



Telephone: (213) 683-1560

Telex: Chief Executive Officer: Chief Operating Officer:

15528 FAX: (213) 628-0015 George D. Leal

Henry Klehn, Jr.

Manager International Division: Peter Rowley (London office)

Domestic Offices:

83 offices throughout the U.S., including DENVER, CO: TEL. (303) 294-9100; CINCINNATI, OH:

TEL. (513) 651-3440; HOUSTON, TX: TEL. (713) 688-4541; PHILADELPHIA, PA: TEL. (215) 657-5000;

BIRMINGHAM, AL: TEL. (205) 969-2677

International Offices:

40 international offices and affiliates, including ENGLAND: London TEL. 44-81-891-6161; AUSTRALIA: Sydney

TEL. 61-2-955-7772

Dames & Moore is a 55-year-old, diversified professional consulting organization for projects involving planning, engineering, the earth and environmental sciences, waste management, design, construction management, and permitting assistance. Among its wide range of clients are mining companies, utilities, and multinational energy corporations. The firm reports annual billings of \$357 million, and employs 3,200 professional and support staff in more than 117 offices worldwide.

Product/Service	Description	
Coal Mining	Geological reconnaissance; exploratory drilling and geophysical logging; mapping of coal characteristics, reserve calculations, pre-mining and mining feasibility studies; design of mining systems; surface and underground mine layout and designs; technical and economic evaluations; restoration and reclamation of mine properties.	
Technical Consultants	Specialist services in coal mine ventilation; strata control, subsidence engineering; mine fires, spontaneous combustion; methane drainage and degasification of coal seams; expert witness testimony.	
Utilities	Development of fuel procurement strategy and fuel specifications; formulation and review of contracts, terms and conditions; evaluation of escalation components; identification and technical evaluation of potential suppliers in terms of reserves, coal quality, production facilities and capabilities; coal preparation and loadout facilities; negotiations on price and delivery for long-term supplies.	
Coal Transport	Analysis and risk assessment of technical and economic aspects of alternative coal transportation systems, including rail, barge, ship, truck and pipelines.	

Denver Equipment Company 621 South Sierra Madre Colorado Springs, CO 80903

Telephone: (719) 471-3463

Telex: 168169 FAX: (719) 471-4469

President: International Sales Manager: Mr. John B. Lundberg Mr. Dennis French

International Sales Offices:

In every country in the world. Contact F. Marconi for name, address and contact information of local sales

representative.

The Denver Equipment Company has been designing and manufacturing mineral processing equipment, worldwide, since 1927.

In addition to the coal processing and sampling equipment detailed below, Denver's engineers design systems to meet your specific application. Denver's worldwide installation list gives a credibility to the years of experience in design and manufacture which have built Denver's reputation.

Product/Service	Designation	Description
Flotation Equipment	DR° and Cell-to-Cell Sub A°	Cells up to 1500 cu ft increase your recovery, whether direct recirculation or cell-to-cell flotation conditioning.
Filters	Tube Press	High pressure filters for dryer cakes; belt filters for dewatering coal fines, disc and vacuum filters.
Heat Exchangers	Holo-Flite*	Custom designed to your application for dewatering and producing more fine- sized coal than other methods.
Thickeners	BL, RD, CRB, D and H Lamelia	Rugged, durable and proven up to 250 ft. in diameter. Center pier or bridge mounted units. For thickening refuse, magnetite and all coal slurries. Also, Lamella parallel plate separators.
Agitators	MIL*	Denver's patented Minimum Induced Loss propellers give high axial flow efficiency. Proven to 22 ft. diameter

Diamond Power Specialty Company 2600 East Main Street Lancaster, OH 43130

Telephone: (614) 687-6500

Telex: 246635 FAX: (614) 687-4304

Chief Executive Officer: International Sales Manager: James S. Kulig David W. Neal

International Offices:

AUSTRALIA: Diamond Power Australia, 5 Herefort Rd., Berkeley Vale, NSW TEL. 61-43-88-4655; CANADA: Diamond Canapower, 1122 Pioneer Road, Burlington, Ontario TEL. (416) 355-0321;

FINLAND: Diamond Superior OY, PL 33, 00701 Helsinki TEL. 358-0-358311; PEOPLES REPUBLIC OF CHINA: Diamond Power Hubei Machine Co., Ltd, 251 Jingyuan Da Dao, Xinshi Zhen, Jir shan County, Hubei TEL. 86 7269 21349; SWEDEN: Diamond Superior AB, P.O. Box 20035, S-161 02 Bromma TEL. 46-8-290440;

ENGLAND: Diamena Power Specialty Ltd., Glasgow Road, Dumbarton, Scotland G82 1ES TEL. 44-389-64151.





Diamond Power Specialty Company (Continued)

Diamond Power is the world's largest manufacturer of boiler cleaning systems with special emphasis on the utility, pulp and paper, process industry, industrial, cogeneration and refuse boiler markets. Diamond maintains fourteen service centers worldwide to provide parts distribution and equipment rebuild and maintenance services for its customers. Diamond also maintains an extensive network of service engineers to provide on-site service, consultation, and supervision. The reliability of Diamond's equipment, coupled with its boiler cleaning expertise, provide its customers with a fully integrated package to assist in the efficient operation of their boilers.

Diamond Power Specialty Company is a boiler performance company with vast capabilities in cleaning, combustion monitoring, analysis and diagnostics. We create total systems of integrated products and services to give operators customized control over individual boiler performance. This revolutionary total system and service approach is designed to help plants in the utility, pulp and paper, process industry, industrial, cogeneration and refuse boiler markets improve boiler cleanliness, increase efficiency and enhance overall plant performance.

Product/Service	Designation	Description
Boiler Cleaning Equipment	Sootblowers	Diamond manufactures a wide range of air, steam, and water sootblowers designed for virtually every market. Included are heavy duty retractable blowers, fixed position rotating blowers, and the waterlance. Many of the blowers incorporate the new selective pattern and partial arc cleaning patterns.
	Controls	Diamond's Boiler control System TM (BOS) controls and monitors boiler cleaning devices. Using industry standard and accepted hardware, it operates as a stand-alone or can be integrated with a plants' existing Distributed Control System. Advanced control features give the operator control of boiler cleaning devices by way of variable pressure and variable speed. The BOS control system supports on-demand cleaning and incorporates into Diamond's diagnostics family of products.
	Water Level Monitoring Systems	Diamond's boiler drum level equipment covers a full spectrum of monitoring products including port type gauges, support tubes, gauge valves, fiber optic sighting equipment, and electrode based remote level indicators (MERLI TM). No matter what your needs, we have the right gauge equipment for you.
	Air Port Cleaning Systems	Diamond's port cleaning systems are specifically designed for automatic cleaning of the air ports on recovery boilers. A heavy duty air cylinder mounted to each port and operated from a programmable control system keeps the ports open to improve boiler operation.
	Maintenance and Rebuild Services	Diamond provides maintenance and rebuild services at the plant site or at one of our U.S. service centers. Our rebuild service ranges from component rebuild to the rebuild of entire sootblowers. All rebuild components use genuine Diamond parts and carry the same warranty as new equipment. Services include maintenance contracts as well as per diem service assistance.
	Mirror Insulation	Mirror insulation is a high quality, all metal reflective insulation made for easy removal and reinstallation. It has the capability of providing excellent thermal insulation and at the same time can be cleaned or decontaminated, if necessary, by simple wash down procedures. Mirror is made for the smallest piping right up to and including reactor vessel insulation
Boiler Cleaning Technology	Diagnostics	It is the diagnostic "toolbox" that takes Diamond from just a hardware supplier to a boiler performance company. With products like the Cleaning Advisor™, Fireside Advisor™, FLAMEVIEW™, GASTEMP™, and others, Diamond can help customers solve boiler operation problems before they become critical.

Dixie Carriers, Inc. 1775 St. James Place P.O. Box 1537 Houston, TX 77251

Telephone: (713) 622-5502 (800) 324-2441

FAX: (713) 964-2200

Chief Executive Officer: Joseph H. Pyne Executive Vice President - Offshore Division: Kenneth C. Bush



Dixie Carriers, Inc. operates 6 U.S. flag dry bulk ocean tug barge tows of 17,000 DWT. Vessels trade domestic U.S., Puerto Rico, Central and South America, West Africa, and Europe carrying coal, grain, fertilizers, ore and other dry bulk commodities and containers. Dixie Carriers, Inc. is a subsidiary of Kirby Corporation, whose stock is traded on the American Stock Exchange.

Product/Service	Designation	Description
Coal Transportation	Ocean Barging	Cross gulf
Limestone	Ocean Barging	Cross gulf
Grain	Ocean Barging	Puerto Rico, South and Central America, West Africa, and Europe
Containers	Ocean Barging	Europe

Duke Energy 400 S. Tryon Street **Suite 1800** Charlotte, NC 28285

Telephone: (704) 382-2520

FAX: (704) 382-9325 M. Rhem Wooten, Jr. President: Vice President: Larry N. Frost

Domestic Offices: International Offices:

CHARLOTTE, NORTH CAROLINA, TEL. (704) 382-2520 AUSTRALIA: Duke Australia, Victoria, TEL. (61) 03-867-7599

Duke Energy structures, finances and manages investments in electric power facilities. Duke Energy's primary role is to manage the commercial and other relationships necessary for a given project. This includes siting, licensing, community relations, contract negotiations, construction oversight, and long-term operation management.

Within the U.S., Duke Energy's primary focus has been the greenfield development of advanced coal-fired generation, including pulverized coal, circulating fluidized bed and coal gasification technologies. For international markets, Duke Energy pursues ownership and operation of advanced coal-fueled, hydroelectric and gas-fired generation, as well as transmission and distribution systems.

Duke Energy is a wholly owned affiliate of Duke Power, the seventh-largest investor-owned utility in the U.S.

Products/Services	Description
Advanced Utilization (IGCC)	Duke Energy, in concert with its affiliates and partners, offers the integrated coal gasification combined cycle technology that utilizes the fixed-bed British Gas Lurgi gasifier. Duke Energy, one of five award winners under the U.S. DOE's Clean Coal Technology V Program, also is developing the IGCC technology in the U.S.
Financing/Equity Ownership	Duke Energy pursues advanced coal-fired, hydroelectric and gas-fired generation as well as transmission and distribution systems.
Technical Services	Duke Energy affiliates Duke Engineering & Services and Duke/Fluor Daniel may provide design engineering procurement, construction, start-up, operation and maintenance, and technical services to projects where Duke Energy has an ownership interest.



East-West Center Program on Resources 1777 East-West Road Honolulu, HI 96848

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Eavenson, Auchmuty & Greenwald Consultants To The Mining Industry

Founded 1920

Telephone: (808) 944-7560

Telex: 230-989171 EWC UD; FAX: (808) 944-7559

Director: Fereidun Fesharaki, Program on Resources: Energy and Minerals

Head, Coal Project: Charles Johnson

The East-West Center brings together people from the U.S., Asia, and the Pacific to study and seek solutions to problems of social, economic, and cultural change. The Center conducts programs of applied research in which people of divergent cultural, political, and professional backgrounds work collaboratively on the region's critical issues. Located in Honolulu, Hawaii adjacent to the University of Hawaii at Manoa, the Center's interests extend from Iran eastward through Asia to Japan, and from Australia across the Pacific to the United States. Established in 1960 by the U.S. Congress, the East-West Center is an educational, non-profit public institution with an international Board of Governors.

Product/Service	Description
Coal Research	Prepare estimates of long term trends in coal supply-demand and trade for all significant coal using countries in the Asian region.
Coal Technology	Prepare projections of electricity growth, coal-fired generation capacity, and rates of introduction of Clean Coal Technologies in Asia.

Eavenson, Auchmuty & Greenwald Airport Office Park III 420 Rouser Road Coraopolis, PA 15108

Telephone: (412) 262-5300 **FAX:** (412) 262-5303

Chairman of the Board:

Executive Vice President:

Edward H. Greenwald, Sr.

Richard F. Wesner

Edward H. Greenwald, Jr.

Domestic Offices:

DANVILLE, PA: R.D. #4, Box 279, Danville, PA 17821 TEL. (717) 275-4043

For nearly seventy-five years EA&G has performed consulting work concerned with the mining, transportation, and marketing of coal and other minerals. The firm's capabilities encompass both economic and technical analysis over a full spectrum of mining industry tasks and requirements. EA&G's expertise has relevancy at every stage involved in the development of a project -- from original conception through feasibility determination, design, engineering, construction, start-up, and full operation. The firm strongly believes that the economics of a project must be advanced parallel to the solutions to each project's distinct technical problems. The integration of these two inseparable factors underlies EA&G's approach to every task which it undertakes on behalf of its clients.

Product/Service

Architecture/Engineering (A&E)

Description

- Technical ConsultantsProject design and engineering for surface and underground mining operations, including determination of both technical and economic feasibility;
- Electrical cogeneration, solid fuels sourcing, characterization, blending, storage and handling systems design and engineering;

Eavenson, Auchmuty & Greenwald (Continued)

- Marketing, including analysis of existing markets and projections of future consumption trends;
- Transportation of mineral products by rail, water, truck, conveyor, and pipeline;
- Environmental and site planning, including the intricacies of permitting, licensure, and statutory/regulatory conformance;
- Mineral preparation and beneficiation, material handling, blending, and other steps and technologies involved in materials handling and treatment;
- Business management services to optimize profitability, identify and eliminate waste or loss factors, and provide knowledgeability concerning state-of-the-art management practices elsewhere in the industry;
- Specialized services in the areas of taxation, forensics, arbitration, and related subjects impacting both planned and existing operations;
- Geological analysis, exploration, and reserve studies;
- Valuations and appraisals of reserves and facilities;
- Technology-intensive computer-assisted research and development, both "project-oriented" and with reference to existing operations.

Ecology and Environment, Inc. **Buffalo Corporate Center** 368 Pleasantview Drive Lancaster, NY 14086

(716) 684-8060 (716) 684-0844

Telephone: FAX:

ecology and

Chief Executive Officer:

Mr. Gerhard J. Neumaier

International Sales Manager:

Mr. Henry Labalme, Arlington, VA

Domestic Offices:

ARLINGTON, VA: International Operations Office, 1700 North Moore St., Arlington, VA 22209, TEL: (703)

522-6065; FAX: (703) 558-7950; MCI TELEX: 650-267-6032. Additional offices in 23 U.S. cities.

GERMANY: E&E UMWELT BERATUNG GmbH, Chemnitzer Strasze 13, Postfach 7, D-09222 Gruna, International Offices:

TEL; (0371) 88-77-33; FAX: (0371) 88-77-07, Attn: Rolf George. E&E has representatives in 22 other countries;

contact Arlington, VA for additional information.

Founded in 1970, E&E has more than 1,200 environmental specialists, representing over 70 scientific and engineering disciplines. The firm provides solid, hazardous and nuclear waste site remedial investigations and feasibility studies; environmental engineering design, planning and construction management; environmental audits and impact assessments; hazardous materials management and emergency spill response; hazards and risks analyses; hydrogeological studies; air and water pollution control; field monitoring, testing, and analytical laboratory services; asbestos removal management; socioeconomic studies; archaeological and cultural resources programs; and related environmental consulting work.

Product/Service

Description

Environmental Consulting

E&E's complete range of environmental and pollution control consulting services is offered worldwide to organizations mining, transporting and/or utilizing coal and other natural resources.

Electric Fuels Corporation 235 Third Street South P.O. Box 15208 St. Petersburg, FL 33733

Telephone: (813) 892-2700

Telex: 514168 FAX: (813) 892-2702

Chief Executive Officer: Richard D. Keller International Sales Manager: Robert Ramey



coal, operations, marine and terminaling, alternative fuels and international marketing. The integration of these groups under Electric Fuels' management provides the necessary exposure to all phases of the coal industry. Products/Service Description Advance Utilization With access to experts in virtually every application of coal combustion, Electric Fuels can provide qualified technical know-how in the areas of ash utilization, mineral and metal recovery from ash and in ash disposal. From start to finish, Electric Fuels' customers are assured of experienced assistance with all their coal handling needs. EFC has developed services ranging from field and laboratory functions to advanced computer support. Coal Derivatives Electric Fuels' involvement in the development of alternative fuels is through COMCO, a leader in the manufacture of coal-oil mixture (COM), coal-water mixture (CWM) and petroleum coke-oil mixture (PETCOM). Coal-liquid mixtures are produced at COMCO's Port Sutton, Florida facility. REDICOAL, COMCO's new powdered coal product for industrial and utility use, has proved to be an economical replacement for fuel oil and natural gas. Coal Mining The coal group is responsible for the mining and preparation of coal from sites containing approximately 300 million tons of reserves located in the states of Virginia, West Virginia and Kentucky. Origin points have capability to load barges, trucks and unit trains. Coal Transport Marine Equipment Management Corporation, a wholly-owned subsidiary, handles coal from all inland river origins in either single barge or unit tow lots. Standby loading is available. Covered barges are available. MEMCO also offers switching and fleeting services at various Mississippi River ports. Dioxide Fuels Limited offers handling, storing, terminaling and transporting bulk cargo by sea-going marine transportation equipment. **Facility Operations** International Marine Terminals is a bulk materials handling facility strategically located near the mouth of the Mississippi River. The recently expanded terminal consists of modern facilities, ground storage/blending and a coal testing laboratory operated by an independent agent. Hatfield Terminals operates transfer facilities in Cincinnati, Ohio, on the Ohio River and near Charleston.

Kentucky May Coal operate a coal transfer facility on the Big Sandy River.

West Virginia, on the Kanawha River.

Electric Fuels Corporation (EFC) through its many subsidiaries is involved in coal mining, coal transportation, coal transfer facilities, fuel research in the coal area and the development of coal-based alternative fuels. Electric Fuels has developed a coal management system that has proved to be successful and highly competitive in supplying coal from mine site to the customer. This fully-integrated system is composed of five essential groups:

Ellis & Watts **Division of Dynamics Corporation of America** 4400 Glen Willow Lake Lane Batavia, OH 45103

Telephone:

(513) 752-9000

FAX: President: (513) 752-4545

International Director:

Andrew J. Pike

Dennis J. Pawlak



Ellis & Watts is a major manufacturer of engineered Heating, Ventilating, and Air Conditioning equipment for environmental control. It was established in 1952 and has over 200 employees at its 200,000 square foot facilities in Cincinnati, Ohio. Ellis & Watts' diversified product line provides the capability of having a single source for a plant's entire environmental requirements.

Product/Service

Description

Facilities Operation

Ellis & Watts' environmental control equipment consists of Air Filtration Systems, Air Handling Systems, Volume Control Dampers, Explosion Proof Electric Duct and Unit Space Heaters, and custom built Air Conditioning Systems. Our engineering staff has extensive experience in the design and coordination of custom built equipment for specific applications. Ellis & Watts is an international company with significant project experience throughout the world.

Ellison Consultants 4966 Tall Oaks Drive Monrovia, MD 21770-9316

Telephone: (301) 865-5302 FAX:

(301) 865-5591

Chief Executive Officer: **International Sales Manager:**

Mr. William Ellison Mrs. Gerd A. Ellison



Formed in 1981, this independent consultancy specializes in assessment and commercial application of SO₂, NO₂ and air toxics control technologies and methods for management of collected wastes. The firm has extensive engineering design and technical marketing experience and background in all worldwide countries that utilize state-of-the-art technology for control of air pollution in the firing of solid fuels including municipal solid wastes. Clients include government agencies, electric utility companies, gas cleaning equipment and gypsum manufacturing companies, law firms, and technical development organizations.

Product/Service

Description

Control Technology

Consulting expertise in evaluation, selection and conceptual design of applicable emission control means Evaluation

for SO₂, NO₂ and air toxics.

Management of Collected Gas Cleaning Wastes

Expert technical services in planning and establishment of programs for utilization or environmentally

disposal of solid and liquid wastes.

EnCoal 105 East 4th Street Cincinnati, OH 45202

Telephone: (513) 621-3733 (513) 621-3734

FAX:

Chief Executive Officer: International Sales Manager:

L. Robert Folan Alan Tweedale

Domestic Offices:

HOT SPRINGS, VA: P.O. Box 826, Hot Springs, VA 24445 TEL. (703) 839-5111

International Offices: ENGLAND: 213 Upper Richmond Road West, London, SW14 8QT England TEL. 011-44-81-878-8355

EnCoal was founded in 1985 as the U.S. partnership between L. Robert Folan and Alan Tweedale. Tweedale has led the British Coal Board's research into clean coal burning technology since World War II. In the 1980's, he took this technology private with Energy Supplies, Ltd., which is very active today throughout the United Kingdom. EnCoal brings this technology into the United States market featuring small fluidized beds. EnCoal's first project will be to rebuild the power plant of The Homestead Hotel in Hot Springs, Virginia with a clean burning, coal fired cogeneration plant.

Product/Service

Description

EnCoal designs, builds, finances, and operates small steam driven power plants.

EnCoal contracts with customers to reduce their energy costs by utilizing clean combustion technology to produce steam that in turn produces electricity, process steam, heating, and air conditioning. EnCoal's technology complies with the proposed Clean Air Act of 1990, and is predicated on bottom line savings to the customer through a long term contract with EnCoal.

<u>En</u>ergy and

Energy and Environmental Research Corporation 18 Mason

Irvine, CA 92718

Telephone: (714) 859-8851 FAX:

(714) 859-3194

Chief Executive Officer:

Thomas J. Tyson

International Sales Manager:

S. Chen

Domestic Offices:

ORRVILLE, OH: 1645 N. Main, Orrville, OH 44667 TEL. (216) 682-4007, FAX (216) 684-2110; DURHAM, NC: 3622 Lyckan Parkway, Durham, NC 27707 TEL. (919) 489-1726, FAX (919) 493-5670; WHITEHOUSE, NJ: P.O.

Environmental
Research Corporation

Box 189, Whitehouse, NJ 08889 TEL. (201) 589-1726, FAX (201) 534-9018.

International Offices:

Please contact company headquarters for further information.

EER specializes in combustion and air pollution control for coal. This includes the development and application of advanced combustion systems and emission control equipment. EER also specializes in the turning and optimization of combustion equipment. This includes burner balancing, sootblower optimization and other techniques to produce optimum thermal performance and minimum emissions. EER has experience with all fossil fuels including coal, oil and gas. EER also has experience in the incineration of waste materials including hazardous waste; municipal solid waste and medical waste. Annual sales are approximately \$25,000,000. Employees number about 200, mostly engineers with advanced degrees.

Product/Service

Description

Coal Quality Evaluation

Comparative evaluations of alternate coals including analysis and test burns.

Emissions Compliance

Evaluations of alternate strategies for meeting NO₁, SO₂ and particulate emission regulations at minimum total cost.

Performance Optimization

Tuning coal combustion systems for maximum efficiency, minimum emissions and minimum total cost.

SO₂ Control Systems

Several SO₂ control processes including in furnace and duct sorbent injection systems.

NO, Control Systems

Several NO, control processes including reburning, ammonia injection, flue gas recirculation, low NO, burners and

several new technologies under development.

Energy International Corporation 135 William Pitt Way Pittsburgh, PA 15238

ENERGY INTERNATIONAL CORPORATION

Telephone: (412) 826-5350

5106019265 (U-PARC UQ) FAX: (412) 826-5378 Telex: President: Dr. Alan H. Singleton VP, Business Development: Mr. R.K. (Kim) Fenland

Energy International Corporation (EI) was formed to develop, license, and market new technologies and services for the advanced utilization of coal, special coal processing services, and the conversion of gas to premium liquid fuels. El provides these services worldwide, including resource evaluation and selection, environmental impact evaluation, market assessments and project development. These services are available from project inception through operational startup and can involve intermediate and final products.

Product/Service	Description
Advanced Utilization	El provides special Mineral Processing Services for grinding, washability studies, and testing of coals.
Power Generation Fuel (Underground Coal Gasification)	El's Underground Coal Gasification technology can supply a range of gas products for industrial fuel use, electrical power generation, or synthesis gas to produce transportation fuels, fertilizers, and plastics from uneconomically minable coal resources.
Coal Derived Products (Coal Water Slurry Fuels)	El develops and supplies specialized Coal Water Fuel slurries containing from 55% to 65% coal solids which can replace heavy fuel oil for electric power generation and for industrial boilers.
Mulled Coal	El provides and licenses technology for solving wet fine coal handling problems; provides economic alternatives to thermal drying and coal water slurries.
Coal Liquefaction	El provides and licenses technology for indirect coal liquefaction via gasification followed by proprietary Fischer Tropsch catalyst and process; the F-T technology is also applicable to natural gas feedstock.
Technical Consultants	El provides resource assessments, coal evaluations, technology transfer, process design, and project development and management services.

Energy Trading Corp. 767 Fifth Avenue, 44th Floor New York, NY 10153

Telephone: (212) 421-1930

Telex: 968693 ETCOAL NYK FAX: (212) 421-1937

President:

Mr. Emmanuel Merle

Domestic Offices:

Assistant to the President: Mr. Jean-Francois Baudry

Domestic Sales Manager: Marketing Manager:

Mr. Dan McQuade Mr. Laurent Lebras

Energy Trading Corp. is very active in the export of coal through the U.S. East Coast and Gulf ports. While most of their European steam exports originate from the Gulf, they rely on the East Coast for metallurgical products.

Recently, Energy Trading Corp. has become more involved in the "Northern Tier" and relies on Pennsylvania, Virginia, and West Virginia coal products to supply a growing number of domestic industrial accounts.

ENSR Consulting and Engineering 35 Nagog Park Acton, MA 01720

Telephone: (508) 635-9500 FAX: (508) 635-9180

Chief Executive Officer:

Robert Anderson International Sales Manager: Kathy Reppucci

Domestic Offices:

FLORENCE, AL: (205) 740-8240; ANCHORAGE, AK: (907) 561-5700; LOS ANGELES, CA; (Camarillo) (805) 388-3775 (Newport Beach) (714) 476-0321; SAN FRANCISCO, CA: (510) 865-1888; FORT COLLINS, CO: (303) 493-8878; HARTFORD, CT: (203) 657-8910; CHICAGO, IL: (708) 887-1700; BOSTON, MA: (508) 635-9500; MINNEAPOLIS, MN: (612) 924-0117; MAHWAH, NJ: (201) 818-0900; MOUNT LAUREL, NJ: (609) 234-5520; SOMERSET, NJ: (908) 560-7323; RALEIGH, NC: (919) 571-0669; PITTSBURGH, PA: (412) 261-2910; DALLAS,

TX: (214) 960-6855; HOUSTON, TX: (713) 520-9900; SEATTLE, WA: (206) 881-7700

International Offices:

SAN JUAN, PR: (809) 753-9509

ENSR Consulting and Engineering is an environmental services firm specializing in solving problems for industry. Areas of expertise include air, water, and hazardous waste management; environmental permitting; risk assessment; environmental management; and occupational health management. For 25 years, ENSR project managers have helped industrial companies solve some of the toughest environmental problems of our times. Most of our projects have been performed for private industry, including 43 of the top 50 Fortune 500 companies. ENSR's staff of more than 1,000 scientists, engineers, and support personnel have specialized expertise in more than 60 disciplines.

Product/Service

Description

Emissions Control & Waste Disposal

Systems

In-house resources for permitting, compliance, air toxics engineering, emissions management or risk assessment. Engineers have specialized expertise in wastewater treatment processes and air pollution control, design of landfills, hazardous waste incinerators, and remediation programs.

Technical Consultants

Property transfer/due diligence; cleanup of Superfund sites; environmental permitting of landfills, industrial developments, energy and mineral projects, industrial boilers, cogeneration plants; worker exposure, product liability, toxic torts; dioxin and benzene risk assessment; chemical and oil spills; environmental impact assessments.



ENSR

The ERM Group 855 Springdale Drive Exton, PA 19341

Telephone: (800) 544-3117

49600537 FAX: (215) 524-7335 Telex: Founder: Paul H. Woodruff International Sales Manager: Jack C. Newell



Domestic Offices:

SAN FRANCISCO, CA TEL: (510)

946-0455; DENVER, CO TEL: (303) 741-5050 OR (800) 669-7330; TAMPA, FL TEL: (813) 622-8727; CHICAGO, IL TEL: (708) 940-7200; BOSTON, MA TEL: (617) 742-8228; LONG ISLAND, NY TEL: (516) 921-4300; COLUMBUS, OH TEL: (614) 433-7900 OR (800) 966-3766; EXTON, PA TEL: (215) 524-3500; NASHVILLE, TN TEL: (615) 373-3350; HOUSTON, TX TEL: (713) 579-8999; SEATTLE, WA TEL: (206) 827-9440

International Offices:

AUSTRALIA, Environmental Resources Pty Ltd TEL: (011-61-2) 262-5716; BELGIUM, ERL Bruxelles TEL: (011-32-2) 732-5144; BRAZIL, SEMCO-ERM do Brasil Ltda. TEL: (055-11) 523-0055; CANADA, ERM-Canada, Inc. TEL: (604) 684-4434; ERM-Ontario, Inc. TEL: (416) 507-3343; ENGLAND, Environmental Resources Ltd. TEL: (011-44-71) 465-7200; Four Elements Ltd. TEL: (011-44-71) 973-8041; ERL (North) TEL: (011-44) 207-507254; Environmental Resources Ltd. TEL: (011-44) 604-791551; Environmental Resources Ltd. TEL: (011-44) 865-793004; Buxton Court TEL: (011-44) 865-204944; Enterprise House TEL: (011-44-70) 3-511-711; GERMANY, ERL-Umwelt Consult TEL: (011-49) 6251-76057; ERM Umwelt Consult Rhein-Ruhr TEL: (011-49) 2304-46652; HONG KONG, ERL (Asia), Limited TEL: (011-85-2) 72-20292; INDIA, ERM (India), Private Limited TEL: (011-91-44) 45-0425; IRELAND, ERL Northern Ireland TEL: (011-44) 266-48924; ITALY, ERL Italia S.r.I. TEL: (011-39-2) 295 22275; MEXICO, ERM-Mexico, S.A. de C.V. TEL: (011-525) 286-4625; NETHERLANDS, ERL Nederland B.V. TEL: (011-31) 795-22777; POLAND, ERM Polska Sp.Z.O.O TEL: (011-48) 22-15-35-44; PORTUGAL, Impacto 2000, Lda (ERM Portugal) TEL: (011-351-1) 315-0561; SCOTLAND, ERL North (Scotland) TEL: (011-44) 555-665937; SPAIN, ERL Espana, S.A. TEL: (011-34-1) 522-2750; TAIWAN, ERM-Taiwan TEL: (011-886-2) 16-0495

environmental consulting, construction management, analytical labor public sector clients. Specific services include site remediation; water resources; health, safety and toxicology; risk assessment; engineering; air quality management; construction and tank mana,

With 2,500 employees working from more than 75 locations worldwide, the Environmental Resources Management Group (ERM) provides exceptional and information and data management services to a wide range of provate and at consulting; hazardous/solid waste management; hydrogeology; ground vestigations; industrial/municipal water and wastewater treatment; omputer software; and information management services.

E. Tu Associates, Inc. 5725 Dragon Way, Suite 117 Cincinnati, OH 45227

Telephone: (513) 561-1010 FAX: (513) 561-1018

Chief Executive Officer: Elizabeth A. Tu Vice President: David Weil

E. Tu Associates, Inc. is a Far East consultant and trading company based in Cincinnati. We assist Asian trading companies in sourcing U.S. product, equipment, or technology. We provide either a "solution selling" service or a "match making" service for industrial products. We provide U.S. product and supply information quickly and efficiently so that the Asian buyer can make intelligent decisions. We welcome sincere inquiries with the intention to develop long term-export business with and to the Far East.

Product/Service	Description
Commercial and industrial burners	Gas and oil burners for commercial and industrial use. U.S. manufacturer.
Wet Electrostatic Precipitators	For stack smoke elimination. Low maintenance, high performance.
Solution selling	Source energy related or industrial products that are hard to find.
Match making or Rep-find service	Find unique energy related or industrial products for Asian trading companies to represent exclusively.

Exxon Coal and Minerals Company P.O. Box 1314 Houston, TX 77251-1314

Telephone: (713) 973-5333

Telex: 762171 EXXON ECM HOU FAX: (713) 978-5618

President: Vice President: R. P. Larkins R. J. Doyle

Vice President: Marketing Manager U.S. Coal: G.E. Tillman H.W. Ellis

Marketing Manager International Coal: E. W. Markowski



Exxon Coal and Minerals Company, a division of Exxon Corporation, markets coal produced from mining operations located in New South Wales, Australia, Colombia, South America, and Illinois and Wyoming U.S.A. During 1992, Exxon's share of production from these operations was 41 million short tons of coal, of which 12 million short tons were produced outside the United States. Exxon Coal USA, Inc., an affiliate of Exxon Coal and Minerals Company, was the fifth largest United States coal producer.

Product/Service

Description

Coal Mining/Coal Marketing

Exxon Coal USA, Inc. has two operating divisions within the United States. The domestic operations are The Carter Mining Company and Monterey Coal Company. The Carter Mining Company is an Eastern Powder River Basin coal producer which operates two surface mines in the Gillette. Wyoming, area that produced 24 million short tons in 1992. The Monterey Coal Company is an Illinois Basin coal producer which operates two underground mines in Illinois and produced 5 million

short tons in 1992. Coal quality specifications are available upon request.

Technical Support

Mining operations and marketing are supported by a coal research laboratory, and related facilities, with full-time research personnel at Exxon Research and Engineering Company in Baytown, Texas. Combustion furnace and state of the art technical facilities are available along with research personnel to analyze optimum, cost saving coal use for our customers. Technical service personnel visit on site with power plant staff for problem analysis.

Farrell-Cooper Mining Company P.O. Box 1947 6001 South Zero Fort Smith, Arkansas 72902

Telephone: (501) 646-4366 FAX: (501) 646-3220

Chief Executive Officer: William J. Cooper International Sales Manager: William J. Cooper

International Offices:

Please contact company headquarters for further information.

Farrell-Cooper Mining Company is in the business of mining, transporting and exporting bituminous coal and cannel coal for industrial fuel and domestic home heating fuel. We operate coal loading facilities on the Arkansas River (1,500 ton barges), but mainly at the Port of Corpus Christi, Texas. At Corpus Christi, we handle product for export as well as product being imported.



Description

Coal Exporters

Export facility is located adjacent to Port of Corpus Christi. The port's depth is 45 feet and is the deepest port on the

Gulf of Mexico.

Coal Mining

Operate two surface mines in the State of Oklahoma on Low Volatile and High Volatile Bituminous Coal. Operate two surface mines in the State of Texas on a High Volatile, Low Ash Cannel Coal under the name of Farco Mining of

Texas, Inc. All coal mines are equipped with coal washing facilities.

Coal Transport

All of our mines are equipped with railroad tipples in addition to major highway access.



The Fieldston Company, Inc. 1920 N Street, N.W., Suite 210 Washington, D.C. 20036-1613



Telephone: (202) 775-0240 FAX:

(202) 872-8045

President/CEO:

James N. Heller

Fieldston Company, Inc. is a coal market and coal transportation consulting and publishing firm. The company publishes a bi-annual coal transportation reference guide, "The Fieldston Coal Transportation Manual"; a reference guide for exporting coal from the U.S., "The Fieldston U.S. Coal Export Manual"; as well as two newsletters, "Coal Transportation Report" and "Compliance Strategies Review." Fieldston's primary areas of consulting expertise involve analyzing coal transportation rates, costs and logistics, and coal markets, for international and domestic clients.

Product/Service	Description
Fieldston Coal Transportation Manual	The Manual is a reference volume dedicated exclusively to coal transportation, from mine to end- user. The publication contains data on all components of coal transportation, including railroads, river docks, barge companies, foreign and domestic coal terminals, electric utilities and coal producers. The Manual is published biannually.
Fieldston U.S. Coal Export Manual	A new publication, the Export Manual explains and analyzes the companies involved in exporting coal from the U.S. The Manual discusses in detail major coal suppliers, railroads, barge companies, river docks and ocean terminals participating in U.S. coal exports. Data and information contained in the Manual includes major export contracts, coal prices, rail and transportation rates and more.
Coal Transportation Report	A bi-weekly newsletter addressing issues pertinent to the coal and coal transportation industries. Areas of coverage include new coal and transportation contracts, transportation regulation, innovations in coal transportation technologies and general coal industry issues having an impact on the nation's coal transportation infrastructure. Coal producers, railroads, barge companies, river docks, and coastal and Great Lakes coal terminals are all covered.
Compliance Strategies Review	A bi-weekly newsletter covering electric utility compliance with the Clean Air Act Amendments of 1990. Areas of coverage include SO ₂ emission, allowance trading, tax issues, issues affecting low-sulfur coal, the scrubber industry, NO ₂ emissions and other related areas.

Fluor Daniel, Inc. 3333 Michelson Drive Irvine, CA 92730

FLUOR DANIEL

Chairman and CEO: Les G. McCraw

Sales Manager: Telephone:

FAX:

FAX:

Dick Behrman (803) 281-5959 (803) 281-8157

Sales Manager: Telephone: John Bradburne (202) 955-9300 (202) 833-1630

Worldwide Offices:

The Americas: Anchorage, AK; Bakersfield, CA; Calgary, Alberta, Canada; Caracas, Venezuela; Charleston, WV; Chicago, IL; Cincinnati, OH; Corpus Christi, TX; Dallas, TX; Denver, CO; Detroit, MI; Greenville, SC; Houston, TX; Irvine, CA; Kansas City, MO; Kingston, Ontario, Canada; Mexico City, Mexico; New York, NY; Philadelphia, PA; Richmond, VA; San Francisco, CA; San Juan, Puerto Rico; Santiago, Chile; Sudbury, Ontario, Canada; Tulsa, OK; Vancouver, British Columbia,

Canada; Washington, D.C.

Asia/Pacific: Bangkok, Thailand; Beijing, China; Brisbane, Australia; Hong Kong; Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; Melbourne, Australia; Perth, Australia; Seoul, Korea; Singapore; Sydney, Australia; Tokyo,

Japan

Europe/Africa/Middle East: Asturias, Spain; Bergen op Zoom, Netherlands; Camberley, England; Dhahran, Saudi Arabia; Dubai, U.A.E.; Dusseldorf, Germany; Haarlem, Netherlands; Jeddah, Saudi Arabia; Leipzig, Germany; London, England;

Madrid, Spain; Manchester, England; Paris, France; Wiesbaden, Germany

Fluor Daniel provides a full range of engineering, construction and related services through over 50 offices worldwide. These services include feasibility studies, conceptual design, project management, engineering, procurement, construction, technical services, project financing, consulting, environmental services, maintenance and plant operations. Our affiliate, AT Massey Coal Company, produces both high-quality, low-sulfur coal and metallurgical coal and ranks among the five largest coal marketers in the United States. Massey sells produced coal and markets coal for independent producers. Fluor Daniel, in partnership with Duke Power, designs and constructs or modernizes coal-fired power plants and performs operations and maintenance.

Product/Service	Description
Power Generation Systems	Fluor Daniel provides design engineering, procurement and construction of integrated coal gasification power generating systems as a part of our work with combustion turbine technology. Duke/Fluor Daniel has engineered or constructed over 75 conventional fossil fuel generating stations ranging from 5Mw to 1080Mw and provided maintenance and operating services in over 150 units.
Advanced Utilization (CCT)	Fluor Daniel offers engineering, procurement, construction and consulting support to Clean Coal Technology (CCT) projects. We have performed over 105 coal gasification studies and participated in 14 major projects including Sasol, the world's largest coal gasification facility, on which Fluor Daniel performed engineering, procurement and construction.
Coal	Through Fluor Corporation's subsidiary, A.T. Massey produces high-quality, low-sulfur steam coal for the electric generating industry and metallurgical coal for the steel industry. Massey operates through a network of nine operating companies.
Engineering/Procurement/	Fluor Daniel's engineering, procurement and construction experience includes coal mines, coal handling and

transport facilities, and plants for utilities and other coal consumers.

Construction

Franklin Coal Sales Company 50 Jerome Lane Fairview Heights, IL 62208

Telephone: (618) 394-2400 FAX: (618) 394-2515

President/CEO: Sales Manager:

E.J. O'Neil M.V. Altrudo

Domestic Offices:

50 Jerome Lane

Fairview Heights, IL 62208

Franklin Coal Sales Company subsidiary of Zeigler Coal Holding Company Zeigler

Franklin Coal Sales Company is a subsidiary of Zeigler Coal Holding Company, responsible for international and domestic marketing of metallurgical and steam coals from Zeigler's mining operations throughout the United States. With the acquisitions of Old Ben Coal Company in 1990 and Shell Mining Company in 1992, Zeigler has grown from two million tons per year in the mid-1980's to become one of the largest coal producers in the United States.

Products/Service

Description

Metallurgical Coal

Old Ben Coal Mine #20 in Mingo County, West Virginia produces about 1.2 million tons of high-volatile metallurgical coal,

reknowned the world over for its high quality.

Steam Coal

Franklin Coal Sales represents a wide variety of low sulfur and higher-sulfur steam coal production from Zeigler-owned mines in Central Appalachia, the Illinois Basin, and the Powder River Basin. Coals may be exported from the East, Gulf, or West

Coasts as customer needs dictate.

GAI Consultants 570 Beatty Road Monroeville, PA 15146

Telephone: (412) 856-6400 FAX: (412) 856-4970

Chief Executive Officer:

Dr. Anthony M. DiGioia, Jr. International Sales Manager: Mr. Henry A. Salver



CHARLESTON, WV: 114 West Lee Street, Charleston, WV 25302 TEL. (304) 344-5300, FAX (304) 344-8174; ORLANDO, FL: 1833 Edgewater Drive, Orlando, FL 32804 TEL. (407) 423-8398, FAX (407) 843-1070; RALEIGH, NC: 401 Glenwood Avenue, Raleigh, NC 27603 TEL. (919) 828-0801, FAX (919) 833-2784; MT. LAUREL, NJ: 300 Birchfield Drive, Suite 301, Mt. Laurel, NJ 08054 TEL. (609) 273-6585, FAX (609) 273-0050; FT. WAYNE, IN: 117 Airport North Office Park, Ft. Wayne, IN 46825 TEL. (219) 489-2900, FAX (219) 489-4159

International Offices:

Please contact Monroeville office for further information.

GAI Consultants professional staff of 450 engineers, geologists, scientists, environmental specialists, planners, economists, and technical and administrative personnel provides a comprehensive range of quality planning, study, and design services in civil, environmental, geotechnical, and structural engineering; energy; mining (including pre-blasting and pre-mining surveys); soil science and agronomy; water resources; industrial/hazardous waste management; transportation; site development; and construction monitoring.

Product/Service

Description

Mine Planning and Design

Full design and planning services for new or expanding mines include drilling, geophysical testing, feasibility studies, mine layouts, permitting, and selection of mining methods and mine access. GAI also provides assistance in planning and siting auxiliary mine facilities and beneficiation and coal gasification facilities.



GAI Consultants (Continued)

Waste Disposal and Land Reclamation

Waste disposal and land reclamation services range from overall engineering design and materials handling procedures to environmental studies, and ground-water investigations. GAI provides services for dry refuse disposal areas and slurry impoundments; treatment of acid mine drainage; design of waste disposal dams and ponds; and regrading, revegetation, and reclamation planning.

Environmental and Subsidence

Engineering

Environmental services include pollution abatement, reclamation planning, environmental impact statements, waste disposal and permitting studies, ground-water monitoring, and acid mine drainage studies. Subsidence-related services include subsidence plans, mine and surface stabilization, prediction of subsidence and ground movement, subsidence investigation and control plans, and design of subsidence-resistant structures.

General Maritime Transportation Services, Inc. P.O. Box 278
Metairie, LA 70004-0278

Telephone: (504) 885-9397

Telex: 161878 FAX: (504) 887-1890

President:

Jay Goertz

Vice President Operations & Sales: Michael A. Maloz

Domestic Offices:

Suite 125

4200 S. I-10 Service Road W.

Metairie, LA 70001



General Maritime Transportation Services, Inc.



General Maritime Transportation Services, Inc. is a full service marine agency attending to all aspects of coal trading representing exporters, sellers, buyers and vessel owners, operators and charterers.

Products/Service	Description
AGENCY	Representation of coal exporters, sellers, buyers and ocean going vessel owners, operators and charterers.
FREIGHT FORWARDERS	Full and complete coordination and documentation of cargo movements from the mine to the end user.
CONSULTANTS	Negotiation of sales contracts, letters of credit and development of all relevant logistical details and information for rail, barge, terminaling and ocean movements.

GeoResearch, Inc.

Geochemical Testing R.D. 2 Box 124 Somerset, PA 15501

Telephone: (814) 443-1671 **FAX:** (814) 445-6729

Chief Executive Officer: Sales Representative:

GEOCHEMICAL TESTING

a division of Energy Center, In

Scott L. McClintock Forrest E. Walker

Since 1975, Geochemical Testing has provided state-of-the-art laboratory testing services to a wide class of participants in the coal industry. These entities include coal exporters, producers, developers, intermediaries, utility and industrial users, and U.S. and local government consumers. Geochemical Testing has been accredited by the A2LA (American Association for Laboratory Accreditation) in all phases of coal sampling, preparation, and analytical testing. Through the U.S. Geological Services, Geochemical Testing has developed and implemented a coal laboratory training program for qualified foreign nationals. The company also has extensive capabilities in laboratory services related to coal fly ash and bottom ash wastes produced by electric utility and by co-generation plants.

Product/Service	Description
Sampling/Analysis	Spot and Inspection Sampling for U.S. coal shipments and receipts. Complete analytical services for all types of coal samples.
Consulting - Laboratory	Evaluation of coal laboratory layout and equipment, personnel requirements, procedures, and processes.
Consulting - Sampling/Prep	Site evaluation of coal sampling and preparation equipment. Bias testing: development, inspection, and implementation relating to sampling systems and system performance.

GeoResearch, Inc. 115 N. Broadway Billings, MT 59101

Telephone: (406) 248-6771 **FAX:** (406) 248-6770

Chief Executive Officer: International Sales Manager:

Douglas Richardson, Ph.D. Douglas Richardson, Ph.D.

International Offices:

Please contact company headquarters for further information.

GeoResearch, Inc., provides comprehensive environmental consulting services to coal mining, coal processing, and coal burning industries.

GeoResearch is an experienced multidisciplinary firm, with staff including expert hydrogeologists, meteorologists, air quality specialists, analytical chemists, environmental engineers, and computer programmers. GeoResearch has extensive experience in issues pertaining to acid rain. GeoResearch is currently conducting a two year study in conjunction with the Government of Italy to assess the occurrence and potential for acid rain there.

GeoResearch also offers Global Positioning Satellite (GPS) survey services integrated with computer based Geographic Information Systems (GIS) to produce surveys, maps, and to effectively manage geographic data of all types.

Product/Service	Description
Air Quality Services	Monitoring system design and computer dispersion modeling of all relevant parameters including: meteorology, SO_2 , NO_x , O_3 , H_2S , odor, total and respirable particulates, etc. Acid rain studies. Source apportionment.
Water/Ground Water Services	Hydrogeologic analysis, aquifer testing, ground water monitoring, water supply, mine dewatering, mine drainage, water quality, hydrochemistry, flow measurements, aquifer remediation.
Computer Mapping Services	State-of-the-art computer based survey and mapping capabilities utilizing Global Positioning Satellite technology integrated with ARC/INFO and other GIS software. Positional and topographic tolerances to $\pm~2$ cm. Developer and distributor of the GeoLink Mapping System, which combines GPS and GIS.

Gilbert/Commonwealth, Inc. Green Hills Corporate Center P.O. Box 1498 Reading, PA 19603-1498



Telephone: (215) 775-2600

Telex: 173-228 FAX: (215) 775-2670

Chief Executive Officer: Alexander F. Smith, III

International Sales Manager: Dennis J. Vito

International Offices: ENGLAND: Keith Millard, Gilbert Europe, Fraser House, London Road, Twickenham, Middlesex, TWI-3ST

TEL. 44 81 891-4383. TELEX 266-951 GILBT G; ENGLAND: Halcrow Gilbert Associates, Ltd., Burderop Park, Swindon, Wiltshire SN4 OQD TEL. 44 79 381-4756 TELEX 44844 HALWIL G;; EGYPT: Vincent W. Condrath, Jr., Gilbert International, Road 282, Villa No. 78, New Maadi (Port 3) Cairo TEL. 20 2 353-2771 TELEX 21157 GAMEL

UN. Contact: Halcrow Gilbert Associates - Terrence Tovey.

Gilbert/Commonwealth (G/F) provides consulting engineering and allied capabilities to a wide variety of industrial, utility and governmental clients around the world. Our extensive experience with fossil fuels and fossil fueled power plants encompasses the full range of consulting engineering services, including feasibility studies, engineering analyses, trade-off studies, independent engineers reports, conceptual and final design, cost estimates, planning and scheduling, specifications, quality assurance, construction management, and startup and test. Gilbert/Commonwealth's commitment to and experience with advanced energy technologies is well-known, with many assignments for industry and government agencies, including the design and operation of the High Sulphur Center for the Electric Power Research Institute. Further, G/C's engineering and applications experience with acid rain and greenhouse effect problems has put the company at the leading edge of research on these important issues. Gilbert/Commonwealth has been the prime contractor on several Department of Energy advanced energy projects which focused on technologies such as duct injection, fluidized bed combustion, gas stream clean-up, and magnethohydrodynamics. G/C is one of the operators of DOE's Pittsburgh Energy Technology Center and is the A/E services contractor for DOE's Morgantown Energy Technology Center, both of which are coal research facilities.

Product/Service Description

Architecture/Engineering

Complete consulting engineering services, including feasibility studies, engineering analyses, trade-off studies, independent engineers reports, conceptual and final design, cost estimates, planning and scheduling, specifications,

quality assurance, construction management, startup and test.

Global Energy USA 1500 Chiquita Center 250 East Fifth Street Cincinnati, OH 45202



Telephone: FAX:

(513) 621-0077 (513) 621-5947

President/CEO:

H.H. Graves

Domestic Offices:

Global Energy de Mexico SAdeCV, 3773 Cherry Creek North Drive, Suite 1001, Denver, CO 80209

Phone: (303) 321-8811 FAX: (303) 321-7690

International Offices:

UK: Global Energy Europe Limited, c/o Fife Energy Limited, Westfield Development Centre, Cardenden, Fife KY5 0HP

Phone: 0592-860293 FAX: 0592-860193

Global Energy USA serves as technology supplier and project developer for a new class of environmentally superior Power Stations. These Power Stations utilize Global Energy's patented Advanced Fuel Technology (AFT) and Integrated Gasification Combined Cycle (IGCC) based on the highly acclaimed British Gas/Lurgi slagging gasifier. This technology combination yields a Fuel Island, Gas Island and Power Island as major Power Station components. The AFT Fuel Island produces fuel briquettes comprised of coal and organic waste that serve as a low cost feedstock for the IGCC. The net result is low cost power generation and low cost waste elimination all from an environmentally superior Clean Coal Technology Power Station.

Global Energy USA is developing domestic and international projects through its subsidiaries in conjunction with specific project partners.

GPS Technologies. Inc.

Global Energy USA (Continued)

Description of Products/Services

Global Energy USA offers environmental technology supply and project developer services for AFT-IGCC Power Stations. These power stations are designed to serve Major Metro areas with low cost power generation and low cost waste elimination within an environmentally superior Clean Coal Technology package. IGCC is well regarded as the power station technology of the future with emission levels at less than 10% of the US EPA New Source Standard. This ultra clean technology becomes available today via the economic boost provided by the AFT Fuel Island in the way of low cost feedstock.

Global Energy USA is committed to helping major metro areas achieve low cost power generation and low cost waste elimination with Environmental Technology.

GPS Technologies, Inc. 6700 Alexander Bell Drive Columbia, MD 21046

Telephone:

(410) 290-2700

Telex:

7108622878 FAX: (410) 290-2660

Vice President Fossil Services:

Herman P. Stone II

International Sales Manager:

Sheryl Lash

Domestic Offices:

Amherst, NY; Craig, CO; Atlanta, GA

International Offices:

SINGAPORE: GP Asia, Pte, Ltd., 80 Marine Parade Road, #11-01 Parkway Parade, Singapore 1544, TEL. 65-3453363, FAX 65-3457938; MALAYSIA: GP Malaysia Sdn. Bhd., B-2-2, Block B, Bangunan SPPK, 46

Jalan Dungun, Daman Sara Heights, Kuala Lumpur, 50490, Malaysia, TEL: 603-254-9888

GPS Technologies is a mature and established company that provides diverse technical services to industries and government. GPS employs over 1,000 people and had over \$70 million in annual sales in 1992. We are a high-technology company organized to respond to individual client needs. General Physics has a well-qualified staff of former power plant supervisors, managers, and operators. They understand the problems and concerns of the coal industry and clean coal technologies. We have developed a methodology that has been proven effective in solving plant problems. The key to our performance has been enthusiasm, imagination, and performance.

Description

Operations Support Services

The services available in operations support include: Audits of Coal Sampling Equipment and Sample Preparation; Combustion Technology Improvement Programs; Coal Handling System Descriptions; Coal Handling Operating Procedures; Alarm/Abnormal Response Procedures; Start Up Procedures and Support; Coal Handler Qualification Programs; Operations Audit; Human Factors Assessments; and Thermal Performance Monitors.

Training Services

GPS is also involved in all aspects of training plant personnel with particular emphasis on developing training programs based upon specific client needs. These include: Training Program Needs Analysis; Coal Handler Training Program Design and Development; Development of Classroom, Self-Taught, Laboratory, In-Plant, Simulator and On-the-Job Training Programs for any plant system; Preparing Training Materials; Conducting Training Programs; Developing Operations and Maintenance Qualification and Requalification Programs; Administration Materials; Coal Handling Systems Training; Advanced Operator Training (Combustion Efficiency); and Simulator Training.

Maintenance Services

GPS has been involved in providing maintenance services since 1971. These maintenance support and maintenance training services include: Preventive/Corrective Maintenance Procedures; Coal Unloaders; Stacker Reclaimers; Crushers; Conveyor Belts; Coal Silos; Feeders; Other Equipment; Mechanical Maintenance Training of Coal Equipment; Electrical Maintenance Training of Coal Equipment; Instrument Maintenance Training of Coal Equipment; Technical Repair Specifications; Maintenance Planning Support; Outage Management and Support; Diagnostic Testing and Inspection; Preventive Maintenance Programs; Reliability Centered Maintenance Programs; Maintenance Audits; Preventive Maintenance Procedures; Inspection and Repair Procedures; and Spare Parts Program.

GRAY STAR™ Division EAMarketing Inc. 5010 Mayfield Rd. Cleveland, OH 44124

Telephone:

(216) 291-2840

FAX:

(216) 291-3422 Chief Executive Officer:

Mr. Edmund F. Avolio

GRAY STAR²² offers design and site selection for volume metallurgical coke drying plants of 20 to 50 metric tons per hour or more.

GRAY STAR™ has been operating a Met coke drying plant in Birmingham, Alabama since 1985.

EAMarketing, the parent of GRAY STAR[™] has been a broker and trader of metallurgical coke and coal since 1975.

1990 saw development of "RAPID FOAM"". This is a specially developed and designed product for use as a slag foamer in high voltage electric furnaces.

Product

Design of volume metallurgical coke drying plants in the 20 to 50 ton per hour range. This service can include site and equipment selection.

Greenhorne & O'Mara, Inc. 9001 Edmonston Road Greenbelt, MD 20770

FAX:

President:

Telephone: (301) 982-2800 (301) 220-2483

Chief Executive Officer:

A. James O'Mara, P.E., P.L.S. William A. Caruthers, Jr., P.E.

Vice President, Corporate Marketing: David A. Denne

Domestic Offices:

Greenhorne & O'Mara has 16 offices in the United States, primarily located along the Eastern seaboard and in

Greenhorne & O'Mara, Inc., is an engineering, environmental, scientific, architectural, and surveying consulting firm, offering multidisciplinary services to public and private clients. Services include: civil and site engineering, site planning, architecture, facilities design, landscape architecture, environmental studies and permitting, wetland delineation and mitigation design, cultural resources (archeology and historic preservation), structural engineering, environmental/sanitary engineering, manual and digital surveying, automated information services, Computer-Aided Design and Drafting (CADD), Computer-Aided Mapping (CAM), geographic information systems (GIS), photogrammetric mapping, transportation engineering and traffic planning, water resources engineering, hazardous waste site assessments, and constructions services.

G&O has extensive experience in surveying on mining and mine reclamation projects. This work involves aerial photography, photo control, monumental control, photo enlargements, and topographic mapping at scales of 1" - 100' and 1" - 200' with 2' and 5' contours. Additional services included digitizing and volumetric measuring of coal stockpiles, as well as cross-section plotting. We have provided mapping services for private mining companies on hundreds of thousands of acres of land in coal fields.



T. J. Gundlach Machine Company One Freedom Drive P.O. Box 385 Belleville, IL 62222

Telephone:

(618) 233-7208

Telex:

910-756-2081 FAX: (314) 436-5221

President: VP/General Manager: T. F. Gundlach Michael F. Barron

International Customer Service:

Fran Black

International Offices:

ENGLAND: Jenkins of Retford, Trumpton Ln., Retford, Nottinghamshire N22 7AN, TEL. 777-706777; FAX 777-08141; AUSTRALIA: ANI Ruwolt, P.O. Box 327, Ipswich, Queensland 4305, TEL. 280-7222; FAX 202-1928; INDIA: Larsen & Toubro, 3B Shakespeare Sarani, Calcutta 700 071, TEL. 261-8181; FAX 291323/447587; MEXICO: LYUSA, Fuente de Piramides 182, Suite 4, Tecamachalco, Estado de Mexico, CP 53970, TEL. 294-84-69 & 294-25-09; FAX 294-45-58

T. J. Gundlach Machine Company manufactures crushing, comminution and mixing equipment, for mining, chemicals, minerals beneficiation, steel industries and Industrial Application. Hot materials crushed to 1000°C. Custom Crushers are a specialty.

Product/Service

Description

Crushers

Single-Stage (2 roll) and Two-Stage (4 roll) Roll Crushers and Cage Mill Impact Crushers for size reduction of materials, including high temperature applications. Capacities of equipment from 1 TPH to over 3,000 TPH Run-of-Mine Feed Size capabilities.

Grizzly Breaker

A breaker mounted on rails, which traverses back and forth across the top of a truck dump grizzly, and reduces oversize lumps on an automatic or semi-automatic basis.

Hawley Fuel Coal, Inc. **Reliance Building** P.O. Box 188 Altoona, PA 16603

Telephone:

(814) 944-1730

FAX:

(814) 944-9756

President/CEO:

Jean-Paul Ruff

Sales Manager:

Theodore Sohnen

Domestic Offices:

Reliance Building, Altoona, PA 16603

International Offices:

Empire State Building, Suite 8004, New York, NY 10118

Hawley Fuel was founded in 1879 and is currently engaged in supplying coal to the domestic utility markets as well as utility and metallurgical markets worldwide. Hawley Fuel is one of the largest and oldest independent coal exporters from the U.S. Besides dealing in coal for counter-trade purposes, Hawley has also become involved in steel, pig iron, coke, petroleum coke and cement business. Hawley's main sphere of international trade is to the major utilities of Western Europe and to the steel mills in Eastern Europe and Japan.

Products/Service

Description

On coal exports, Hawley provides full service including shipment by rail or barge, transloading at either East Coast or Gulf Coast piers, ocean freight chartering, ocean freight, insurance and financing and/or barter trade where necessary.

Hazen Research, Inc. 4601 Indiana Street Golden, CO 80403

Telephone: (303) 279-4501

Telex: 45-860 FAX: (303) 278-1528

Vice President:

D. Erik Spiller

Senior Project Manager - Coal: Rick Kenney



Hazen Research, Inc. (Hazen) offers a variety of research and development services for the coal industry. In addition to operating our own physical and chemical coal testing laboratories, Hazen's engineering capabilities include pilot plant testing, beneficiation process development, treatability studies for coal waste cleanups, and field services.

Product/Service

Description

Technical Consultants

Pilot plant facilities used for process development studies for coal cleaning as well as producing tonnage quantities of

sized, clean coal for further testing.

Physical & Chemical Coal

Comprehensive battery of tests including (not limited to): Proximate, Ultimate, Washability Analysis, and Testingol

Physical Handling Characteristics.

Sampling Service & Equipment On-site sampling/testing services; plant efficiency evaluations.

Henkels & McCoy, Inc. 985 Jolly Read, P.O. Box 950 Blue Bell, PA 19422-0900

Telephone: (215) 283-7600 FAX: (215) 283-7587

Chief Executive Officer: Paul M. Henkels President/Chief Operating Officer: Dr. Kenneth L. Rose

International Sales Manager:

Mr. Ian H. Sargent, Division Manager, Engineering Division

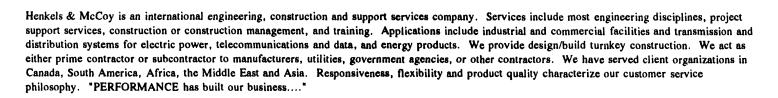
Domestic Offices:

Oreland, PA; Rising Sun, MD; New Castel, DE; Portland, OR; York, PA; Aurora, CO; Lewisville, TX;

Elkhart, IN; Oxford, MA; Newington, VA; Richmond, VA; Tampa, FL; Fontana, CA

International Offices:

Please contact International Operations Division for further information.



of enginéering innovation

Henkels & McCoy, Inc. (Continued)

Product/Service

Description

Architecture/Engineering

Our Engineering Division is a multi-disciplined organization serving the industrial, utility, and communications markets for over 60 years. We have engineered major new plants and facilities and have rehabilitated others for a variety of applications. Each client's needs are addressed on a specific project basis. While developing the project's plans and specifications we design all pertinent systems, select appropriate equipment and incorporate operating considerations. Typical projects include the electrical, mechanical, civil/structural, and general site engineering disciplines supported by our architectural capabilities, as needed, for offices, laboratories, warehouses,

Corrosion Control

The Corrosion Control Department within the Engineering Division provides comprehensive services for underground, above ground and marine structures, tanks and pipelines. We perform corrosion surveys and stray current analysis, monitor existing systems, audit corrosion control programs, design cathodic protection systems, evaluate reinforced concrete, and evaluate/design protective coating systems.

Heyl & Patterson, Inc. P.O. Box 36 Pittsburgh, PA 15230

Telephone: (412) 788-6900

Telex: 5106974017 FAX: (412) 788-6913

Chairman and CEO: International Sales Manager: Mr. H.R. Edelman III Mr. Robert M. Turbeville,

President

Product/Service

Description

Coal Transport Equipment

Continuous barge unloaders, railcar unloading systems, stacker-reclaimers for loading and unloading of coal and other

bulk materials.

HRI, Inc. 100 Overlook Center, Suite 400 Princeton, NJ 08540

Telephone: (609) 243-8700 **FAX:** (609) 987-0204

Chief Executive Officer: James MacArthur

Product/Service

Description

Engineering

Since its inception in 1943, HRI has developed basic technology and processing schemes associated with the petroleum, steel, coal, petrochemicals, cryogenics and shale oil industries. HRI has admnistered projects from conception to large-scale pilot plant tests. When analyzing processing systems, thorough evaluations are made on the treatment, clean up and/or disposal of ancillary streams which constitute a source of environmental concern.

HRI has worked as a contractor to various agencies of the United States Government. One such project was the H-Coal Pilot Plant in Catlettsburg, Kentucky, whose engineering and design began in 1974. HRI provided the process data base, the plant design, detailed engineering and operational support. Approximately 800,000 manhours over a six-year period were devoted to this effort. HRI was responsible for procuring approximately \$35 million in plant equipment and also materials for the pilot plant.

HRI engineering provides detailed process & equipment design for high pressure hydrocracking processes for the Liquefaction of Coal and can provide experienced engineering and operational start-up training & support services.

H-Coal*

The H-Coal* Process is a single stage coal liquefaction process based on the catalytic ebuliated bed reactor that produces 2.8 to 3.5 barrels of liquids per ton of dry coal. Products from H-Coal* can be upgraded to gasoline, aromatics, diesel & turbine fuels and heating oils. Most lignites, sub-bituminous and bituminous coals can be easily converted to liquids using hydrogen from partial oxidation of the bottoms produced from the process.

Plant size:

2,000 to 10,000 tons coal/day

Operating Pressure:

1500 - 3000 psig

Operating Temperatures:

700 - 900°F

Co-Processing

The HRI Co-Processing process for the conversion of coal and residual petroleum derived oils is based on the single or two-stage ebullated bed conversion of the coal and resid to distillates and heavy oil products. Distillate yields average 5 bbs/ton of feed with demetalization over 90%.

Feedstocks

Coal:

Lignite, Sub-Bituminous and Bituminous

Crudes:

Maya, Hondo, Lloydminster, Cold Lake, Venezuelan and Most others.

Plant Size:

15,000 to 60,000 bbls/day

Pressure:

1500 - 3000 psig

Temperatures:

700 - 900°F

CTSL™

The CTSL, Catalytic Two-Stage Liquefaction process consists of two close-coupled ebullated bed reactors in series that converts sub-bituminous and bituminous coals to distillate transportation fuels. Distillate yields are 4.3 to 5.0 barrels per ton of MAF coal with extinction recycle of the residual oils, with on-line hydrotreating clean distillates with less than 10 ppn nitrogen and sulfur are produced. Products range from gasoline, diesel, jet fuel, turbine fuels and chemicals.

Feedstocks

Coals:

Lignite, Sub-Bituminous and Bituminous

Plant Size:

2,000 - 10,000 tons coal/day

Pressures:

1500 - 3000 psig

Temperature:

700 - 900°F

Huffman Laboratories, Inc. 4630 Indiana Street Golden. CO 80403

Golden, CO 80403

Telephone: (303) 278-4455 **FAX:** (303) 278-7012

President:

Dr. E. W. D. Huffman, Jr.

Technical Services Coordinator: Suzanne J. Zeller



Huffman Laboratories, Inc. has been providing quality analytical services since 1936. We are a full service laboratory specializing in elemental microanalysis for the chemical, research and manufacturing industries. Evaluations for CHONS, P, halides, ash, metals and BTUs are performed for a wide variety of organic and inorganic matrices. Coal analyses are routinely performed based on ASTM procedures. Other analytical services include TOC, TOX, EOX and molecular weight determinations, emission spectroscopy, atomic absorption, gas chromatography and ion chromatography.

Product/Service

Description

Coal Testing

Includes proximate & ultimate analyses, BTU, volatile matter, sulfur forms, metals and ash analysis.

Elemental Analysis

Carbon, hydrogen, oxygen, nitrogen, sulfur, phosphorous, halides, and metals on organics, inorganics,

organometallics, coal, shale, petroleum, water and wastes.

Water Testing

Routine analyses following EPA, AWWA, ASTM and other methods.

HWS Consulting Group, Inc. 825 J Street, Box 80358 Lincoln, NE 68501

Telephone:

(402) 479-2200 (402) 479-2276

FAX:

(402) 479-2276

Chief Executive Officer:

International Sales Manager:

James L. Linderholm James L. Linderholm

Domestic Offices:

OMAHA, NE: 10844 Old Mill Road, Suite 1, Omaha, NE 68154; TEL: (402) 496-0333; DENVER, CO: 9101 East Kenyon Avenue, Suite 1600, Denver, CO 80237; TEL: (303) 771-6868; WICHITA, KS: 924 North Water

Street, Wichita, KS 67203; TEL: (316) 264-4328

HWS is a full service civil and environmental engineering firm founded in 1944. Currently ranked 286th of the top 500 engineering and architectural firms in the U.S. by ENR (Engineering News Record), HWS offers clients more than 45 years of project experience.

Product/Service

Description

Environmental Studies

Asbestos Consulting, Environmental Site Assessments/Audits, Environmental Engineering, Hydrogeology, Contaminant Studies, Remediation Design, RCRA/CERCLA Compliance, Underground Storage Tanks.

Civil Engineering

Airports, Highways, Railroads, Site Engineering, Telecommunications, Water/Wastewater Systems.

Geotechnical Engineering

Foundations Engineering, Engineering Geology.

ICF Kaiser Engineers 1800 Harrison Street Oakland, CA 94612

Telephone: (510) 419-6000

Telex: 335326 FAX: (510) 419-5355

Chief Executive Officer: James Edwards, Chairman

Raymond List, Chairman

Domestic Offices: International Offices: PITTSBURGH, PA: Four Gateway Center, 12th Floor, Pittsburgh, PA 15222 TEL. (412) 281-8121, FAX (412) 281-8145 AUSTRALIA: IBM Building, Level 4, 1060 Wasy Street, West Perth, Western Australia 6005 TEL. 61-9 327-5211, TELEX AA 94559; PORTUGAL: Edificio Monumental, Avenida Fontes Pereira de Melo, 51-2D, 1000 Lisbon, TEL. 011-

351-1-315-5681, FAX 011-351-1-315-5466

ICF Kaiser Engineers is an international engineering and construction firm, headquartered in Oakland, California. The company provides services to private and public sector clients involved with transportation, advanced technology, environmental, industrial and other infrastructure projects. The firm employs 4,000 professionals.

Product/Service

Architecture/Engineering

Facility Construction

Technical Consultants

Inspectorate Griffith USA Inc. 50 Main Street, Suite 1000 White Plains, NY 10606

Telephone: (914) 682-2054

Telex: 178413 DCGSAMP FAX: (914) 682-2116 Vice President: Vincent J. Mazzone Mgr. - Business Development: Vincent Furtkevic INSPECTORATE WORLDWIDE QUALITY SERVICES

ICF KAISER

ENGINEERS

Domestic Offices:

ASHLAND: Charles M. Vidas, Manager, 3321 Winchester Avenue, Ashland, KY 41101, TEL. (606) 325-3122, FAX (606) 325-3125; BALTIMORE/PHILADELPHIA: Ian Campbell, Manager, 180 South Main Street, P.O. Box 558, Ambler, PA 19002, TEL. (215) 646-8320, FAX (215) 656-7365; LONG BEACH: Steve Glynn, Operations Manager, 426 South Main Street, Suite 703, Long Beach, CA 90745, TEL. (213) 835-4017, FAX (213) 835-4631; NEW ORLEANS: Robert Drew, Manager, Gilbert Wright, Marketing, 104 Alpha Drive, Destrehan, LA 70047, TEL. (504) 764-9950, FAX (504) 764-9236; NORFOLK: James Rosemond, Operations Manager, 727 West 25th Street, Norfolk, VA 23517, TEL. (804) 625-3911, FAX (804) 625-3911

Inspectorate Griffith USA Inc. is an independent alternative for handling your worldwide inspection, testing, and control service needs. For over 150 years, Inspectorate has continuously broadened its services to improve clients' cost efficiency by ensuring quality and quantity. Procedures and techniques are in accordance with the latest domestic and international standards.

Inspectorate has facilities, strategically located in the heart of the U.S. coal producing region and at most major ports around the world. Inspectorate offers "Total Quality Management" for barge loadings upstream and at vessel loading downstream, and at discharge. Inspectorate Griffith is dedicated to the elimination of risk, whether our clients are importers or exporters, producers or consumers. We ensure that we will provide professional and efficient service by employing skilled personnel, by adopting innovative training techniques, and by utilizing dynamic management methods.

Inspectorate Griffith has a reputation for providing reliable service with outstanding professional integrity. Our certificates of weight, sampling and analysis are recognized worldwide by this and other industries.

International Coal Testing Conference P.O. Box 1970 Ashland, KY 41105-1970



(606) 325-1970 Telephone: FAX: (606) 325-2689

Director: Mr. Lee S. Rigsby Coordinator: Mrs. Tamra H. Broam

A three day program includes technical presentations and panel discussions with question and answer sessions afterwards, an exhibition of state-of-theart instrumentation and social events. The conference is scheduled approximately every 12-18 months.

The International Coal Testing Conference is your opportunity to make direct buyer contact with key people in the coal quality field.

Key people responsible for coal quality in the coal industry, as well as industrial coal users and others, will be in attendance for an authoritative, practical program of the latest information and instrumentation available for coal testing.

Proceedings of the technical presentations are available for purchase. Attendees receive a complimentary copy.

International Consolidated Exchange Corp. 4023 Ellery Avenue Dayton, OH 45439

Telephone: (513) 294-4023

Telex: 9102403895 FAX: (513) 294-4020 President and CEO: Alan Doll

International Sales Manager: Daniel L. Hellmuth

Product/Service Description

EMC/Consultants International Consolidated Exchange Corporation (ICE) is an export/import consulting company with representatives in

27 countries, including expertise in both the Soviet Union (CIS) and China (PRC). ICE offers export management (EMC) to both domestic and international companies who wish to sell their products and/or services abroad.

International Marine Terminals Route 1, Box 649 Port Sulphur, LA 70083-9722

Telephone: (504) 656-7341

Telex: (810) 951-7152 FAX: (504) 656-2071/2201
President: Mr. Bryan Bashore
Sales Manager: Gene M. Taft

International Marine Terminals is a non union full service bulk stevedore company specializing in coal and petroleum coke transfer from/to barge to/from vessels on the Lower Mississippi River. IMT's principal facility is located 35 miles south of New Orleans at Myrtle Grove (mile post 57), equipped with 45 acres of storage dedicated to coal/petcoke.

IMT's facilities range from large-capacity soil cement storage pads to a computer equipped operations center to a completely self-contained midstream shiploader. Mid-stream transfer operation is available anywhere from mile 55 AHP to mile 226 AHP on the Mississippi River. IMT is fully equipped to deliver the most advanced on-line weighing, blending, 4 stage automatic sampling, temperature monitoring, and metal detection and collection services twenty-four hours a day, with precise quality control at every stage of every operation. IMT handled 10 million tons in 1991.

Products/Service

Description

Coal Monitor One

A barge-mounted midstream transfer terminal equipped with blending capabilities, 3 stage automatic sampling metal collection, and temperature monitoring for coal and/or petroleum coke. Working in tandem with a barge-mounted stevedoring crane, the CMO is capable of loading barged coal directly to vessels at speeds exceeding 20,000 tpd.

Coal Blending

IMT performs computerized mass proportional blending of coal and/or petcoke to provide the most homogenous blends on the U.S. Gulf Coast.

Interstate Equipment Corporation 929 Park Avenue Pittsburgh, PA 15234

Telephone: (412) 563-5556 **FAX:** (412) 563-6741

President/CEO:
Sales Manager:

James F. Vogel Joseph L. Vogel

Domestic Offices:

Same as above

International Offices:

India: c/o Hans Plaza, 15 Barakhamba Road, New Delhi, INDIA 110001

Interstate Equipment Corporation is now in its 90th successful year of worldwide operations. Completely engineered bulk material handling systems have been providing the mining, electrical power and river industries with proven cost effective handling solutions tailored to the operator's unique requirement. Project specifications are analyzed and bulk material handling recommendations made based on the company's broad experience with Aerial Tramways/Ropeways Systems, Conveyor Systems and Port and River Barge Handling Systems. Interstate Equipment can design, manufacture and install a system to support the particular customer's total bulk material handling system requirement from project start-up to completion.

Product/Service

Description

The company offers complete turnkey services of all types of Aerial Tramway Systems, including units to convey coal and mine refuse. The range of service includes feasibility studies, design, manufacturing and installation on a worldwide basis. Aerial Tramways have proven themselves over the years a low cost form of transportation, particularly in rough terrain.

Conveyor Systems

Complete Conveyor System, design, equipment supply and construction is offered to handle coal from the mine overland to the plant or from the plant overland to the refuse area. In addition,

specialty feeders are available.

(Continued on next page)

Interstate Equipment Corporation (Continued)

Port & River Barge Handling

Systems

Interstate Equipment Corporation features a complete package of designed equipment for barge handling at a port or river unloading/loading facility. Cost effective alternatives for moving and controlling barges are provided on an installed basis.

John S. James Co. P.O. Box 2166 (31498) 144 Drayton Street Savannah, GA 31401

John S. James Co.

Telephone: (912) 232-0211

Telex: 804722 FA

804722 FAX: (912) 233-2150

Chief Executive Officer:
Marketing and Sales Manager:

John Wm. James
Joseph K. Ebberwein

Domestic Offices:

ATLANTA, GA: TEL. (404) 762-5556; CHARLESTON, SC: TEL. (803) 554-6400; CHARLOTTE, NC:

TEL. (704) 357-6901; CHATTANOOGA, TN: TEL. (615) 855-0455; GREENSBORO, NC: TEL. (919) 855-0046; JACKSONVILLE, FL: TEL. (904) 356-9646; KNOXVILLE, TN: TEL. (615) 970-3367; NORFOLK, VA: TEL. (804) 625-0641; RALEIGH/DURHAM, NC:

TEL. (919) 467-5688; SAVANNAH, GA: TEL. (912) 232-0211; WILMINGTON, NC: TEL. (919) 343-0700

These services may be combined with Import or Export shipments to provide a Door-to-Door service or may

International Offices: Agents worldwide. Please contact company headquarters for further information.

be used on strictly domestic movements.

John S. James Co. was founded in 1941. Within our organization, we have over 100 International Customs and Forwarding Specialists serving the needs of the transportation community. The John S. James Company is committed to the continuation of providing expertise in handling Customs/Consular document preparation and cargo coordination in the International Marketplace. We have corresponding agency agreements with various companies in the states and abroad which enable us to handle shipments to and from ALL points.

Product/Service	Description
Foreign Freight Forwarder FMC #150-R	Our computerized Export Program allows us to tailor documents according to each client's individual needs. As your International Freight Forwarder, we become an extension of and a personal representative in the port/city of loading for you.
Customhouse Broker CHB #5611	John S. James is fully computerized and automated and transmits via in-house computer directly to Customs in Washington, D.C., through the A.B.I. (Automated Broker Interface) system. "We are proud to be the very FIRST Customs Brokers in the entire U.S. to be approved on the 'Cargo Release' System. Being an ABI broker enables us to expedite document processing, facilitating the movement of your cargo."
International and Domestic Air Cargo	By associating with a network of carriers, economical rates have been established to all points throughout the nation and the world. We also arrange to have packages and/or documents delivered door to door via courier at a discounted price. Further discounts are available for volume shippers.
Chartering	Our eight offices plus contacts in New York and abroad afford us first-hand knowledge of current market conditions throughout the world and allow us to expedite substantial shipments, both air freight and ocean freight.
NVOCC (Consolidation Service)	This fully-insured service enables us to accommodate the needs of the "less than container" load shipments. We offer a viable alternative for moving cargo at a significant cost savings on ocean freight charges while expediting delivery of their products.
Warehousing/Distribution	Our domestic transportation system can assist commercial development firms in the movement, warehousing and installation of their furniture, fixtures, and expendable items.

Inland Transportation

Jenike & Johanson, Inc. One Technology Park Drive Westford, MA 01886

Telephone: (508) 392-0300 FAX: (508) 392-9980

President: Vice President (east coast):

Vice President (west coast): International Sales Manager:

John W. Carson, Ph.D. Mr. T. Anthony Royal Mr. David Stuart-Dick Mr. Roderick J. Hossfeld

Domestic Offices:

SAN LUIS OBISPO, CA: 3485 Empresa Drive, San Luis Obispo, CA 93401 TEL: (805) 541-0901 FAX:

Jenike & Johanson

JOY TECHNOLOGIES INC. Mining Machinery Division

(805) 541-4680

International Offices:

CANADA: 400 Carlingview Drive, Etobicoke ON M9W 5X9 TEL: (416) 674-8595 FAX: (416) 674-8520

Specializing in the storage and flow of bulk solids. Originated the scientific approach to the measurement of flow properties of bulk solids and to the design of storage vessels for controlled flow of bulk solids. Developed equipment to measure these flow properties; measured them for over 3,000 materials. Method stresses the importance of the bin and feeder, acting in unison, in obtaining reliable flow. Recognized as the leaders in the field of solids flow. Drs. Andrew W. Jenike and Jerry R. Johanson founded the firm in 1966. Dr. John W. Carson, President, joined the firm in 1970 after receiving his Ph.D. from M.I.T. Twenty-five additional employees including twelve professionals.

Product/Service Description **Bulk Solids Testing** Flow properties tests in controlled environment to determine: mass flow hopper angles, minimum hopper openings, compressibility, permeability, segregation potential, attrition, abrasive wear, pneumatic conveying characteristics. Design Services Recommendations or detailed design for storage hoppers and feeders and related systems; structural design; on-site consultation. Custom Equipment Retrofits to convert funnel flow bins to mass flow; new mass flow bins and feeders; BINSERT system; solids pump. Education In-house courses on Solids Flow in Bins and Feeders.

Joy Technologies, Inc. One Oxford Centre, 39th Floor **301 Grant Street** Pittsburgh, PA 15219-1490

Telephone: (412) 562-4500 FAX: (412) 562-5570

President/CEO: Marcus F. Wray John Hanson

Mining Machinery Div. President:

Domestic Offices:

U.S. MANUFACTURING OPERATIONS: Franklin, PA 16323, 120 Liberty St., Tel: (814) 437-5731; Claremont, NH 03743, Foundry Division, Grissom Lane, Tel. (603) 543-1228;

Cleveland, OH 44142, Smith & Harris Division, 5170 W. 130th St., Tel. (216) 267-3366; Solon, OH 44139, Bedford Gear Division, 6160 Cochran Road, Tel: (216) 248-7970

U.S. REGIONAL SALES OFFICES & SERVICE CENTER-WAREHOUSES: Mt. Vernon, IL 62864, Industrial Park, P.O.B. 1269, Tel. (618) 242-3650; Homer City, PA 15748, 350 Lucerne Road, Tel. (412) 479-3555; Houston, PA 15342, 2101 W. Pike St., HeadowLands Service Cent, Tel: (412) 873-4300; Price UT 84501, 1556 East 100 South, P.O. Box 757, Tel. (801) 637-6161; Bluefield, VA 24605, State Route 720,

Route 2, Box 157, Tel. (703) 322-5454; Duffield, VA 24244, State Route 772, P.O.B. 256,

Tel. (703) 431-2821

International Offices: Joy Manufacturing Company (Pty.) Limited - Tel. 011-61-48-682011, Moss Vale, Australia 2577 Vale Road, P.O.B. 314; Joy Manufacturing Company (Africa) (Pty.) Limited - Tel. 011-27-11-613-6831, Johannesburg,

South Africa 2000, Steel St., Steeledale, P.O.B. 4070; Joy Manufacturing (U.K.) Limited - Tel.

011-44-3552-39121, East Kilbride, G745LN, Scotland, United Kingdom, Peel Park Place

(Continued on next page)

Joy Technologies, Inc. (Continued)

Joy Technologies Inc. is a full service supplier that designs, manufactures, markets and services mining equipment worldwide for the underground extraction of coal and other bedded materials. The Company maintains an extensive global network of service and distribution centers to service, rebuild and update equipment and to provide parts and services to its customers.

Products/Service

Description

Continuous Miners Longwall Shearers Shuttle Cars Continuous Haulage Systems

Highwall Miner Systems

The Company's Mining Machinery Division designs, manufactures and distributes continuous miners, longwall shearers, shuttle cars and continuous haulage systems for use in underground mining, and highwall mining systems for applications in surface mining operations. It maintains an extensive network of service and spare parts distribution centers to rebuild and service equipment and sell spare parts. This network includes six service centers in the U.S. and four abroad. The Mining Machinery Division also manufactures conventional underground mining machinery and equipment, consisting principally of drills, loaders, cutters and related

JTM Industries, Inc. 1000 Cobb Place Boulevard **Building 400** Kennesaw, GA 30144

TIM JTM INDUSTRIES, INC.

Telephone: (404) 424-1900 FAX: (404) 424-9290

CEO:

Bill G. Fletcher Executive V.P., Sales and Marketing: Dennis L. Kinder

Domestic Offices (Regional Offices):

MID CENTRAL REGION: 2278 Grange Hall Road, Beavercreek, OH 45431

TELEPHONE (513) 426-7711, FAX (513) 426-1511;

NORTH CENTRAL REGION: 5665 Flatiron Parkway, Boulder, CO 80301

TELEPHONE (303) 938-5500, FAX (303) 938-5520;

SOUTH CENTRAL REGION: 4800 Sugar Grove Boulevard, #410, Stafford, TX 7747

TELEPHONE (713) 240-4082, FAX (713) 240-4073;

NORTHEAST REGION: Commerce Plaza, 5100 Tilghman Street, Bldg. 2, Suite 255, Allentown, PA 18104

TELEPHONE (215) 366-1959, FAX (215) 366-1968

SOUTHEAST REGION: 1000 Cobb Place Boulevard, Building 400, Kennesaw, GA 30144

TELEPHONE (404) 424-1900, FAX (404) 499-9219

ENGINEERING SUBSIDIARY: KBK ENTERPRISES, INC., 1000 Cobb Place Boulevard, Building 400,

Kennesaw, GA 30144

TELEPHONE (404) 426-5944, FAX (404) 499-9219

JTM Industries, Inc. (JTM), a wholly-owned subsidiary of USPCI and Union Pacific Corporation (UP), is a full service coal combustion by-product management company headquartered north of Atlanta, Georgia. With substantial financial strength as part of UP and over 15 years of experience, JTM remains a stable force in a rapidly changing environmental field and currently manages over seven million tons of by-products each year. JTM provides total by-product management programs to the generators of coal combustion by: (1) developing and implementing proprietary processes which generate higher market value products from coal combustion residue; and (2) developing proprietary processes to accommodate reuse and/or disposal of more highly regulated non-hazardous ash streams. JTM has five regions, each concentrating on by-product management while drawing upon expertise available throughout the corporation.

Products/Service

Description

Total Coal Combustion By-Products Management

To provide a comprehensive coal combustion by-product management program, including all activities related to utilization, marketing or disposal as well as engineering, permitting, design and construction of material handling systems and disposal cells.

Kaskaskia Valley Scale Company 2154 Beckmann Road Lenzburg, IL 62257

(618) 295-3331

Telephone: (618) 295-3331

President:

FAX:

Ron Dietrich

Kaskaskia Valley Scale Co. is a small family owned and operated scale service organization. We specialize in In-Motion weighing applications from conveyor belt scales to in-motion track scales. We manufacture and remanufacture calibration testchains for conveyor belt scales. We are an authorized service representative of Ramsey Technologies, Inc. Ron has been in the scale industry since 1961.

Product/Service

Description

Material Testing, Conveyor

Consultant and impartial third party services

Conveyor scale service

Authorized services representative of Ramsey Technologies

Track scales

Specialized in In-motion weighing systems

Test chains

Custom manufacturer of calibration test chains

Rebuilt Test chains

Remanufacturer of existing test chains

Mechanical retrofit

Electronic retrofit of most mechanical scales

Lee-Simpson Associates, Inc. 203 W. Weber Avenue P.O. Box 504 **DuBois**, **PA** 15801

Telephone:

(814) 371-7750

FAX:

(814) 371-8864

Chief Executive Officer:

Edward S. Nasuti, President

International Sales Manager: Duane L. Berry

International Offices:

Please contact company headquarters for further information.

Lee-Simpson Associates, Inc. is a diversified consulting engineering firm which employs registered professional engineers, registered surveyors, certified technicians, planners and other individuals with specialized training in the art and science of engineering. The firm's history began in 1900 with a proprietorship, followed by partnerships and mergers into a corporation known as Yost Associates, Inc. in 1958 and renamed Lee-Simpson Associates, Inc. in 1971. Our firm provides professional assistance to individuals, private enterprise and all levels of government in the fields of civil, electrical, communications, environmental, mining engineering and planning. The firm has available a fully equipped laboratory for water and soil testing.

Product/Service

Description

Technical Consultants

Lee-Simpson Associates, Inc. provides engineering, planning and evaluation services to coal and non-coal mining companies. The services provided consists of mapping mineral reserve evaluation, permit application preparation, water analysis, slope stability analysis, preparation of erosion and sedimentation control plans, geologic and hydrologic studies, and the design of buildings and structures for coal handling.



Levin-Richmond Terminal Corporation 402 Wright Avenue Richmond, CA 94804

Telephone: (510) 232-4422

Telex: 650 282 2846 MCIUW FAX: (510) 236-0129 Chief Executive Officer: William S. Benak, President

James C. Powell Terminal Manager: Director of Marketing: Jim Cannon

Coal Marketing: Mike McCoy, Marketing Representative



Levin-Richmond Terminal is a privately owned dry bulk marine terminal located in the North East portion of the San Francisco Bay. Over 43 different products have been handled at the terminal since 1981. In addition to coal, the primary exports are petroleum coke and scrap metal. Imports include furnace coke, cement, clinker, bauxite, gypsum and various other commodities. Marketing services include truck and rail contracting and vessel chartering. Levin Richmond Terminal Corporation also owns a short line railroad, Parr Terminal Railroad.

Product/Service	Description
Facility Operation	Eighty-four car coal train loads are delivered to a local switchyard. Levin's short line, the Parr Terminal Railroad receives coal directly from the Southern Pacific and the AT&SF Railroads. Coal is bottom dumped from rail cars, stockpiled, or loaded on board vessels. Stockpiles are reclaimed by front end loaders. Loading rate of a portable ship loader is 12,000 MT per day.
Coal Transport	Two berths are available to load coal. The berths have 40 ft. and 38 ft. of available water depth. The ship channel is maintained at 35 feet (MLLW) with daily tides adding an additional 6 feet of water. Vessels are limited to Panamax size. Maximum coal storage is 100,000 MT.
Coal Exporter	As a private facility, Levin-Richmond Terminal will contract with suppliers or customers to provide a commodity and full transportation services. Combined rail, loading and ocean transportation services at competitive rates can be provided.

Lignite Energy Council P.O. Box 2277

Bismarck, ND 58502

Telephone: (701) 258-7117 FAX: (701) 258-2755

President: **Director of Communications:** Marc Conrad

John W. Dwyer Director of R&D: Clifford Porter

Council also administers the state's R&D program.



John B. Long Co. 1504 Proctor Street P.O. Box 50608 Knoxville, TN 37950-0608

Telephone:

(615) 522-8686

FAX: (615) 523-4996
President & International Sales Manager:

Armistead M. Long

JBLCo is a full service engineering, manufacturing and sales company, producing and selling equipment to the mining and materials handling industry. Formed in 1984, it has over 50 employees, operating from its 35,000 square foot manufacturing facility in Knoxville, TN with branch sales and service offices in Kentucky, West Virginia and Alabama. JBLCo produces and markets bulk material samplers and related equipment, underground personnel carriers, underground rockdusting equipment and related components.

Product/Service

Description

Mechanical Sampling Systems

Technology leader in modular automated sampling systems for sampling coal and other bulk materials from belt conveyor flows 100 tph to 10,000 tph built to ASTM, ISO, etc. standards. Holder of 8 patents in sweep sampler

design with additional pending.

Sampling System Components

Crushers, Transfer Conveyors, Laboratory Dividers.

Mantrip Vehicles

Battery operated and rubber tires for transportation of personnel in limited headroom situations, MSHA certified

design.

Rock Dusters

For distribution of rockdusts in underground coal use. MSHA certified design.

Mine Headlights

Patented dual beam Long-Lite II and single beam Long-Lite. MSHA certified mine headlights.

LSR Technologies, Inc. 898 Main Street Acton, MA 01720 LSR Technologies, Inc.

Telephone:

FAX:

(508) 635-0123 (508) 635-0058

President/CEO: Technical Director: S. Ronald Wysk
Dr. Leo A. Smolensky

Domestic Offices:

ACTON, MA: 898 Main Street

International Offices:

International Operations - Please contact company Headquarters for further information.

LSR performs research and development in the area of coal combustion, energy conversion, and air pollution control. The company also offers design and engineering services, and supplies dust collection equipment to industry. Other capabilities include complete source testing services for particulate and gaseous emissions.

Products/Service

Description

Emissions Control

Provide particulate control equipment for removal of fine dust from flue gas.

Research & Development

Development of advanced systems to control air toxics, particulates, and gaseous emissions.

Compliance Testing

Complete source testing capability for air emissions with EPA Methods 1-25.

A.T. Massey Coal Company, Inc. P.O. Box 26765
Richmond, VA 23261

Telephone: (804) 788-1800 **FAX:** (804) 788-1811

Chairman/President/CEO: Donald L. Blankenship Executive Vice Pres.-Sales: Wynston D. Holbrook

Domestic Offices

P.O. Box 26765 Richmond, VA 23261

Massey Coal, a wholly-owned subsidiary of Fluor Corporation, is the premier supplier of Central Appalachian coal to world markets. Diversity is what sets Massey Coal apart from its competitors--diversity in technology, products, markets, human resources, mining methods and modes of transportation. With ten mining complexes located throughout Central Appalachia's coalfields, Massey Coal is uniquely positioned to supply a diversity of products. We sell coal to electric utilities and industrial and steel-producing customers throughout the United States, and we export all grades of bituminous coal to customers around the world.

Product/Service

Description

State-of-the-art, computer-controlled coal processing plants make it possible for Massey Coal to provide a wide range of products. Our plants are operated under Statistical Process Control guidelines, and our laboratories are capable of the full spectrum of coal analyses and quality control tests. Meticulous design of coal storage, handling and blending facilities insures that we achieve our customers' exacting quality specifications.

McNally Wellman 4800 Grand Avenue Pittsburgh, PA 15225

Telephone: (412) 269-5000

Telex: 199211 WELL UT FAX: (412) 269-5030 Chief Executive Officer: Raymond M. Koper

International Offices:

Please contact company headquarters for further information.

McNally Wellman has enjoyed over 100 years of providing a variety of services and products to the coal industry. With extensive experience in bulk material handling and storage, McNally Wellman can design and supply equipment and systems tailored to the requirements of mining operations, electric power plants, or other transportation situations. A recognized leader in coal preparation, McNally Wellman can provide efficient and reliable "modular plant" coal cleaning facilities incorporating the latest in cleaning technology. In addition, McNally Wellman offers a wide range of coal sizing, cleaning and dewatering equipment that has been proven dependable in the coal industry.



Product/Service	Description
"Modular" Coal Preparation Plants	McNally Wellman "modular" preparation plants are designed to recover the best possible product from a seam of coal utilizing water or dense media cleaning circuits. Our "modular" plants offer a flexible as well as economical alternative to conventional designed plants.
Coal Handling Systems & Equipment	McNally Wellman provides efficient and practical handling systems to move coal effectively. Our belt conveyor systems provide the link between the mine mouth and the preparation plant or the railroad car and the barge. Equipment includes railcar and barge/ship unloading and loading devices.
Coal Storage Systems	McNally Wellman will design a system to satisfy any coal storage requirement. Our systems have included traveling trippers, radial stackers, stacking tubes and stacker/reclaimers. In cases where enclosed storage is required, McNally Wellman offers various types of storage systems.
Coal Processing Equipment	McNally Wellman features a wide variety of specialized processing equipment to size, clean, and dewater coal. Processing equipment available from McNally include reciprocating feeders, roll crushers, rotary breakers, baum jigs, heavy medium vessels, water-only cyclones, curved sieves, and centrifugal dryers.

MEMCO 13523 Barrett Parkway Suite 241 St. Louis, MO 63021

Telephone: (314) 821-8011 **FAX:** (314) 821-7843

President/CEO:

Christopher M. Parsonage

Sales Manager:

Jack A. Flahaut

Domestic Offices:

St. Louis, MO Pittsburgh, PA

MEMCO is a barge transportation company operating on the Inland Waterways, primarily the Ohio River and its tributaries, the Mississippi and Arkansas Rivers and the Gulf Intracoastal. Our fleet of barges, both covered and open, is one of the newest in the industry. Some of the products we transport are coal, coke, grain, ores and alloys, fertilizer, salt, iron and steel products, machinery and cement, to name a few. We operate our own boats under a towing company, "METCO", and our own repair facility under the name of "Elmwood Fleet, Inc." located in New Orleans.

Products/Service

Description

Transportation

Our business is to transport commodities from points on the Inland River System to their destinations or a transfer point in the Gulf for export. We have the ability to move one barge or 100 barges efficiently, safely and at a reasonable cost.

Midland Enterprises, Inc. 580 Walnut Street, Suite 1400 Cincinnati, OH 45202



Telephone: (513) 721-4000 **FAX:** (800) 950-1695

President/CEO: Fred Raskin Sr. Vice President Sales and Marketing: Pete Hubbard

Domestic Offices:

Cincinnati, OH; Pittsburgh, PA; St. Louis, MO; Chicago, IL

Through its subsidiaries, Midland Enterprises, Inc. is one of the largest U.S. inland river coal carriers. The company's transportation subsidiaries—The Ohio River Company, Orgulf Transport Co. and Chotin Transportation Inc.—transported over 40 million tons of coal in 1992. These three companies operate a combined fleet of 2400 dry cargo barges. In addition, Midland operates two rail-to-barge coal loading terminals on the Ohio River at Huntington and Kenova, West Virginia. The total annual throughput capacity of these two terminals exceeds 10 million tons.

Products/Service

Description

Barge Transportation

The Company offers barge transportation throughout the inland waterway system.

Coal Terminalling

Terminals are capable of handling multi-car shipments. Offers homogenous belt blending to meet customer

specifications.

J. W. Miller & Associates, Inc. Miller Building No. 2 Hale Street Charleston, WV 25301

Telephone: (304) 343-9524 **FAX:** (304) 343-9530

President: Mr. James W. Miller
Vice President: Mr. David S. Miller
Vice President: Mr. Gary J. Miller

J.W. Miller & Associates, a family held company, has been incorporated since 1964.

Product/Service

Geological Exploration; Coal Mining, Underground, Surface, Auger; Coal Preparation; Coal Exploration; Coal Transportation; Port Facilities; Efficiency and Productivity Studies; Appraisals; Coal Analysis; Financing; Complete Feasibility Studies; Economic Evaluations; Market Studies; Management/Operations Research; Design Contracting; Exploration, Drilling, Preparation Plant Construction, Mine and Plant Management, Beehive Coke Oven Construction, RR Loading and Unloading.

Scott Michael Moore, M.A., J.D. Attorney & Counselor-At-Law H.C. 1 Box 20 Gratiot Lake Road Mohawk, MI 49950 USA

Telephone: (906) 337-4420 **FAX:** (906) 337-4420

Compuserve E-Mail: 71431, 3023

International Lawyer

Product/Service

Providing personal, prompt, and cost-effective international business legal services to clients worldwide. Licensed and admitted to practice before the U.S. Court of International Trade and the U.S. Court of Appeals for the Federal Circuit, among others.

Morrison-Knudsen Corporation One Erieview Plaza Cleveland, OH 44114

Telephone: (216) 523-3706 FAX: (216) 523-5539

Chairman/Chief Executive Officer: V.P. - International Operations:

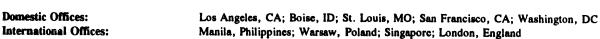
Tom Zarges Darryl G. Moffett

Product/Service Description

Architecture/Engineering Morrison Knudsen Corporation is an international firm engaged in design, construction, and program

management in energy, industrial, and government markets. It has proven capability for construction of totally integrated grassroot facilities, plant expansion, and modernization and retrofit programs. MK services range from feasibility studies through design, procurement, construction, and startup. The company has extensive experience in power and steam generation and related environmental control facilities, having completed over 150 such major projects in the past 10 years. Recent projects include: flue gas cleaning systems for Ontario Hydro, Sunflower Electric, Cleveland Electric Illuminating Co., and Tucson Electric Power Co.; coal-fired power plants for Utah Power & Light and Central and Southwest Services; wood-fired power plant for

Washington Water Power Co.; and two NOXSO power plants for U.S. DOE.



Facilities Construction

Morrison Knudsen Corporation P.O. Box 73

Boise, ID 83729

Telephone: (208) 386-5000

Telex: 368439 FAX: (208) 386-6919

Chief Executive Officer: Mr. William M. Agee Mining Group President: Mr. Robert A. Tinstman International Sales Manager: Mr. Steven Y. Chi

Mr. Gerald L. Sneddon (208) 386-6102

Mr. James R. Schultz (208) 386-6719

Domestic Offices: SAN FRANCISCO, CA: 180 Howard Street, San Francisco, CA 94105 FAX (415) 442-7363;

CLEVELAND, OH: One Erieview Plaza, Cleveland, OH 44114 FAX (216) 523-5922; SAN ANTONIO,

TX: 2446 Cee Gee Street, San Antonio, TX 78217 FAX (512) 824-5765

International Offices: Buenes Aires; Jakarta; Manila; Taipei, Bangkok, Warsaw; Cairo; Rio De Janeiro; Asuncion, San Jose, Costa

Rica; Melbourne; Ulaanbaatar; Mexico City; and Zurich. Please contact company headquarters for more

information.

Founded in 1912, Morrison Knudsen Corporation is one of the largest engineering, contracting and operating companies in the United States. Major markets include mining, environmental, waste management, water resources, transportation, power generation, rail systems, and manufacturing for a host of goods and services. "MK" has completed projects in more than 80 countries and is backed by a worldwide labor force of 20,000 people, including 4,000 engineers, managers, administrators, and project support personnel.

Product/Service Description

Technical Consultants MK's Mining Group provides a full range of consulting and engineering services, including: resource evaluation,

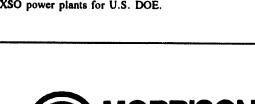
geologic modeling, baseline studies, environmental assessment, hydrologic evaluation, permitting, reclamation

planning, mine planning/design, material handling, management systems, and cost estimating.

Facilities Operations Start-up, training, technology transfer, mine management and mine operations are offered for open cost mines

utilizing trucks, shovels, loaders, draglines, and bucketwheels. MK operates as a contractor, manager, or venture

partner.



MVTL Laboratories 1411 S. 12th Street Bismarck, ND 58504

Telephone: (701) 258-9720 **FAX:** (701) 258-9724

Chief Executive Officer: Fred E. Day International Sales Manager: John Gray MYTL

MVTL LABORATORIES, INC.

National

Domestic Offices:

NEW ULM, MN; (507) 354-8518; GRAND FORKS, ND (701) 746-8335; NEVADA, IA (515) 382-5486

MVTL Laboratories is an independent testing laboratory founded in 1951. We operate laboratories in Bismarck and Grand Forks, North Dakota; New Ulm, Minnesota, and Nevada, Iowa. The Bismarck facility was established in 1977. The primary objective of the Bismarck branch is to provide analysis to the coal mining and energy generation industries. Our routine activities include coal quality analysis, chemical analysis of soil, water, overburden, ash and lubricating oils and greases.

Product/Service

Description

Laboratory Analysis of Coal Overburden Analysis Analysis according to ASTM procedures.

National Marine, Inc. 1515 Poydras Street, Suite 1500 New Orleans, LA 70112

Telephone: (504) 529-8600

Telex: 810-951-6376 FAX: (504) 529-8643

Chief Executive Officer: Vice President, Dry Cargo Sales: Dominic J. Verona Gary W. Kovac

Regional Offices:

CHICAGO/LEMONT, IL: 224 Ceco Road, Lemont, IL 60439 TEL: (708) 257-6510 PITTSBURGH, PA: Four PPG Place, Suite 300, Pittsburgh, PA TEL: (412) 434-1792 HOUSTON, TX: 2030 North Loop West, Suite 130, Houston, TX 77018 (713) 688-3974

National Marine, a member of the Vectura Group, is one of the largest carriers on the inland river system, operating approximately 900 barges and 60 towboats. National Marine provides control of service and cost with strategically located fleets and switching services at Pittsburgh, PA; Lemont, IL; Baton Rouge, LA; Mobile, AL, and Houston, TX.

Product/Service

Description

Coal Transport

National Marine, Inc. operates on the Ohio, Monongahela, Allegheny, Kanawha, Big Sandy, Green Cumberland, Tennessee, Missouri, Upper & Lower Mississippi, Illinois, Arkansas, Warrior and the Gulf Intracoastal Waterway.

NEDRAC, Inc. 3396 Sunland Way Costa Mesa, CA 92626

Telephone: (714) 957-1202

Telex: 984068 FAX: (714) 957- 1261 Chief Executive Officer: D. Carden



Product/Service

Description

Air and Ocean Forwarding

Ship and aircraft charter broker. Letter of credit negotiation and banking.

International Freight

Forwarder

Neundorfer, Inc. 4590 Hamann Parkway Willoughby, OH 44094

Telephone:

(216) 942-8990 (216) 942-6824

FAX: President/CEQ:

Michael Neundorfer

Sales Manager: Steve Ostanek



Neundorfer provides products and services related to air pollution abatement, using electrostatic precipitation. Electric power generation, metals processing, rock products (cement) and paper industries are the major types of businesses served since the early 1970s. Products include system upgrades, rebuilding, microprocessor controls for voltage and rapping, discharge electrodes, plate alignment systems, pneumatic and electric rappers, voltage isolation and stabilizing components, feedwater heater level controls, coal sampling devices and boiler tube deslagging systems. Services include consulting, field service, training, and performance diagnosis of electrostatic precipitator operations. Neundorfer is associated with the National Air Vibrator Company (NAVCO) of Houston, Texas, producers of pneumatic equipment.

Product/Service	Designation	Description
NAVCO Rappers EMR Rappers	R2, R3, R4 EMR 20110, EMR 20220	Pneumatic Impact Rappers, Pin Plates, Anvil Beam Sockets Magnetic Impulse Rappers
Discharge Wires Plate Alignment Hopper Evacuation MVCII MicroRap PS90	DE Electrodes Straighteners R3, PP3 Voltage Control Rapper Control Purge Stabilizer	Discharge Electrode Wires, spring & solid shroud Plate Realignment System Hopper Evacuation Systems Microprocessor-based Voltage Control System Microprocessor-based Rapper Control System Hopper-mounted lower wire frame air-purged insulating stabilizer
COAL LANTZ Mdc2000	Coal Sampler Feedwater Control	Automatically extracts sample of coal on as-burned basis Microprocessor-based or software algorithm to optimize levels of feedwater heaters

Norfolk Southern Corporation Three Commercial Place Norfolk, VA 23510-2191

Telephone: (703) 985-6707 (Roanoke, VA)

FAX:

(703) 985-6398

Chairman, President & CEO:

David R. Goode

Vice President Coal & Ore Traffic:

W.B. Bales

Assistant Vice President

International Coal & Ore Traffic:

T.E. Rappold

Domestic Offices:

110 Franklin Road, Roanoke, VA 24042-0026

Norfolk Southern (NS) is a holding company formed in 1982 with the merger of the Norfolk and Western and Southern Railways. As of December 31, 1992, NS operates 14,700 miles of track covering 21 states, primarily in the East, Southeast, and Midwest sections of the U.S. Rolling stock includes 47,350 open top coal hoppers which have an average hauling capacity of 96 tons per car and 2,048 locomotives. During 1992, coal mines located on the NS rail system loaded 115 million tons. Of this total, 31.2 million tons were exported through the NS Pier 6 coal terminal located at Lamberts Point, Norfolk, VA. The mines served by NS ship high-quality, low-sulfur steam and metallurgical coal.

Prod		10	
PTOG	uct.	Ser	VICE.

Designation

Description

Coal Export Terminal

Pier 6

Pier 6 is 1,850 feet (564 meters) in length, has two traveling shiploaders capable of loading two ships simultaneously or these two loaders can concentrate on one ship. Combined loading rate of both loaders is 16,000 tons per hour. The pier can accommodate vessels with a beam of 175 feet (53 meters), air draft of 55.5 feet (17 meters), and can accommodate a sailing draft of 50 feet (15.24 meters). New in 1993 are two storage silos with a capacity of approximately 5,000 tons each. These silos will allow ships to be dispatched sooner and will increase annual dumping capacity by 6 million tons to 48 million tons.

Norfolk Testing Laboratories, Inc. Division of McCreath & Son of Hampton Roads, Inc. 301 West Freemason Street Norfolk, VA 23510



Telephone: Telex:

(804) 622-6136

President:

823 434 FAX: (804) 623-4688 Richard R. Conlin

Lab Manager:

Joseph A. Mayer

Sampling Supervisor:

Howard E. Ennis, II

Technical Director:

William P. Huff

Domestic Offices:

HARRISBURG, PA: (Head Office) Andrew S. McCreath & Son, Inc., 610 Willow Street, Harrisburg, PA 17101 TEL. (717) 238-9331; NEWPORT NEWS, VA: Sampling Associates International, 11818 Rock Landing Drive, Suite

202, Newport News, VA 23606 TEL. (804) 873-0366

Founded in 1913 and a member of ASTM since 1927, Norfolk Testing Laboratories is a full service, independent laboratory dedicated to the sampling and analysis needs of the coal and coke industries. In addition to servicing the Port of Hampton Roads, NTL is capable of performing manual sampling at all east coast ports, railyards, stockpiles, or mine heads. Through its subsidiary, Sampling Associates International, mechanically sampled coal can also be obtained on sublot, lot, or consignment basis and can subsequently be analyzed rapidly at the Norfolk laboratory. The laboratory is fully equipped and staffed to perform all common analyses and more specialized requests such as sole-heated oven, ASTM, IRSID and Micum Tumbler tests, Gray-King, Roga and Mineral Analysis of ash. NTL is also a participant in worldwide performance studies.

(Continued on next page)

Norfolk Testing Laboratories, Inc. (Continued)

Product/Service

Description

Analysis/Preparation

Laboratory: Prox, FSI, FTA, Calorific Value, Arnu-Audibert and Ruhr Dilatometer, Gieseler, HGI, Ultimate, Mineral of Ash, Roga Gray-King, Chlorine, Fluorine, Forms of Sulfur, Koppers Test. Preparation Department: Total Moisture, Screen/Sieve Test, ASTM, IRSID and Micum Tumbler Tests, Sole-Heated Oven, Bulk Density, and Drop

Shatter Test.

Manual Sampling

Manual sampling can be performed in all east coast ports and through affiliates in the Gulf of Mexico. Sampling at all

railyards, stockpiles, and mine heads in the Appalachian region can also be arranged.

Norton Chemical Process Products Corporation P.O. Box 350 Akron, OH 44309-0350

Telephone:

(216) 673-5860

Telex: 433-8012 (ITT) FAX: (216) 677-7245

Chief Executive Officer:

Robert C. Ayotte

Chief Operating Officer: General Manager Environmental Products: James F. Kraynak Larry R. Fordham

International Offices:

GERMANY: Fred Jansen, Norton Chemical Process Products, Theodor-Heuss-Platz 11, Postfach 10 11 51, D-4040

Neuss 1, Germany TEL: 02131-21048 FAX: 02131-275669

HOLLAND: Simon Prins, Norton Chemical Process Products, Bredewater 26, 2715 CA Zoetermeer, Netherlands

TEL: 079-517200 FAX: 079-513964

Product/Service

Description

NOx Removal Catalyst

NC-300(R) catalyst, a unique homogeneous zeolite composition ensures maximum NOx removal over a wide range of temperatures. With its high efficiency and excellent thermostability, the NC-300 catalyst offers the highest level of NOx removal available - 90 percent or better for most applications. This zeolite-based catalyst and entire support systems are used to convert industrial emissions of nitric oxide into nitrogen and water, thereby reducing air pollution

and acid rain. The non-hazardous zeolite material also minimizes disposal concerns.



NRG Energy, Inc. 1221 Nicollet Mall Suite 700 Minneapolis, MN 55403



N75 Energy, Inc.

(612) 373-5300 Telephone: FAX:

(612) 373-5312

Roland Jensen **David Peterson** Carl Carreca

CEO: President and COO: VP - Business Development & Marketing:

NRG Energy, Inc. is an independent power producer (IPP) which designs, constructs, owns, finances and operates fossil fueled power plants. NRG is a wholly owned subsidiary of Northern States Power Company (NSP). Headquartered in Minneapolis, Minnesota, NRG is an umbrella corporation for unregulated energy related businesses on a worldwide basis and consists of the following core businesses.

- Independent power producer
- Full service material and energy recovery from solid waste.
- Production of steam energy and related services.
- Coal enhancement technologies
- Nuclear fuel enrichment

NUS 910 Clopper Road Gaithersburg, MD 20878-1399

Telephone: (301) 258-6000 (301) 258-8764 FAX:

President: James W. Vaughan, Jr.



Headquartered in Gaithersburg, MD, NUS is a global provider of engineering, consulting, construction management, operations and maintenance services for nuclear power generating and government entities. With more than 1,000 employees NUS provides a broad range of services from conceptual studies, consulting and siting and environmental assessments, through engineering, operations and maintenance, to dismantling, repowering, and site restoration.

Product/Service	Description
Architect/Engineer	NUS provides a broad range of services to worldwide nuclear power generating and government entities that need safe, cost-effective and environmentally acceptable new facilities; need to operate and maintain their present facilities
Facility Operations	in an efficient, environmentally acceptable manner, and require disposition of excess and retired facilities. NUS also provides computer services such as system integration, software development and customization and a variety of
Facility Maintenance	Class 1E and non-1E instrumentation and control equipment. Other services include: plant betterment, modifications, monitoring, security issues, risk assessments, training, design work, regulatory assistance, and
Facility Construction	environmental consulting.

H.C. Nutting Company 4120 Airport Road P.O. Box C Cincinnati, OH 45226

Telephone: (513) 321-5816 **FAX:** (513) 321-0294

Jack Scott Boyd Graves

Domestic Offices:

President/CEO:

Sales Manager:

Charleston, West Virginia Erlanger, Kentucky Columbus, Ohio Cincinnati, Ohio THE H. C. NUTTING COMPANY

MAILURE SIMES

GEOTECHNICAL, ENVIRONMENTAL AND TESTING ENGINEERS

SINCE 1921

The H.C. Nutting Company is a geotechnical, environmental and construction materials engineering and testing firm, serving thousands of clients in the Midwest and Eastern United States. Clients include governments, private industries, developers, contractors, public utilities, other engineers and architects. In-house support includes a fleet of drill rigs for subsurface exploration, coring and sampling and laboratory for all routine physical tests of all subsurface materials and construction materials.

Products/Service Description

Geotechnical Provide geotechnical engineering studies including test borings, laboratory testing and engineering reports.

Environmental Perform a variety of assessments and studies relating to definition and design relative to contamination of surface and

subsurface materials.

Materials Perform materials engineering on a variety of natural and man-made materials, especially construction materials.

Ohio Coal Development Office (OCDO)
Ohio Department of Development (ODOD)
77 S. High Street, 25th Floor
P.O. Box 1001
Columbus, OH 43266-0101

Telephone: (614) 466-3465 **FAX:** (614) 466-6532

President/CEO: Jacqueline F. Bird
Sales Manager: Howard J. Johnson, P.E.

International Offices: See listings for the Ohio Department of Development, International Trade Division (ODOD/ITD). ODOD/ITD has offices in

Tokyo, Brussels, Toronto and Hong Kong.

The Ohio Coal Development Office within the Ohio Department of Development oversees the State of Ohio's Clean Coal Technology Research and Development program. Ohio and its river valley have more on-going pilot and demonstration/development clean coal technology projects underway than any other state, and is known as the "clean coal technology corridor." These projects have a high degree of public and private participation, many of them with U.S. Department of Energy co-sponsorship. OCDO's funding is limited to entities doing business in Ohio or educational or scientific institutions located in Ohio.



Description

OCDO co-funds promising technologies and processes that can use high-sulfur coal in an environmentally-sound, economic manner. In addition, OCDO assists in displaying those technologies that have just become available for commercialization and sale domestically or overseas.

OCDO can assist in arranging tours of the project sites and discussions with the technology developers. (However, ODCO cannot underwrite the cost of the tours.) OCDO can also assist in locating Ohio-based companies engaged in coal mining and sale of Ohio coal, production and sale of mining equipment, and related environmental control equipment.



BURN OHIO COAL

Ohio Department of Development/International **Trade Division** 77 S. High Street, 29th Floor/P.O. Box 1001 Columbus, OH 43266-0101

Telephone: (614) 466-5017

Telex: 6874627 TRAOH UW FAX: (614) 463-1540

Deputy Director:

David L. Harpley

OHIO DEPARTMENT OF DEVELOPMENT

International Offices: We have four out-of-state trade offices. They are located in Toronto, Brussels, Hong Kong, and Tokyo.

The International Trade Division (ITD), an agency of the Ohio Department of Development, promotes exports for Ohio manufacturing and service companies and promotes trade investment in Ohio. Supported by four out-of-state trade offices, located worldwide, the ITD is staffed by Commercial Officers who provide export assistance to Ohio companies interested in: new markets, expanding a present market or exporting for the first time.

Products/Service

Description

Service:

- Current market information and country profiles;
- Advice on market penetration;
- Lists of potential representative agents, distributors, importers and prospective customers in foreign markets;
- Contacts with key government and trade associations for foreign markets;
- Trade leads and trade show information;
- Current reference list of Ohio export services and a commercial reference library; and,
- Advice on business practices and culture/customs of foreign countries.

The Ohio Valley Coal Company 56854 Pleasant Ridge Road Alledonia, Ohio 43902

FAX:

Telephone: (614) 926-1351 (614) 926-1615

President: Sales Manager: Robert E. Murray Richard S. Rice

Domestic Offices:

56854 Pleasant Ridge Road Alledonia, Ohio 43902

The Ohio Valley Coal Company is a coal production and sales enterprise. In 1992, the Company produced 3,500,000 tons of fully washed, thermally dried, high quality bituminous coal from its Powhatan No. 6 Mine in Belmont County, eastern Ohio. Coal is shipped from the Ohio Valley Coal Company's facilities via The Powhatan Transportation Center, owned by an affiliate, The American Coal Sales Company, at MilePost 110.8 on the Ohio River. At this facility coals from throughout the eastern United States can be transloaded to trucks, trains, or barges, and accurately blended into homogeneous products. These blended products can then be loaded into trains for export through East coast ports or into barges for export through New Orleans, Louisiana.

Products/Service

Description

Cost

High quality, fully washed, thermally dried bituminous coal.



Oxbow Carbon International, Inc. 1601 Forum Place, Suite 1202 West Palm Beach, FL 33401



Telephone: (407) 640-8800 **FAX:** (407) 697-1876

President/CEO: Executive Vice President: Manager European Sales: Hans H. Fleskes
Patrick E. Valentine
Christopher C. MacEachern

Oxbow Carbon International, Inc.

From OCI headquarters in West Palm Beach, FL, OCI conducts trading and marketing activities in petroleum coke, coal, alumina, fly ash, and other products; develops new marketing opportunities, especially in regards to petroleum coke and fly ash consumption; evaluates potential projects and acquisitions; and sources fuels for cogeneration projects in the United States.

Louisiana Carbon Company - A Joint venture with Conoco Carbon & Minerals, Inc. which markets fuel grade petroleum coke produced by Conoco, Inc. and other refineries. Annually, LCC ships over 2,500,000 tons to overseas customers and over 500,000 tons in the North American Market. Oxbow/LCC manufactures preblended fuels consisting of coal and petcoke for consumption in the utility industry.

Products/Service

Description

OCI is a privately held company whose primary business is marketing and trading solid fuels such as petroleum coke, coal and other bulk solids including fly ash, cement, bauxite and other aggregates. OCI is active in marketing, blending, brokerage and other value-added business on both an export and import basis. Product is transported via truck, rail, barge and vessel to serve OCI's domestic and overseas suppliers and customers.

Ash Separation

OCI has formed a Joint Venture with International Separations Systems, Inc. (ISSI) to separate carbon from fly ash.

P & L Systems, Ltd. 4970 Cleveland Avenue Columbus, OH 43231

Telephone: (614) 891-4970 **FAX:** (614) 891-4984

President: Thomas E. Rybski
Sales Manager: William G. Weber



Since the company's inception in 1971, P & L Systems, Ltd. has consistently promised and delivered the highest quality professional engineering, surveying and consulting services to our clients. Our multi-disciplined staff with our broad experience base permits turnkey solutions, incorporating the client's vision in a soundly engineered, practical manner. The professional staff at P & L Systems, Ltd. includes registered engineers and surveyors; geologists/hydrologists; resource development and environmental specialists, backed by a full complement of support personnel and equipment. The company has technicians and field crews which facilitate complete service, quicker response and greater quality control. In-house computer added design and drafting is employed for increased efficiency and accuracy.

Products/Service Engineering Mine Consulting Description

Parr Instrument Company 211 Fifty-Third Street Moline, IL 61265

Telephone: (309) 762-7716

Telex: 270226 FAX: (309) 762-9453

President: Michael R. Steffenson V.P. Marketing: W. Sherman Hamel



Since its founding more than ninety years ago, the Parr Instrument Company has been engaged exclusively in the manufacture and sale of combustion bombs, calorimeters, chemical reactors, pressure vessels and related equipment developed specifically for laboratory use throughout the world. These instruments are available from scientific instrument distributors in almost all countries throughout the world. Our calorimeters meet standard test methods for coal as designated by various International Organizations, ASTM, ISO, BS, and DIN. Additional instruments for producing a proximate and sulfur analyses may be networked with the calorimeter to a computer which has Coal Lab Software for data retrieval.

Product/Service	Designation	Description
Calorimeter	1261	An oxygen bomb calorimeter with microprocessor control for rapid and precise calorific tests with minimal operator attention.
Sulfur Analyzer	1760	An automatic titrimetric system for rapid sulfur determinations following combustion in a Parr Oxygen Bomb.
Proximate Analyzer	1750	A rapid data processing system which interfaces to balances and calculates the proximate analysis of coal.
Air Dry Loss Interface	1750A	A microprocessor system which collects weights from a digital balance and sends them to 1750 Proximate Analyzer for incorporation into a proximate analysis report.
Computer Interface	1747	An interface designed to connect an IBM PC XT or AT compatible computer onto a Smart Link Network. Also includes the software to communicate with instruments on the Smart Link.
Water Handling System	1563	A closed circuit water supply for assured repeatability and convenient calorimeter operations.
Automatic Calorimeter	1271	A fully automatic oxygen bomb calorimeter system that includes water handling and bomb rinsing for rapid and precise calorific tests without operator attention.

Parsons Behle & Latimer
One Utah Center
201 South Main Street, Suite 1800
P.O. Box 11898
Salt Lake City, UT 84147-0898

PARSONS BEHLE & LATIMER

A PROFESSIONAL LAW CORPORATION

Telephone: (801) 532-1234 **FAX:** (801) 536-6111

President: Raymond J. Etcheverry, Esq.

International Section Leaders: Daniel M. Allred and James M. Elegante

Founded in 1882 to serve the needs of western mining companies, today, the law firm of Parsons Behle & Latimer continues to represent mining entities, but has greatly expanded its practice. The firm's 90 attorneys practice in the areas of natural resources and environmental law, litigation and general business matters. They represent domestic companies in connection with their foreign business activities, as well as foreign nationals with their business activities in the United States. One of the preeminent western firms, Parsons Behle & Latimer represents a number of mining companies in environmental, general business, government relations, administrative, tax matters, immigration, labor and employment, OSHA and MSHA.

(Continued on next page)

Parsons Behle & Latimer (Continued)

Product/Service

Description

Natural Resources

Parsons Behle & Latimer has the largest Natural Resources Section in Utah, with extensive expertise in natural resources, mining, environmental and administrative law. The Firm represents many of the largest mining and energy companies in the West. Our lawyers practice before federal and state agencies in Arizona, Colorado, Ohio, Nevada, Utah and Wyoming on: environmental matters, reclamation matters, workers compensation, water rights, mineral leasing, energy matters, occupational health and safety, public lands, mining matters, taxation and oil and gas matters.

Litigation

Parsons Behle & Latimer has one of the largest litigation departments in the Intermountain West. The attorneys practice before federal and state courts, administrative agencies and arbitration panels. Representative areas of trial practice are: Commercial Litigation, Natural Resources and Environmental (including Super Fund cases), Intellectual Properties and Antitrust, Labor and Employment, Banking, Insolvency, Personal Injury and Products Liability, and Mass Media.

Business

Evolving to meet the complex legal needs of businesses today, Parsons Behle & Latimer's business group has built on its traditional strengths of providing advice on corporate, commercial and regulatory questions in a broad range of business transactions, both nationally and internationally. Representative areas of business practice are: Mergers and Acquisitions, Business, Corporate and Securities, Banking and Finance, Real Estate, Tax, Regulatory and Administrative, Energy, Government Relations, and transactional transactions and immigration law.

Parsons Brinckerhoff Inc. One Penn Plaza New York, NY 10119

Telephone: (212) 465-5000

Telex: WU 12-5441, RCA 232117

FAX: (212) 465-5096

Chief Executive Officer: James L. Lammie

Director of Corporate Development: Robert Prieto (212) 465-5036

Domestic Offices:

Over 100 offices in the U.S. and abroad. SAN FRANCISCO, CA: Mining Division Headquarters, 303 Second Street, Suite 700 North, San Francisco, CA 94107-1317 TEL. (415) 243-4600 FAX (415) 243-9501; DENVER, CO: Environmental Engineering & Services Corp. (a PB Affiliate) 1660 Lincoln Street, Suite 2000, Denver, CO 80264 TEL. (303) 832-9091 FAX (303) 832-9095; HOUSTON, TX: PB/KBB Subsidiary, 11767 Katy Freeway, Suite 810, Houston, TX 77079 TEL. (713) 496-5590 FAX (713) 496-5658; SAN FRANCISCO, CA: Energy Systems Group, 303 Second Street, Suite 850 North, San Francisco, CA 94107-1317 TEL. (415) 281-8700 FAX (415) 281-8707

International Offices:

Woodrow W. Hitchcock

President

Parsons Brinckerhoff International, Inc. 700 Eleventh Street, N.W., Suite 710

Washington, D.C. 20001

(703) 709-1170

AUSTRALIA: Brisbane, TEL. +61-7-371-4533 FAX +61-7-371-4262; Sydney, TEL. +61-2-957-4465, FAX +61-7-957-6046; AUSTRIA: Vienna, TEL. +43-1-534-39510 FAX +43-1-534-39511; EGYPT: Cairo, +20-2-705-800, FAX +20-2-710-439; TAIWAN: Taipei, TEL. +882-2-778-0850, FAX +886-2-771-0322; ENGLAND: London, TEL. +44-81-891-3217, FAX +44-81-891-5027; HONG KONG, TEL. +862-894-7488, FAX +865-891-5021; LAPANI: Talva TEL. +81-2-3503-5075, FAX +81-3-3505-6335.

+852-884-7488, FAX +852-885-5931; JAPAN: Tokyo, TEL. +81-3-3503-5075, FAX +81-3-3595-6335; SINGAPORE, TEL. +652-293-7777, FAX +652-943-383; THAILAND: Bangkok, TEL. +66-2-231-0614,

FAX +66-2-231-0448.

(Continued on next page)

Parsons Brinckerhoff Inc. (Continued)

Parsons Brinckerhoff (PB) is a 108-year-old multidisciplinary consulting engineering, planning, architecture and construction management firm providing services to public and private clients throughout the world. Preeminent in the planning and design of transportation systems and facilities, the firm is also a leader in the design and engineering of power generation systems; advanced energy conversion technologies, fluidized bed combustion, cogeneration systems; compressed air/gas storage systems for peaking power; diverse underground structures and systems; tunnels and water resources systems; nuclear waste repositories; storage of petroleum resources, natural gas, and compressed air in caverns and wells. It specializes in mine planning and design that incorporates geotechnical and environmental engineering, and project and construction management. Mine services range from technical and environmental audit to complete feasibility study, mine planning and design, and detailed design of shafts and hoists. Our mining experience includes various types of mediums including coal and industrial minerals, oil shale, uranium, base metals, and precious metals. The firms' international arm, Parsons Brinckerhoff International, Inc., is utilizing project experience gained in the U.S. and abroad for highways, transit, infrastructure, public works and private developments in over a dozen international offices on six continents.

Consulting Services

Description

The Energy Systems Group of PB has specialized expertise in the study, evaluation and design of cogeneration plants; waste-to-energy and waste incineration facilities; hydroelectric facilities; industrial utility systems; heat transfer; electrical power generation and distribution systems; and fluidized bed combustion and gas/compressed air storage systems.

Environmental Engineering & Services Corporation, a PB affiliate provides a full range of services in the hazardous waste industry from initial investigations and negotiations to remedial design, construction management and facility closure. Services provided include regulatory compliance services; permitting; site characterization/remediation; property assessment and site investigation.

The Mining Division of PS provides engineering services for underground and surface mines; mine drainage treatment; mine cleaning; clean-up of hydrocarbons; mine surface facilities; preparation plant; land reclamation; railroad loading/unloading; and tidewater/river/lake/dock facilities.

PB-KBB a subsidiary of PB specializes in the engineering, design, construction, and operation of solution-mined storage facilities; conventionally mined storage facilities, solution mining mineral recovery systems; underground disposal wells and handling systems; compressed air energy storage caverns; surface systems storage facilities; compressor stations, tank farms, platforms, pipelines, and terminals.

Relevant Projects

Central Heating/ Power Generation Mielec, Poland

El Cerrejon Coal Mining and Transportation Project Bogota, Colombia

Yangpu Power Plant Management (Stage 1A) Yangpu, Hainan, PRC Red River Army Depot Waste Fuel Burning Steam Plant Fort Worth, TX

Sewells Point Naval Complex Coal Gasification/Combined Cycle Power Plant Feasibility Norfolk, VA

Coal Transshipment Terminal Superior, WI

Parsons Main, Inc. 101 Huntington Avenue Boston, MA 02199

Telephone: (617) 262-3200

Telex: 4430035/CTMAIN FAX: (617) 859-2576

Chief Executive Officer:

James T. Callahan, President

Vice President:

Charles L. Holland

Domestic Offices:

CHARLOTTE, NC: 4701 Hedgemore Drive, Charlotte, NC 28209 TEL. (704) 529-6246; PASADENA, CA: 100

West Walnut Street, Pasadena, CA 91124 TEL. (800) 362-6304

A subsidiary of The Parsons Corporation, Parsons Main, Inc. (Parsons Main) (formerly Chas. T. Main, Inc.), established in 1893, is a major international engineering and construction firm with over 1,000 people representing all engineering disciplines, process engineering, architecture, project management, construction management, procurement, quality assurance, and project controls functions. Parsons Main serves electric utilities and other energy producers; pulp and paper producers; the chemical process industry; high-technology manufacturers; the printing industry; commercial enterprises and institutions; and government agencies. Services provided range from feasibility studies, consultant services, to turnkey supply of complete operating facilities.

Product/Service

Description

Services to the Power Industry

Over 4,200 public and private sector clients throughout the world have been served by our specialists in Thermal Power, Industrial Power, Hydroelectrical Power, and Power Delivery. Projects have included power generation and delivery services to over 100 utilities in the United States and to clients in over 60 countries worldwide. Parsons Main's power generation experience includes engineering design and construction management services for over 56,000 megawatts of installed capacity, including oil-fired, combined cycle gas/turbine, hydroelectric, coal/lignite, and cogeneration. Additionally, Parsons Main has extensive experience with transmission lines, substations, and numerous distribution, switchyard, communication, and load management systems.

PCT Technical Services, Inc. 101 North Main Street Greensburg, PA 15601

Telephone:

(412) 834-7555

FAX:

(412) 837-9241

Chief Executive Officer:

Mr. Joseph Ciarimboli

International Sales Manager:

Mr. Joseph Ciarimboli

International Offices:

Please contact company headquarters for further information

PCT Technical Services, Inc. services the coal and coke industry with technical, economic, market study investigations, and environmental impact studies regarding special situations as to utilization of coal and cokemaking facilities. Contracts have included the authoring of the book: "World Coke Dynamics," considered the most comprehensive treatise of worldwide cokemaking; novel uses of obsolete conventional coke production facilities to convert municipal solid wastes to energy; new applications of waste refuse bituminous coal in fluidized bed furnaces to generate power without coal beneficiation; novel techniques of reclamation involving vegetating directly onto coal surfaces avoiding the costly application of top soils.

Product/Service

Designation

Description

Technical Consulting

PCT Tech Services

PCT Tech Services, Inc. is an organization of experts in coal and coke matters that performs special situation studies to develop new systems technology for problems in coal utilization and reclamation matters. The expertise includes unique capabilities in coke production determining new uses for old coke batteries such as with the pyrolysis of municipal solid wastes.

Peabody COALSALES Company 701 Market Street, Suite 830 St. Louis, MO 63101

Peabody Engineering
Hamworthy Engineering group

Telephone: (314) 342-7600 **FAX:** (314) 342-7609

Officer: Richard M. Whiting (President)

International Sales Manager: D.D. Turnbull (V.P. Sales & Marketing,

Charleston, WV)

Domestic Offices:

Charleston, WV, Peabody COALSALES Company, 500 Lee Street, Laidley Tower, Suite 200, Charleston, WV 25301

TEL: (304) 340-1725 FAX: (304) 340-1749. Also: Henderson, KY and Flagstaff, AZ.

Peabody COALSALES Company markets more coal than any other U.S. organization. Domestic and export sales in 1992 were 90.8 million short tons of steam and metallurgical coal from mining operations in eight states. The company is the principal sales agent for Peabody Coal Company, Peabody Western Coal Company, Powder River Coal Company and Eastern Associated Coal Corp. The majority of the company's export shipments originate from West Virginia and are transloaded through Dominion Terminal at Newport News, VA. Peabody Holding Company, Inc., Peabody COALSALES' parent, owns a 30 percent interest in Dominion Terminal.

Product/Service Description

Customer Services COALSALES markets all grades of steam and metallurgical coal to consumers in at least 14 countries worldwide.

COALSALES personnel identify coal souring options meeting customer specifications, analyze and identify

transportation modes to maximize efficiency and economy, arrange product test burns, and provide technical assistance.

Pier IX Terminal Company P.O. Box 38 Newport News, VA 23607

Telephone: (804) 244-8800

Telex: 901448 FAX: (804) 247-0287

President: Charles M. Whitten
Director of Marketing: C. Douglas Starrett

Pier IX Terminal, a division of SMC Mining Company, is located on the James River in Southeast Newport News, Virginia. Since its opening in 1983, this terminal has loaded over 50 million tons of coal to over 1,100 vessels destined to all parts of the world.

In June of 1990, Pier IX commissioned a Dry Bulk Unloading System which initially handles bulk cement. This new system is capable of handling other dry bulk material; i.e., potash, salt, fertilizers, import coals, etc. Plans are to incorporate required equipment to handle self unloader vessels as well as bulk vessels to both open and covered storage.

Product/Service	Description
Coal Berth	52 ft. water depth, 80 ft. air draft, 8000nt/hr loading capacity, 1,000,000 open ground storage
Bulk Unloading Berth	43 ft. water depth; siwertel unloader - 800 TPH capacity; good potential for open and covered storage up to 25,000 tons; planned improvement to handle self unloading belt dischargers
Rail Connections	CSX
Highway Connections	adjacent to I-664 with direct routes - south to Carolinas, north to Richmond and Baltimore/Washington areas, and west to Staunton, Virginia

Pincock, Allen & Holt, Inc. 274 Union Boulevard, Suite 200 Lakewood, CO 80228

Telephone: (303) 986-6950

Telex: 666457 KAPIN FAX: (303) 987-8907

President:

John J. Antony, P. Eng.

Manager-Coal Services:

K.M. Kolin, P.E.

Domestic Offices:

Denver, Colorado: Telephone (303) 986-6950

15 Valley Drive, Greenwich, CT 06830: Telephone (203) 661-4411

Pincock, Allen & Holt, Inc. (PAH) is an international consulting engineering firm specializing in the evaluation, planning, design and management of mining industry projects. Since its founding in 1968, PAH has completed over 1600 assignments related to precious and base metals, industrial minerals and coal. Through its Geology, Mine Engineering, Mineral Processing, and Mineral Economics Departments, PAH serves the mining, financial and governmental communities.

Products/Service

Description

Mineral Industry Consulting Services

Geologic investigations

Manual and computer-based reserve estimation

Property appraisals

Surface and underground mine planning Capital and operating cost estimates Economic and financial analysis Commodity and market studies

Conceptual and detailed process design and engineering

Bankable documents

Environmental audits, mitigation and permitting

Port of Long Beach P.O. Box 570 Long Beach, CA 90801

Telephone: (213) 437-0041

Telex: 656452 FAX: (213) 437-3231

Chief Executive Officer:

Steven R. Dillensbeck

International Sales Manager:

Don Wylie

Domestic Offices:

LONG BEACH, CA: 925 Harbor Plaza, Long Beach, CA 90802

International Offices:

Please contact domestic office for details

The Port of Long Beach, established 1911, is a Department of the City functioning through a five-member Board of Harbor Commissioners. Currently comprising over 2,800 acres, the Port has expansion plans to add an additional 1,400 acres by the year 2020. Since over 50% of its tonnage volume is comprised of bulk cargo, the Port remains committed to handling cargos of all types. As the West Coast's largest Port in total tonnage, Long Beach offers facilities capable of handling current and future coal export volume.

Product/Service

Description

Special Coal System

Coal exports move through the Pier G facility operated by Metropolitan Stevedor Company. The Port's rail yard can hold up to two unit trains. With unloading capability of 30 cars/hr. throughput of four trains per day is achievable. The terminal operates two loaders with 3,000 mt/hr and 5,000 mt/hr capability. Two berths handle panamax and cape size vessels up to about 130,000 tons. Rail service into the Port is by Sante Fe, Southern Pacific and Union Pacific Railroads.



TRADE CENTER FOR THE WORLD

Sheppard T. Powell Associates 1915 Aliceanna Street Baltimore, MD 21231



Telephone: (410) 327-3500 **FAX:** (410) 327-7506

Managing Partner:

David A. Cline, Jr.

Sheppard T. Powell Associates provides consulting and laboratory analysis services in the field of water treatment and corrosion control. We are strictly a consulting services organization that neither manufactures nor markets chemicals and equipment used in water treatment. Our position of independence and objectivity in the practice of water treatment consultation is widely known in the utility and private industry. Independent consultants to users of water and steam for over 70 years; cycle chemistry audits; corrosion assessment and control; start-up and chemical cleaning assistance; chemical and metallurgical services; high purity water analysis; training; emergency "in plant" support; water/waste treatment and management; environmental investigations and permitting assistance; water supply treatability evaluations; and preparation/review of conceptual designs and technical specifications.

Product/Service	Description
Technical Consultants	Consulting services relating to review of boiler water, steam cycle and cooling water chemistries, inspection of equipment, troubleshooting and recommendations for optimizing operations.
Utilities	Consulting services including field support, equipment inspections and engineering studies designed to define problem areas and offer recommendations to correct and optimize water-related operations of all types.

Preiser Scientific, Inc. 94 Oliver Street St. Albans, WV 25177

Telephone: (304) 727-2902

Telex: 710-938-1654 FAX: (304) 727-2932

Chief Executive Officer: Mr. A.E. Preiser International Sales Manager: Mr. Chris Cline

Preiser Scientific

Preiser Scientific is a full service laboratory supply company specializing in supplying sample preparation, testing equipment and supplies to coal testing laboratories throughout the world. Principal products available include equipment for ash and ash fusion determinations; calorimetric determination; carbon-hydrogen analysis; coal sampling stations, crushers and pulverizers; dilatometers and plastometers; FSI determination; grindability; moisture determination; sample splitters, sieves and sieve shakers; sulfur determinators; VCM determination and water testing equipment.

Product/Service Description

Coal Testing Equipment
Sample Preparation Equipment
Laboratory Supplies

Equipment includes analytical balances, calorimeters, colorimeters, lab furniture, furnaces, glassware,

ovens, pH meters, plasticware, porcelainware, water stills, etc.

Process Technology, Inc.

Headquarters:

1122 Calumet Avenue Calumet, MI 49913

Telephone:

(906) 337-0020

FAX:

(906) 337-0023

Sales & Service Office: 2767-69 East Fourth Avenue Columbus, OH 43219

Telephone: FAX:

(614) 252-9583 (614) 252-9562

Chief Executive Officer:

Mel J. Laurila

International Sales Manager: Mcl J. Laurila

PTI was incorporated in early 1986 to assist the coal industry in improving preparation plant efficiency and control. PTI has designed a line of on-line analyzers, enabling the instantaneous monitoring of ash and moisture (or solids) on any belt or pipe in a preparation facility. Current development work includes the addition of a sulfur measurement to PTI's ash analyzers. A series of software packages have been developed that utilize this information in real-time control that employs the latest in Fuzzy Logic Controls technology. Our Preparation Plant Simulator has been used by many equipment manufacturers to evaluate and predict the performance of their equipment in preparation plants. PTI continues to perform contract research both as a contractor and subcontractor for Department of Energy projects through the Pittsburgh Energy Technology Center (PETC) and Small Business Innovative Research program (SBIR). PTI also conducts contract research and performs engineering services for many of the major coal producers in the United States and Canada. We also serve as an analytical laboratory, particularly for the fine particle/particle separations. PTI is currently the worldwide exclusive licensee of the KEN-FLOTETM Column flotation technology, developed by the University of Kentucky's Center for Applied Energy Research (CAER).

Products/ Services

Description

PTI Ash Monitor Coarse Ash Monitor Microwave Moisture Meter Nuclear, in-plant, automated slurry ash and solids analyzer Nuclear, in-plant, automated coarse coal ash monitor

Nuclear, in-plant, automated moisture meter to determine moisture content of the coal on the belt.

PROCESS

KEN-FLOTE™ Flotation Column

Software Packages

PTI Preparation Plant Simulator and Fuzzy Logic Control

Advanced Coal Cleaning Technology Development Development of new coal cleaning technologies, pyritic sulfur removal, and super clean coals.

Progress Materials, Inc. One Progress Plaza Box 15208 St. Petersburg, FL 33613

Telephone:

(813) 824-6693

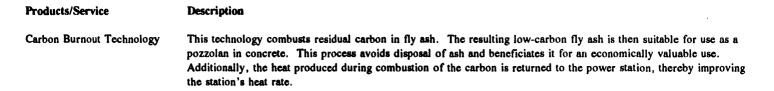
FAX: President/CEO: Sales Manager:

(813) 824-6601 Peter D. Hay Peter D. Hay

Domestic Offices:

St. Petersburg, FL





Prox Company, Inc. 1201 S. First Street P.O. Box 1484 Terre Haute, IN 47808

Telephone: (812) 232-4324 FAX: (812) 232-4325

President: Robert F. Prox, Jr.



Prox Company, Inc. designs and manufactures mining equipment replacement parts. Prox currently markets ripper chains, trim chains, conveyor chains and flites, and assorted bit blocks for various continuous miners as well as cutter bars and chains for conventional mining equipment. At our facility in Terre Haute, Indiana we have the capability to custom machine parts as well as welding and heat treating.

Product/Service	Description
Continuous Miner Parts	We currently have ripper chains, conveyor chains and flites, and trim chains for various continuous mining equipment.
Conventional Mining Parts	Cutter bars, cutter chains, and drive sprockets for conventional mining equipment.
Bit Blocks	Assorted bit blocks for cutting drums, boring machines, longwall shearers, and cobs.

PSI Technology Company A Division of Physical Sciences, Inc. 20 New England Business Center Andover, MA 01810

Telephone: (508) 689-0003 FAX: (508) 689-3232

President: **Principal Point of Contact:** Anthony N. Pirri Stephen A. Johnson



PSIT is a privately held business providing products and services to the power generation and waste technologies sector. Our engineers apply their fundamental understanding of coal combustion phenomena to provide innovative, practical solutions to real-world coal utilization/emission control problems. Current customers include electric utility companies, power plant equipment suppliers, and coal companies.

Product/Ser ce

Description

Applied R&D

Development of advanced systems to control NOx, SO2, toxic metals and organics during coal

combustion/gasification.

Coal Quality Consulting

Specialized lab-scale and full-scale coal testing to determine effects of coal blending/switching on boiler operation.

Emission Control Systems

Engineering

Application of combustion and post-combustion NOx controls to coal-fired boilers and coal-based combined-

cycle power plants. Also sorbent injection for SO₂, alkali and toxic metal control.

Measurement/Control

Equipment

Optical temperature monitor for controlling sootblower operation and optimizing boiler performance.

Radian Corporation P.O. Box 201088 Austin, TX 78720-1088

Telephone: (512) 454-4797

Telex: RCA #269263 RAD UR FAX: (512) 454-7129

Chief Executive Officer: International Sales Manager:

Dr. Donald M. Carlton Mr. R. Murray Wells

Domestic Offices:

ALBUQUERQUE, NM: TEL. (505) 881-7415; ALEXANDRIA, VA: TEL. (703) 683-0102; ATLANTA, GA: TEL. (404) 414-4522; BATON ROUGE, LA: TEL. (504) 922-4450; BOULDER, CO: TEL. (303) 443-2378; CINCINNATI, OH: TEL. (513) 459-9048; DENVER, CO: TEL. (501) 292-0800; HOUSTON, TX: TEL. (713) 785-9225; LOS ANGELES, CA: TEL. (310) 640-0045; LOUISVILLE, KY: TEL. (502) 425-9530; MILWAUKEE, WI: TEL. (414) 643-2700; MINNEAPOLIS, MN: TEL. (612) 921-3253; NORTH LOS ANGELES, CA: TEL. (818) 752-3290; OAK RIDGE, TN: TEL. (615)

483-9870; ORANGE COUNTY, CA: TEL. (714) 261-8611; RALEIGH/DURHAM, NC: TEL. (919) 541-9100; ROCHESTER, NY: TEL. (716) 292-1870; SACRAMENTO, CA: TEL. (916) 362-5332; SALT LAKE CITY, UT: TEL. (801) 261-2187; SAN ANTONIO, TX: TEL. (210) 525-7957; SAN FRANCISCO,

CA: TEL. (510) 932-7120; SEATTLE, WA: TEL. (206) 637-0662; WASHINGTON, DC:

TEL. (703) 713-1500

International Offices:

HANNOVER, GERMANY: Radian GmbH, Hildesheimer Strasse 53, 3, Stock, 3000 Hannover 1, Germany TEL. 49 511 80 71 125; HONG KONG: 2001 Lippo Tower, Lippo Centre, 89 Queensway Central, Hong Kong TEL. 852-523-1016; LONDON, ENGLAND: Radian Limited, Meirion House, Guildford Road, Woking, Surrey GU 22 7QF, UK TEL. 44-483-729307; MADRID, SPAIN: ET&P/Radian, General Margallo, 17 - 1.°F, 28020 Madrid, Spain TEL. 341-571-5089; MEXICO CITY, MEXICO: Corporacion Radian, S.A. de C.V. Arquimedes 209, 1er. Piso, Col Polanco, 11560 Mexico, D.F., Mexico TEL. 525-250-3006; TAIPEI, TAIWAN, R.O.C., 3 FL-4, No. 192, Tun Hwa S. Road, Section 1, Taipei, Taiwan, R.O.C. TEL. 886-2-7816161; TORONTO, CANADA: Radian Canada Inc., 100 Matheson Blvd. E, Suite 201, Mississauga, Ontario L4Z 2G7, Canada TEL. (416) 890-0804

(Continued on next page)

Radian Corporation (Continued)

Radian Corporation, established in 1969, provides technical services to industry and government, both domestically and worldwide. The company's primary areas of business in the environmental area include: environmental management services, engineering and design services, and analytical chemical services. A principal player in wet scrubbing technology, the company has remained in the forefront of technology designed to permit the use of coal while meeting all applicable environmental requirements. Services provided by over 2000 people at Radian Corporation include analyzing available options for the use of coal, including conceptual designs and preliminary cost estimates, assisting the client in their discussions with vendors and A&Es, and providing performance testing after start-up. Radian supplies a full array of analytical chemical services from its full-service laboratories, as well as the design and operation of bench- and pilot-scale projects.

Radian is a company of The Hartford Steam Boiler Inspection and Insurance Company.

Product/Service

Description

Technical Consultants

A principal player in wet scrubbing technology, Radian has remained in the forefront of technology designed to permit the use of coal while meeting all applicable environmental requirements. Services provided by over 2000 people at Radian Corporation include analyzing available options for the use of coal, including conceptual designs and preliminary cost estimates, assisting the client in selecting the most attractive technology, working with the client in their discussions with vendors and A&Es, and providing performance testing after start-up. Radian also supplies a full array of analytical chemical services, as well as the design and operation of bench- and pilot-scale projects.

Radix Group International 5510 West 102nd Street Los Angeles, CA 90045



Telephone: (213) 338-2400

Telex: 216408 FAX: (213) 417-5031

Chief Executive Officer: Matthew P. Sheppard

International Sales Manager: Gary Syner, Vice President, Sales and Marketing

Domestic Offices: LOS ANGELES, CA; DALLAS, TX; TULSA, OK; HOUSTON, TX; PHOENIX, AZ; SEATTLE, WA;

SAN FRANCISCO, CA; CHICAGO, IL; ATLANTA, GA; COLUMBUS, OH; INDIANAPOLIS, IN; MINNEAPOLIS, MN; NEW YORK CITY, NY; BOSTON, MA; ALBANY, NY; BALTIMORE, MD; NORFOLK, VA; CHARLOTTE, NC; MIAMI, FL; TUCSON, AZ; CHARLESTON, SC; RICHMOND, VA

International Offices: All principal cities worldwide. Please contact company headquarters for further details.

Radix Group International is an EDI automated, full service international freight forwarder and customs broker engaged in all aspects of international transportation. Radix became a significant national firm through the merger and integration of a number of old line and prestigious firms. Presently, Radix operates twenty-five offices in nineteen cities throughout the U.S. and an extensive agent network worldwide. Staffed by over five hundred professionals, Radix offers the strength and resources of a major corporation while maintaining the high standard of personalized service which are the hallmarks of the regional firm.

Product/Service

Description

Freight Forwarding NVOCC

Expedite and coordinate both air and ocean shipments, from point of origin to final destination. Arrange consolidations, warehousing, packing, crating, distribution, inland transport, insurance, duty drawback. Prepare all documentation involved including: ocean and air bills of lading, export declarations, packing lists, certificates of origin, consular documents and bank documentation.

Raytheon Engineers & Constructors, Inc. **141 Spring Street** Lexington, MA 02173

Engineers & Constructors

Telephone: Telex:

(215) 422-3000 (Philadelphia)

FAX:

83-4203 (Philadelphia)

(215) 422-4648 (Philadelphia)

Chief Executive Officer: International Sales Manager:

Charles Q. Miller, Lexington, MA V.J. Berry, Cambridge, MA

Domestic Offices:

BOSTON, MA: One Broadway, Cambridge, MA 02142, TEL. (617) 494-7000 PHILADELPHIA, PA: 30 S. 17th St., Philadelphia, PA 19101, TEL. (215) 422-3000 DENVER, CO: 5555 Greenwood Plaza Blvd., Englewood, CO 80111, TEL. (303) 843-2000

CHICAGO, IL: 1333 Butterfield Road, Downers Grove, IL 60515, TEL. (708) 829-3000 TAMPA, FL: 1401 N. Westshore Blvd., Tampa, FL 33607, TEL. (813) 289-1991

International Offices:

LONDON: C.I. Tower, St. Georges Square, High Street, New Malden, Surrey KT3 4HH, TEL. 44/81/942-0055

THE HAGUE: Binckhorstlaan 117, 2516 BA, The Hague Netherlands, TEL. 31/70/349-4004

Raytheon Engineers & Constructors is a worldwide engineering and construction firm whose 8,000 people are serving corporations and government clients in more than 20 countries on five continents. The organization represents the consolidation of a number of engineering and construction organizations that have been meeting the needs of the mining, metallurgical, petroleum and gas, power, process, chemical and biotechnology industries since 1885. The company's coal experience ranges from conceptual engineering studies to coal mining and handling facilities design; coal processing, beneficiation and gasification projects; and construction and operation of coal conversion projects.

Product/Service	Description
Architectural/Engineering	Complete services from conceptual studies through detailed design. All phases of engineering of coal-fired power generation plants including fluid bed combustion, environmental engineering licensing, and waste management.
Facility Construction	Every type of construction arrangement from direct hire to complete subcontract. We can provide all construction services including field engineering, labor relations, safety programs, quality assurance, project controls, expediting, cost management, and inspection.
Facility Operations	Operation and maintenance activities of fossil-fueled plants including plant life extension, modifications, retrofits.

testing and startup, operation training, and energy economics.

Resource Data International, Inc. 1320 Pearl Street, Suite 300 Boulder, Colorado 80302

Telephone: (303) 444-7788

FAX: (303) 444-1286

Chief Executive Officer: Ronald L. McMahan, PhD

Director of Sales: Michael J. Minkel

Domestic Offices: 1320 Pearl Street, Suite 300, Boulder CO 80302



Resource Data International, Inc., (RDI), is the authoritative data company in the energy information field. Many of the world's largest mineral energy resource companies, as well as railroads,, financial institutions and electric utilities are among its client base. RDI focuses on all fuels in the energy industry -- covering all United States sources and users of energy, the transportation systems that serve them, the macro and micro economic linkages that tie them together -- as well as the macro and micro study of electric utilities: Detailed financial competitor and bulk power supply-demand analysis. The Company provides customized reports and expert consulting services, and distributes regularly published data reports to subscribers via PC, mainframe, or hard copy delivery.

Product/Service

Description

COALDAT*

is a coal mine and market analysis system used by coal companies, utilities, railroads and other industries involved in the coal business. The coal chain - SUPPLY-DEMAND/TRANSACTION-DEMAND - is the basis for COALDAT's design. COALDAT links a fully developed base of information on all coal mines to an equally detailed base of information on all coal-burning utility plants via their monthly contract and spot transactions. COALDAT also includes detailed market information on over 1,900 coal-fired industrial plants, as well as U.S. export and Great Lakes shipments. Additionally RDI provides complete transportation rates for all utility coal shipments in the U.S. and F.O.B. mine prices for all operating mines. Leg level detail for all utility coal movements is supplied and includes carrier name, dollars per ton, mileage and cents per tone per mile for each leg.

FUELDAT*

encompasses all of COALDAT and goes beyond it. The System includes all U.S. utilities and their consumption, generation and supply for all fuels. It combines the depth of the COALDAT supply-side with the all-fuels breadth of the FUELDAT transaction, supply and demand sides.

POWERDAT*

encompasses all of COALDAT and FUELDAT and, in general, is a database designed to analyze and monitor, on a yearly as well as monthly basis, a utility's competitive position as well as the potential markets for power sales. Monthly information on generation, fuel consumption, power sales and power purchases will be provided. In addition, the POWERDAT system will provide, on an annual basis, detailed information concerning power contracts, financial performance, energy balances, transmission capabilities, plant production costs, monthly breakouts of peak loads and load forecasts.

Resource Dynamics Corporation 8605 Westwood Center Drive Vienna, VA 22182

Telephone: FAX:

(703) 356-1300 (703) 356-2230

President: Chairman: Jeffrey P. Price N. Richard Friedman

Domestic Office:

Palo Alto, CA: (415) 494-2850

Product/Service

Description

Technology Evaluation

The Resource Dynamics Corporation provides expert services in assessing the economics, reliability, and commercialization prospects of advanced technology for coal processing, power generation, and emissions control. Clients rely on RDC technology evaluations for feasibility studies, research and development program reviews, and

technology acquisition.

Market Research

RDC performs market research to assess opportunities in coal utilization and other energy markets. RDC analyzes international markets for fuels, chemical by-products, power generation equipment, and emissions control equipment.

These market analyses help companies plan their energy sector business.

Coal Economics

RDC assesses the economics of energy production and utilization through resource appraisal and market research. The firm also analyzes and forecasts changes in the coal, oil and natural gas markets and analyzes interfuel

competition.

Resource Economics Corporation 2004 South Wright Street Urbana, IL 61801

Telephone: FAX:

(217) 337-6000 (217) 244-7757

President/CEO:

Charles Kolstad

Resource Economics Corporation develops and markets software for better understanding coal and related markets. The primary product of REC is the World Coal Trade Expert System (WOCTES). WOCTES is the leading economic model of the international coal market and has been used or is being used in virtually every continent of the world. WOCTES was originally developed by Prof. Charles Kolstad.

Products/Services

Description

WOCTES

World Coal Trade Expert System: a software system for forecasting prices and trade in the international steam coal market.

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Riomar Agencies, Inc. 6600 Plaza Drive, Suite 105 New Orleans, LA 70127



Telephone:

(504) 244-6646

Telex: (504) 161934 FAX: (504) 244-6690

President:

Robert B. Spilling

Executive Vice President:

Daryl H. Van Derwood

Domestic Offices:

Houston, TX, Lake Charles, LA, Pascagoula, MS, Beaumont, TX, Corpus Christi, TX

COALSHIPS, a division of Riomar Agencies, Inc., is unique in that its range of services includes ship's agency, coal forwarding and documentation, cargo control and transportation.

Roberts & Schaefer Company 120 S. Riverside Plaza Chicago, IL 60606

Telephone:

(312) 236-7292

Telex: FAX:

(628) 57960 (312) 726-2872

President: Sales Manager: Earl C. Antonson

Robert L. Williams, Jr.

Roberts & Schaefer Company, a full service engineering and construction organization, has served the power, coal, and mineral industries for more than ninety years. R&S specializes in sole responsibility - turn key bulk handling systems for new, upgraded, or retrofit projects and mineral beneficiation facilities.

Our engineered products group manufactures cyclones, ceramic and ni-hard, thermal dryers, sieve bends, skirtboards, stacker/reclaimers, ship loaders, ship unloaders and belt feeders.

Sargent & Lundy 55 East Monroe Street Chicago, IL 60603

FAX:

Telephone: (312) 269-2000 (312) 269-3680

Chief Executive Officer: International Sales Manager:

Mr. Eugene V. Abraham Mr. Steve R. Trenholm

International Offices:

KOREA: 98, Nonhyeon-dong, Kangnam-Ku, Seoul, 135-010 TEL: 82-2-547-3396 FAX: 82-2-549-6111; INDONESIA: Umawar Centre, 5th Floor, 28, Kapten P. Tendean, Jakarta 12710 TEL: 62-21-520-4230

Bargent 🔏 Luni

FAX: 62-21-520-4232.

Sargent & Lundy is a full-service firm that has specialized in power projects since 1891. Services provided by the firm's 2,500 person staff include preproject planning, project management, detailed design, specification preparing, procurement, construction management, and start up. Overall, Sargent & Lundy has designed more than 700 steam-electric generating units worldwide. Many of Sargent & Lundy's international projects include a comprehensive transfer-of-technology program. Thermal power project experience and expertise includes large and small pulverized coal units, including supercritical and mine-mouth stations; fluidized bed combustion; co-generation; coal gasification and combined cycle plants. Expertise also includes a full-scope of retrofit projects, including flue gas desulfurization installations and other air quality control technologies, fuel switching, life extension, and repowering.

Product/Service

Description

New Unit Engineering

Full-scope consulting, engineering and project management for all types of coal-fired power facilities based on 100

years of experience.

Emissions Control and Retrofit

Full-scope of consulting and engineering services for new and operating units.

Savage Industries, Inc. 5250 South 300 West, Suite 200 Salt Lake City, UT 84107

Telephone:

FAX:

(801) 263-9400

Chief Executive Officer:

and handling concept.

Executive V.P., Development:

V.P., Development: Director, Marketing Services:

(801) 261-8766

Mr. Allen B. Alexander Mr. David G. Wolach Mr. Fred Busch

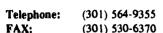
Mr. James B. Emery

Savage Industries, Inc., in business since 1946, is a specialized transportation and material handling company specializing in the performance of innovative truck transportation services and loading, unloading, transloading, screening, crushing, weighing and storage systems for coal and other bulk materials. The company provides services throughout the entire bulk commodity transportation and handling infrastructure from mine to ultimate end user. The company handles over 60,000 tons of coal daily. The company has current operations in Colorado, Utah, Wyoming, California, West Virginia, Nevada, Oregon, Washington, New Mexico, Pennsylvania and South Dakota. Savage specializes in the utilization of the total transportation



ASSOCIATES

Schnabel Engineering Associates, Inc. 10215 Fernwood Road, Suite 250 Bethesda, MD 20817



Chief Executive Officer: International Sales Manager: Mr. James J. Schnabel, P.E. Mr. Victor Omelchenko, P.E.

International Offices:

Please contact company headquarters for further information.

Schnabel Engineering Associates is a 160 person multi-disciplinary consulting firm specializing in geotechnical, mining, and environmental engineering. They are one of the oldest engineering firms in the United States that specialize in geotechnical, geological, and environmental engineering. The Schnabel staff has a wide range of coal, metallic, and non-metallic mining experience. Their design services include design of slopes and underground openings, mine dewatering, evaluation of groundwater contamination, mine subsidence studies, design of tailing dams and spoil piles, and design of building foundations. Their facilities include complete CAD capabilities and a wide range of geotechnical, mining, and geohydrology software. Their staff includes individuals fluent in many languages including Spanish, French, Korean, Hungarian, German, Chinese, and Russian.

Product/Service	Description
Technical Consultants	Schnabel Engineering provides geotechnical, mining, and environmental consulting services. They can provide assistance in mineral exploration studies, design of slopes and underground openings, mine dewatering, mine subsidence, design of building foundations, design of tailing dams, and contamination problems.
Architecture/Engineering	Schnabel Engineering provides engineering design of tunnels, mines, tailings, dams, slopes, (A&E) and contamination containment and cleanup. They have complete CAD capabilities and a wide range of geotechnical, mining, and geohydrology software.

Science Applications International Corporation Fossil Energy Technology Division 1710 Goodridge Drive, Mail Stop 2-2-1 McLean, VA 22102

Telephone: (703) 749-8675

FAX: (703) 827-9514 or (703) 827-7390

Dr. James T. Bartis (703) 442-5691
Principal Point of Contact: Dr. Anton Dilo Paul (703) 442-5697

Domestic Offices: 39 offices in key geographical locations nationwide

International Offices: 5 International offices



Fossil Energy Technology Division

Science Applications International Corporation (SAIC), established in 1969, is one of the foremost R&D companies in the U.S. At the leading edge of new technology developments, the Fossil Energy Technology Division concentrates on concept development, technology transfer, and systems engineering in the areas of coal preparation, coal-based alternate fuels, advanced power generation systems, and environmental compliance strategies. The Division's in-depth analyses and assessments on technical, economic, and regulatory issues has led to the success of several energy-related R&D projects and business ventures.

Science Applications International Corporation (FETD) (Continued)

The Division provides technical and management support for the U.S. Department of Energy (DOE) to formulate, evaluate, and execute R&D projects in advanced systems for coal preparation and combustion. Our analyses have led to the development and commercialization of advanced coal preparation technologies as a viable environmental compliance strategy. DOE's Combustion 2000 Program, a major research and demonstration program to build coal-fired, high-efficiency power systems with extremely low emissions, was established using conceptual designs, analyses, and costings developed by Division Engineers. We are playing a lead role in the development of data and computer models for a Coal Market Module within the National Energy Modelling System under the Energy Information Agency. Our expertise is also extending overseas with coal-based energy projects in the Ukraine, Eastern Europe, and India.

Products/Services	Description
Technology Assessments	Concept development, definition, and evaluation for energy projects. Technical opportunities and risk associated with conventional and advanced coal preparation, combustion and synthetic fuel applications.
Economic Analyses	Market potential for energy technologies under varying economic conditions. Rate of return and cost/benefit evaluations and sensitivities.
Policy & Regulatory Analysis	Impacts of environmental legislation/regulation Identification and analysis of alternative regulatory structure.
Energy Resources	Technical evaluations of potential energy sources, including prices projects and price stability analyses. Development and analysis of utility and industrial fuel procurement, transportation strategies, and contracts.
Scientific Research	Fluid dynamics of multiphase systems. Thermodynamics and kinetic phenomena associated with coal, coal processing and coal utilization.

Science Applications International Corporation Instrumentation and Testing Division (ITD) 3351 South Highland Drive, Suite 206 Las Vegas, NV 89109

Telephone: (702) 732-0108 **FAX:** (702) 737-6263

Division Manager: Kenneth R. Sites

Domestic Offices: SAN DIEGO, CA (corporate headquarters): 10210 Campus Point Drive, San Diego, CA 92121,

with a wide variety of applications, including acquisition systems used by the U.S. Bureau of Mines and commercial clients in the mining, gas and oil

TEL. (619) 546-6000

SAIC is a diversified technical and management consulting company with a professional staff exceeding 15,000 and annual sales of over 1.5 billion dollars. Since 1975 the ITD has designed and manufactured sophisticated electronics equipment for recording and signal conditioning data associated

An Employee-Owned Company

(Continued on next page)

industries.

Science Applications International Corporation (ITD) (Continued)

Product/Service	Designation	Description
32-Channel Microseismic Processor Recorder (MPR). An instrument used to locate stress buildup that may result in a major mine support failure.	DP-138	A rugged water-resistant portable unit designed to capture and process acoustic data from random microseismic events within an underground mine structure. It will store in a nonvolatile read/write RAM cartridge and transmit the information to a remote data terminal for further processing. It will accept up to 32 acoustic sensor signals, determine whether the incoming signals are valid microseismic events or noise, log the time of day for the first channel that is valid and the incremental time interval for all other channels that respond within an adjustable Event Window Period. In addition, the event energy produced by four predetermined channels is acquired during the (separately controllable) Energy Window Period.
Microseismic Processor Reader	DP-139	This unit will accept the RAM cartridge that is used by the DP-138 MPR to store data. Data taken from the RAM cartridge are encoded and transmitted in RS-232 serial format.
16-Channel Trigger Box	DP-140	This unit is designed to provide an interface between digitizer and microprocessor instrumentation used in the microseismic method of detecting instability and high stress zones in rock structures. It does an analysis of the data, and then generates three control signals which are fed to the microprocessor to control data ingestion from the digitizer. The signals indicate: 1) a channel (any) has been hit; 2) the event time window elapsed; and 3) that the number of hits set on Minimum Channels Responding switch has been equaled or exceeded.

Science Applications International Corporation Physical Sciences Group 14062 Denver West Parkway, Suite 200 Golden, CO 80401



Telephone: FAX:

(303) 279-7242 (303) 279-5525

Group Manager:

Howard R. Pratt

Domestic Offices:

SAN DIEGO, CA: (corporate headquarters) 10210 Campus Point Drive, San Diego, CA 92121, TEL. (619) 546-6000.

Founded in 1969 by a small group of research scientists, SAIC has grown into a large, diversified, high-technology corporation. SAIC's revenues exceed \$1.5 billion and the company employs over 14,500 people in more than 200 locations. A selected listing of products and services that SAIC provides to the coal industry is given below. For further information please contact Dermot Ross-Brown or Bill Thompson in the Golden office.

Product/Service	Description
Engineering Services	Areas of specialization include resource evaluation; exploration and development; mine planning; drilling and blasting; analysis of pillar stability, ground support, and use of backfill; subsidence investigations; stability and design of excavated mine slopes, spoil piles, and waste ponds; and hydrological investigations.
Environmental Services	With over 1,500 environmental professionals the company is able to provide scientific, engineering and management skills to solve a wide variety of environmental problems.
Coal Processing	SAIC manufactures on-line coal analyzers to meet a variety of process control and quality control needs. These include the Model 200 Sulfur Meter, the Model 400 Ashmeter TM , and the Model 600 Moisture Meter. The company is also experienced in the development and application of clean coal technologies.

Science Applications International Corporation (PSG) (Continued)

Laboratory Testing Services Laboratory services include the Rock Mechanics Laboratory which is fully equipped to perform routine and

special tests on rocks and soils. Most mechanical, thermal and permeability tests can be carried out at up to 60,000 psi confining pressure, 20,000 psi pore pressure and 150°C temperature. Complex behaviors and processes can be simulated. The laboratory also designs and manufactures a wide variety of specialized test

equipment.

Field Testing & Instrumentation The company manufactures electronic equipment for monitoring high explosive tests, as well as downhole

pressure probes, and microseismic monitoring systems. A full range of geotechnical field testing services is

offered

Data Acquisition & Analysis SAIC has extensive experience in developing data acquisition systems, and providing on-line analysis of the

data.

Seamodal Transport Corporation 221 Main Street Suite 765 San Francisco, CA 94105

Telephone: (415) 543-7420

Telex: 910-372-8406 FAX: (415) 543-2137

President: N.E. Vacakis
Executive Vice President: G.L. Fischer

Marketing Manager - West Coast: F.K. Villanueva Marketing Manager - East Coast: L.R. Wilson

Domestic Offices:

CHARLESTON, SC: C.J. McCarthy III, District Manager, 24 Vendue Range, Suite 107, Charleston, SC 29401 TEL. (803) 577-3742 FAX (803) 723-1113 TLX 461-3064 ANS: SMTUI; CHICAGO, IL: L.A. Conley, District Manager, 3158 Des Plaines Avenue, (River Road) Suite 24, Des Plaines, IL 60018 TEL. (708) 299-6170 FAX (708) 299-6175 TLX. 687-1474 ANS: STCDP UW; LONG BEACH, CA: R. Archia, District Manager, 249 East Ocean Boulevard, Suite 506, Long Beach, CA 90802 TEL. (310) 432-4088 FAX (310) 432-3308 TWX. 910-341-6591 ANS: SEAMODAL LGB; NORFOLK, VA: C.N. Byrd, District Manager, Plume Center West, Suite 520, 100 West Plume Street, Norfolk, VA 23510 TEL. (804) 625-1928 FAX (804) 625-0146 TWX: 710-881-1110 ANS: SEAMODAL NFK; H.W. Koeppen, Jr., Airfreight Supervisor, Air Cargo Terminal, Suite 350, Norfolk International Airport, Norfolk, VA 23518-5801 TEL. (804) 628-8430 FAX (804) 857-4581 TWX. 710-881-1110 ANS: SEAMODAL NFK; SAN FRANCISCO, CA: A.V. Dolojan, Regional Manager Operations, C.M. Roque, District Manager, 221 Main Street, Suite 765, San Francisco, CA 94105 TEL. (415) 543-7420 FAX (415) 543-2137 TWX: 910-372-8406 ANS: SEAMODAL SFO; HAYWARD, CA: O.G. Dolojan, Manager FMS Operations, 3544 Arden Road, Hayward, CA 94545 TEL. (510) 785-5700 FAX (510) 785-7506 TWX. 910-372-2304 ANS: SEAMODALDC SFO

Seamodal Transport Corporation, incorporated in 1977, was established as a shipping firm licensed to do business as an International Freight Forwarder, Customs Broker, air freight agent, freight property broker and non-vessel operating common carrier (NVOCC). Seamodal operates facilities conveniently located in six major areas throughout the U.S. with its headquarters in San Francisco, California. The company's national coverage facilitates transport logistics to major areas worldwide.

Product/Service

Description

Freight Forwarders/Customs Broker

The company's fully automated system enables transmission of import entry data directly to U.S. Customs in Washington, D.C. The forwarding service includes preparation of all necessary export documents, ocean and inland rates analysis, booking and arranging of shipment, expertise in international letters of credit negotiation and banking, and freight consolidation for both air and ocean shipments.

Shipyard River Coal Terminal 1801 Milford Street Charleston, SC 29405

Telephone: (803) 722-2878 **FAX:** (803) 722-5720

President/CEO: Charles M. Whitten
Sales Manager: Greg Hutchison



nipyard River, a subsidiary of SMC Mining Company, is located in Charleston, South Carolina. Shipyard River Coal Terminal owns and operates a multi-product import/export marine terminal. Shipyard River Coal Terminal's main product is coal for export. Shipyard River Coal Terminal has ground storage space for 250,000 mt of coal is rated for 2.5mm tons per year throughput. Controlling draft is 43 feet. Shipyard River Coal Terminal is served by both the CSX and NS rail systems. Shipyard River Coal Terminal also handles other dry bulk commodities and operates a liquid tank farm.

Skelly and Loy, Inc. 2601 North Front Street Harrisburg, PA 17110

SKELLYAND LOY, INC. ENGINEERS - CONSULTANTS

Telephone: (717) 232-0593 **Toll Free:** 1-800-892-6532 **FAX:** (717) 232-1799

Chief Executive Officer: LeRoy D. (Bud) Loy, P.E.

International Sales Manager: John W. Gunnett, Executive Vice President

Domestic Offices: MONROEVILLE, PA: 520 Seco Road, Monroeville, PA 15146, Tel. (412) 856-1676 FAX (412) 856-5730

Skelly and Loy, established in 1969, has been providing technical assistance and engineering support to the mining, quarry, and utility industries for twenty-five years. During this time, we have had involvement in mining projects in every coal producing state in the United States and in fourteen foreign countries; are currently working abroad; and have had project involvement at hundreds of operations employing various mining procedures. Our staff of 140 employees includes mining engineers, biologists, chemists, and economists. Services are offered in areas of surface and underground coal mining and preparation, quarry and open pit operations, mineral processing, and haulage and transportation.

Soble & Associates **Suite 1000** 1100 Connecticut Avenue, N.W. Washington, D.C. 20036

SOBLE & ASSOCIATES

(202) 223-8282 Telephone: FAX: (202) 223-8560

The law firm of Soble & Associates specializes in international and domestic corporate and commercial transactions. Located in Washington, D.C., the firm has unique international expertise. Members of the firm have represented individuals, corporations, joint ventures, government-owned corporations, and foreign governments in the United States and overseas. The firm's transactional work is complemented by a sophisticated corporate, legislative, banking and regulatory practice tailored to Washington, D.C. The firm has expertise in trade and customs law and in U.S. export control matters. Members of the firm have advised clients on virtually every form of commercial transaction, including international sales agreements, joint venture arrangements and countertrade barter.

Product/Service

Description

International Law and Commercial Transactions Provides services in a wide variety of areas, including: U.S. laws affecting international trade and business; international investments and acquisitions; joint ventures; technology transfer/licensing agreements; structuring of countertrade, barter and other special arrangements; international sales, distribution, licensing arrangements, etc.

Soros Associates 485 Fifth Avenue New York, NY 10017

Telephone: (212) 972-5800 FAX: (212) 972-5848

President: Leonard Sugin CEO/Vice Chairman: Sergio Terzani Assistant Vice President: Nathan Frawert

Jack Hinrichs, Regional Manager, 74 Neron Place, New Orleans, LA 70118

James Newman, 3800 N. Fairfax Drive, Apt. 609, Arlington, VA 22203 c/o Snamprogetti USA, 2950 N. Loop West #290, Houston, TX 77092

International Offices: Soros Insip, c/o Snamprogetti, Terzo Palazzo Uffici, Viable A. De Gasperi 16, 20097 San Donato, Milano, Italy

Soros Associates is an international consulting engineering firm specializing in the planning, design and construction management of ports and material handling and transportation systems. The great majority of the firm's assignments have involved a combination of these two fields, bulk handling and ports. Soros Associates has played a prominent and innovative role in the advances in the "state of art" of bulk terminals in the last thirty years.

Soros Associates was founded specifically to provide a complete range of system's capability and integrated engineering services for bulk port projects, requiring a high level of expertise in material handling, mechanical, electrical, civil, structural and marine engineering. A permanent staff of engineers in all of these disciplines is maintained at the firm's New York City executive offices. Field offices are established at project locations as the need arises.





Soros Associates (Continued)

Consulting engineering services on a worldwide basis are offered for projects that entail:

- Economic and Financial Analysis
- Transportation Studies
- Terminal Port, and Transportation System Simulation
- Bulk Material Handling and Terminals
- Site Investigations
- Feasibility Studies
- Master Planning
- Operations Research and Computer Simulations
- Environmental Services
- Conceptual Engineering
- Detailed Engineering and Design
- Procurement
- Construction Management
- Acceptance Testing and Start-Up
- Operation Evaluation and Assistance

Spire Corporation One Patriots Park Bedford, MA 01730

Telephone: (617) 275-6000

Telex: 951072 FAX: (617) 275-7470

Chief Executive Officer:

Roger G. Little

SPI-WEAR™ Contact:

Charles C. Blatchley, Ph.D.

mass/charge ratio prior to implantation.

Ion Implantation Contact:

Raymond Bricault



Spire offers two major technologies for coal-based systems: (1) SPI-WEARTM for precisely measuring wear, erosion, and corrosion in mechanical systems; and (2) ion implantation treatments to enhance wear and corrosion resistance. SPI-WEARTM is a powerful method for in-situ wear measurement and on-line diagnostic monitoring which is based on radionuclides induced in wearing surfaces by energetic ion beams. Gamma rays from the activated surface are easily detected outside allowing precise measurement of surface loss from inaccessible locations. Extremely accurate, flexible, and unaffected by local conditions such as temperature or pressure, it is an ideal solution to wear measurement problems in many components of power generation systems. Extreme precision reduces testing time and allows resolution of subtle tribological phenomena such as break-in or lubricant additive depletion.

Spire is a leader in surface modification by ion implantation and other vacuum technologies for improving wear and corrosion resistance without dimensional changes. Spire is a diversified research firm with four main business areas: surface engineering, biomaterials, optoelectronics, and photovoltaics. Approximately 45 technical personnel are devoted to ion implantation, sputtering, and other ion beam processes. In-house facilities include six mass-analyzed ion implanters, two sputtering machines, and two ion beam enhanced deposition systems. Evaporators, electron beam annealing accelerators, and extensive materials characterization equipment are also available.

Product/Service	Description
SPI-WEAR™ 200 Analyzer	System for on-line diagnostic monitoring of surface loss due to wear, erosion, or corrosion. Includes: multichannel analyzer with internal HV supply, timing control, dead-time corrections, pulse shaping pre-amplifier. Controlled by PC operating in parallel using menu driven software package. Includes all cables and NaI detector.
SPI-WEAR™ Support Services	Accelerator activations, customized selection of beam parameters, depth profile calibrations, on-site technical support, data analysis.
Ion Implantation Services	Ion implantation consists of directing ions of a desired chemical species through an accelerating electric field to implant them into a target material. Ions are electrically extracted from plasma, focused by magnetic and electrostatic lenses, and accelerated to high energies. Advanced implanters use magnetic analysis to separate desired ions by their

SSR Engineers, Inc. 2234 Lewis Avenue P.O. Box 20876 Billings, MT 59104



Telephone: (406) 656-8100 **FAX:** (406) 652-2758

Chief Executive Officer: J.R. Rush, P.E. International Sales Manager: Craig Jardine, P.E.

SSR Engineers, Inc. is a medium size consulting firm with 35 years of experience in power system design for substations, transmission, distribution, and utility system studies. In addition to planning and design, SSR Engineers offers a wide variety of testing and technical services. We provide a full range of power engineering services to over 50 utilities, many of which depend on SSR Engineers for all of their power engineering requirements.

Product/Service Description Electric Power System Design EUH transmissions structural design and analysis; overhead/underground distribution planning and design; substation planning and protective relay design; construction management; co-generation; load management; combustion turbine/diesel generation systems; motor control centers; rate and short circuit studies. Mechanical Design Mechanical/electrical design for commercial and institutional buildings, high pressure steam boiler plants thermal storage, energy conservation audits, economic and feasibility studies. Technical/testing Services System commissioning and equipment acceptance testing for relay and control systems, large power transformers, power factor, insulation, high voltage cable.

Stagg Engineering Services, Inc. 5457 Big Tyler Road P.O. Box 7028 Charleston, WV 25356

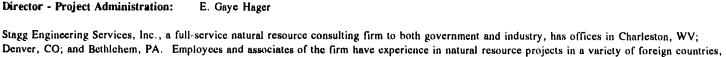
Telephone: (304) 776-6660 **FAX:** (304) 776-7867

FAX: (304) 776-7867 President:

President: Alan K. Stagg
Executive Vice President: Alison J. Pierpoint
Vice President-Corporate Services: Peter Lawson
Vice President-Geology, Coal Div.: Gregory C. Smith

with the firm's primary emphasis being on coal.

Vice President-Geology, Mineral Div.: Joe Norris
Vice President-Administration: Joyce L. Javins
Principal Mineral Economist: David R. Hammond



Product/Service

Description

Geologic and engineering services involving all aspects of the evaluation of coal properties and operations, the preparation of feasibility studies, and the development of production cost estimates.

Coal Sourcing

The identification of potential sources of coal of given specifications; the sampling, analysis, and quality assessment of coals; and the assessment of a producer's production capabilities.

Market Research

Detailed studies into existing and potential domestic and foreign coal markets, including volume requirements, pricing structures, the assessment of competitive fuel issues, and the analysis of transportation issues.

Standard Laboratories, Inc. Technical Services Division P.O. Box 1970 Ashland, KY 41105-1970

Technical Services Division

Telephone: (606) 325-1970 **FAX:** (606) 325-2689

Director:

Mr. Lee S. Rigsby

Specializing in consulting, bias testing, and round robin services.

Product/Service

Description

Bias Testing

Equipment performance testing.

Consulting

Quality control, conflict resolution, contract assistance.

Round Robin

Programs include: 1) daily high rank; 2) daily low rank; 3) monthly high rank; 4) monthly low rank; 5) monthly

preparation and HGI; and 6) monthly plasticity and dilation.

Stinnes Hansen Coal Company, Inc. 605 Third Avenue 44th Floor New York, NY 10158

Telephone: (212) 972-4800 **FAX:** (212) 682-5570

President:

Executive Vice President:

Vice President: Treasurer: General Manager:

Mrs. Connie Grossman Mr. Daniel J. Duda, Sr. Mr. Robert Nagle

Mr. Juergen H. Lorenz

Mr. Michael T. Madden

Mr. Joseph Groneman

Regional Office:

Manager:

333 West Vine Street Lexington, KY 40507

Telephone: (606) 233-3324 **FAX:** (606) 233-3328

STINNES

Stines Hansen Coal Co., Inc. (formerly Hansen Coal Corp.) a coal and coke marketing company, has serviced domestic and foreign consumers since 1965. Representing a broad spectrum of independent coal producers and affiliated coal companies, they provide metallurgical utility, industrial and specialty coals and coke worldwide. A wholly owned subsidiary of Stinnes Intercarbon AG, Mulheim, Germany, Stinnes Hansen Coal, in addition to their New York location, maintains an office in Lexington, KY as well as several international locations.

Stock Equipment Company General Signal Corp. 16490 Chillicothe Road Chagrin Falls, OH 44023-4398



Telephone:

(216) 543-6000

FAX:

(216) 543-5944

Chief Executive Officer: International Sales Manager: Mr. A. Neil Small Mr. David R. Brown

Domestic Offices:

International Offices:

ST. LOUIS, MO: 12015 Manchester Road, St. Louis, MO 63131-4417, TEL. (314) 966-5685 JAPAN: Stock Japan, Ltd., 1719-1, Aza Kasashi-Mac, Ohata, Niihari-Mura, Niihari-Gun, Ibaraki Prefecture, 300-41 Japan TEL. (81)(298) 62-5162

Since its founding in 1929, Stock has become the standard of quality by which all others who produce products for the power industry have been measured. Stock has a major commitment to scientific and engineering development of electronic controls and bulk material handling technology, backed by extensive testing facilities. Stock Equipment Company serves a worldwide market with their own manufacturing facilities plus work in concert with other international companies which share their commitment to engineering excellence. The result is a broad-based engineering and

manufacturing company; one that blends extensive experience with design innovation and a commitment to quality and customer satisfaction.

Product/Service Description Coal Feed Systems for Bunker-to-Pulverizer Fluidized Bed Boilers Stoker

Applications

Bulk Material Valves

Batch Weighing Scales

Sampling Equipment

Stock has been the design leader in developing gravimetric feeders for pulverized feed system and for replacement of older volumetric models for better efficiency. Stock has also developed a lowpressure gravimetric feeder to meet the rapid growth of fluidized bed boiler technology. These feeders are available in varying lengths and sizes to meet the necessary applications.

The STOCK Bulk Material Valve is designed for material handling applications which involve harsh environments, wide temperature ranges, pressure differentials, or unusual flow characteristics. These valves have been applied successfully in thousands of worldwide installations and adapted as the industry standard.

Stock offers a complete line of process batching, platform, and continuous weighing equipment. All stock scales are built around a universal weighing and a microprocessor-based control system which assures cost effective operation.

Stock has developed a complete line of manual and automatic "as-fired" coal sampling equipment. The same technology is applicable for sampling other bulk material at conveyor discharge points.

Stone & Webster Engineering Corporation 245 Summer Street Boston, MA 02210

Stone & Webster

Telephone: (617) 589-5111

Telex: W.U. 94-0001 FAX: (617) 589-2156 or (617) 589-8071

President/CEO:

Ben Charlson

Vice President:

Albert M. Ferrer (617) 589-6627

Domestic Offices:

Anchorage, AK; Boston, MA; Chattanooga, TN; Cherry Hill, NJ; Denver, CO; Fort Lauderdale FL; Houston, TX; San

Francisco, CA; New York, NY; Washington, D.C.

International Offices:

United Kingdom: Milton Keynes; Canada: Toronto; Saudi Arabia: Damman. Stone & Webster also maintains offices in the following cities: Abu Dhabi, Bangkok, Kuala Lumpur, Seoul and Taipei. Please contact headquarters in Boston for

further information.

Stone & Webster Engineering Corporation, which celebrated its Centennial in 1989, is one of the world's largest engineering and construction firms. Since its founding as a two-man consultancy in Boston, the firm has planned, engineered, and provided construction and construction-management services for utilities and industrial power concerns worldwide. Have designed and/or built plants with a total capacity exceeding 50 million kilowatts, the company is considered on of the world's largest and most experienced engineer-constructors of coal power facilities. Over the years, Stone & Webster has helped many domestic and international clients develop technologies that can lead to cleaner and more efficient use of coal. For instance, in the United States the company has conceptually designed integrated gasification/combined-cycle systems for new generating stations and evaluated the use of coal liquids for existing oil-fired station. Stone & Webster also worked on the first utility coal-gasification project in Brazil. Today, we continue to work with government agencies and private firms on new ways to clean and burn fossil fuels. Our development projects include fluid-bed combustors, a retrofit combustor system that eliminates a variety of pollutants and a furnace injection system that removes sulfur dioxide. Listed below are some of the areas in which Stone & Webster applies its consulting, engineering and construction expertise.

Products/Service	Description
Advanced Utilization	Coal processing systems: direct and indirect liquefaction; coal gasification combined cycle power systems; advanced power generation systems; pressurized fluidized bed technology; externally fired high temperature gas turbine combined cycle systems and direct fired dual working fluid power cycles.
Coal Industry	Coal drying technologies: surface and underground coal mining; coal handling; fuel analysis.
Coal Mining	Correlation and preliminary evaluation of data; mine planning and engineering design (surface and underground): pit planning and design; underground planning and design, production engineering, land reclamation. Drilling; blasting engineering and optimization; equipment selection and justification; budget review; reserve analysis; haulroad design; coal evacuation and loading design; auxiliary utility design: compressor systems, water piping systems; ventilation design; slop stability engineering; economic analysis; fatal flaw analysis; geological aspects: exploration methods and requirements, preliminary evaluations.
Coal Transport	Railroad construction, design and engineering; truck-shovel optimization; coal slurry technology.
Facility Construction	Silo design and engineering; conveyor systems; coal loadout facilities; crushing operations and design.

Stone & Webster Management Consultants One Penn Plaza - 250 W. 34th Street New York, NY 10119

A Stone & Webster

Telephone: (212) 290-7000

Telex: (W.U.) 12-8291 FAX: (212) 290-7094
President: Richard B. Hieber
Vice President: William E. Greenough, Jr.

Domestic Offices:

DENVER, CO: 5500 S. Quebec Street, Englewood, CO: 80111-1914 TEL. (303) 741-7900, TELEX 45-4401 (W.U.),

289251 (RCA), FAX (303) 741-7935; HOUSTON, TX: 330 Barker Cypress Road, Houston, TX 77094 TEL.

(713) 492-4000, TELEX 275546 (RCA), FAX (713) 492-4484; BOSTON, MA: 245 Summer Street, Boston, MA 02210

TEL. (617) 589-5111, TELEX 94-0001 94-0977 (W.U.), FAX (617) 589-2156

Stone & Webster Management Consultants supports utilities, coal companies and others such as financial institutions and cogeneration/independent power producers with their operation in the challenging marketplace of today. Services are offered in the areas of: market analysis-competition and pricing, economics and feasibility studies, coal supply and demand, infrastructure review, coal contract review, coal procurement strategy and coal selection economic analysis.

Product/Service

Description

Technical Consulting

The company has an outstanding understanding of domestic and international coal markets. Services can be provided in the areas of market assessment for supply and demand and competitive economics.

Evaluate economics of alternative modes of coal transportation.

We have the computerized capability for evaluating the life cycle busbar cost of electricity for powerplants burning all ranges of fuel from peat to anthracite coal.

TAMS Consultants, Inc. The TAMS Building 655 Third Avenue New York, NY 10017

Telephone: (212) 867-1777

Telex: ITT 422188 FAX: (212) 697-6354

President:

Dana E. Low

International Sales Manager:

Mario Asin, Corporate Vice President

Domestic Offices: NEW YORK, NY: (212) 867-1777; AMHERST, NY: (716) 831-8084; CLIFTON, NY: (518) 371-9102;

CONCORD, CA: (510) 682-3533; FRESNO, CA: (209) 453-7071; BELLEVILLE, IL: (618) 233-2556; CHICAGO, IL: (312) 819-4949; BOSTON, MA: (617) 482-4835; BLOOMFIELD, NJ: (201) 338-6680; ADJ NJ: (202) 242-8235; ADJ NJ: (202) 242-825; ADJ NJ: (202) 242-825; ADJ NJ: (202) 242-825; ADJ NJ: (202) 242-825;

TAMS

ARLINGTON, VA: (703) 243-8000; SEATTLE, WA: (206) 296-0700.

International Offices:

ABU DHABI, UNITED ARAB EMIRATES: (971) (2) 393682; LA PAZ, BOLIVIA: (591) 329277; RIO DE JANEIRO, BRAZIL: (5521) 262-7222; BOGOTA, COLOMBIA: (571) 257-2800; SANTO DOMINGO, DOMINICAN REPUBLIC: (809) 565-8857 or (809) 565-8858; GUAYAQUIL, ECUADOR: (5934) 396959;

DOKKI, CAIRO, EGYPT: (20) (2) 348-4835/349-2835; BANJUL, THE GAMBIA: (220) 28860; GUATEMALA CITY, GUATEMALA: (5022) 68-22-04; MASERU 100, LESOTHO: (266) 311-369; MACAU (via HONG KONG): (853) 860-125; CAPITAL CITY, LILONGWE 3, MALAWI: (265) 723557; FREETOWN, SIERRA LEONE: (232) (22) 30961; CARACAS 1060, VENEZUELA (582) 951-1811;

LUSAKA, ZAMBIA.

TAMS Consultants, Inc. (Continued)

TAMS Consultants, Inc. is a multidisciplinary consulting firm providing professional services throughout the United States and overseas in the fields of engineering, architecture, planning, and environmental science. Established in 1942, TAMS Consultants, Inc. serves a wide range of public and private sector clients and has branch offices located worldwide.

Product/Service Description

Coal Transport
Technical Consultants
Architecture/Engineering
Facilities Construction

Analysis, planning and design of multi-modal transportation systems involving waterborne transportation, channels and harbors, marine terminals, railroads, roadways, conveyors, and transfer systems. TAMS also provides construction phase services including inspections and reports.

Techno-Economic Consulting, Inc. Park Avenue Atrium 237 Park Avenue, 21st Floor New York, NY 10017

Telephone: (212) 362-4446

Telex: 425170 FAX: (212) 697-8486

President: Mr. A.S. "Art" Aktar, P.E.
Senior Advisor: Professor Emeritus Stefan Boshkov

Senior Advisor: Mr. Roger Hulette, P.E.

Domestic Offices: RIDGEWOOD, NJ: 76 North Maple Avenue, Ridgewood, NJ 07450 Tel: (201) 447-3447 FAX: (201) 445-7857

TEC is a management and engineering consulting firm. It provides services in coal geology, reserve calculations, project economics, project planning and development, project financing, open pit and underground mining management, shipping, and operations review, to both domestic and international clients. TEC was formed in 1977 and has 28 Senior Associates. Mr. Aktar's specialty is project management and economics. Mr. Hulette is one of the foremost authorities on engineering, design and construction of major material-handling systems and operations.

Product/Service

Technical Consultants; Financing and Resource Packaging; and Architecture/Engineering.

International Offices:

TECO Transport & Trade Corporation 5405 W. Cypress Street, Suite 300 Tampa, FL 33607

Telephone: (813) 281-4200 TWX: 810-876-0687 Telex: 808852 FAX: (813) 289-3514 D. Jeff Rankin President:

VP, Sales and Marketing:

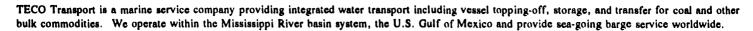
John C. Crane

MID-SOUTH TOWING COMPANY: P.O. Box 790, Metropolis, Illinois 62960, TEL. (618) 524-3100 **Domestic Offices:**

ELECTRO-COAL TRANSFER: P.O. Box 6, Davant, Louisiana 70046, TEL. (504) 333-7200

GULFCOAST TRANSIT COMPANY: P.O. Box 22048, Tampa, Florida 33622-2048, TEL. (813) 281-4200 TECO TRANSPORT & TRADE: Attn: Mr. Ko Yoshida, 4-18-2, Nishiazabu, Minato-ku, Tokyo, 106 Japan,

TEL. (03) 407-0865



Product/Service	Designation	Description
Coal Transport	Mid-South Towing Company	Operates 14 line haul river tugboats and 528 hopper barges on the Ohio and Mississippi river system.
Facilities Operations	Electro-Coal Transfer	Ocean marine transfer terminal facility south of New Orleans. Provides 4 million tons of storage area and transfer capability for 25 million TPY. Serves up to 150,000 D.W.T. cape-size vessel.
Transport Equipment	Gulfcoast Transit Company	Operates 14 dry-bulk ocean barge/tug units with cargo capacity ranging from 9,600-42,800 tons.

Tidewater Coal Inspection Bureau, Inc. 1200 Boissevain Avenue Norfolk, VA 23507

Telephone: (804) 627-0400

FAX: (804) 627-1118 President:

Director of Operations: Laboratory Director:

Carlisle Wroton Henry W. Wroton, Jr. Karol Hutchison

International Offices: Please contact company Headquarters for further information.

Established 1927. Family owned and operated. Coal sampling, inspection and analytical laboratory to determine if coal meets specifications of contracts between buyers and sellers on the eastern seaboard and Gulf Coal ports. Sampling and analysis is done in accordance with standards set by American Society of Testing and Materials (ASTM).

Company Professional Affiliations:

Partner in Consortium of Sampling Associates International (SAI) Union Internationale des Laboratories Independents Hampton Roads Coal Association

American Council of Independent Business Hampton Roads Maritime Association National Federation of Independent Business



Tidewater Coal Inspection Bureau, Inc. (Continued)

Product/Service	Description
Coal Sampling Inspection	Manual sampling available at all port facilities. Mechanical sampling available at most port facilities. Inspection, witness, and supervision of sampling and loading at all facilities.
Coal Analysis	Proximate, sulfur, FSI, heating value, dilatation, plasticity, chlorine, mineral analysis, sizing, and others available. Flame and graphite furnace AA, ICAP, and GC.
Environmental and Industrial Hygiene	Consulting and analysis available for water, air, soil, hazardous waste, noise pollution, asbestos, safety and health, and hazard communication.

Tippett & Gee, Inc. 502 North Willis Abilene, TX 79603

Telephone: FAX:

(915) 673-8291 (915) 672-5251

Chief Executive Officer:

Louis S. Gee

International Sales Manager: Robert S. Gee, President

Tippett & Gee was organized in 1954 to serve the electric utility industry. The Company offers complete engineering/architectural services. The Company's specialty is the design of fossil fuel fired central power stations. The Company has dealt extensively with both steam electric and combustion turbine generation and combined cycles. The Company's designs have received national recognition for innovative features; high availability and low \$/KW installed costs. Project capabilities include initial load studies, siting studies, environmental permitting, design, procurement, construction management and startup services.

Product/Service

Description

Architecture/Engineering

During the past decade Tippett & Gee has designed and placed in service three major power stations firing solid fuel. The first was a 450 MW mine mouth plant in South Texas utilizing 5000 Btu/lb lignite. This high sulfur fuel has 32% ash, a moisture content of 28% and has an extremely high slagging and fouling tendency. The second plant was a 450 MW mine mouth plant in East Texas utilizing 4300 Btu/lb lignite. This high sulfur fuel has 28% ash, a moisture content of 35% and has an extremely high fouling potential. The Company's latest design was a 700 MW plant in North Texas utilizing western sub-bituminous coal from Exxon's Rawhide mine in Wyoming. Each of these plants had electrostatic precipitators and wet scrubbers.

Trade Development Corporation of Chicago (China Trade Development Corp. of Chicago) Suite 480 2049 Century Park East Los Angeles, CA 90067

Telephone: (310) 556-8091

Telex: 9102210054 FAX: (310) 556-3088

Chief Executive Officer:

Michael R.A. Wade

China Manager:

Xianqui Liu (Beijing)

Our Company is a full-service Asian trade consulting, market research, and export management firm founded in Chicago in 1979. We are the first Asia specialists in the United States to be granted antitrust protection by the U.S. Departments of Justice and Commerce under the Export Trading Company Act. Our services include introducing modern machinery, precision instruments, and medical equipment into China and other Asian countries; facilitating countertrade, joint ventures, and licensing arrangements; conducting industrial surveys and market research; assisting with direct sales and worldwide product sourcing; and preparing brochures/sales literature in Asian languages.

Product/Service

Description

Technical Consultants

Representation; Business intelligence reports and specialized research; Foreign investment guidance; Language

services

Union Pacific Railroad 1416 Dodge Street Omaha, NE 68179

Telephone: (402) 271-4342 FAX: (402) 271-3378

President/CEO: **AVP Energy:**

Richard K. Davidson Henry L. Arms

Domestic Offices:

International Offices:

Taipei, Taiwan; Shin-I-Lin; 10-1, Len Shin South Road Phone: 011-886-2-393-8650 FAX: 011-866-2-394-7102

Tokyo, Japan; J. Shikata; 4th Floor, Satoh Bldg., Hamamatsu-Cho, Minato-Ku, Tokyo 105 Japan Phone:

011-813-3578-9411 FAX: 011-813-3578-9415

Mexico City, DF Mexico; Dave Baker; Homero No 1804, Suite 802, Col Los Morales, Delegacion Miguel Hidalgo

11510 Phone: 011-525-557-8177 FAX: 011-525-395-7662

Union Pacific is the fourth largest U.S. coal-hauling railroad and hauls coal and coke. Export markets include the Pacific Rim, Europe and Mexico. With operations in 19 western U.S. states, UP has direct connections to Mexico and Canada and serves major Pacific and Gulf coast ports.

Either directly or with connecting carriers, UP accesses the Uinta, Powder River, Colorado, Hanna and Green River low-sulfur coal basins along with mines in the Illinois Basin. All coal business moves in unit trains.

Maintaining optimum company-wide performance is Union Pacific's primary goal. Two significant focuses in achieving this goal are continual capacity expansion to stay ahead of growing business demands and on-going reinforcement to the company's Total Quality Management System. UP's formal Quality effort, which keys on customer service and satisfaction, was started in 1987 and is continually being strengthened and expanded.

Union Railroad 135 Jamison Lane P.O. Box 68 Monroeville, PA 15146

Telephone: (412) 829-3465 FAX: (412) 829-6603

Chief Executive Officer: Mr. Donald H. Hoffman Vice President Marketing: Mr. Thomas J. Siegel

Union Railroad is a common carrier switching railroad operating in Western PA. At Duquesne Wharf, PA on the Monongahela River, Union operates a barge to rail coal transfer facility. Barges arrive from Monongahela River, Ohio River, Kanawha River and Big Sandy River mines. Coal is transferred to railcars which are delivered to the main line rail carriers serving Pittsburgh.

Product/Service Description

Barge to rail coal transfer Both a continuous bucket machine and a crane are available.

Railroad Transportation Union connects with Bessemer & Lake Erie to export via the Great Lakes St. Lawrence Seaway route and with

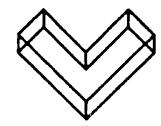
Conrail to export via the East Coast ports.

Valley Forge Laboratories, Inc. 6 Berkeley Road Devon, PA 19333

Telephone: (215) 688-8517 FAX: (215) 688-8143

President: Dr. James J. Schuster, P.E. Vice President: Mr. Michael Boyle

Vice President: Mr. Michael Wong



Valley Forge Laboratories, Inc. was founded in 1967. As an engineering consulting firm, our services have expanded through the years and include the following: geotechnical engineering, transportation and traffic engineering, construction quality control, laboratory testing, non-destructive testing, environmental engineering and research and special studies.

Product/Service	Description
Geotechnical Engineering	Complete engineering services including subsurface investigations, geotechnical evaluations and remediations, soil and rock mechanics, slope stability analysis, soil stabilization, ground modifications and designing with geosynthetics such as geogrid retaining walls.
Transportation and Traffic Engineering	Comprehensive planning and operational studies including site developments, zoning and permitting applications, safety studies, accident investigation, parking studies, highway and signalized intersection design.
Construction Quality Control	Inspection services on all phases of construction, with assurance of current and acceptable construction practices in accordance with specifications and contract drawings. Non-Destructive Testing (NDT) of in-place concrete, welded connections and related services.
Laboratory Testing	Physical testing services to support our engineering services.
Environmental Engineering	Analysis of environmental effects including noise, air, water quality, wetlands delineation, mitigation and permit applications.
Research and Special Studies	Planning and execution of various research and testing programs including the utilization of non-hazardous wastes. U.S. DOE/SBIR Phases I and II project on the development of a lightweight synthetic aggregate (Patent Pending).

Virginia Port Authority 600 World Trade Center Norfolk, VA 23510

Telephone: (800) 446-8098; (804) 683-8000

FAX:

(804) 683-8500

Executive Director:

Sr. Managing Director of Marketing Services:

Managing Director of Marketing:

J. Robert Bray John Covancy Carroll N. Harris

Domestic Offices:

CHICAGO, IL: TEL: (708) 361-5170 FAX: (708) 361-9508; Ronald L. Furry, Area Manager; Diane McDonald, Regional Manager; COVINGTON, KY: TEL: (606) 292-2524 FAX: (606) 292-2578; Carol J. Schreiber, Regional Manager; JERSEY CITY, NEW JERSEY: TEL: (201) 432-4848 FAX: (201) 432-8595; Phone in New York (212) 432-7710; Thomas MacGregor, Regional Manager; HIGH POINT, NC: TEL:

(919) 454-5703 FAX: (919) 454-6750; Prestine L. Macy, Regional Manager

International Offices:

BRUSSELS: TEL: (322) 648-80-72; FAX: 322646-3554; Betty Princen-Dignef, Director; HONG KONG: TEL: 852/ 5255313 FAX: 852/8105495; Wing Hong Li, Director; SAO PAULO: TEL: 55-11-533-7101, FAX: 55-11-533-0871; Jose B. Romao, Director; SEOUL: TEL: 822/739-6538 FAX: 822/739-6538; San-

ortec

Corporation

Min Woo, Director; TOKYO: TEL: 813/3508-2759; A. Sakamoto, Director

The Virginia Port Authority (VPA) is a state affiliated organization which oversees the commerce and operations of the Port of Hampton Roads. The primary responsibility of the VPA is to promote and encourage commerce through the Port of Hampton Roads, in support of the overall development of Virginia's economy.

Product/Service

International marketing and analysis

Vortec Corporation 3770 Ridge Pike Collegeville, PA 19426-3158

Telephone:

(215) 489-2255

FAX:

(215) 489-3185

President:

Dr. James G. Hnat

Pilot Plant:

Harmarville, PA

International Offices:

Please contact company Headquarters for further information.

Vortec Corporation provides high temperature process equipment, research-development services and engineering-consulting services for the hazardous waste, utility, chemical, aluminum, steel, and glass industries, as well as other high temperature process industries. Mechanical design, I&C design, furnace and combustion modeling, and systems engineering services are a strong part of Vortec's engineering/consulting service capabilities. Vortec's industrial process research has focused on innovative approaches to advanced coal combustion, glass melting, glass refining, heat recovery, primary metals smelting, hazardous waste incineration and vitrification, and radioactive waste vitrification.

Product/Service

Description

Combustion & Melting System

(CMS)

Vortec's multi-fuel capable CMS effectively vitrifies and recycles various hazardous and non-hazardous waste materials. The vitrified material can be disposed of in a non-hazardous landfill, recycled as a feedstock to selected processes or further processed on-site to be sold as a value added product. Organics contained in waste materials are also effectively oxidized. Applications of the CMS vitrification process include: Post Consumer Waste Glass, Waste Insulation Fiberglass, Utility Flyash, Municipal Incinerator Flyash, Aluminum Processing Flyash & Dust, Incinerator Flyash, Asbestos, Electric Arc Furnace Dust, Foundry Sand, Low Level Radioactive Waste, Contaminated Soils & Sludges, Hospital & Medical Wastes, Filter Cakes, and Heavy Metals Containing Wastes.



WAL, Inc. 6385 W. 52nd Ave. #5 Arvada, CO 80002

Telephone: (303) 420-7700 **FAX:** (303) 420-2330

Chief Executive Officer: International Sales Manager: Vice President, Operations: Dr. M. LeRoy Jacobs Dr. M. LeRoy Jacobs Mr. Charles R. Wilson



WAL, Inc., provides a variety of analytical, consulting and third-party laboratory services to the coal and mining industries. Third-party coal mine site laboratories are currently located in Drennen, West Virginia, and Florence, Colorado. The main Arvada laboratory is instrumented to provide major and trace elemental analysis of solids and liquids by spark source mass spectrography (SSMS), X-ray fluorescence spectrometry (XRF), and inductively coupled argon plasma spectrometry (ICP).

Product/Service Description

Trace Elemental Analysis Inorganic Ultra-trace Element Analysis by ICP, SSMS

Major Elemental Analysis Inorganic Determination of Major Element Concentrations by XRF, ICP

Mine Site Laboratories Third-Party Mine Management Site Laboratories

Warrior & Gulf Navigation Company End of Viaduct Road P.O. Box 397 Chickasaw, AL 36611

Telephone: (205) 452-6000 **FAX:** (205) 452-6014

Chief Executive Officer: Mr. Donald H. Hoffman
President: Mr. Nicholas J. Barchie, Jr.

International Offices: Contact Headquarters for more information.



Warrior & Gulf Navigation Company

Warrior & Gulf Navigation Company is a contract water carrier operating principally in the State of Alabama and the Gulf Intracoastal Waterway between St. Marks, Florida, and Brownsville, Texas. Warrior & Gulf Navigation Company operates a rail to barge coal transfer facility at Birmingham, and a barge to ship, stoker coal transfer facility at Mobile. Barges are loaded in Birmingham and are transported to Mobile, Alabama, and New Orleans, Louisiana for the export market.

Product/Service Description

Rail to Barge Coal Transfer Bottom dump pit and conveyor system and gantry cranes are available.

Barge Transportation WGN operates 250 Hopper Barges used primarily in the transportation of Export Coal from Birmingham, Alabama to

Mobile, Alabama and New Orleans, Louisiana.

Welded Construction Company 26933 Eckel Rd. (43551) P.O. Box 470 Perrysburg, OH 43552

Telephone: (419) 874-3548 FAX: (419) 874-4883

Chief Executive Officer: R.H Mogg International Sales Manager: D.W. Thorn

Welded Construction Company has been in the pipeline construction business since 1966, building oil, natural gas and other cross-country pipelines for major transmission companies. We have qualified personnel, equipment, insurance and bonding available for large construction projects.

Product/Service

Description

Facility Construction

Coal Slurry Pipeline Construction

Western Research Institute 365 N. 9th P.O. Box 3395 **University Station** Laramie, WY 82071



(307) 721-2209 Telephone: FAX: (307) 721-2345

Chief Executive Officer:

International Sales Manager:

Dr. James G. Speight Dr. James G. Speight

The Western Research Institute (WRI) conducts research on energy, coal processing and upgrading, the environment, synfucls, surface and in-situ hazardous waste treatment, and asphalt. Specific programs include coal mild gasification and coal drying using an inclined fluidized bed. WRI employs approximately 140 technical and support staff and has an annual budget of over \$9.5 million.

Product/Service	Designation	Description
Inclined Fluidized Bed Reactors	IFB	The inclined fluidized bed reactors have been developed and patented by Western Research Institute. They have been used in coal mild gasification and coal drying programs at WRI.
Coal Mild Gasification Process		The coal mild gasification process involves heating coal to moderate temperatures at atmospheric pressure. The process produces char, pitch, oil, and gas which can be used for various industrial purposes.
Coal Drying Process		The coal drying process uses an inclined fluidized bed to produce stable, dry (nearly 0% moisture) briquettes from high-moisture (nearly 30%), sub-bituminous Wyoming and Alaskan coals, without addition of a binder. The low sulfur, dry, stable briquette is a high quality fuel of about 11,900 Btu/lb.
Underground Coal Gasification	UCG	Western Research Institute possesses the capabilities to evaluate UCG feasibility for a particular resource at a specific geologic location, and to manage and execute laboratory and field investigations. WRI's abilities include the entire spectrum of energy development from conception to pre-commercial field testing.

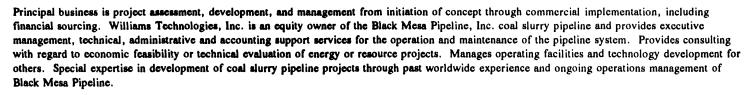
Williams Technologies, Inc. 320 South Boston, Suite 831 Tulsa, OK 74103

Telephone: (918) 582-5811 **FAX:** (918) 584-0474

Chief Executive Officer: David R. Williams, Jr.

International Sales Manager: H.J. Brolick

International Offices: Please contact the company headquarters for further information.



Product/Service

Description

Coal Transport

Provides development, management, financial packaging and operation management of coal slurry pipeline systems.

Architectural/Engineering

Provides consulting services in planning and feasibility study, as well as management of design, construction, and operations for coal slurry pipeline and oil and gas pipeline systems. Provides similar services for cogeneration plants and alternative energy projects.

Wyoming Analytical Laboratories, Inc. 1660 Harrison Laramie, WY 82070

Telephone:

(307) 742-7995

FAX:

(307) 721-8956

President:

(307) 721-8930

International Sales Manager:

Jane V. Thomas Jane V. Thomas

Wyoming Analytical Laboratories, Inc. was founded in 1977 to provide analytical services to the mining industry, and provides chemical and physical testing of geochemical and environmental samples: coal, water hazardous wastes. In addition to routine coal analysis, other services provided for the coal industry include third-party services, bias testing of automatic sampling systems, washability testing.

Product/Service	Description
Coal Analysis	Proximate and ultimate analyses; determination of heating value, ash fusion temperatures, forms of sulfur, Hardgrove grindability index, elemental analysis of ash, equilibrium moisture, water soluble alkalies, and a selection of trace elements.
Environmental Analysis	Analysis by AA and UV/VIS spectrophotometry, automated elemental analyzers, gravimetric and volumetric analysis; leach tests and subsequent inorganic analysis; alternate fuel analyses for cogeneration plants.
Consulting	Coal laboratory audits; unique sample preparation for alternate fuel sources and/or research samples; procedures for analysis of alternate fuels.

W.R. Zanes & Co. of LA, Inc. 223 Tchoupitoulas Street New Orleans, LA 70130

Telephone:

(504) 524-1301

Telex:

58-356 FAX: (504) 524-1309

Chief Executive Officer:

William St. John, Jr.

International Sales Manager:

David Delatte

Domestic Offices:

DALLAS, TX TEL. (214) 574-7111; HOUSTON, TX TEL. (713) 451-6991; MOBILE, AL

TEL. (205) 438-1597

Founded in Dallas, Texas, in 1913 by Walter Revere Zanes, W.R. Zanes & Company is engaged in Cargo Logistic Activity in addition to its service to the International Trade as Customs Brokers and International Freight Forwarders. Expansion to Houston, Texas; Dallas, Texas; New Orleans, Louisiana; and Mobile, Alabama, permits Zanes to offer complete U.S. Gulf Coast coverage to it's clientele. Zanes' approach to servicing customers is to consider our operations an extension of our client's staff and to pursue their interests with the same intensity they would if they were undertaking our functions. Personalized high quality performance is what we guarantee -- and deliver.

Product/Service

Description

Freight Forwarding

Zanes provides all the necessary Trade Documentation and Controls to satisfy Government requirements both in the United States and the importing country, to meet contractual obligations for our clients to guarantee proper delivery of cargo, and to secure timely payment for product. As a Forwarder, Zanes can establish origin to destination transport and other related costs and secure contracts for performance. We also generally oversee the cargo move tracking as specified by our customer.

V. FINANCING AND RESOURCE PACKAGING

American International Marine Agency 80 Maiden Lane New York, NY 10270

Telephone: (212) 770-6273

Telex: 6176676 FAX:(212) 514-7304

Chief Executive Officer:

Mr. William Mack

International Sales Manager:

Mr. Charles Capozzoli

Domestic Offices:

ATLANTA, GA: Ralph Santoro, TEL: (404) 617-2255; BOSTON, MA: Carole Peterson, TEL: (617) 345-6430; CHICAGO, IL: George Kustin, TEL: (312) 930-5392; COSTA MESA, CA: Kathy Nedbal, TEL: (714) 435-6617; HOUSTON, TX: Rudy Molinet, TEL: (713) 268-8671; LOS ANGELES, CA: Bruce Adams, TEL: (213) 480-3482; NEW YORK, NY: William Lang, TEL: (212) 770-5862;

PHILADELPHIA, PA: John Smaltz, TEL: (215) 981-7040; SAN FRANCISCO, CA: John Cecchi, TEL: (415) 445-2750; SEATTLE, WA: David Kaseler, TEL: (206) 344-3219; TORONTO: Paul Down,

TEL: (416) 596-3011

International Offices:

Offices in Kenya, Bahrain, Puerto Rico, Argentina, Brazil, Chile, Belgium, England, France, Germany, Holland, Italy, Spain, Sweden, Turkey, Hong Kong, Japan, Korea, Philippines, Singapore, China, Thailand,

Australia and New Zealand. Contact corporate headquarters for further information.

American International, through its global network, is one of the world's foremost Marine insurers providing coverage for a significant share of the Marine market in the United States and abroad. American International has offices and facilities in over 130 countries and jurisdictions and employs mostly local personnel to ensure effective and efficient service. Innovative and flexible underwriting combined with excellent claims service make American International an excellent choice for insuring all foreign and domestic ocean marine risks.

Product/Service

Description

Marine Insurance

Cargo/Ocean and Air Full Coverage of Goods in Transit; Inland Transportation; Hull; Excess P&I; Marine Liabilities;

Yachts.

The Bank of California 400 California Street San Francisco, CA 94104

THE BANK OF CALIFORNIA®

Telephone: (415) 765-3269

Telex: TRT:184920 BANKCAL UT FAX: (415) 765-2979

Bank of California International 2 World Trade Center, No. 1410 New York, NY 10048

Telephone: (212) 323-9557

Telex: TRT:177344 BOCINY UT FAX: (212) 323-9599

President/CEO:

Yasumasa Gomi

Sales Manager:

Myra Souza, Vice President & Manager

Export Banking Services

Bank of California International - San Francisco

Ashok Malhotra, Vice President & Section Manager

Export Banking Services

Bank of California International - New York

Domestic Offices:

LOS ANGELES INTERNATIONAL: 550 South Hope Street, 3rd Floor, Los Angeles, CA 90071, TEL. (213) 243-3201 FAX: (213) 243-3217 TELEX: TRT 188008 BANKOFCALA LSA, Christine Nguyen, Manager; PORTLAND INTERNATIONAL: 407 S.W. Broadway, Portland, OR 97205, TEL. (503) 225-2828 FAX: (503) 225-2957 TELEX: TRT 184920 BANKOFCALA POR, Karen Lesh, Manager; SEATTLE INTERNATIONAL: 910 Fourth Avenue, Seattle, WA 98164, TEL. (206) 587-3666 FAX: (206) 587-3663 TELEX: TRT 184920 BANKOFCALA SEA, Chris Chrisostomos, Manager

International Offices:

BANGKOK: 183 Rajdamri Road, 11th Floor, Bangkok 10500, Thailand, TEL. (011-66-2) 251-5335 FAX: (011-66-2) 255-2374 TELEX: 81069 BANKCALB TH, Tawisin Sangsomsup, Manager; BOMBAY: 91-92 Mittal Court, B-Wing, Nariman Point, Bombay 400021, India, TEL. (011-22) 232-105 FAX: (011-22) 230-532 TELEX: 3074 BCRO IN, M.V. Chandurkar, Manager;

CEBU: Aniceta Building - 2nd Floor, 849 Osmena Boulevard, Cebu City, Philippines, TEL. (2) 9-68-80

TELEX: 48148 BKCAL PM, Nanette Pimental, Manager;

HONG KONG: 5th Floor, Fairmont House, 8 Cotton Tree Drive, Central, Hong Kong, TEL. (011-852) 826-0600

FAX: (011-852) 877-2666 TELEX: (780) 82385 BOCHK HX, Ellen Hwang, Manager;

JAKARTA: 18th Floor, Wisma Kosgoro, J1. M.H. Thamrin 53, Jakarta 10350, Indonesia, TEL. (011-62-21) 320576,

(011-62-21) 320876 FAX: (011-62-21) 326339 TELEX: (796) 61530 BOC IA, John Hills, Manager; KUALA LUMPUR: Bagunan Angkasa Raya, 5th Floor, Jalan Ampang, Kuala Lumpur 50450, Malaysia, TEL. (011-60-3) 242-7819, (011-60-3) 242-7944, (011-60-3) 242-7992 FAX: (011-60-3) 241-5450

TELEX: BCALKL MA 32585, K.F. Lee, Manager;

MANILA OFFSHORE BRANCH: 8th Floor, Ace Building, Rada Corner Dela Road Street, Legaspi Village, Nakati,

Metro Manila, TEL. (011-63-2) 85-87-41 through 49 FAX: (011-63-2) 817-01-02 TELEX: ITT 742 4556

BANKCAL PM, 22620 BOC PH, Jay Cruz, Manager;

SAO PAULO: Rua Libero Badaro-5 Andar, 633/641142, Centro, Sao Paulo-01009-000, Brazil,

TEL. (55-11) 37 80 17 FAX: (55-11) 34 46 99 TELEX: 11 25810 BKCS BR, Claudio A. Abrahamson, Manager;

SEOUL BRANCH: Kyobo Building - 12th Floor, No. 1 Chongro 1-KA, Congro-KU, Seoul, Korea, TEL. (011-82-2) 732-9525, (011-82-2) 736-5431, (011-82-2) 736-5435 FAX: (011-82-2) 732-9526

TELEX: K 22815 BANKCAL, K 24110 BANKCAL, Seon-Hoon-Hong, Manager;

TAIPEI BRANCH: 99 Fu Hsing North Road, 12th Floor, Taipei, Taiwan, TEL. 011-886-2-717-8220

FAX: (011-886-2) 719-7645 TELEX: 28339 BANKCAL, David Crockett, Manager;

TOKYO BRANCH: Palace Building, Suite 502, 1-1, Marunouchi 1-Chome, Chiyodo-Ku, Tokyo 100, Japan,

TEL. (011-81-3) 5543-0355 FAX: (011-81-3) 5543-0356 TELEX: J 24870 BANKACAL,

J 24246 BANKACAL-DEALING ROOM, Kiyoshi Inomata, Manager

The Bank of California (Continued)

The Bank of California's International Banking Group serves global business with 11 foreign banking offices and five U.S. international offices.

We are active in promoting business with Pacific Rim nations through full service branches in Tokyo, Seoul, and Taipei, a limited license branch in Hong Kong, and representative offices in Bangkok, Bombay, Cebu, Jakarta, Kuala Lumpur, Manila, and Sao Paulo. Our U.S. international business is handled through offices in New York, San Francisco, Portland, Seattle, and Los Angeles.

The Bank of California's relationship approach to serving our clients ensures that a wide range of commercial banking services is available to you at all times, both domestically and internationally. These services include:

- Trade finance and International Banking Services including: Letter of Credit, Letter of Credit reimbursements, Collections; Paying and Receiving, Cash Letter, Loans/Bills Discounted; Acceptances, and Foreign Exchange.
- Cash Management Services;
- Trust and Investment Services; and
- Personal Banking Services.

Bechtel Enterprises, Inc. Fifty Beale Street San Francisco, CA 94105-1895

Telephone: (415) 768-6745

Telex: 184907 BECHTEL SFA; FAX: (415) 768-2154 Chief Executive Officer: John D. Carter International Sales Manager:

Timothy D. Statton

Domestic Offices:

SAN FRANCISCO, CA: 50 Beale Street, 22nd Floor, San Francisco, CA 94105-1895;

TEL. (415) 768-6745, FAX (415) 768-2154

GAITHERSBURG, MD: Ronald L. Lillejord, 15740 Shady Grove Road, Gaithersburg, MD 20877-1454;

TEL (301) 417-0195, FAX: (301) 926-6003

International Offices:

ENGLAND: Charles W.G. Allen, 245 Hammersmith Road, London, W6, 8DP; TEL. (44-81) 846-5951,

FAX: (44-81) 846-6940

HONG KONG: Steven C. Williams, 94 Granville Road, Tsimshatsui East, Kowloon; TEL (852-3) 672047,

FAX: (852-3) 7243429

SAUDI ARABIA: P. Lewis Davies, P.O. Box 10488, Riyadh 11433; TEL: (966-1) 482-9051, FAX: (966-1)

482-9563

SINGAPORE: Michael A. Adams, 331 North Bridge Road #18-02, Odeon Towers, Singapore 0718; TEL:

(65) 339-5022, FAX: (65) 339-8090

As a developer and merchant banker subsidiary of Bechtel Group, Inc., one of the world's leading engineer-constructors, Bechtel Enterprises provides a full spectrum of project services to assist clients develop projects. Services include economic, financial, and technical feasibility studies; preliminary engineering; site selection and acquisition; formation of development partnerships; structuring of commercial arrangements, such as sales contracts, supply arrangements, operating arrangement, and construction contracts; arranging debt and equity financing; permitting and approvals; and startup and operations. Bechtel Enterprises has funded development efforts and taken equity positions on projects throughout the world.

Bechtel Enterprises, Inc. (Continued)

Product/Service

Description

Development

Bechtel Enterprises works with developers from concept through startup and operations and can utilize Bechtel's considerable technical and engineering resources. Experience includes coal-fired power and cogeneration facilities,

coal gasification, mining, marine terminals, coal slurry pipelines, and other projects.

Financing

Bechtel Enterprises has arranged over \$7 billion in project financing over the last decade from international sources, such as commercial banks, export credit agencies, international financial institutions, bilateral agencies, and other

sources.

Operation

Bechtel Enterprises is experienced in starting up and managing the operations of power and other facilities.

Caterpillar, Inc. 100 N.E. Adams Street Peoria, IL 61554



Telephone: President/CEO: (309) 675-1000

Donald V. Fites

Sales Manager:

Local Caterpillar Dealer (over 200 worldwide)

Caterpillar Inc. manufactures machines and products used in highway, dam, pipeline, building and other construction; and in logging, mining, agricultural, waste disposal, industrial, warehousing, material handling, stevedoring, and maintenance activities.

Machines include track-type tractors; pipelayers; hydraulic excavators; wheel and track skidders; feller bunchers; wheel tractor scrapers; motor graders; off-highway trucks and tractors; articulated dump trucks; wheel loaders; integrated toolcarriers; wheel tractors; soil compactors; landfill compactors; track-type loaders; backhoe loaders; pavement profilers; asphalt pavers; road reclaimers/soil stabilizers; diesel and spark ignited engines; generator sets; turbines; lift trucks; self-guided vehicle systems; and container handlers.

Caterpillar engines are used in earthmoving and construction machines; on-highway trucks; marine, petroleum, locomotive, agricultural and industrial applications, and electric power generation systems. Diesel and spark-ignited engines meet power needs from 42 to 7,300 horsepower (31 to 5 400 kilowatts) and, in generator set configurations, from 40 to 4,910 kilowatts. Turbines range from 1,340 to 12,600 horsepower (100 to 9 400 kilowatts) and, in generator set configurations, from 1,080 to 8,840 kilowatts.

Caterpillar products are sold primarily through a worldwide organization of 216 independently-owned dealers and one company-owned dealership. Caterpillar Inc. is a multinational company, incorporated in 1925 and headquartered in Peoria, Illinois.

CH2M Hill International Ltd. 6060 S. Willow Drive P.O. Box 24548 Denver, CO 80222



Telephone: (303) 796-9001

Telex: 4742047 CH2M PTL FAX: (303) 796-8710

President and CEO:

Howard Schirmer, Jr., PE

Domestic Offices:

CH2M HILL, Inc. includes nearly 60 offices in North America

International Offices:

AUSTRALIA: Sydney, Australia; EGYPT: Alexandria and Cairo, Egypt; ENGLAND: Bracknell and London,

England; FRANCE: Paris, France; HUNGARY: Budapest, Hungary; TAIWAN: Taipei, Taiwan

CH2M HILL International Ltd. is a wholly-owned subsidiary of CH2M HILL Ltd., a firm of engineers, planners, economists, and scientists with more than 25 years experience in international projects in 63 countries. CH2M Hill provides comprehensive planning, study, design, and construction management services for clients with interests in: industrial plants and processes, geotechnical services, solid and hazardous waste management and disposal, water supply and wastewater, water resources, irrigation, city and regional planning, economics, and program management.

Product/Service Description

Consulting Engineering Pre-project planning and project support services include feasibility studies and assessments; earth sciences;

environmental impact studies; regional/urban/rural planning and site evaluation. Among project preparation services are detailed designs, technical appraisals, funding and procurement advice, tender documents, and bid

evaluation. Additional services include construction implementation and post-construction services.

Industrial Facility Engineering Specialized services include site environmental audits, industrial site selection, permitting and development, plus

hydroelectric, thermal, solar, bio-energy, geothermal, and cogeneration systems. Industrial wastes management and

CHEMICAL

control services are also provided.

Chemical Bank 270 Park Avenue New York, NY 10017-2036

Telephone: (212) 270-7665 **FAX:** (212) 270-2555

President: Chairman & CEO: Walter V. Shipley
John F. McGillicuddy

Account Manager:

Rohan Paul

Domestic Offices:

CHICAGO, IL: TEL. (312) 807-4000; LOS ANGELES, CA: TEL. (310) 788-5600; DALLAS, TX: Texas

Commerce Bank, N.A. TEL. (214) 922-2300; HOUSTON, TX: Texas Commerce Bancshares, TEL. (713) 236-4865;

and over 12 other locations.

subsidiaries of the Corporation are Chemical Bank, a New York banking corporation, and Texas Commerce.

International Offices:

ARGENTINA: TEL. 54-1-312-1767; AUSTRALIA: TEL. 61-2-230-1000; CANADA: TEL. (416) 594-9800; CHILE:

TEL. 56-2-697-1722; FRANCE: TEL. 33-1-49 06 36 00; GERMANY: TEL. 49-69-7158-1; MEXICO: TEL. 52-5-280-4211; UNITED KINGDOM: TEL. 44-71-932-3000; and over 25 other locations.

Chemical conducts domestic and international financial services businesses through various bank and non-bank subsidiaries. The principal bank

Chemical Bank (Continued)

Some of the financial services provided by the Corporation's domestic subsidiaries include business loans, consumer financing, leasing, real estate financing, investment banking, mortgage banking, cash management, safe deposit facilities, payroll management, correspondent banking, full investment services, discount brokerage, United States Government and Federal agency securities dealership, and state and municipal government securities dealership and underwriting.

Products/Service	Description
Financing	Chemical provides bank financing and public and private long term debt placement services for companies that range in size from middle market to Fortune 100. Chemical completed over \$100 billion in syndicated bank loans in 1992, the largest volume of all banks worldwide.
Corporate Finance Advisory	Chemical provides merger and acquisition, divestiture, valuation, leasing, restructuring, project finance, and general corporate finance advisory services for natural resource companies.

Commerce Bank of Kansas City 1000 Walnut (64106) P.O. Box 419248 Kansas City, MO 64141-6248



Telephone: (816) 234-2000 FAX: (816) 234-2019

Chief Executive Officer: Jonathan M. Kemper International Sales Manager: Leslie M. Boll

Commerce Bank of Kansas City, an affiliate of Commerce Bancshares, Inc., is a premier provider of quality financial services. It was established in 1865 and currently has over 1,300 employees. Key services include: International Banking Services, Cash Management Services, Correspondent Services, Credit Services, Real Estate Services, Agribusiness Services, and Consumer Banking Services. Commerce Bancshares, Inc., the parent company, has five non-banking subsidiaries involved in small business investment, credit and related insurance, mortgage banking, and real estate activities.

Crestar Bank 919 East Main Street Richmond, VA 23219



Telephone: (804) 782-7416

Telex: 827420 FAX: (804) 782-7324

Chief Executive Officer: International Division Head: Richard G. Tilghman Jerry W. Giles - SVP

Crestar Bank is a leading provider of international trade banking services throughout the Mid-Atlantic states. The bank's initial activities in this area date back to the 1800's when agricultural exports were a principal component of our local economy. Today, the bank offers a sophisticated array of services designed to meet current and future banking needs. Crestar maintains direct correspondent relationships with over 665 foreign banks in 110 countries. The bank's reciprocal depository accounts with 16 of the world's top 20 banks, and 30 of the top 50 globally, accelerate trade payments where the most active trading countries are involved.

Product/Service	Description
Export Finance	Credit, insurance, and guarantee services that finance the buyer, provide immediate payment on receivables, and reduce or eliminate risk.
Bankers Acceptance (BAs)	A time draft, usually supported by a letter of credit, that has been "accepted" by the exporter's or importer's bank for payment at a future date.
Foreign Exchange	This service provides the ability to lock into cost of funds for future payment to an international supplier, or safeguard the value of receivables denominated in other currencies.
Letters of Credit	These instruments substitute the credit of a major financial institution for that of a buyer. They can also be used to assure compliance with the terms of a contract before payment is made.
Documentary Collections	Collections provide more protection than an open account but less than a letter of credit.
International Payments	Payments are made worldwide in most currencies by Telex or SWIFT, and Crestar can receive from abroad directly through the foreign banks' U.S. dollar accounts.

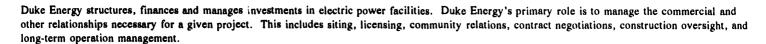
Duke Energy 400 S. Tryon Street Suite 1800 Charlotte, NC 28285

Telephone: (704) 382-2520 **FAX:** (704) 382-9325

President: Vice President: M. Rhem Wooten, Jr.

Larry N. Frost

Domestic Offices: International Offices: CHARLOTTE, NORTH CAROLINA, TEL. (704) 382-2520 AUSTRALIA: Duke Australia, Victoria, TEL. (61) 03-867-7599



DUKE ENERGY

Within the U.S., Duke Energy's primary focus has been the greenfield development of advanced coal-fueled generation, including pulverized coal, circulating fluidized bed and coal gasification technologies. For international markets, Duke Energy pursues ownership and operation of advanced coal-fueled, hydroelectric and gas-fueled generation, as well as transmission and distribution systems.

Duke Energy is a wholly owned affiliate of Duke Power, the seventh-largest investor-owned utility in the U.S.

Products/Services	Description
Advanced Utilization (IGCC)	Duke Energy, in concert with its affiliates and partners, offers the integrated coal gasification combined cycle technology that utilizes the fixed-bed British Gas Lurgi gasifier. Duke Energy, one of five award winners under the U.S. DOE's Clean Coal Technology V Program, also is developing the IGCC technology in the U.S.
Financing/Equity Ownership	Duke Energy pursues advanced coal-fueled, hydroelectric and gas-fired generation as well as transmission and distribution systems.
Technical Services	Duke Energy affiliates Duke Engineering & Services and Duke/Fluor Daniel may provide design, engineering, procurement, construction, start-up, operation and maintenance, and technical services to projects where Duke Energy has an ownership interest.

EnCoal 105 East 4th Street Cincinnati, OH 45202

Telephone: (513) 621-3733 FAX:

(513) 621-3734

Chief Executive Officer: Internations? Sales Manager: L. Robert Folan Alan Tweedale

Domestic Offices:

HOT SPRINGS, VA: P.O. Box 826, Hot Springs, VA 24445 TEL. (703) 839-5111

International Offices: ENGLAND: 213 Upper Richmond Road West, London, SW14 8QT England TEL. 011-44-81-878-8355

EnCoal was founded in 1985 as the U.S. partnership between L. Robert Folan and Alan Tweedale. Tweedale has led the British Coal Board's research into clean coal burning technology since World War II. In the 1980's, he took this technology private with Energy Supplies, Ltd., which is very active today throughout the United Kingdom. EnCoal brings this technology into the United States market featuring small fluidized beds. EnCoal's first project will be to rebuild the power plant of The Homestead Hotel in Hot Springs, Virginia with a clean burning, coal fired cogeneration plant.

Product/Service

Description

EnCoal designs, builds, finances, and operates small steam driven power plants.

EnCoal contracts with customers to reduce their energy costs by utilizing clean combustion technology to produce steam that in turn produces electricity, process steam, heating, and air conditioning. EnCoal's technology complies with the proposed Clean Air Act of 1990, and is predicated on bottom line savings to the customer through a long term contract with EnCoal.

Energy Trading Corporation 767 Fifth Avenue, 44th Floor New York, NY 10153

Telephone: (212) 421-1930

Telex: 968693 ETCOAL NYK FAX: (212) 421-1937

President: Mr. Emmanuel Merle

Domestic Offices: Assistant to the President: Mr. Jean-Francois Baudry

> Domestic Sales Manager: Mr. Dan McQuade Marketing Manager: Mr. Laurent Lebras

Energy Trading Corporation is very active in the export of coal through the U.S. East Coast and Gulf ports. While most of their European steam exports originate from the Gulf, they rely on the East Coast for metallurgical products.

Recently, Energy Trading Corporation has become more involved in the "Northern Tier" and relies on Pennsylvania, Virginia, and West Virginia coal products to supply a growing number of domestic industrial accounts.



ExIm Corp. 6620 W. Broad Street Suite 270 Richmond, VA 23230

Telephone: (804) 282-5052 or (800) 289-0506

FAX: (804) 285-0868

Chief Executive Officer: David L. Shepardson

International Offices: Contact Richmond Office

Exim specializes in trade finance. All of Exim's trade finance programs accommodate the Buyer's need for deferred payment terms while accelerating the Seller's payment. The Seller automatically has reduced the risk because Exim buys the goods for resale to the Buyer at the same price, taking a sales discount in compensation.

Product Description

Account Receivable Factoring ExIm pays supplier at shipment and assumes the credit, collection, and political risk of providing the Buyer's open

account terms of 30 to 90 days.

Purchase Order Financing ExIm pays supplier at shipment.

Inventory Financing ExIm pays supplier at shipment and assumes the credit, collection, and political risk of providing the Buyer payment

terms of 180 days or longer. Usually the Buyer's bank will guarantee these transactions.

Letters of Credit ExIm will open an L/C to guarantee payment, performance, or bids on behalf of either the Exporter or Importer.

Export-Import Bank of the United States 811 Vermont Avenue, N.W. Washington, D.C. 20572

EXIMBANK

Telephone: (202) 566-8802 **Telex:** 197681 FAX: (202) 566-7524

Vice President - Engineering: John W. Wisniewski

The Export Import Bank of the United States is the U.S. government agency that facilitates the export financing of U.S. goods and services. Eximbank's financing support includes loans and guarantees for overseas coal projects or insurance for coal exports.

Global Associates, Inc. 4515 Poplar Avenue Suite 426 Memphis, TN 38117

Telephone: (901) 685-6835 **FAX:** (901) 685-6906

International business consultants with a special focus on serving as international coal brokers for clients in Europe and the Far East.

Products/Service Description

International Coal Brokers Serve as intermediary for coal exporters and importers.

High Technology Export Services, Inc. 1100 Connecticut Avenue, N.W., Suite 535 Washington, D.C. 20036

Telephone:

(202) 775-8781

FAX:

(202) 862-4996

President/CEO:

James B. Seil



High Technology Export Services, Inc.

High Technology Export Services is a Washington based, full service export administration company that provides comprehensive export control and compliance expertise and related international business services. Our staff is current with export policies and procedures promulgated by the Export Administration Regulations, International Traffic in Arms Regulations, and the Nuclear Regulatory Commission Export Regulations. Since 1987, HTES has provided a wide range of companies with the knowledge necessary to carry out their international business transactions. From one person companies to multi-national corporations--even foreign companies that deal in U.S. goods and technologies--HTES has provided detailed assistance relating to exports of numerous commodities and technologies.

Products/Service

Description

Export Regulation Compliance

Provides comprehensive assistance for compliance with the U.S. export regulations.

Handbook of Export Controls

Designed as a supplement to the EAR, this one-of-a-kind hand desk-top reference manual extracts information from several different sections of the EAR and consolidates it into one easy-to-read format. You no longer have to page back and forth to determine if an export is acceptable under certain controls because this information and more is all on one page.

Illinois Department of Energy and Natural Resources Office of Coal Development and Marketing 325 W. Adams, Room 300 **Springfield, IL 62704-1892**

Telephone: (217) 782-6370 (217) 524-4177

FAX: President/CEO: Sales Manager:

Kim Underwood Kim Underwood

Domestic Offices:

Springfield, IL: 325 W. Adams Street, Room 300



The Illinois Department of Energy and Natural Resources' Office of Coal Development and Marketing (OCDM) seeks to ensure the continued and expanded use of Illinois' coal resources in environmentally safe and economically viable ways. The OCDM is committed to assisting the Illinois coal and utility industries to improve the image and utilization of high-sulfur Illinois coal. This commitment will be achieved by developing research agendas responsive to current and anticipated needs, increasing research and development productivity, demonstrating promising clean coal technologies, expanding and enhancing the quality of current programs and heightening the effectiveness of energy-related products and services offered statewide to the coal industry, utility companies and the general public.

Product/Service

Description

Research and Development

The Coal Research and Development Program works toward increasing extraction and utilization of Illinois coal. This is accomplished by prioritizing the basic and applied research agenda and selecting those projects based on technical merit that will best serve constantly changing energy patterns. Research is presently being conducted in areas of resource extraction, fuel utilization and environmental protection.

Illinois Department of Energy and Natural Resources (Continued)

Marketing

The Coal Marketing Program is committed to assisting the coal industry in improving the marketability of high-sulfur Illinois coal. The Marketing Program will assist the industry by identifying Illinois coal sales opportunities on national and international levels. The Coal Marketing Program also seeks to promote the application of new technologies compatible with high-sulfur coal.

Demonstration and Planning

The Coal Demonstration and Planning Section is committed to identifying innovative clean coal technologies and providing financial assistance for selected demonstration projects through the Coal Demonstration Program. The program assists the technology developer by identifying potential hosts for the demonstration project, providing guidance in securing the required permits (state and local) and suggesting funding sources for the project. Most recently, the efforts of the Coal Demonstration and Planning Section have been directed at providing support for respondents to the U.S. Department of Energy's Clean Coal Technology Program.

Kerr-McGee Coal Corporation P.O. Box 25861 Oklahoma City, OK 73125

Telephone: (405) 270-2552

Telex: 673-5377 UW FAX: (405) 270-2967

President:

Robert C. Scharp

Executive Vice President:

Wayne T. Ewing

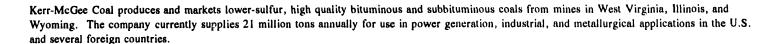
Domestic Offices:

Same address as above.

International Offices:

ICF Marketing Ltd., 450 London Road, North Cheam, Surry SM3 842, England TEL. (081-641-1171) FAX: (081-641-7327); Incontra Ltd., Hochhaus Zhr Palme, 33, Bleicherweg, Zurich, Switzerland

TEL. (01) 201 3535 FAX: (01) 202 4422



Product/Service	Description
Subbituminous Coal	Low-sulfur subbituminous coals are mined from the Jacobs Ranch and Clovis Point Mines in the Powder River Basin of northeastern Wyoming.
Bituminous Coal	Mid- to low-sulfur bituminous coal is mined at the Galatia Mine in southern Illinois. This coal is suitable for steam, coking blends and PCI use, and is exported from Gulf Coast ports.
Metallurgical Coal	Pioneer Fuels Corp., a subsidiary of Kerr-McGee Coal, produces high-quality metallurgical coals from its mines in Wyoming County, West Virginia.

Lehigh Valley Coal Sales Co. P.O. Box 450 Pittston, PA 18640

Telephone: (717) 654-3355

Telex: 510-658-3453 FAX: (717) 654-1422

President:

Joseph R. Pagnotti, Sr.

Lehigh Valley Coal Sales is a leading producer, shipper and exporter of industrial quality anthracite. Our mines produce metallurgical grade coal that has high carbon content, low volatility, low sulphur content, and is low in phosphorus. Lehigh Valley exports through the Port of Philadelphia.

Mellon Bank, N.A. One Mellon Bank Center Pittsburgh, PA 15258-0001

Telephone: (412) 234-0349

Telex: 199103 FAX: (412) 234-4401

President/CEO: Sales Manager:

Frank V. Cahouet John D. Sabroske

Domestic Offices:

Pittsburgh, Philadelphia, Chicago, Los Angeles, Houston and New York

International Offices:

Grand Cayman, London, Tokyo, Hong Kong and Toronto

Mellon Bank Corporation is a major bank holding company which engages in three core financial services businesses: Retail Banking; Wholesale Banking (including Middle Market Banking); and Service Products; which includes trust and investment, cash management, data processing, securities transfer and mortgage banking. The Corporation's Retail Banking and Middle Market Banking activities are focused in the Central Atlantic region. Wholesale Banking and Service Products activities are national in scope and are supported by locations in key domestic and international business centers.

Products/Service	Description
Wholesale Banking	Mellon's Wholesale Banking business serves the national corporate and institutional marketplace, the middle market in the central Atlantic region and selected international markets.
Service Products	Mellon is a leader in providing fee-based banking-related services to corporations, financial institutions, government agencies and individuals. Many of these businesses are technology-based. They complement our lending-based Wholesale and Retail banking business and provide a diversified earnings base for the Corporation.
Retail Ranking	Mellon's Retail Banking husiness serves consumers and small husiness customers throughout the states of

Pennsylvania and Delaware and in the Maryland suburbs of Washington, D.C.

J. W. Miller & Associates, Inc. (A Family Held Company)

Miller Building
No. 2 Hale Street
Charleston, WV 25301

Telephone: (304) 343-9524 **FAX:** (304) 343-9530

President: Mr. James W. Miller
Vice President: Mr. David S. Miller
Vice President: Mr. Gary J. Miller

Incorporated since 1964.

Product/Service

Geological Exploration; Coal Mining, Underground, Surface, Auger; Coal Preparation; Coal Exploration; Coal Transportation; Port Facilities; Efficiency and Productivity Studies; Appraisals; Coal Analysis; Financing; Complete Feasibility Studies; Economic Evaluations; Market Studies; Management/Operations Research; Design Contracting; Exploration, Drilling, Preparation Plant Construction, Mine and Plant Management, Beehive Coke Oven Construction, RR Loading and Unloading.

Morrison Knudsen Corporation One Erieview Plaza Cleveland, OH 44114

Telephone: (216) 523-3706 **FAX:** (216) 523-5539

Chairman/Chief Executive Officer: Tom Zargots
V.P. - International Operations: Darryl G. Moffett

Domestic Offices:
Los Angeles, CA; Boise, ID; St. Louis, MO; San Francisco, CA; Washington, DC International Offices:
Manila, Philippines; Warsaw, Poland; Singapore; London, England; Cairo, Egypt

Product/Service

Description

Architecture/Engineering

Facilities Construction

Morrison Knudsen Corporation is an international firm engaged in design, construction, and program management in energy, industrial, and government markets. It has proven capability for construction of totally integreted grassroot facilities, plant expansion, and modernization and retrofit programs. MK services range from feasibility studies through design, procurement, construction, and startup. The company has extensive experience in power and steam generation and related environmental control facilities, having completed over 150 such major projects in the past 10 years. Recent projects include: flue gas cleaning systems for Ontario Hydro, Sunflower Electric, Cleveland Electric Illuminating Co., and Tucson Electric Power Co.; coal-fired power plants for Utah Power & Light and Central and Southwest Services; wood-fired power plant for

Washington Water Power Co.; and two NOXSO power plants for U.S. DOE.

Oxbow Carbon International, Inc. 1601 Forum Place, Suite 1202 West Palm Beach, FL 33401

(407) 640-8800 Telephone: FAX: (407) 697-1876

President/CEO: **Executive Vice President:** Manager European Sales:

Hans H. Fleskes Patrick E. Valentine Christopher C. MacEachern

Oxbow Carbon International, Inc.

From OCI headquarters in West Palm Beach, FL, OCI conducts trading and marketing activities in petroleum coke, coal, alumina, fly ash, and other products; develops new marketing opportunities, especially in regards to petroleum coke and fly ash consumption; evaluates potential projects and acquisitions; and sources fuels for cogeneration projects in the United States.

Louisiana Carbon Company - A Joint venture with Conoco Carbon & Minerals, Inc. which markets fuel grade petroleum coke produced by Conoco, Inc. and other refineries. Annually, LCC ships over 2,500,000 tons to overseas customers and over 500,000 tons to the North American Market. Oxbow/LCC manufactures preblended fuels consisting of coal and petcoke for consumption in the utility industry.

Products/Service Description Solid Fuels OCI is a privately held company whose primary business is marketing and trading solid fuels such as petroleum coke, coal and other bulk solids including fly ash, cement, bauxite and other aggregates. OCI is active in marketing, blending, brokerage and other value-added business on both an export and import basis. Product is transported via truck, rail, barge and vessel to serve OCI's domestic and overseas suppliers and customers.

> OCI has formed a Joint Venture with International Separations Systems, Inc. (ISSI) to separate carbon from fly ash.

> > PEDCO INCORPORATED

Pedco Incorporated 11464 Lippelman Road

Ash Separation

Cincinnati, OH 45246

Telephone: (513) 771-2570 FAX: (513) 782-4950

President/CEO: E.E. McCracken Sales Manager: W.H. Long

Domestic Offices: 11464 Lippelman Road, Cincinnati, OH 45246

International Offices: Contact Company Headquarters

Pedco is actively engaged in the development and promotion of its proprietary and patented Rotary Cascading Bed Combustion Technology for the economical and environmentally safe burning of high sulfur and waste coals, as well as certain industrial and municipal wastes, to produce steam for process uses and electrical power generation. This technology has been demonstrated on a wide variety of fuel materials including industrial and municipal wastes, either fired alone or co-fired with high sulfur and/or waste coals. This technology forms the basis for several proposals to provide inexpensive industrial energy while helping industries and/or communities beneficially dispose of otherwise unmarketable combustible wastes.

Products/Service

Description

The Pedco Rotary Cascading Bed Combustion System is patented in the United States, Canada, Europe, Asia and South America. It offers industry a means of using otherwise unusable fuels to provide inexpensive energy in an environmentally acceptable manner. Boilers using this technology are not dependent of size-graded fuels and can fire almost any combustible non-hazardous waste, with coals or alone and can change fuels on-the-fly.

United States Department of Energy

PNC Bank, Kentucky, Inc. **Natural Resources Banking Group** Citizens Plaza Louisville, KY 40296

PNCBANK

Telephone:

(502) 581-4955

Telex: 204280 FAX: (502) 581-2302

Department Chairman:

Michael B. Vairin

Sales Manager:

Christopher Moravec

We provide financing for producers, brokers and vendors in the coal, petroleum, gas and mineral industries in Kentucky and the surrounding region. The Natural Resources Banking Group has tailored financing for reserve-based and production projects, contract miner operations and exports. We also offer stockpile and working capital financing, and we have developed an inexpensive reclamation surety program that has been copied in other states. Our staff combines financial skill with technical knowledge, enabling us to make decisions quickly in serving energy industry clients.

Product/Service

Description

Financing

Acceptance financing; accounts receivable loans; acquisition assistance; cash flow lines; certificates of deposit; coal reserve financing; development loans; equipment financing; equipment leasing loans; export financing; foreign exchange trading; industrial revenue bonds; invoice or accounts receivable financing; international financing services; letters of credit; lock box; trust services; and underground mining equipment loans.

Resource Data International, Inc. 1320 Pearl Street, Suite 300 Boulder, Colorado 80302

Telephone: (303) 444-7788

FAX:

(303) 444-1286

Chief Executive Officer:

Ronald L. McMahan, PhD

Director of Sales:

Michael J. Minkel

Domestic Offices:

1320 Pearl Street, Suite 300, Boulder CO 80302

Resource Data International, Inc., (RDI), is the authoritative data company in the energy information field. Many of the world's largest mineral energy resource companies, as well as railroads, financial institutions and electric utilities are among its client base. RDI focuses on all fuels in the energy industry -- covering all United States sources and users of energy, the transportation systems that serve them, the macro and micro economic linkages that tie them together -- as well as the macro and micro study of electric utilities: Detailed financial competitor and bulk power supply-demand analysis. The Company provides customized reports and expert consulting services, and distributes regularly published data reports to subscribers via PC, mainframe, or hard copy delivery.

Product/Service

Description

COALDAT*

is a coal mine and market analysis system used by coal companies, utilities, railroads and other industries involved in the coal business. The coal chain - SUPPLY-DEMAND/TRANSACTION-DEMAND - is the basis for COALDAT's design. COALDAT links a fully developed base of information on all coal mines to an equally detailed base of information on all coal-burning utility plants via their monthly contract and spot transactions. COALDAT also includes detailed market information on over 1,900 coal-fired industrial plants, as well as U.S. export and Great Lakes shipments. Additionally, RDI provides complete transportation rates for all utility coal shipments in the U.S. and F.O.B. mine prices for all operating mines. Leg level detail for all utility coal movements is supplied and includes carrier name, dollars per ton, mileage and cents per ton per mile for each leg.

(Continued on next page)

Resource Data International. Inc.

Resource Data International, Inc. (Continued)

FUELDAT

encompasses all of COALDAT and goes beyond it. The System includes all U.S. utilities and their consumption, generation and supply for all fuels. It combines the depth of the COALDAT supply-side with the all-fuels breadth of

the FUELDAT transaction, supply and demand sides.

POWERDAT*

encompasses all of COALDAT and FUELDAT and, in general, is a database designed to analyze and monitor, on a yearly as well as monthly basis, a utility's competitive position as well as the potential markets for power sales. Monthly information on generation, fuel consumption, power sales and power purchases will be provided. In addition, the POWERDAT system will provide, on an annual basis, detailed information concerning power contracts, financial performance, energy balances, transmission capabilities, plant production costs, monthly breakouts of peak loads and load forecasts.

Alison K. Schuler, Attorney at Law 5700 Harper Drive, NE Suite 430 Albuquerque, NM 87109

ALISON K. SCHULER

Telephone:

(505) 822-8826

FAX:

(505) 828-2682

Chief Executive Officer:

Alison K. Schuler, Esq.

International Offices:

Refer to Headquarters for further information.

Product/Service

Description

Financing and Resource Packaging

Technical Consulting

Legal Services

Provide consultation on various methods of obtaining financing for and structuring international transactions and enterprises and preparation of financial offering packages for

presentation to potential new markets and investors overseas.

Stinnes Hansen Coal Company, Inc. 605 Third Avenue 44th Floor New York, NY 10158

Telephone: (212) 972-4800

FAX:

(212) 682-5570

President:

Mr. Juergen H. Lorenz Mr. Michael T. Madden

Executive Vice President: Vice President:

Mr. Joseph Groneman

Treasurer:

Mrs. Connie Grossman Mr. Daniel J. Duda, Sr.

General Manager: Manager:

Mr. Robert Nagle

Regional Office:

333 West Vine Street, Lexington, KY 40507

their New York location, maintains an office in Lexington, KY as well as several international locations.

Telephone: (606) 233-3324

FAX: (606) 233-3328 Stinnes Hansen Coal Co., Inc. (formerly Hansen Coal Corp.) a coal and coke marketing company, has serviced domestic and foreign consumers since 1965. Representing a broad spectrum of independent coal producers and affiliated coal companies, they provide metallurgical utility, industrial and specialty coals and coke worldwide. A wholly owned subsidiary of Stinnes Intercarbon AG, Mulheim, Germany, Stinnes Hansen Coal, in addition to



Techno-Economic Consulting, Inc. Park Avenue Atrium 237 Park Avenue, 21st Floor New York, NY 10017

Telephone: (212) 362-4446

Telex: 425170 FAX: (212) 697-8486

President: Senior Advisor: Mr. A.S. "Art" Aktar, P.E. Professor Emeritus Stefan Boshkov

Senior Advisor:

Mr. Roger Hulette, P.E.

Domestic Offices:

RIDGEWOOD, NJ: 76 North Maple Avenue, Ridgewood, NJ 07450 Tcl: (201) 447-3447 FAX: (201) 445-7857

TEC is a management and engineering consulting firm. It provides services in coal geology, reserve calculations, project economics, project planning and development, project financing, open pit and underground mining management, shipping, and operations review, to both domestic and international clients. TEC was formed in 1977 and has 28 Senior Associates. Mr. Aktar's specialty is project management and economics. Mr. Hulette is one of the foremost authorities on engineering, design and construction of major material-handling systems and operations.

Product/Service

Technical Consultants; Financing and Resource Packaging; and Architecture/Engineering.

Trade Development Corporation of Chicago (China Trade Development Corp. of Chicago) Suite 480 2049 Century Park East Los Angeles, CA 90067

Telephone: (310) 556-8091

Telex: 9102210054 FAX: (310) 556-3088

Chief Executive Officer:

Michael R.A. Wade

China Manager:

Xianqui Liu (Beijing)

Our Company is a full-service Asian trade consulting, market research, and export management firm founded in Chicago in 1979. We are the first Asia specialists in the United States to be granted antitrust protection by the U.S. Departments of Justice and Commerce under the Export Trading Company Act. Our services include introducing modern machinery, precision instruments, and medical equipment into China and other Asian countries; facilitating countertrade, joint ventures, and licensing arrangements; conducting industrial surveys and market research; assisting with direct sales and worldwide product sourcing; and preparing brochures/sales literature in Asian languages.

Product/Service

Description

Technical Consultants

Representation; Business intelligence reports and specialized research; Foreign investment guidance; Language

services

Welt International Corporation 1413 K Street, N.W. Suite 1400 Washington, DC 20005

Telephone: (202) 371-0555

Telex: 281 409 TAOA UR FAX: (202) 408-9369
Chief Executive Officer: Leo G.B. Welt
VP for Publications: Joni Rafalski
VP for Travel Services: Walton Egelanian

Welt International is an export trading company dealing in equipment, machinery, chemicals, coal and commodities. Our main markets have been Eastern Europe, the Soviet Union and China. Our expertise is in financial engineering or unconventional financing, buyback, compensation, countertrade, technology transfer and joint venture development.

Welt International also publishes the following newsletters: East/West Business and Trade, China Business and Trade, East West Technology Digest, Latin American Index, Washington Report on Africa, and American Export Marketer. We provide travel services through Travel Advisors of America, and specialize in travel to Eastern Europe, the Soviet Union, China, North Korea, Vietnam and Cuba.

Williams Technologies, Inc. 320 South Boston, Suite 831 Tulsa, OK 74103

Telephone: (918) 582-5811 **FAX:** (918) 584-0474

Chief Executive Officer: David R. Williams, Jr.

International Sales Manager: H.J. Brolick

International Offices: Please contact the company headquarters for further information.

Principal business is project assessment, development, and management from initiation of concept through commercial implementation, including financial sourcing. Williams Technologies, Inc. is an equity owner of the Black Mesa Pipeline, Inc. coal slurry pipeline and provides executive management, technical, administrative and accounting support services for the operation and maintenance of the pipeline system. Provides consulting with regard to economic feasibility or technical evaluation of energy or resource projects. Manages operating facilities and technology development for others. Special expertise in development of coal slurry pipeline projects through past worldwide experience and ongoing operations management of Black Mesa Pipeline.

Product/Service	Description
Coal Transport	Provides development, management, financial packaging and operation management of coal slurry pipeline systems.
Architectural/Engineering	Provides consulting services in planning and feasibility study, as well as management of design, construction, and operations for coal sturry pipeline and oil and gas pipeline systems. Provides similar services for

cogeneration plants and alternative energy projects.

APPENDICES

Appendix A - U.S. Associations Supporting Domestic and International Coal and Coal Technology Export Activities

ADVANCED UTILIZATION

Clean Coal Technology Coalition Ben Yamagata, Executive Director 1050 Thomas Jefferson Street, N.W. 7th Floor Washington, DC 20007 (202) 342-3368 The Clean Coal Technology Coalition acts as the spokesman for the development and use of clean coal in industry. CCTC is oriented toward encouraging, demonstrating, deployment and widespread commercialization of clean coal technology.

Council on Alternative Fuels Michael S. Koleda, President 1110 N. Glebe Road, Suite 610 Arlington, VA 22201 (703) 276-6655 The Council on Alternative Fuels is made up of 25-30 companies involved in the production of synthetic fuels. Research and development and engineering companies work as associate members for the companies in their projects involving alternative fuels.

BOILER EQUIPMENT

American Boiler Manufacturers
Association
Russell Mosher, Executive Director
950 North Glebe Road, Ste. 160
Arlington, VA 22203
(703) 522-7350

The American Boiler Manufacturers Association is comprised of 100-125 companies which manufacture and generate steam systems. Many members are involved in the combustion of coal by these systems and in the promotion of steam through coal combustion.

Council of Industrial Boiler Owners William Marx, President 6035 Burke Center Pkwy, Ste. 360 Burke, VA 22015 (703) 250-9042 The Council of Industrial Boiler Owners is comprised of 50 companies owning and operating industrial steam boilers. COIBO is a trade association selling boilers to various companies, including those affiliated with the coal/coke industry.

COAL DERIVATIVES

American Coal Ash Association Samuel Tyson, Executive Director 1913 I Street, N.W., Ste. 600 Washington, DC 20006 (202) 659-2303 The American Coal Ash Association includes 100 companies which produce fly ash from coal combustion. The ACAA members are interested in the promotion of ash utilization in industry.

American Coke and Coal Chemicals Institute Mark T. Engle, President 1255 23rd St., N.W. Washington, DC 20037 (202) 452-1140 The American Coke and Coal Chemicals Institute is comprised of 50-60 companies, national and international, which represent coke and metallurgical coal producers and processors of chemicals derived from petroleum tar and coal. Members are major producers of components and dedicated to the promotion of the petroleum industry.

COAL EXPORTERS

Coal Exporters Association of the United States Moya Phelleps, Executive Director 1130 17th St., N.W. Washington, DC 20036 (202) 463-2639 The Coal Exporters Association of the United States is made up of 40 members affiliated with the National Coal Association. The CEA of the United States is a lobbyist for the promotion of coal export.

The Mississippi Valley Coal Exporter Council C. R. Moore, President 1013 World Trade Center New Orleans, LA 70130 (504) 566-1001 The Mississippi Valley Coal Exporter Council is made up of 70 member companies concerned with coal export from the Mississippi Valley. Most of MVCEC's work involves the promotion and technical marketing of United States coal overseas.

COAL INDUSTRY

American Coal Foundation Richard Lawson, President 1130 17th Street, N.W., Ste. 220 Washington, DC 20036 (202) 463-2625 The American Coal Foundation provides instructional materials to aid teachers in classrooms across the country. The ACF is also quite active nationwide conducting periodic workshops regarding the coal industry.

Anthracite Industry Association Mazie Mahoney, Executive Director (202) 408-8833 Anthracite coal producers make up the Anthracite Industry Association, founded in 1931. Anthracite coal is produced solely in PA and this 60-member association is dedicated to the continued use and development of this coal.

Coal & Slurry Technology Association Stuart Serking, Executive Director 1156 15th Street, N.W., Ste. 525 Washington, DC 20005 (202) 296-1133

The Coal & Slurry Technology Association is the recognized representative of the coal and slurry technology industry before Congress, the Administration, and the media. CSTA is a non-profit organization dedicated to the advancement of technology, pipeline delivery of solids and the further development of coal and slurry technology.

National Coal Council
James McAvoy, Executive Director
P.O. Box 17370
Arlington, VA 22216
(703) 527-1191

The National Coal Council is a privately funded, federally chartered advisory group serving the Secretary of Energy. Their work revolves around the coal industry and related coal energy issues.

National Coal Association Richard L. Lawson, President 1130 17th Street, N.W., Ste. 220 Washington, DC 20036 (202) 463-2625 The National Coal Association represents 2/3 of coal production in the U.S. They are the principal lobbying association for the coal industry in Washington, DC, covering a wide variety of coal and energy-related issues.

SHIPPING

American Bureau of Shipping Robert D. Somerville, President Two World Trade Center New York, NY 10048-0772 (212) 839-5000 The American Bureau of Shipping is comprised of 480 members certifying the soundness of offshore drilling units and other marine structures. The American Bureau of Shipping sets standards on construction and certification of these structures such as drilling units, containers, machinery, and equipment.

The American Institute of Merchant Shipping Ernest Corrado, President

1000 16th Street, N.W., Ste. 511 Washington, DC 20036 (202) 775-4399 The 23 members of American Institute of Merchant Shipping are operators and owners of U.S. flag flying vessels, usually tankers, bulk carriers, and container ships. The institute represents members interests when dealing with international and domestic agencies concerned with shipping.

The Federation of American Controlled Shipping Phillip Loree, Chairman 50 Broadway, Suite 3400 New York, NY 10004 (212) 344-1483 The Federation of American Controlled Shipping represents the interests of ships belonging to U.S. companies operating under the Liberian, Panamanian, and Bahamian flags. The FACS has 20 member companies involved in the industrial importing and exporting business.

Shipbuilders Council of America John Stocker, President 4301 N. Fairfax Drive, Suite 330 Arlington, VA 22203 (703) 276-1700

The Shipbuilders Council of America has 50-60 member companies involved in building and repairing ships as well as manufacturing marine equipment and supplies. Many of these companies perform contract work for the federal government involving repair and equipment.

ELECTRIC POWER

Edison Electric Institute Thomas Kuhn, President 701 Pennsylvania Ave., N.W. Washington, DC 20004 (202) 508-5000

The Edison Electric Institute is comprised of 200 member companies involved in energy conservation and management. These are investor owned electric companies which work closely with and sponsor the Edison Electric Institute's Power PAC.

Electric Generation Association Margaret Welsh, Executive Director 2715 M Street, N.W., Suite 150 Washington, DC 20007 (202) 965-1134 The Electric Gneration Association (EGA) is a national trade association representing independent power producers (IPPs) and other suppliers of goods and services to the competitive wholesale electric industry. EGA's members provide their wholesale utility customers, and hence the general public, with safe, reliable, low-cost, and clean electricity, and serve as a source of significant investment in the economy.

Electric Power Research Institute Richard E. Balzhiser, President P.O. Box 10412 Palo Alto, CA 94303 (415) 855-2000 The Electric Power Research Institute is involved in research relating to the production, transmission, distribution, and utilization of electric power. The EPRI is comprised of over 450 electric utility companies with an annual budget of about 300 million dollars.

Gas Research Institute
Stephen D. Ban, President
1331 Pennsylvania Avenue, N.W.
Suite 730N
Washington, DC 20004
(202) 662-8989

Gas Research Institute is a non-profit organization performing research for private contractors on natural gas supply. The GRI receives money from the FERC to fund projects such as extraction of gas from coal.

Institute of Gas and Technology Research

Dr. Bernard Lee, President 3424 S. State Street Chicago, IL 60616 (312) 949-3650

The Institute of Gas and Technology Research is an independent non-profit center for energy and environmental research and education. Their programs include the production of clean fuels and chemicals from coal and the development of modern carbonate fuel cells.

International Energy Development Council

James S. Pignatilli, President/CEO 1050 Thomas Jefferson Street, N.W., 7th Washington, DC 20007

National Independent Energy Producers

Merribel S. Ayres, Executive Director 601 13th Street, N.W., Suite 3205 Washington, DC 20005 (202) 783-2244

COAL MINING

The American Mining Congress John Knebel, President 1920 N Street, N.W., Ste. 300 Washington, DC 20036 (202) 861-2800

The American Mining Congress is an industrial Coal and Hard Rock trade association representing over 400 member companies, including producers of metals, coal, industrial/agricultural minerals, equipment manufacturers. and financial institutions serving the mining industry.

Bituminous Coal Operators Association Joseph Brennen, President 918 16th Street, N.W., Ste. 303 Washington, DC 20006

(202) 783-3195

The Bituminous Coal Operators Association is the representative of coal companies in collective bargaining agreements with coal workers unions. The scope of the bargaining involves the Bituminous Coal Wage Agreement specifically.

National Independent Coal Operators Association

Louise Hunter, Executive Vice President P.O. Box 354 Richland, VA 24611 (703) 964-6065

The National Independent Coal Operators Association involves 4500-5000 small bituminous union and non-union coal mines not owned by large companies. NICOA keeps track of all laws and legislation and acts as an information network for their members.

COAL TRANSPORT

American Waterways Operators Joseph Farrell III, President 1600 Wilson Blvd., Suite 1000 Arlington, VA 22209 (703) 841-9300 The American Waterways Operators are the National Trade Association for the inland and coastal barge and towing industry. The AWO members transport coal in barges overseas and domestically.

Association of American Railroads Edwin L. Harper, President 50 F Street, N.W. Washington, DC 20001 (202) 639-2100 The Association of American Railroads is representative of 243 railroads serving the industries of the continental U.S. since its inception AAR has strived to keep railways a safe method of transporting materials such as coal and other industrial commodities as well as passengers.

Pipeline Contractors Association Hailey Roberts, Managing Director 4100 First City Center 1700 Pacific Avenue Dallas, TX 75201 (214) 969-2700 The Pipeline Contractors Association represents pipeline contractors in the United States regarding labor agreements. Negotiations between contractors and unions are handled by the association on the contractors behalf.

Western Coal Transport Association Robert Lee Kessler, Executive Director P.O. Box 176 Denver, CO 80201 (303) 694-6611 The Western Coal Transport Association is an organization of actual and potential producers and consumers of western coal interested in its transportation. Interests are mainly domestic concerns and how coal is distributed to areas in need.

ENGINEERING

ASTM
James Thomas, President
1916 Race Street
Philadelphia, PA 19103
(215) 299-5400

The ASTM Committee on Coal and Coke sets the standards for the coal and coke industry and develops the specifications for coal and coke produced from coal. The primary goal of this committee is the promotion of research and dissemination of knowledge in the coal/coke industry.

Society of Mining Engineers
William M. Shepard, Executive Director
P.O. Box 625002
Littleton, CO 80162-5002
(303) 973-9550

The Society of Mining Engineers is a technological organization for professionals in mineral industries. The Society of Mining Engineers publishes literature and conducts meetings, enhancing the mineral industry through field service to participants and the public they serve.

FINANCING

American Bankers Association
Donald Oglivie, Executive Vice President
1120 Connecticut Avenue, N.W.
Washington, DC 20036
(202) 663-5000

The American Bankers Association is the national trade and professional association for America's commercial banks from the smallest to the largest. ABA's members represent more than 90 percent of the industry's total assets. Approximately 94 percent of ABA members are community banks with assets of less than \$500 million.

Bankers' Association for Foreign Trade Mary Condeelis, Executive Director 1600 M Street, N.W., 7th Floor Washington, DC 20036 (202) 452-0952 The Bankers' Association for Foreign Trade (BAFT) is an association of banking institutions dedicated to fostering and promoting international trade, finance and investment between the United States and its trading partners. Fundamental to BAFT's philosophy are open access to financial markets, the concept and practice of "national treatment", and open non-discriminatory trade practices.

Export/Import Bank
Bruce Hunt, Deputy Vice President
811 Vermont Avenue, N.W.
Washington, DC 20571
(202) 566-8997

The Export/Import Bank is an investment bank involved in various projects, including the development and research involving the coal industry. Many of the Export/Import Bank's projects involve the lending of funds to further pursue development overseas.

InterAmerican Development Bank Sergio Mancilla, Chief, Energy Division 1300 New York Avenue, N.W. Washington, DC 20433 (202) 623-2016 The InterAmerican Development Bank finances coal projects in South and Central America and the Caribbean, Brazil, and Mexico. The IADB also funds studies in qualities of minerals extracted and development of new sites.

Overseas Private Investment Corporation Ruth Harkin, President 1100 New York Ave., N.W. Washington, DC 20527 (202) 336-8680

The Overseas Private Investment Corporation is a self-sustaining agency whose purpose is to promote economic growth in developing countries by encouraging U.S. private sector investment. OPIC has two major programs to assist U.S. investors: political-risk insurance and financing (both direct loans and loan guarantees).

World Bank

Anthony A. Churchill Vice President, Private Sector Financial Operations

Ibrahim I. Elwan Manager, Private Sector Financial Operations CoFinancing and Financial Advisory Services

818 H Street, N.W. Washington, DC 20433 (202) 477-1234 The World Bank acts as a major investor in international mining development. Responsible for funding many projects in developed and underdeveloped countries.

FREIGHT FORWARDERS

National Customs Brokers and Forwarders Association of America John Hammon, Executive Vice President 1 World Trade Center, Ste. 1153 New York, NY 10048 (212) 432-0050 The National Customs Brokers and Forwarders
Association of America acts as agents for importers and
exporters of minerals overseas.

LABOR

United Mine Workers of America Richard Trumka, President 900 15th Street, N.W. Washington, DC 20005 (202) 842-7200 The United Mine Workers of America acts as liaison between workers and labor and the government. The UMWA protects the rights and provides the political voice of the mine workers.

Appendix B - U.S. Department of Energy Clean Coal Technology Demonstration Projects - Active or Planned - for Funding under the Clean Coal Demonstration Program

COMPLETED PROJECTS

LIMB Demonstration Project
Extension and Coolside
Demonstration
(The Babcock & Wilcox
Company)
1562 Beeson Street
Alliance, OH 44601
Todd Johnson
(216) 829-7355

To demonstrate, with a variety of coals and sorbents, the LIMB process as a retrofit system for simultaneous control of NO_x and SO₂ in the combustion process, and that LIMB can achieve up to 60 percent NO_x and SO₂ reductions; to test alternate sorbent and coal combinations, using the Coolside process, to demonstrate in-duct sorbent injection upstream of the humidifier and precipitator and to show SO₂ removal of up to 80 percent.

Location: Lorain, OH

Advanced Cyclone Combustor with Internal Sulfur, Nitrogen, and Ash Control (Coal Tech Corporation) P.O. Box 154 Merion, PA 19066 Bert Zauderer (215) 667-0442

Location: Williamsport, PA

To demonstrate that an advanced cyclone combustor can be retrofitted to an industrial boiler and that it can simultaneously remove up to 90 percent of the SO_2 and 90-95 percent of the ash within the combustor and reduce NO_x by up to 100 ppm.

Nucla CFB Demonstration Project

(Tri-State Generation and Transmission Association, Inc.) P.O. Box 1149 Montrose, OH 81402 Raymond Keith (303) 249-4501

Location: Nucla, CO

To demonstrate ACFB at a scale of 110 MWe, representing a 2:1 scaleup from previously demonstrated capacities; to verify expectations of the technology's economic, environmental, and technical performance in a repowering application at a utility site; to accomplish greater than 90 percent SO₂ removal; to reduce NO_x emissions by 60 percent; and to achieve an efficiency of 34 percent in a repowering mode.

CCT I PROJECTS

Development of the Coal Quality Expert

(ABB Combustion Engineering, Inc., and CQ, Inc.) One Quality Center P.O. Box 280 Homer City, PA 15748-0280 Clark Harrison (412) 479-6016 To demonstrate an expert system that can be run on a personal computer and provide coal-burning utilities with a predictive tool to assist in the selection of optimum quality coal for a specific based on operational efficiency, cost, and environmental emissions.

Locations:

Alliance, OH Windsor, CT

Grand Forks, ND

Wilsonville, AL

Springdale, PA

Gulfport, MS

Bayport, MN

Homer City, PA

Oologah, OK

Enhancing the Use of Coals by Gas Reburning and Sorbent Injection

(Energy and Environmental Research Corporation) 18 Mason Irvine, CA 92718 Blair A. Folsom (714) 859-8851

Locations: Hennepin, IL Springfield, IL To demonstrate gas reburning to attain 60 percent NO_x reduction along with sorbent injection to capture 50 percent of the SO₂ on two different boiler configurations: tangentially fired and cyclone fired.

TIDD PFBC Demonstration Project

(The Ohio Power Company) c/o American Electric Power Service Corporation 1 Riverside Plaza Columbus, OH 43215 Mario Marrocco (614) 223-1740

Location: Brilliant, OH

To demonstrate PFBC at a 70-MWe scale, representing a 13:1 scaleup from the pilot plant facility; to verify expectations of the technology's economic, environmental, and technical performance in a combined-cycle repowering application at a utility site; and to accomplish greater than 90 percent SO_2 removal, NO_x emission level of 0.2 lb/million Btu, and an efficiency of 38 percent in a repowering mode using the existing steam system.

Advanced Coal Conversion Process Demonstration (Rosebud SynCoal Partnership) P.O. Box 7137 Billings, MT 59103-7137 Ray W. Sheldon (406) 748-2366 and/or (406) 252-2277

Location: Colstrip, MT

To demonstrate Western Energy's advanced coal conversion process to produce a stable coal product having a moisture content as low as 1 percent, sulfur content as low as 0.3 percent, and heating value up to 12,000 Btu/lb.

York County Energy Partners Cogeneration Project (York County Partners, L.P.) 2146 White Street York, PA 17404 Bradley Hahn (215) 481-3955

Location:

West Manchester Township, PA

To demonstrate ACFB at 250 M We, representing a 1.7:1 scaleup from previously constructed facilities; to verify expectations of the technology's economic, environmental, and technical performance in a greenfield cogeneration application; and to provide cogenerators, as well as utility and non-utility power producers, with the data necessary for evaluating a 250-MWe ACFB as a commercial alternative to accomplish greater than 90 percent SO₂ removal, to reduce NO_x emissions by 60 percent when compared with conventional technology, and to achieve a steam efficiency of 88 percent.

CCT II PROJECTS

Combustion Engineering IGCC Repowering Project (ABB Combustion Engineering, Inc.) P.O. Box 500 Windsor, CT 06095-0500

Location: Springfield, IL

Robert W. Glamuzina (203) 285-5904

To demonstrate an advanced dry-feed, air-blown, two-stage, entrained-flow coal gasifier with a moving-bed, zinc titanate, hot-gas cleanup system; to assess long-term reliability and maintainability of the system at a sufficient scale to determine commercial potential.

SNOX Flue Gas Cleaning
Demonstration Project
(ABB Combustion Engineering,
Inc.)
Environmental Systems Division
P.O. Box 43030
Birmingham, AL 35243
Bill Kingston
(205) 995-5368

Location: Niles, OH

To demonstrate on U.S. coals at an electric power plant that SNOX technology will catalytically remove 95% of SO₂ and more than 90 percent of NO_x from flue gas and produce a salable by-product of concentrated sulfuric acid.

PFBC Utility Demonstration Project (The Appalachian Power Company)

American Electric Power Service
Corporation
1 Riverside Plaza
Columbus, OH 43215
Mario Marrocco
(614) 223-1740

Location: New Haven, WV

To demonstrate PFBC at 340 MWe, a large utility scale representing a four-fold scaleup of the technology, the world's largest PFBC, and the first commercial application of PFBC in the United States; to assess long-term reliability, availability, and maintainability of PFBC in a commercial operating mode and the integration of a reheat steam cycle.

Demonstration of Coal Reburning for Cyclone Boiler NO_x Control (The Babcock & Wilcox Company) 1562 Beeson Street Alliance, OH 44601 Todd Johnson (216) 829-7355

To evaluate the applicability of reburning technology for reducing NO_x emissions from a full-scale coal-fired cyclone boiler, pulverizing a portion of the primary coal fuel to use as the secondary, "reburning" fuel; and to achieve greater than 50 percent reduction in NO_x emissions with no serious impact on cyclone combustor operation, boiler efficiency, boiler fireside performance (corrosion and deposition), or ash removal system performance.

Location: Cassville, WI

NOX-SOX-ROX Box Flue Gas Cleanup Demonstration Project (The Babcock & Wilcox Company) 1562 Beeson Street Alliance, OH 44601 Todd Johnson (216) 829-7355

Location: Dilles Bottom, OH

To demonstrate that the SOX-NOX-ROX box process, used in retrofitting a high-sulfur-coal-fired power plant, can remove high levels of all three pollutants using a single processing unit for treating flue gas, thereby lessening on-site space requirements and capital costs.

Innovative Coke Oven Gas Cleaning System for Retrofit Applications (Bethlehem Steel Corporation) 1739 Martin Tower

1739 Martin Tower 1170 8th Avenue Bethlehem, PA 18016 Marshall R. Mazer (215) 694-2389

Location: Sparrows Point, MD

To demonstrate a first-of-kind novel integration of commercially available process steps for simultaneous removal of hydrogen sulfide and ammonia from COG, recovery of hydrogen sulfide and ammonia, destruction of ammonia, and recovery of sulfur in a commercial-sized application; and to reduce SO₂ emissions by at least 80 percent accompanied by substantially reduced emissions of volatile organic compounds and discharge of ammonia to wastewater treatment.

Cement Kiln Flue Gas Recovery Scrubber

(Passamaquoddy Tribe)
Passamaquoddy Technology, L.P.
P.O. Box 350
Thomaston, ME 04861-0350
Garrett Morrison
(207) 594-5555

Location: Thomaston, ME

To retrofit and demonstrate a full-scale industrial scrubber and waste recovery system for a coal-burning wet process cement kiln using waste dust as the reagent to accomplish 90-95 percent SO₂ reduction using high-sulfur eastern coals and to produce a commercial by-product. potassium-based fertilizer.

Advanced Flue Gas Desulfurization Demonstration Project

(Pure Air on the Lake, L.P.) 7201 Hamilton Boulevard Allentown, PA 18195-1501 Don Vymazal (215) 481-3687

Location: Chesterton, IN

To demonstrate removal of 90-95 percent or more of the SO₂ at approximately one-half the cost of current conventional scrubbing technology; and to demonstrate significant reduction of space requirements.

Demonstration of Advanced Combustion Techniques for a Wall-Fired Boiler

(Southern Company Services, Inc.)
P.O. Box 2625
Birmingham, AL 35202-2625
John N. Sorge
(205) 877-7426

Location: Coosa, GA

To achieve 50 percent NO_x reduction with the AOFA/LNB system; to determine the contributions of AOFA and the LNB to NO_x reduction and the parameters determining optimum AOFA/LNB system performance; and to assess the long-term effects of AOFA and LNB on NO_x reduction and boiler performance.

Demonstration of Innovative Applications of Technology for the CT-121 FGD Process (Southern Company Services, Inc.) P.O. Box 2625

P.O. Box 2625 Birmingham, AL 35202-2625 David P. Burford (205) 870-6329

Location: Newnan, GA

To demonstrate the CT-121 flue gas desulfurization system, including several design innovations, at the 100-MWe scale; more specifically, to demonstrate 90 percent SO₂ control at high reliability with and without simultaneous particulate control with possible additional reductions in operating costs.

Demonstratin of Selective
Catalytic Reduction Technology
for the Control of NO_x
Emissions from High-SulfurCoal-Fired Boilers
(Southern Company Services,
Inc.)
P.O. Box 2625
Birmingham, AL 35202-2625
J.D. (Doug) Maxwell
(205) 877-7614

To evaluate the performance of commercially available SCR catalysts when applied to operating conditions found in U.S. pulverized coal-fired utility boilers using U.S. high-sulfur coal under various operating conditions while achieving as much as 80 percent NO_x removal.

180-MWe Demonstration of Advanced Tangentially Fired Combustion Techniques for the

Location: Pensacola, FL

Reduction of NO_x Emissions from Coal-Fired Boilers (Southern Company Services, Inc.)

P.O. Box 2625 Birmingham, AL 35202-2625 Robert R. Hardman

Location: Lynn Haven, FL

(205) 877-7772

To demonstrate in a stepwise fashion the short- and long-term NO_x reduction capabilities of low-NO_x concentric firing system (LNCFS) Levels I, II, and III on a single reference boiler under typical dynamic operating conditions; and evaluate the cost effectiveness of each low-NO_x combustion technique.

CCT III Projects

Commercial-Scale
Demonstration of the LiquidPhase Methanol (LPMEOHTM)
Process

(Air Products and Chemicals, Inc.)
7201 Hamilton Boulevard
Allentown, PA 18195-1501
William R. Brown
(215) 481-7584

Location: Daggett, CA

To demonstrate on a commercial scale the production of methanol from coalderived synthesis gas using the LPMEOHTM process; and to determine the suitability of methanol produced during this demonstration for use as a low-SO_x, NO_x alternative fuel in boiler, turbine, and transportation applications.

10-MW Demonstration of Gas Suspension Absorption

(AirPol, Inc.)
32 Henry Street
Teterboro, NJ 07608
Frank E. Hsu
(201) 288-7070

Location: West Paducah, KY

To demonstrate the applicability of gas suspension absorption for flue gas desulfurization using high-sulfur U.S. coals by installing and testing a 10-MWe GSA demonstration system.

Healy Clean Coal Project (Alaska Industrial Development and Export Authority) 480 West Tudor Anchorage, AK 99503-6690 John Olson (907) 561-8050

Location: Healy, AK

To demonstrate an innovative new power plant design featuring integration of an advanced combustor and heat recovery system coupled with both high- and low-temperature emissions control processes.

Full-Scale Demonstration of Low-NO_x CellTM Burner Retrofit (The Babcock & Wilcox Company) 1562 Beeson Street Alliance, OH 44601 Todd Johnson (216) 829-7355

To demonstrate through the first commercial-scale full burner retrofit the cost-effective reduction of NO_x from a large base-load coal-fired utility boiler with Low-NO_x CellTM burner technology; and to achieve at least a 50 percent NO_x reduction without degradation of boiler performance at less cost than conventional low-NO_x burners.

Location: Aberdeen OH

Confined Zone Dispersion Flue Gas Desulfurization Demonstration (Rechtal Composition)

(Bechtel Corporation)
P.O. Box 3965
San Francisco, CA 94119-3965
Allen G. Rubin
(415) 768-6514

Location: Seward, PA

To demonstrate SO₂ removal capabilities of in-duct CZD/FGD technology; specifically, to define the optimum process operating parameters and to determine CZD/FGD's operability, reliability, and cost-effectiveness during long-term testing and its impact on downstream operations and emissions.

Blast Furnace Granulated-Coal Injection System Demonstration Project

(Bethlehem Steel Corporation) 1739 Martin Tower 1170 8th Avenue Bethlehem, PA 18016 Daniel Kwasnoski (215) 694-6478

Location: Burns Harbor, IN

To demonstrate that existing iron-making blast furnaces can be retrofitted with blast furnace granulated-coal injection technology; and to demonstrate sustained operation with a variety of coal particle sizes, coal injection rates, and coal types, and to assess the interactive nature of these parameters.

PCFB Demonstration Project (DMEC-1 Limited Partnership) Midwest Power, Inc. 666 Grand Avenue Des Moines, IA 50303 Gary Kruempel

Location: Pleasant Hill, IA

(515) 281-2459

To demonstrate PCFB at sufficient scale to evaluate environmental, cost, and plant performance and to obtain the technical data required for commercialization of the technology; to assess operating performance of unique features that include an integral ceramic hot-gas filter and slightly modified, commercially available gas turbine.

ENCOAL Mild Coal Gasification Project (ENCOAL Corporation) P.O. Box 3038 Gillette, WY 82717 Jim Frederick (307) 686-5493

Location: Near Gillette, WY

To demonstrate the integrated operation of a number of novel processing steps to produce two higher value fuel forms from mild gasification of low-sulfur subbituminous coal; and to provide sufficient products for potential end users to conduct burn tests.

Evaluation of Gas Reburning and Low-NO_x Burners on a Wall-Fired Boiler

(Energy and Environmental Research Corporation) 18 Mason Irvine, CA 92718 Blair A. Folsom (714) 859-8851

Location: Denver, CO

To attain up to a 70 percent decrease in the emissions of NO_x from an existing wall-fired utility boiler firing low-sulfur coal using both gas reburning and low-NO_x burners.

LIFAC Sorbent Injection Desulfurization Projection (LIFAC-North America) ICF Kaiser Engineers, Inc. 4 Gateway Center Pittsburgh, PA 15222-1207 Jim Hervol (412) 497-2735

Location: Richmond, IN

To demonstrate that electric power plants—especially those with space limitations—burning high-sulfur coals, can be retrofitted successfully with the LIFAC limestone injection process to remove 75-85 percent of the SO₂ from flue gas and produce a dry solid waste product for disposal in a landfill.

Commercial Demonstration of the NOXSO SO₂/NO_x Removal Flue Gas Cleanup System (MK-Ferguson Company)

1500 West 3d Street Cleveland, OH 44114 Eugene R. Recher (216) 523-5923

Location: Niles, OH

To demonstrate removal of 97 percent of the SO_2 and 70 percent of the NO_x from a coal-fired boiler's flue gas using the NOXSO process.

Integrated Dry NO_x/SO₂
Emissions Control System
(Public Service Company of
Colorado)
5900 East 39th Avenue
Denver, CO 80207
Gordon A. Schott
(303) 329-1702

To demonstrate the integration of three technologies to achieve up to 70 percent reduction in NO_x and SO₂ emissions; more specifically, to assess the integration of a down-fired low-NO_x burner with in-furnace area injection for additional NO_x removal and dry sorbent in-duct injection with humidification for SO₂ removal.

Location: Denver, CO

Tampa Electric Integrated Gasification Combined-Cycle Project

(Tampa Electric Company) P.O. Box 111 Tampa, FL 33601-0111 Donald E. Pless (813) 228-1332

Location: Lakeland, FL

To demonstrate the IGCC technology in a greenfield, commercial, electric utility application at the 260-MWe size with a Texaco gasifier. To demonstrate the integrated performance of a zinc-titanate hot-gas cleanup system, conventional cold-gas cleanup, and an advanced gas turbine with nitrogen injection (from the air separation plant) for power augmentation and NO, control.

CCT IV PROJECTS

Self-Scrubbing Coal[™]: An Integrated Approach to Clean Air

(Custom Coals International) 100 First Avenue, Suite 500 Pittsburgh, PA 15222 Robin Godfrey (412) 642-2625

Locations:

Stoystown, PA Springdale, PA Richmond, IN Ashtabula, OH To demonstrate advanced coal-cleaning unit processes to produce low-cost compliance coals that can meet full requirements for commercial-scale utility power plants to satisfy CAAA of 1990 provisions.

Milliken Clean Coal Technology Demonstration Project (New York State Electric & Gas Corporation) 120 Chenango Street Binghamton, NY 13902 Dennis O'Dea (607) 729-2551 To demonstrate at a 300-MWe utility-scale a combination of cost-effective and innovative emission reduction and efficiency improvement technologies, including the S-H-U wet scrubber system enhanced with formic acid to increase SO₂ removal in a Stebbins lined scrubber; urea injection for NO_x removal; and a heat-pipe preheater.

Location: Lansing, NY

Piñon Pine IGCC Power Project (Sierra Pacific Power Company) 6100 Neil Road Reno, NV 89520-0400 Jack Motter (702) 689-4013

Location: Reno, NV

To demonstrate air-blown, pressurized, fluidized-bed IGCC technology incorporating hot gas cleanup; to evaluate a low-Btu gas combustion turbine; and to assess long-term reliability, availability, maintainability, and environmental performance at a scale sufficient to determine commercial potential.

Toms Creek IGCC
Demonstration Project
(TAMCO Power Partners)
Tampella Power Corporation
2300 Windy Ridge Parkway
Suite 225
Marietta, GA 30067
J.G. Patel
(404) 984-8871

Location: Coeburn, VA

To demonstrate an air-blown, fluidized-bed gasification, combined-cycle technology, incorporating hot gas cleanup, for generating electricity and to assess the system's environmental and economic performance for meeting future energy needs. Also to demonstrate the newly developed zinc titanate fluidized-bed hot-gas cleanup technology.

Micronized Coal Reburning Demonstration for NO_x Control on a 175-MWe Wall-Fired Unit (Tennessee Valley Authority)

1101 Market Street
ATTN: MR-3A
Chattanooga, TN 37402

Tom Butler (615) 751-6120

Location: West Paducah, KY

To reduce NO_x emissions by 50-60 percent using micronized coal as the reburning fuel combined with advanced coal-reburning technology.

Demonstration of Pulse Combustion in an Application for Steam Gasification of Coal (ThermoChem, Inc.) 5570 Sterrett Place, Suite 210 Columbia, MD 21044 William Steedman (410) 997-9671

To demonstrate the MTCI pulse combustor in an application for steam gasification of coal to produce a medium-Btu fuel gas from subbituminous coal.

Location: Near Gillette, WY

Demonstration of the Union Carbide CANSOLVTM System at the ALCOA Generating Corporation Warrick Power Plant

(Union Carbide Chemicals and Plastics Company, Inc.) 39 Old Ridgebury Road J3-386 Danbury, CT 06817-0001 Alex B. Barnett (203) 794-2561

Location: Newburgh, IN

To demonstrate the CANSOLV^{FM} regenerable flue gas desulfurization system to achieve SO₂ removal efficiencies of at least 99 percent.

Wabash River Coal Gasification Repowering Project

(Wabash River Coal Gasification Repowering Project Joint Venture) Destec Energy, Inc. 2500 City West Boulevard Suite 1700 Houston, TX 77042 David G. Sundstrom (713) 974-8238

Location: West Terre Haute, IN

To demonstrate utility repowering with a two-stage, oxygen-blown IGCC system, including advancements in the technology relevant to the use of high-sulfur bituminous coal, and to assess long-term reliability, availability, and maintainability of the system at a fully commercial scale.

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