PLANNING MANUAL FOR
ENERGY RESOURCE DEVELOPMENT
ON INDIAN LANDS

(FORMERLY "COMPREHENSIVE ANALYSIS OF ISSUES REGARDING
ENERGY RESOURCE DEVELOPMENT ON INDIAN RESERVATIONS")

VOLUME II--MANAGEMENT
AND CONTRACTUAL ARRANGEMENTS

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PREFACE^{1/}

This is one of five volumes constituting the "Planning Manual for Energy Resource Development on Indian Lands," (The title of the final draft report, dated October 1977, was "Comprehensive Analysis of Issues Regarding Energy Resource Development on Indian Reservations.") The other four volumes produced under this contract are:

"Volume I -- Benefit-Cost Analysis"

"Volume III -- Manpower and Training"

"Volume IV -- The Environment"

"Volume V -- Energy Information and Clearinghouse Design"

In addition to these five separate reports, there is an Executive Summary covering the key points from each of the individual task reports. The Executive Summary is intended for wide distribution and has been written in non-technical language.

^{1/} The reader should be aware that the Energy Research & Development Administration (ERDA), Federal Energy Administration (FEA), Federal Power Commission (FPC), and some divisions of the Department of the Interior (DOI) were reorganized into a consolidated U.S. Department of Energy (DOE) effective October 1, 1977. The DOE is in the process of being reassigned accordingly. As a result, some of the source and/or telephone numbers listed in this manual may have been changed. If information of a specific nature is desired, and this manual does not provide sufficient detail to obtain it, the reader should call the DOE general information number: (202) 252-5000.

TABLE OF CONTENTS

LIST OF EXHIBITS	iii
SUMMARY	1
PART I--MANAGEMENT OF TRIBAL ENERGY RESOURCES	
I. INTRODUCTION	I-1
II. IDENTIFICATION OF PROGRAM NEEDS	II-1
III. EVALUATION OF ALTERNATIVE PROGRAMS	III-1
Introduction	III-1
Current Programs and Activities	III-2
Activities Currently Performed by the Department of the Interior	III-7
Shortcomings of Existing Practices	III-25
Alternative Methods	III-32
Planning	III-32
Development Decisions	III-33
Controls on Operations	III-33
Resource Requirements	III-44
Skill Requirements	III-44
Staff Workload	III-55
Costs	III-60
IV. DESIGN OF RESOURCE MANAGEMENT PROGRAMS	IV-1
Introduction	IV-1
Program Selection	IV-1
Tribal Discretion	IV-2
Specific Deficiencies in Current Programs	IV-3
Tribal Fiscal Constraints	IV-3
General Tribal Policies	IV-4
Appropriation of Funds	IV-5

Organizational Format	IV-6
Alternative Program Designs	IV-8
Organizational Model I	IV-9
Organizational Model II	IV-11
Organizational Model III	IV-20
PART II--ASSESSMENT OF ALTERNATIVE CONTRACTUAL ARRANGEMENTS AND CONTRACT MANAGEMENT REQUIREMENTS	
V. ASSESSMENT OF ALTERNATIVE CONTRACTUAL ARRANGEMENTS AND CONTRACT MANAGEMENT REQUIREMENTS	V-1
Introduction	V-1
Mineral Inventories	V-2
Exploration Agreements	V-4
Lease Sales vs. Negotiated Contracts	V-8
Negotiation of Agreements	V-12
Alternative Contractual Arrangements	V-15
Leases and Operating Agreements	V-16
Joint Ventures	V-23
Service Contracts	V-29
Contract Terms	V-31
Oil and Gas	V-32
Coal	V-36
Uranium	V-38
Geothermal	V-39
Oil Shale	V-41
Regulation of Development	V-43
State Taxation of Mineral Development on Reservations	V-45
Tribal Taxation of Mineral Development Companies	V-58
APPENDICES	
A: SAMPLE FORMATS FOR SUMMARIZING EVALUATIONS OF MINERALS PROGRAMS	A-1
B: REVIEW OF EXISTING FEDERAL REGULATIONS GOVERNING MINERAL DEVELOPMENT ON TRIBAL LANDS	B-1

LIST OF EXHIBITS

<u>Exhibit No.</u>	<u>Title</u>	<u>Page</u>
II-1	Overview of Resource Management Programs for Federal Lands	II-3
II-2	Sample List of Key Decisions	II-6
II-3	Sample Goals and Objectives for Resource Management	II-9
II-4	Tasks Related to Minerals Planning	II-11
II-5	Tasks Related to Development Decisions	II-13
II-6	Tasks Related to Overseeing or Regulating Operations	II-15
II-7	Other Resource Planning and Management Tasks	II-17
III-1	Index to Major Federal Minerals Management Activities Affecting Indian Lands	III-4
III-2	Tasks Performed for Oil and Natural Gas Development .	III-12
III-3	Tasks Performed for Development of Other Minerals . .	III-17
III-4	Possible Shortcomings in Current Trust Practices . .	III-28
III-5	Opportunities to Strengthen Existing DOI Programs: Oil and Natural Gas	III-37
III-6	Opportunities to Strengthen Existing DOI Programs: Energy Minerals Other Than Oil and Natural Gas . .	III-39
III-7	Options for Independent Tribal Programs	III-43
III-8	Skills Required for Major Program Tasks	III-47
III-9	Skills Required for Key Staff Positions	III-53

<u>Exhibit No.</u>	<u>Title</u>	<u>Page</u>
III-10	Annual Staff and Cost Requirements for Tribal Resource Planning Activities	III-58
III-11	Staffing and Cost Estimate for Regulatory Activities	III-59
IV-1	Example of an Organizational Format for Model II: Distribution of Minerals Tasks Among Functional Areas	IV-18
IV-2	Example of an Organizational Format for Model II: Concentration of Minerals Tasks with Direct Line Authority	IV-19
IV-3	Example of Organizational Format for Model III . .	IV-24
V-1	Comparison of Alternative Exploration Permits . . .	V-6
V-2	Comparison of Lease Sales and Negotiated Contracts	V-11
V-3	Variations of Lease Contractual Form	V-17
V-4	Joint Venture Variations	V-25
V-5	State Taxes on Mineral Production	V-47

SUMMARY

This volume explores options for strengthening tribal control of energy resource development activities on their reservations. These options fall into two major categories:

- Improvement of the tribe's internal administrative capability to plan, monitor and regulate development activities. Part I of this volume addresses how this can be done.
- Stronger and more explicit contract terms in the development, agreement, and enforcement of those terms. Part II deals with this subject.

In order to develop an effective control system, a tribe must be concerned with both these areas. Contract stipulations will not be effective unless the tribe can ensure that they are enforced. Likewise, in monitoring and regulating company activities, a tribe is in a stronger position if it is backed up by contract terms governing operations on the reservation.

The Tribes participating in this study have different levels of managerial capability and technical expertise in the energy field. Their interest in stronger controls on development varies. Therefore, a range of options has been suggested.

Part I of this volume includes four sections on tribal resource management: (1) Introduction; (2) Identification of Program Needs; (3) Evaluation of Alternative Programs; (4) Design of Resource Management Programs.

The introduction discusses the goals of Part I, which are:

- To provide tribal leaders with a framework that may be used to identify, evaluate, and select the resource planning and management programs that should be undertaken by the tribal government
- To provide information on programs to assist in the preparation of an implementation plan for a tribal minerals office.

Section II, Identification of Program Needs, discusses the role of tribal leaders in setting policy and establishing priorities regarding management of energy resource development. It also provides exhibits listing tasks related to planning, making development decisions, overseeing or regulating operations, and other, general planning and management areas.

Section III, Evaluation of Alternative Programs, discusses the role of tribal planning staff in analyzing, in greater detail, programs targeted by tribal leaders. This section covers three areas:

- Documentation of activities currently performed to plan and manage tribal mineral development, and analysis of shortcomings
- Identification of criteria that may influence alternative methods for controlling resource development
- Cost and staffing estimates for various approaches that a tribe could undertake.

This section contains exhibits detailing the tasks performed by the Bureau of Indian Affairs (BIA), U.S. Geological Survey (USGS), and the tribe for coal, oil, and gas development. These exhibits include code citations of each party's authority to perform these tasks. Also presented

are exhibits detailing program tasks and professional personnel needed to perform each task. Staff and cost parameters are provided for the following activities:

- Policy planning studies
- Oil and gas permit analysis
- Administration and enforcement of operating standards
- Accounting for leases.

Section IV, Design of Resource Management Programs, focuses on criteria that tribal leaders may use to select and design their minerals program. The following criteria should be used in selecting the programs and tasks to be performed and assigning priority to them:

- Tribal discretion
- Contractual arrangements used
- Specific deficiencies in the current level of activity
- Tribal fiscal constraints
- General tribal policies.

Each of these is discussed in detail in this section. Sample formats for ranking programs and tasks are included in Appendix A.

Finally, Section IV contains three alternative programs or models for a tribal minerals office. The models are developed on the basis of whether the tribe prefers to accept, augment, or supersede the management support activities currently provided by the Department of the Interior (DOI). The models are based on the following premises:

- Model I assumes that the existing (or revised) resource management activities under BIA and USGS regulations provide sufficient protection of tribal interests in resource development. In this case, the tribe would utilize only these services with very little or no increase in its staff workload or budget expenditure.
- Model II assumes that a tribe decides to participate more fully in planning and management activities, either because it concludes that existing practices need to be upgraded or because it wishes to better exercise its discretion and decision-making powers under the revised regulations (e.g., review contract impact analyses, perform inspections or audits of operations). This model implies variable increases in workload and costs depending on the capabilities developed.
- Model III assumes that a tribe has codified its own set of minerals-related standards (e.g., Mine Reclamation Codes, Zoning Ordinances, Taxation Codes) to supersede the Department of Interior regulations. While it is recognized that the tribe could incorporate these codes into a contract (thereby shifting the enforcement tasks to DOI), this model assumes that the tribe plans to assume responsibility for implementing its own standards. Consequently, certain tasks are made mandatory rather than discretionary under this approach.

For each model, a discussion is included that covers the purpose of program activity, functions performed by the office, tribal resource requirements (staff and financial) to operate the program, and organizational format.

These models are intended to provide tribes with guidelines concerning the functions that a tribal minerals office could perform. To a great extent, our approach in developing these models was based on management problems that the tribes themselves have experienced with companies in the past.

Part II concerns the contractual arrangements under which tribal resources can be developed. The first subsection discusses the importance of mineral inventories for tribes in terms of the effect that a lack of information has on the tribe's ability to obtain reasonable contract terms. The next subsection discusses some of the problems tribes have experienced with exploration agreements and compares the advantages and disadvantages of exclusive and non-exclusive exploration permits.

The third subsection addresses lease sales versus negotiated agreements. It includes a discussion of negotiating techniques that mineral-rich developing nations have found useful in dealing with developers.

Since there is a movement away from standard form leases and toward operating agreements and profit sharing, the advantages and disadvantages of various contractual forms are discussed. For easier reference, we have developed charts comparing various elements of different types of leases, operating agreements, and joint ventures.

A subsection on contract stipulations for each of the energy resource types covered in this study is included. To assess contract stipulations for addressing problems associated with energy development, the experiences of tribes that have been involved in energy development in the past are reviewed. Tribes just getting into energy development can perhaps benefit from the experiences of other tribes' approaches to development decisions and problems.

The controversy over state taxation of revenues from mineral development on tribal lands is becoming a volatile issue. For reference purposes, we have included charts covering state taxes on mineral production. Most of the states contacted had no formal policy on whether these taxes

would be applicable to mineral development on tribal lands. However, given that these taxes exist, tribes should specifically address the question of who is to bear responsibility for them in negotiating development agreements.

Finally, Part II includes a discussion of tribal taxation of mineral companies extracting minerals from reservation lands. A number of tribes have attempted to increase revenues from mineral production through the imposition of taxes on developers.

Appendix B briefly summarizes those sections of the Code of Federal Regulations (CFR) concerning development of mineral resources on tribal lands. Also included is a summary of the key provisions of proposed revisions to these sections of the CFR.

I. INTRODUCTION

Indian mineral owners must ensure that any development of their resources will be compatible with tribal objectives. The key to matching tribal goals with development options is informed decision-making by tribal officials. Many tribal leaders have suggested that they could improve the quality of their decisions if the tribal government staff had the expertise to assist them in minerals matters. Part I of this volume provides materials that may be used by tribal leaders and staff to build an energy resource management capability in the tribal government.

The staff assistance needed by tribal decision-makers will depend on the nature of their responsibilities in developing energy resources on the reservation. The capability needed by a tribe faced with evaluating proposals will differ from that needed by a tribe concerned with monitoring existing production. Similarly, the nature of the tribal government activities will depend on whether the tribe decides to oversee, regulate, or participate in the development of its resources. For such reasons, there is no one model for developing tribal resource management programs. The leadership of each tribe must select and implement the tasks needed to meet its unique needs and circumstances.

For any particular minerals program, the options that are available to the tribe are numerous and diverse. It is important that each alternative

be evaluated systematically so that the limited tribal staff and financial resources will be used most effectively. This is especially true because there are no specific requirements for these programs, and few tribes have had practical experience in implementing them.

This report on tribal resource management has been prepared as a reference document on implementing a minerals program within tribal governments. It is not an issue paper; it does not discuss the special funding, staffing, or political problems that will confront tribes that choose to perform energy-related functions. Such matters are common to any activity undertaken by tribal governments, and are treated better in forums like that provided by the American Indian Policy Review Commission (AIPRC).^{1/} In light of these considerations, the purpose of this Part is twofold: first, to provide tribal leaders with a framework that may be used to select the resource management programs that are suited to the tribes' needs; and second, to provide information on programs that can be used to prepare an implementation plan for a tribal minerals office.

Each of the sections has been structured to illustrate a program evaluation framework. The sections are keyed to the party that is responsible for each step in the process. Section II covers the initial task of identifying program needs, including a statement of purpose, identification of decisions, responsibilities and problems faced by a tribe, and a tribe's degree of involvement in managing development and the strategy its leaders employ.

^{1/} For example, see Report on Tribal Government, the final report of Task Force Two on Tribal Government, AIPRC, July 1976.

Section III of this Part provides sample criteria that may be used by the tribal staff to evaluate alternative programs. For each activity, it may be useful to analyze the following factors:

- Goals to be achieved by the program
- Effectiveness of current programs
- Alternative methods of performing the task
- Resource requirements of both existing and alternative programs (e.g., costs and staffing needs).

The final section reviews some of the criteria that may be used by the tribal leadership to select and design the minerals program. This phase involves ranking the priority of alternative programs, appropriating tribal resources to the high-priority activities, and integrating the functions into the organizational structure of the tribal government. Samples of program rankings and designs are provided in Appendix A.

The information and data in each section are intended to assist in all of these tasks. In cases where the decisions involve policies set by the tribal leadership, the discussion provides examples of possible concerns or considerations. For example, Section II includes exhibits that present sample program goals and outputs, and Section IV provides specific examples of how a minerals management program may be organized within tribal government. However, in no instance are these examples meant to be recommendations on policies or actions. Where the task involves normative factors, such as evaluating programs, more specific data can be provided. For this reason, Section III includes a documentation of the current methods of managing tribal mineral resource development; a review of factors that determine

alternative methods; and general estimates of the staffing, costs, and skills^{1/} required to perform the activities. A tribe that wishes to implement a minerals program may tailor these general data to its particular needs.

^{1/} The education and training needed for these skills are reviewed in Volume III.

II. IDENTIFICATION OF PROGRAM NEEDS

Tribal leaders have expressed an interest in having staff within the tribal government that can assist them in mineral matters. Discussions with the tribes participating in this study resulted in a long list of potential programs that they feel are needed. However, most tribes do not have sufficient funds to staff or implement all of the programs that are desired. Consequently, each tribe must set priorities among the alternative programs. The first step in setting these priorities is to have tribal leaders reach an agreement on the specific types of mineral programs that the tribe needs to meet its responsibilities. The following series of questions and examples may be useful in clarifying which tasks are suited to the tribes' energy concerns.

First, what is the purpose of the tribal program? The process of identifying needs should begin with a consensus on the role and purpose of the tribal government in managing energy development. In general, these programs will be based on the tribes' roles as owner of the minerals and as a unit of government. The purpose of the programs may be twofold: (1) to provide information that is needed to make decisions on mineral development; and (2) to provide mechanisms to monitor and/or control the manner in which the resources are developed.

The tribes' role and responsibilities influence the type and scale of the programs that are needed. For example, in their role as developers of resources, energy companies implement programs to locate markets for the energy, obtain access to developable resources; do feasibility studies; obtain funding; develop the deposit; operate the wells, mines, or conversion facilities; and, abandon the operation upon completion of the project. The Bureau of Mines estimates that the opening of a one million ton per year surface coal mine could involve a minimum of four years and \$21 million.^{1/} Similarly, one oil shale developer spent over \$13 million on the baseline analyses of its federal prototype lease tracts in Utah.^{2/} In its role as owner and manager of federally-owned resources, the Department of the Interior (DOI) expected to spend \$72.2 million in fiscal year 1978 for several minerals management programs. Exhibit II-1 indicates the costs of the Department's major activities. Because of their similar role in energy development, most tribal programs parallel those performed for federal lands.

^{1/} General Accounting Office, U.S. Coal Development -- Promises, Uncertainties, September 1977, pp. 4.11, 4.42.

^{2/} U.S. Senate, Committee on Energy & Natural Resources, Hearings on Oil Shale Technologies, 1977, p. 171.

EXHIBIT II-1

OVERVIEW OF RESOURCE MANAGEMENT PROGRAMS FOR FEDERAL LANDS^{1/}

<u>Programs</u>		<u>Fiscal Year 1977</u> <u>(Millions of dollars)</u>
BLM: ^{2/}	<u>Multiple-use planning</u> (Federal resources) only, includes non-mineral resources)	\$11.4
GS: ^{3/}	<u>On-shore lease tract evaluation</u> (Federal & Indian minerals)	
	Oil & Gas	.3
	Coal	7.8
	Oil shale	.3
	Geothermal	1.0
	Subtotal for tract evaluation	9.4
BLM:	<u>On-shore leasing</u> (Federal resources only)	
	Oil & Gas	9.7
	Coal	20.2
	Oil shale	.6
	Geothermal	2.4
	Subtotal for on-shore leasing	32.9
GS:	<u>Regulation of mineral development</u> (Federal and Indian minerals)	
	Oil & Gas	13.0
	Hard minerals (e.g., coal, uranium)	3.8
	Oil shale	.6
	Geothermal	1.1
	Subtotal for regulation of development	18.5
	Total	\$72.2

^{1/} Source: Budget proposals of the Department of the Interior, Bureau of Land Management and Geological Survey, in Department of the Interior and Related Agencies Appropriations for 1978, Hearings before the U.S. House of Representatives, Committee on Appropriations, Part I, 1977, pp. 1-201 and 663-827.

^{2/} BLM is the acronym for the Bureau of Land Management.

^{3/} GS is the acronym for the Geological Survey.

Second, what energy development decisions and responsibilities does the tribe face? The information and mechanisms needed will depend on the stage of development of each of the tribe's resources. Therefore, the next step in identifying needs is to document the types of tribal decisions and responsibilities that may require supporting programs. Most of the tribe's activities fit one of the following broad classifications:

- Planning: At this phase, the tribe is in the position to make recommendations on whether, when, where, and how to develop any mineral resources that have not been developed. In cases where development has occurred, planning activities may involve economic development and environmental planning.
- Development decisions: At this phase, the tribe is in the position of deciding whether to approve or disapprove individual proposals for prospecting permits, mineral agreements, water entitlements, rights-of-way easements, and energy conversion facility permits. This involves preparing stipulations for the permits or contracts, as well as negotiating them.
- Controls on operations: If a permit, contract, or project is approved, the tribe is in the position to monitor, regulate, or participate in the actual operations of the development.
- Other: There are two other aspects of tribal responsibility that can create program needs. For example, tribal governments often are responsible for providing certain services for tribal members. Therefore, if an energy project creates a demand for tribal housing, social services, water and sewer facilities, or similar infrastructure requirements, the tribe may have to implement programs to meet these needs. Similarly, the staff of the tribal government will have to administer and manage any minerals program.

In order to clarify the tribe's responsibilities, it may be helpful to prepare a checklist of the key decisions. This should provide tribal leaders with a brief overview of where the tribe stands regarding its energy development opportunities. Exhibit II-2 provides a sample checklist.

EXHIBIT II-2

SAMPLE LIST OF KEY DECISIONS

Tribal Resources					Decisions and Responsibilities	Examples of Information or Mechanisms Needed
Oil & Gas	Coal	Uranium	Geothermal			
X	X	X			<u>I. Planning</u> <ol style="list-style-type: none"> 1. Prepare profile of tribal resources. 2. Prepare analyses of development trends. 3. Adopt policy guidelines. 	<ul style="list-style-type: none"> • Land and minerals ownership records. • Maps of existing land-uses and critical environmental areas.
X					<u>II. Development Decisions</u> <ol style="list-style-type: none"> 1. Select and Evaluate Tracts. 2. Select Contracting Methods. 3. Analyze and Negotiate Contracts. 	<ul style="list-style-type: none"> • Geologic and economic analyses of reserve quantity and quality. • Legal and financial analyses of contracts.
X					<u>III. Controls on Operations</u> <ol style="list-style-type: none"> 1. Approve Operating Plans. 2. Supervise Operations. 3. Enforce Conditions. 	<ul style="list-style-type: none"> • Performance standards. • Reports. • Inspections. • Legal authority to administer and enforce standards.

EXHIBIT II-2 (Cont.)

X	X				<p><u>IV. Other</u></p> <ol style="list-style-type: none"> 1. Implement programs to provide services to meet demands from energy developments. 2. Manage minerals program. 	<ul style="list-style-type: none"> • Analyses of socioeconomic impacts of regional and reservation energy development. • Stipulations on development proposal regarding provision of services.
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Third, what problems are of particular concern to the tribe?

Within each area of responsibility, there will be some aspects that are of greater concern than others. Some tribes may want to stress environmental protection, while others may be more interested in income from production or employment opportunities. A tribe may base its priorities on tribal goals (e.g., maintain cultural traditions and lifestyles, promote the well-being of tribal members, etc.); on its own experiences with previous or past energy development; or on familiarity with problems encountered by other tribes. Because these priorities will affect which programs will be needed, it may be useful to prepare a statement setting forth tribal goals regarding energy development. Exhibit II-3 presents examples of a goals statement.

EXHIBIT II-3

SAMPLE GOALS AND OBJECTIVES FOR RESOURCE MANAGEMENT

Goal: Maximize Tribal Revenues

Objectives:

- To obtain fair economic return for minerals extracted
- To obtain optimal contract terms for royalties, rents, and/or profits over both the short and long term
- To ensure maximum production
- To use resources and/or revenues to develop and diversify the tribal economy

Goal: Maximize Employment Opportunities for Tribal Members

Objectives:

- To identify the management and operating job opportunities for tribal members
- To have tribal members skilled in those areas
- To obtain optimal contract terms for tribal employment, training, and upward mobility over the period of the contract

Goal: Minimize Impacts on the Physical Environment

Objectives:

- To protect environmentally sensitive areas
- To limit and manage air, water, solid waste, and land use impacts
- To prevent irreparable damage to the environment

Goal: Minimize Adverse Effects on Tribal Population

Objectives:

- To provide housing, water, sewer and other facilities for tribal members who would be relocated because of energy development
- To provide social services to tribal members who would be affected by energy development
- To ensure timely provision of state and local government facilities and services (e.g., upgrading of transportation network, schools)
- To ensure timely provision of facilities and services by the developer
- To protect areas that are religiously or culturally significant.

Fourth, what is the tribe's degree of involvement in managing development? The programs that are needed also depend on whether the tribe chooses to oversee, regulate, or participate in the development of its energy resources. For example, if the tribe selects to regulate or participate in the operation, then programs to process reports and inspect and audit operations may be mandatory under the terms of the code or contract. If the tribe prefers to limit its role to oversight functions, such programs would be optional. If the tribe has adopted resolutions or ordinances and/or entered into contracts that determine the tribe's management strategy, this should be noted in the analysis of program requirements.

Finally, what programs are needed to meet the tribe's objectives, responsibilities, and strategies in managing energy development? Once tribal leaders have reached a consensus on the above matters, the next step is to identify the types of tasks and activities that suit the problems being addressed. If possible, the tribe should decide which programs are essential and which ones are optional.

When preparing this inventory of possible programs, it may be useful to contact federal ^{1/} and state agencies, energy companies, and other tribes that have implemented minerals programs. ^{2/} Exhibit II-4 provides examples of planning tasks; Exhibit II-5 provides tasks of programs relating to development decisions; Exhibit II-6 of controls on operations; and Exhibit II-7, tasks for other types of responsibilities.

^{1/} Key agencies may include the Bureau of Indian Affairs (BIA), Geological Survey (GS), Bureau of Land Management (BLM), and Environmental Protection Agency (EPA).

^{2/} These would include the Osage & Jicarilla Apache for oil and gas operations; the Papago for hard minerals operations; the Navajo for environmental planning as well as oil and gas, coal, and uranium operations; and the Northern Cheyenne and Crow Tribes for planning studies.

EXHIBIT II-4

TASKS RELATED TO MINERALS PLANNING

Prepare Profile of Tribal Resources

- Update and systematize records and maps on:
 - land ownership
 - minerals ownership
 - minerals contracts (permits, leases, easements)
 - minerals activities (existing or abandoned wells, mines, right-of-way, etc.)
- Prepare maps designating sacred or culturally significant areas
- Assemble baseline data on the reservation's climate, topography, soils, vegetation, surface water quantity and quality, ground-water quantity and quality, air quality, and other factors
- Assemble baseline data on all tribal resources: minerals, rangeland, forests, farmlands, etc.
- Prepare a socioeconomic profile of the tribal and/or reservation population
- Prepare maps indicating current land uses, population centers, location of resources, critical areas, etc.

Prepare Analyses of Development Trends

- Analyze basic trends in tribal:
 - employment
 - income
 - demand for services (health, police, fire)
 - demand for facilities (water, utilities, schools).

EXHIBIT II-4 (Cont.)

- Analyze development opportunities for all minerals:
 - estimate the type and scale of development that could be supported by the mineral deposits
 - estimate the likely employment income that would be generated by development
 - estimate the demand for services and facilities that would result from development
 - estimate the likely environmental impacts of minerals development.
- Analyze development opportunities for all other resources.

Adopt Policy Guidelines

- Identify development objectives for each resource
- Prepare development recommendations for each resource
- Identify major and minor conflicts among development opportunities
- Evaluate ways to minimize any conflicts and maximize benefits
- Decide whether, when, where, and how tribal minerals will be developed
- Identify areas where mineral development will not be allowed
- Identify tasks related to decisions on specific development proposals.

EXHIBIT II-5

TASKS RELATED TO DEVELOPMENT DECISIONS

Select and Evaluate Tracts

- Offer or receive nominations for leasing (or negotiating contracts) areas which the tribe wants to develop
- Evaluate the adequacy of the data on the resource quantity and quality to estimate the fair market value of the reserves
- Determine minimum bids.

Select Contracting Method

- Evaluate the data requirements and terms of the exploration permit
- Evaluate the economic flows under alternative contractual arrangements
- Evaluate the tribe's interest in capability to participate in the operations
- (Note: tribes not organized under the 1934 IRA must initially use the competitive bidding process for oil and gas development.)

Analyze and Negotiate Contracts

- Prepare environmental assessment of proposed contracts or development projects
- Prepare income and financial analyses of proposed contracts
- Prepare analyses of economic, employment, training, and other impacts of proposed contracts
- Prepare analyses of accounting and tax provisions of special contractual arrangements
- Prepare analyses of services impacts of the proposed contract

EXHIBIT II-5 (Cont.)

- Develop and negotiate contract stipulations on diligent development, income (e.g., royalties), environment, employment and training, related services, and payment and enforcement schedules
- Approve/disapprove lease or contract.

EXHIBIT II-6

TASKS RELATED TO OVERSEEING OR REGULATING OPERATIONS

Approve Operating Plans

- Review operators exploration and/or mining plans for:
 - efficient resource recovery
 - erosion and flood control
 - water use
 - protection of surface water quality
 - protection of groundwater quality
 - protection of air quality
 - protection of fish and wildlife
 - protection of scenic, sacred, or archeological areas
 - waste management
 - needs and other transportation plans
 - revegetation
 - worker health safety
- Develop monitoring, reporting, and review requirements.

Supervise Operations

- Process assignments and other contract forms
- Review all reports for results of monitoring timeliness, etc.
- Perform on-site inspections of operations to monitor compliance with lease stipulations for:
 - rate of production

EXHIBIT II-6 (Cont.)

- measurement of production
- air and water quality
- health and safety
- reclamation, etc.

Supervise Accounting Practices

- Maintain lease, permits, and other mineral accounts
- Perform audit of lessee payments to verify accuracy and timeliness.

Enforce Conditions

- Assess the severity of the violations and related considerations
- Issue cessation or other notices and orders as appropriate
- Levy civil penalties (fines) as appropriate.

EXHIBIT II-7

OTHER RESOURCE PLANNING & MANAGEMENT TASKS

Develop Services Programs

- Develop implementation plan for energy-related education and training program
- Develop implementation plan for energy-related capital facilities program
- Develop implementation plan for energy-related housing program
- Develop implementation plan for energy-related social services program
- Assist state, federal and private sector authorities who are responsible for education and training, capital facilities, housing and social services to implement energy-related programs.

Perform General Management Functions

- Coordinate formulation of goals, plans, and policies for tribe and tribal government consideration; implement upon approval
- Plan and implement an effective program including administration of budget, obtaining of funds, and application of performance standards
- Organize and maintain an effective staff; select develop and evaluate performance of staff
- Provide for necessary space, facilities, equipment and supplies
- Coordinate programs and activities with other units of tribal government, state and regional agencies and relevant federal agencies; serve as major link between tribe and outside energy-related groups

EXHIBIT II-7 (Cont.)

- Provide necessary coordination within office of its programs and activities (land acquisition, environmental audits, etc.)
- Represent program interests and concerns on tribal committees or authorities
- Measure/evaluate performance of actual to planned targets, goals, objectives
- Communicate with tribal government leaders and tribal members about regular and special energy resource developments; prepare communication material for use in explaining energy resource issues, opportunities and conflicts
- Assure that tribe's Minerals Code and other policies are implemented, publicized, monitored and enforced.

III. EVALUATION OF ALTERNATIVE PROGRAMS

INTRODUCTION

The second step in implementing a minerals program is to evaluate alternative programs and assign priorities so that limited tribal resources will be allocated effectively. The purpose of this section is to identify some of the major criteria that may be used to evaluate the alternatives available to the tribes, and to highlight some of the issues that should be addressed.

Program evaluations usually are based on the following considerations:

- The goals to be achieved by the activity (see exhibits in Section II)
- The effectiveness of current programs
- The alternative methods of doing the task
- The resource (cost and staffing) requirements of the alternative approaches.

After performing these assessments, the decision-makers must rank the priorities of the different programs.

This section provides tribal decision-makers with three sets of information that may be used in the evaluation of specific activities. The first subsection documents the activities that currently are performed to

plan and manage tribal minerals, and it highlights some shortcomings of the present practices. The second subsection identifies some criteria that may influence which alternative methods a tribe wishes to consider. The third subsection presents cost and staffing estimates for various approaches that might be undertaken. Appendix A presents sample formats for summarizing these evaluations.

CURRENT PROGRAMS AND ACTIVITIES

The first step in evaluating alternative programs is to match the inventory of program needs with the tasks currently being performed by the tribe or other groups (e.g., USGS, BIA). By comparing the two, tribal leaders can determine:

- Whether a particular tribal effort would duplicate a program already being implemented (e.g., areas where a tribal program would not be warranted)
- Whether there are existing programs in an area that is of concern to the tribe (e.g., if not, the tribe may want to implement a new program to fill the gap)
- Whether existing programs are effective (e.g., if not, the tribe may want to implement programs to supplement the current effort).

This subsection documents the basic tasks that currently are undertaken on the behalf of Indian tribes, and it highlights some of their shortcomings.

At present, most of the existing programs for managing tribal resource development are sponsored by federal agencies. As trustee for the tribe's mineral assets, the Department of the Interior (DOI) has established programs to assist the tribes and the Secretary of the DOI in reaching decisions in developing the resource and in monitoring and controlling development activities. Several federal agencies also participate

in managing energy development projects because of their responsibilities under certain laws of "general applicability".^{1/} Hence, the Environmental Protection Agency (EPA) has programs for managing the air, surface water, groundwater, solid and hazardous wastes, and radiation impacts of energy development. The Nuclear Regulatory Commission (NRC) controls the manner in which uranium mills are sited, constructed, operated, and abandoned. Similarly, the Mining Enforcement and Safety Administration (MESA) has programs covering worker safety in mines, and the Occupational Safety Health Administration (OSHA) has similar responsibilities for other work environments. In areas where tribal land and minerals ownership are mixed with privately-held rights, some state programs also may apply.

Exhibit III-1 provides a general index to existing programs in each major area: planning, development decisions, and controls or operations. The following discussion focuses on the activities of the Department of the Interior. Detailed descriptions for the other agencies are presented in Volume IV, Section IV of this study.

^{1/} Laws of "general applicability" are those that apply to all activities nationwide, including those on Indian Lands.

EXHIBIT III-1

INDEX TO MAJOR FEDERAL MINERALS MANAGEMENT
ACTIVITIES AFFECTING INDIAN LANDS

Program	Agency	Citation in Federal Register
<u>Planning</u>		
Air Quality:		
Prevention of Significant Deterioration	EPA	40CFR52.21
Preconstruction Review in Nonattainment Areas	EPA	40CFR51.18
Water Quality:		
Areawide Water Quality Planning	EPA	40CFR130, 131
Designation of Underground Drinking Water Sources	EPA	40CFR146
Mining:		
Designation of Areas Unsuitable for Surface Mining	DOI	25CFR177
Other:		
General Planning	ANA ^{1/}	
Economic Development Planning	EDA ^{2/}	
Comprehensive Land-Use Planning	HUD ^{3/}	
<u>Development Decisions</u>		
Oil and Gas Contracts	DOI	25CFR182
Hard Minerals Contracts	DOI	25CFR171, 177
Environmental Impact Statements	CEQ ^{4/}	40CFR1500
Protection of Antiquities	DOI	25CFR132

EXHIBIT III-1 (Cont.)

Program	Agency	Citation in Federal Register
<u>Controls on Development</u>		
Air Quality:		
Existing Source Standards	EPA	40CFR51.10
New Source Standards	EPA	40CFR60
Prevention of Significant Determination	EPA	40CFR52.21
Nonattainment	EPA	40CFR51.18
Water Quality:		
National Pollution Discharge Elimination System	EPA	40CFR125
Oil & Hazardous Pollutants Program	EPA	40CFR112
Underground Injection Control Program	EPA	40CFR146
Mining:		
Oil and Natural Gas	DOI	30CFR22
Coal	DOI	25CFR177
Other Hard Minerals	DOI	30CFR23
Pesticides:		
Federal Environmental Pesticides Control Act	EPA	40CFR171
Radioactivity:		
Licenses for Uranium Milling Activities	NRC	10CFR20, 40
Ambient Radioactivity Standards	EPA	40CFR190

EXHIBIT III-1 (Cont.)

Program	Agency	Citation in Federal Register
<u>Controls on Development</u> (Cont.)		
Solid Waste:		
Hazardous Waste Management	EPA	Not Included
Solid Waste Disposal	EPA	40CFR241
Workplace Safety:		
Occupational Safety & Health Act	OSHA	29CFR1900
Mine Safety	MESA	30CFR10

1/ Administration for Native Americans (within the U.S. Department of Health, Education and Welfare), formerly the Office of Native American Programs (ONAP).

2/ Economic Development Administration (U.S. Department of Commerce).

3/ U.S. Department of Housing and Urban Development.

4/ Council on Environmental Quality.

Other agency names spelled out previously in text.

Activities Currently Performed by the Department of the Interior

As a result of several court decisions and related laws, the management of tribal resources involves two primary parties: the tribes and their trustee, DOI. To fulfill its responsibilities to the tribes, the Secretary of DOI has delegated his responsibilities for overseeing leasing decisions (e.g., whether, when, where, and under what conditions to lease) to the BIA. The Conservation Division of the U.S. Geological Survey (USGS) has been delegated the responsibility for administering and enforcing the conditions of all permits and leases and for serving as technical advisor to the tribes and the BIA on minerals matters.^{1/}

The planning and management activities undertaken by these two agencies are dictated by regulations for the BIA and the USGS.^{2/} In April 1977, the BIA issued a notice of a proposed rulemaking that would revise its leasing procedures and guidelines. The revised 25 CFR 171 would govern leasing of minerals other than oil and gas; 25 CFR 177 would be strengthened to include operating standards for the mining of such minerals as coal; and

^{1/} This functional split applies to all tribes except Osage (the Osage BIA Superintendent carries out all trust activities). Also, it should be noted that at the time that this report was prepared, DOI was weighing proposals to merge the USGS Conservation Division into the Bureau of Land Management (BLM). While this would end the division of lease management activities for public lands, administration of tribal lands may still involve two parties: BIA and BLM.

^{2/} For BIA, see Title 25 of the Code of Federal Regulations - 25 CFR; for USGS, see Title 30 of the Code of Federal Regulations - 30 CFR. Until recently, the required tasks were set forth in the following CFR sections: Leasing of Tribal Lands for Mining (25 CFR 171); Surface Exploration and Reclamation (25 CFR 177); Osage Oil and Gas Leasing and Operating Regulation (25 CFR 183); Oil and Natural Gas Operating Regulations (30 CFR 221); and Operating Regulations for Exploration, Development, and Production (for minerals other than coal, oil, or natural gas) (30 CFR 231).

a new 25 CFR 182 would govern oil and gas leasing. The general provisions of each of these sections are described in Appendix B.

Most of the standards and procedures set forth in the BIA and USGS regulations relate to the seven basic decisions made by the Indian mineral owner and its trustee.^{1/} As a result, the activities performed by DOI emphasize the procedural aspects of tract selection, contracting, and supervising operations. Programs to address the secondary impacts of development remain primarily tribal responsibilities. The following overview is based on the tasks that are implied by the proposed revisions to 25 CFR 171, 177, and 182.^{2/}

Planning. Under its mandate to assist tribes in leasing matters, the BIA has been allocated funds to perform the first task in a resource planning program--mineral inventories. This program has three major phases. Phase I consists of technical reviews of existing literature and data on tribal minerals resources (completion date - 1980). Phase II consists of limited exploration to obtain a more definitive estimate of a tribe's resources where Phase I studies indicate the presence of

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- ^{1/} Per Exhibits II-5 and II-6, these major actions are: (1) approve tracts for leasing; (2) select contracting method; (3) approve prospecting and mining controls; (4) approve project operating plans; (5) supervise operations; (6) supervise accounting and management practices; and (7) enforce stipulations. This set does not include such non-regulatory activities as policy planning, service programs, or general management tasks.
- ^{2/} Although these regulations have not been finalized, it is assumed that they reflect the DOI's commitment to improve the quality of its management of the tribe's mineral trusts. Therefore, although specific details may be modified before the rules are made final, the types of tasks should be retained.

producible minerals (completion date - 1983). Finally, Phase III consists of qualitative and quantitative economic analyses of resources and preliminary development planning for the Phase II tribes (completion date - 1985). A fourth phase that would involve tribal exploration and development also has been mentioned in the budget requests.

It should be noted that the BIA realty offices maintain records on tribal land and minerals ownership, permits, and leases.

Development Decisions. In the area of contract stipulations, BIA and USGS have both administrative and technical responsibilities for the tribes. First, the agencies must process all tract nominations, notify the tribes of proposed tracts and of their option not to lease; hold any approved lease sales, process and evaluate all bids received; and advise the tribes on the acceptability of the bids. Second, the Department must assist the tribe in selecting the appropriate method of contracting. Third, the agencies must prepare assessments of the environmental and socio-economic impacts of proposed contracts and prepare any appropriate contract stipulations. In cases involving projects with major impacts, BIA (or the designated lead agency) will prepare an Environmental Impact Statement (EIS) with assistance from USGS. Similarly, detailed assessments must be prepared on the economic, cultural, and fiscal impacts of contracts for solid minerals (e.g., coal, uranium, oil shale). Finally, the Secretary of the Interior must approve the tribe's final decisions regarding contracts. For oil and natural gas matters, he is supported by the BIA Superintendent (Tribal Agency level); for other energy minerals, by the BIA Area Director.

Controls on Operations. DOI performs four major sets of tasks to administer and enforce contract conditions. First, the USGS Mining Supervisor or Petroleum Engineer^{1/} reviews all operator-proposed mine plans to check for compliance with engineering, environmental, and other regulations. They approve operating plans subject to any conditions that are deemed appropriate. Second, the USGS Supervisor manages all operations through monitoring regular and special reports and by performing on-site inspections. Under the regulations, inspection of coal and other mineral projects is supposed to be frequent. For oil and gas operations, the regulations state that the engineer must inspect predrilling and abandonment activities and may inspect operations at other times. The operating aspects of lease management are handled primarily by the USGS District offices. Third, the USGS Royalty Accounting Division (Area offices) maintains oil and gas lease accounts. A recent "memorandum of understanding" transferred responsibility for solid mineral lease accounting from BIA to USGS. USGS performs some audits of oil and gas accounts. If the royalties from a lease equal or exceed \$5,000 from solid mineral production, the lessee must have an audit prepared by a Certified Public Accountant (CPA). These reports are reviewed by USGS. Finally, if any instances of noncompliance with the operating or income conditions are identified, the USGS Supervisor enforces conditions by issuing notices and levying penalties for liquidated damages, withholding performance bonds, or shutting down the operation.

^{1/} In these discussions, "Mining Supervisor" will connote both that official and the Petroleum Engineer.

Other programs. Existing trust activities provide limited assistance for managing the secondary impacts of developing minerals. The regulations direct the BIA Area Director to prepare an economic assessment of proposed contracts for hard minerals. In this assessment, the BIA must evaluate the possible impacts of projects on the tribal population including increased demands for such services as housing, water, wastewater treatment, and social services. However, no contract terms or programs are provided.

The following exhibits identify all the activities that must be performed by the DOI in administering tribal mineral trusts. These charts are keyed to the major programs identified in the prior section. Exhibit III-2 itemizes the tasks performed for oil and natural gas development, and Exhibit III-3 presents a similar overview for energy minerals activities other than oil and natural gas. Where the exhibits are based on BIA regulations, the proposed revisions of April 1977 are used for the citation.

EXHIBIT III-2

TASKS PERFORMED FOR OIL AND NATURAL GAS DEVELOPMENT

Program Area		Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Select Tracts For Leasing Development	Trust Support Activities					
	Process all geologic and geophysical permits	25 CFR 182.9				X
	Approve all geologic and geophysical work plans	25 CFR 182.9	X			
	Process all tract nominations	25 CFR 182.12		X		
	Advise tribes of nominations by industry and option to not develop	25 CFR 182.13(a)		X		
	Provide any technical advice requested	25 CFR 182.11(b)			X	X
Select Contracting Method	Tribes organized under the 1934 IRA may opt to use competitive bidding, negotiations, or other means of contracting	25 CFR 182.12(a)	X			X
	Prepare written findings for the DOI Secretary if tribe uses method other than competitive bidding	25 CFR 182.12(d)				X
	Determine any special terms of the contract prior to advertising of bids	25 CFR 182.12(c)	X	X		
	Advise BIA Superintendent on advantages/disadvantages of alternative contracting methods	25 CFR 182.12			X	
	Provide tribe with any technical advice requested on contractual alternatives	25 CFR 182.4			X	X
Award Contract	For competitive bidding <ul style="list-style-type: none"> - Advertise for sealed bids - Hold lease sale 	25 CFR 182.12(c)		X		

EXHIBIT III-2 (Cont.)

Program Area	Trust Support Activities	Code Citation	Tribe	DOI Sec.	USGS Super.	BIA
Award Contracts	Determine that all contracts <ul style="list-style-type: none"> - provide fair and reasonable remuneration - environmental and cultural costs do not outweigh benefits - comply with all applicable laws and regulations 	25 CFR 182.13		X		
	Determine rentals, royalties, if other than minimum rates	25 CFR 182.16	X	X		
	Determine bases for measuring production and value of the products for royalty calculations	25 CFR 182.16(d)	X	X		
	Determine manner and frequency of payments	25 CFR 182.17(a)	X	X		
	Require surety bond, if deemed appropriate	25 CFR 182.15		X		
	Accept/reject bids on contract terms	25 CFR 182.12	X	X		
	Process bid fees, file contract forms, etc.	25 CFR 182.12				X
Approve Operating Terms	Approve all assignments and transfers <ul style="list-style-type: none"> - if entire interest - if only one subdivision of contract or horizon, etc. 	25 CFR 182.19	X X X	X X X		
	Process all assignments and transfers					X
	Approve/deny designated operator	25 CFR 221.19			X	
	Approve, recognize, require cooperative and unit agreements <ul style="list-style-type: none"> - process all applications and documents - file copy of agreements 	25 CFR 182.21	X	X	X X	X

EXHIBIT III-2 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Approve Operating Conditions	Approve contracts for storage facilities	25 CFR 182.22	X	X		
	- process all applications and documents				X	
	- file copies of documents	30 CFR 221.33		X		
	Determine appropriate production flow (e.g., gas-oil ratio; maximum efficient rate (mer) of production	30 CFR 221.10			X	
	Approve well-spacing and well-casing plans	30 CFR 221.11			X	
	Approve procedures for taking gas in-kind	30 CFR 182.16 30 CFR 221.40			X	X
	Determine what samples are required regarding reservoir management	30 CFR 221.23				
	Determine form and manner of submitting drilling reports, division orders, run tickets, and sales agreement	30 CFR 221.13			X	
Supervise Operations	Determine adequate indemnity bond					
	Prepare written consents for variations from well-location restrictions	30 CFR 221.20			X	
	Prepare written consents for locating wells within 200 feet of a home or barn	30 CFR 221.20			X	X
	Prepare written consents for variances from well identification requirements	30 CFR 221.22			X	
	Stipulate precautions for high-pressure areas	30 CFR 221.24			X	

EXHIBIT III-2 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribes	DOI Sec.	USGS Super.	BIA
Supervise Operations	Approve procedures to minimize emulsion/dehydration	30 CFR 221.31			X	
	Approve any variations from vertical drilling	30 CFR 221.27			X	
	Prepare reports and recommendations on conditions and measures to be taken to maximize efficient recovery	30 CFR 221.6			X	
	Process requests for relief from regulations	30 CFR 221.39			X	
	Determine suitable plugging techniques	30 CFR 221.21			X	
	Approve/deny abandonments, suspensions	30 CFR 182.20(b)	X	X		
		30 CFR 221.34			X	
	Approve resumption of production or operations	30 CFR 221.15			X	
	Process reports on fires and accidents	30 CFR 221.36			X	
	Process "sundry" reports on operations (e.g., intention to drill, redrilling, using explosives, etc.)	30 CFR 221.59			X	
	Process reports on well logs and well history	30 CFR 221.60			X	
	Process monthly reports on operations, production	30 CFR 221.61			X	
	Process daily reports on gas meter results	30 CFR 221.62			X	
Supervise Accounting Practices	Maintain lease accounts (but not accounts under other contractual arrangements)	30 CFR 221.12			X	
	Process all payments	30 CFR 221.40			X	

EXHIBIT III-2 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Enforce Conditions	Compile and maintain records of production	30 CFR 221.12			X	
	Compile and maintain records of royalties accrued	30 CFR 221.12			X	
	Compile and maintain records of lost or wasted production	30 CFR 221.12			X	
	Approve/review royalty computations	30 CFR 221.43			X	
	Render monthly reports to lessors, agents on production, royalty, drainage, and loss	30 CFR 221.63			X	
	Perform on-site inspections of operations	30 CFR 221.5			X	
	Review operator reports, accounts, and books	30 CFR 182.18	X	X		
	Prepare and serve notices of noncompliance	30 CFR 182.23(b)			X	
	Assess and levy fines for liquidated damages	30 CFR 221.54			X	
	Require any correction of negative/adverse conditions	30 CFR 221.9			X	
	Authorize shut-down or cancellation of operations	30 CFR 221.53			X	
	Process all payments for damages to Indian property	30 CFR 221.55 30 CFR 221.56			X	
	Investigate all claims by Indian owner that operator is in noncompliance	30 CFR 182.23(e)			X	

EXHIBIT III-3

TASKS PERFORMED FOR DEVELOPMENT OF OTHER MINERALS
(Including Coal, Uranium and Oil Shale)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Select Tracts For Leasing or Development	Process all tract nominations	25 CFR 171.4		X		
	Advise tribes of nominations by industry and option not to develop	25 CFR 171.4(a)			X	X
	Provide any technical advice requested	25 CFR 171.3(b)		X	X	X
Select Contracting Method	Choose method of contracting: competitive bidding, negotiations, or other approach	25 CFR 171.4(a)	X			
	Prepare written findings for the DOI Secretary justifying use of methods other than competitive bidding	25 CFR 171.4(d)				X
	Advise Area Director on advantages/disadvantages of alternative contractual arrangements	25 CFR 171.d			X	
	Provide tribe with any technical advice requested on contractual alternatives	25 CFR 171.3(b)		X	X	X

EXHIBIT III-3 (Cont.)

III-18

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Award Contracts	<p>If using competitive bidding:</p> <ul style="list-style-type: none"> - advertise for sealed bids - hold lease sale 	25 CFR 171.4(c)		X		
	<p>Determine that all contracts</p> <ul style="list-style-type: none"> - provide fair and reasonable remuneration - do not have environmental and cultural costs that exceed benefits of project - comply with all other applicable laws and regulations 	25 CFR 171.5		X		
	<p>Prepare written economic assessment, with advice of mining supervisor on contract terms or for:</p> <ul style="list-style-type: none"> - diligent development - water - royalties, income - payment and enforcement schedules - training and employment - mining unit - reputation of operator 	25 CFR 171.6(a)				X
	<p>Advise tribes on legal and economic impacts of severed land/surface ownership</p>	25 CFR 171.6(b)				X
	<p>Require any additional data from operator necessary for contract</p>	25 CFR 171.6(d)		X		

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribes	DOI Sec.	USGS Super.	BIA
Award Contracts	Prepare written environmental assessment of contracts re: <ul style="list-style-type: none"> - flood control, erosion - control water, air impacts - revegetation plans - land-use impacts - fish and wildlife impacts - health and safety - scenic, archeological, technologically valuable area - impact on local Indian population re: dislocation, influx of non-Indians, religion, culture, etc.) 	25 CFR 177.4				X
	Make environmental assessment available to tribe	25 CFR 177.4				X
	Consult with mining supervisor when preparing environmental assessment	25 CFR 177.4				X
	Accept/reject bids or contract terms	25 CFR 171.4	X	X		
	Process bid fees, file contract forms, etc.	25 CFR 171.4(c)				X

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Approve Operating Conditions	Approve/deny assignments of leases	25 CFR 171.11		X		
	Process notices of designated operators, addresses, etc.	25 CFR 231.71				
	Approve/deny operator's mining plan	25 CFR 177.5(a) and 231.10			X	
	Consult with tribe and BIA in review of mining plans	25 CFR 177.5 and 231.3(d)			X	
	Estimate value of reclamation	25 CFR 177.8			X	X
	Approve "partial" plans for preliminary development	25 CFR 177.5F			X	
	Consult with BIA Agency Director and tribe in review of operator plans	25 CFR 177.5			X	
	(Coal only) Evaluate physical conditions that might preclude backfilling	25 CFR 177.21			X	X
	(Coal only) Select sites for measuring stream flow, runoff, etc., in consultation with BIA Agency Director	25 CFR 177.21(a)			X	X
	(Coal only) Review operator's road plans	25 CFR 177.21(a)			X	
	(Coal only) Approve location and markings for access roads in consultation with tribe and BIA Agency Director	25 CFR 177.21(a)			X	
	(Coal only) Evaluate vegetation mix, prescribe revegetation plan	25 CFR 177.21(a)			X	X

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribes	DOI Sec.	USGS Super.	BIA
Supervise Operations	Approve/deny closing of surface openings before permitting abandonment (excluding coal)	30 CFR 231.40			X	
	Inspect area affected by abandonment/cessation	25 CFR 177.9(d)			X	
	Determine whether terms of contract have been met before approving abandonment/cessation	25 CFR 177.9(d) 30 CFR 231.3(c)			X	
	Process reports on accidents and fires (excluding coal)	30 CFR 231.4(c)			X	
	Process records of core and test holes (excluding coal)				X	
	Process operator's geological reports upon completion of prospecting or mining	25 CFR 177.6	X		X	X
	Process and review annual reports on operations, land impacts, and reclamation	25 CFR 177.9(a)			X	X
	Process and evaluate operator's reports after grading and backfilling	25 CFR 177.9(a)			X	X
	Advise tribes of grading and backfilling reports and request tribal inspection for approval	25 CFR 177.9(b)			X	X
	Process operator's reports upon completion of revegetation	25 CFR 177.9(c)			X	X
	Advise tribes of operator's revegetation report	25 CFR 177.9				X

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
	(excluding coal) Develop and approve conditions for waste disposal	30 CFR 231.51			X	
	(excluding coal) Designate areas for protection and/or restoration	30 CFR 231.3(d)			X	
	(excluding coal) Require operators to maintain water use and efficient records	30 CFR 231.4(d)			X	
Supervise Operations	Process petitions for revisions of mining plan	25 CFR 177.5(e)			X	
	Approve revisions to mining plans after consulting Agency Director and tribe	25 CFR 177.5(e)			X	
	Evaluate, approve/reject applications for variances	25 CFR 177.6			X	X
	Process tribes' requests for waivers from regulations	25 CFR 177.11 25 CFR 177.6	X		X	
	Approve/deny any auger or other underground coal operations	25 CFR 177.2(a)			X	
	Approve/deny petitions to extract resources within 500 feet of lease boundary (coal is excluded)	30 CFR 231.35			X	
	Process & evaluate petitions to suspend or abandon operations	25 CFR 177.9(d)			X	X
	Advise tribe of operator's intention to cease, abandon, or resume operations	25 CFR 177.9(d)				X
	Forward abandonment petitions to BIA for approval (excluding coal)	30 CFR 231.3(c)			X	
	Approve/deny any underground workings made inaccessible or abandoned (excluding coal)	30 CFR 231.41			X	

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Supervise Operations	(Excludes coal)	30 CFR 231.c			X	
	Obtain and check records of production				X	
	Determine rental and royalty liability of lessees and permittees	30 CFR 231.c			X	
	Collect and deposit royalty payments	30 CFR 231.c			X	
	Determine appropriate market price to be used in computing royalties	30 CFR 231.61		X		
Supervise Accounting Practices	Examine prospector's and operator's records, perform inspections	30 CFR 231	X	X		
	Require independent audit of operator's records	25 CFR 171.10		X	X	
		30 CFR 231.62		X	X	
Enforce Conditions	(Excludes coal) Inspect operations to determine adequacy of water management, and air and water pollution control measures	30 CFR 231.3(c)				X
	Inform Area Director and tribe of operator's failure to comply with partial plan requirements	25 CFR 177.5(f)				X
	Suspend operations if operator fails to comply with partial plans	25 CFR 177.5(f)			X	X
	Inspect vegetation cover after first full growing season to determine adequacy of cover	25 CFR 177.9(c)			X	

EXHIBIT III-3 (Cont.)

Program Area	Trust Support Activities	Code Citation	Responsible Agent			
			Tribe	DOI Sec.	USGS Super.	BIA
Enforce Conditions	Evaluate lease bonds, release funds where operations meet the standards, after consulting Agency Director & the tribes	25 CFR 177.8			X	
	Increase bonds and/or extend liability as necessary, consulting Agency Director and tribes	25 CFR 177.8			X	
	If operator is in noncompliance, serve notice	25 CFR 171.12		X	X	
	Investigate all claims of Indians re noncompliance	25 CFR 171.12(d)			X	
	Suspend income operations in cases of immediate, serious, or irreparable damage	30 CFR 231.73(c)			X	

Shortcomings of Existing Practices

As the pressure to develop tribal resources accelerated in the 1970's, the agencies responsible for managing tribal resources have been subjected to increased scrutiny.^{1/} At the same time, these agencies have acknowledged the inadequacy of many past practices. To meet the changed circumstances, they have begun to upgrade programs, increase staff capability, and broaden their scope of work. Consequently, any review of shortcomings should recognize that the agencies are in a phase of transition. Also, the specific issues and magnitude of identified problems vary among tribes, BIA Agencies or Area offices, and USGS Districts. Therefore, each tribe should assess the strengths and weaknesses of the existing programs on the basis of its own unique circumstances and experience. The following commentary and exhibit highlights general trends in the principal program areas:

Planning. The BIA does not have any programs which provide tribes with the information or framework needed to set policies regarding whether,

^{1/} Report to the Senate Committee on Interior and Insular Affairs by the Comptroller General of the United States, Indian Natural Resources: Part II: Coal, Oil and Gas, U.S. General Accounting Office, Washington, D.C., March 1976; Federal Trade Commission, Bureau of Competition, Staff Report on Mineral Leasing on Indian Lands, October 1975; Report to the Conservation and Natural Resources Subcommittee, House Committee on Government Operations, Administration of Regulations for Surface Exploration, Mining and Reclamation of Public and Indian Coal Lands, Office of the Comptroller General of the U.S., 1972; U.S. Department of Interior, Office of Audit and Investigation, Review of Royalty Accounting System for Onshore Oil and Gas Leases, June 1975; National Aeronautics and Space Administration and a Support Team from Martin Marietta Corporation, Onshore Lease Management Program Study for USGS, USGS Conservation Division, Reston, Virginia, December 1974; American Indian Policy Review Commission, Report on Reservation Resource Development and Protection, U.S. Government Printing Office, Washington, D.C., 1976.

when, where, and how tribal minerals should be developed. This lack of a comprehensive planning process contrasts with programs that are used by the BLM to manage federally-owned resources. Under its mandate in two laws -- The Federal Land Policy and Management Act and the Federal Coal Leasing Act Amendment -- BLM prepares comprehensive land use plans for all areas under its jurisdiction. These plans then are used as a basis for recommending whether and how the federal resources should be developed. Tribal programs tend to be a patchwork of several planning programs. The fragmentation and variability in funding sources makes it difficult to develop plans oriented toward the minerals issue.

The BIA's minerals inventory program will provide a limited number of tribes with basic reserve information, but the data are not available to help with questions currently facing tribal leaders. Also, the quality of the BIA realty records varies among reservations. Some tribes have accurate current data, while others need to update and systemize all land and minerals records.

Development Decisions. In this area, the BIA and GS do provide assistance in assessing the impacts of development proposals and contracts. The major problem encountered in the past was the fact that the BIA Realty Specialists assigned to help the tribes in contractual matters lacked the minerals expertise needed to do so. The recently revised regulations will increase the level of effort devoted to these programs, but the Bureau has not finalized plans to build the expertise that is needed to do the analyses. However, both the Bureau of Mines and GS have strengthened their expertise

and analytical tools as part of their responsibility to advise federal and tribal decision-makers on these areas.

Controls on Regulations. In the past, the DOI standards and procedures used to monitor and regulate development were criticized as being too weak. As indicated above (see also Volume IV, Section IV) both BIA and GS have strengthened the performance standards so that the inadequacies identified by the tribe and other interested parties can be corrected.

The Conservation Division of USGS is attempting to correct the deficiencies in the performance of its monitoring and enforcement activities caused by a manpower shortage. However, despite an increase in the number of authorized personnel, USGS remains understaffed. In fiscal year 1978, USGS anticipates that its staffing level will be capable of meeting only 62% of its staffing needs in administering tribal oil and gas leases in the near future. USGS staff anticipates being able to complete 100% of the approval tasks and maintain all of the accounts, but they expect to perform only 25% of the desired quarterly lease inspections and 51% of the desired post-audits. Similar deficiencies also exist in mining activities, e.g., in the conduct of inspections.

Exhibit III-4 highlights the problems and issues that have been encountered in each of the major program areas and indicates the corrective measures that are being taken.

EXHIBIT III-4

POSSIBLE SHORTCOMINGS IN CURRENT TRUST PRACTICES

Problem Area	Applicable Standards and Procedures
<u>Conduct Policy Planning</u>	
BIA's planning assistance has been limited to the conduct of the minerals inventory. Many Tribes expressed a need for multiple land-use planning analyses to formulate energy development guidelines.	Neither the BIA regulations nor recent budget requests provide for planning programs comparable to those undertaken for the management of public lands by BLM.
<u>Select and Evaluate Tracts</u>	
Most tribes lack the expertise needed to interpret the geological and geophysical data submitted by prospectors and operators. This has limited their ability to approve tract nominations or to accept/reject high bids from a lease sale.	Both 25 CFR 182 and 25 CFR 171 stress that the Geological Survey's Area Supervisor is responsible for providing Indian mineral owners with technical and scientific advice and information requested by the tribe.
In contrast to its administration of public lands, USGS is not required to develop "minimum acceptable bids" prior to Indian lease sales. Due to manpower shortages and related difficulties, USGS does very little geological analysis of the lease area. As a result, most bid evaluations are based on judgment.	The proposed revisions to these regulations do not require the preparation of "minimum acceptable bids." However, the BIA Area Director must evaluate bids and other variables before the Secretary approves a non-oil/gas contract. Likewise, USGS will continue to advise the BIA and tribes on all oil and gas bids once they have been received.
<u>Select Contracting Method</u>	
Standard contractual arrangements generally have been inflexible (e.g., competitive bidding using bonuses, royalty, and rental criteria may not maximize a tribe's revenue and other objectives; likewise, the highest bonus may not be the most important criterion).	Revised Part 171 would underscore the tribe's discretion to use various contractual procedures including negotiation, competitive bidding, or a combination of the two. Revised Part 182 would enable tribes "organized" under the 1934 Act to select among these options for oil and gas leases. Tribes not so organized must continue to use competitive bidding, but may approve contracts on the basis of criteria other than simply bonus values (e.g., royalties, rents, etc.).

 Problem Area

 Applicable Standards and Procedures

Analyze and Negotiate Contracts

Some tribes feel that the economic and cultural impacts of development have not been evaluated adequately prior to the lease sale and lease negotiations.

Proposed Part 171 of the regulations stipulates that no contracts for minerals (other than oil and gas) will be approved until the BIA Area Director evaluates the employment, economic, cultural, and environmental impacts of the project. Also, revised Part 177 requires the Director's written assessment to include an evaluation of the impacts on possible dislocation of people from jobs and homes; on areas that are important to the tribal culture and religion; and on the effect of an increase in the non-Indian population on the tribal economy (e.g., cost of living, demands for facilities and services, etc.). Oil and gas contracts are subject to conditions imposed on the operators' prospecting or mining plan.

In the past, BIA has lacked the minerals expertise necessary to prepare contract stipulations and to negotiate leases or contracts. Minerals matters have been handled by realty agents at both the Agency and Area office levels. Neither these staff nor the central office personnel have received adequate training to advise tribes on these issues.

Under the revised regulations, BIA must prepare special environmental and economic assessments of proposed contracts and, in conjunction with USGS, must provide the tribes with any management and financial assistance requested. However, BIA's plans to obtain the expertise necessary to prepare the assessments or to provide the assistance have not been specified.

Approve Operating Conditions

Permits and mining contracts often have not included stipulations that address the impacts that will be unique to the tribe and the local environment.

The revised regulations would condition any contract approval on findings that the provisions provide adequate remuneration/compensation; that the cultural and environmental impacts do not outweigh the benefits; and that other applicable regulations are met. For non-oil/gas minerals, the contracts must include measures needed to offset the specific environmental, cultural, or economic impacts that are identified in the analyses required by 25 CFR 177.

Some contractors have either failed to provide performance bonds or have not based the value on the commensurate risks to be covered by the bond.

Proposed revisions to Parts 182 and 171 (e.g., reference to proposed Part 177) provide more detailed specifications for bond calculations than previously existed.

EXHIBIT III-4 (Cont.)

Problem Area	Applicable Standards and Procedures
<u>Supervise Operations</u>	
<p>Several tribes felt that inspections of operations were inadequate to ensure compliance with engineering and environmental regulations.</p>	<p>The oil and gas regulations (30 CFR 221) require USGS to perform pre-drilling and abandonment inspections and provide authority for inspection of operations. However, the regulations do not specify how frequently inspections must be done. The USGS mining supervisors are required to inspect mine operations frequently and to inspect reclamation and revegetation efforts. The Federal regulations for public lands require quarterly inspections of coal mines; the BIA rules do not include this specification.</p>
<p>The Conservation Division of the USGS has suffered from understaffing in its oil and natural gas and solid minerals operations sections. This has resulted in what some consider to be an inadequate level of lease inspections.</p>	<p>Even though more positions have been authorized, the current hiring freeze in the DOI has limited the number of positions that have been filled. Thus, the staff still must emphasize the mandated tasks such as processing permits, approving plans, and performing minimum inspections rather than the tasks that could upgrade the quality of onshore lease management.</p>
<u>Supervise Accounting Practices</u>	
<p>Some tribes feel that operators compute royalties on the basis of contract or other prices that do not adequately reflect the value of the commodity.</p>	<p>The proposed revisions to Part 171 would allow the tribe to develop these formulas on a case-by-case basis for non-oil/gas contracts. NTL^{1/} requires producers to utilize several alternative methods of computing oil and gas royalties each month; payments are based on the formula that yields the highest tribal income.</p>
<p>Several oil and gas tribes and the GAO found that many producers were tardy in paying royalties. Post-audits are slow in detecting such negligence; as a result, tribes may lose the interest-value of their minerals income.</p>	<p>USGS has proposed revisions to its regulations for determining liquidated damages to include a penalty of 1% per month for late royalty payments. If the Osage experience is a useful precedent, this fee should reduce late payments.</p>

^{1/} For more details on the "Notice to Leasees," see Part II of this volume.

EXHIBIT III-4 (Cont.)

Problem Area	Applicable Standards and Procedures
<p>Tribes interested in alternative contractual arrangements, such as joint venture, expressed concern about special tax and accounting requirements that would be created.</p>	<p>Proposed Part 182 specifically exempts the USGS Supervisor from responsibility for the monitoring, accounting, and collection aspects of oil and gas contracts involving anything other than percentage royalty payments. Proposed Part 171 does not address this issue for minerals other than oil and gas.</p>
<p>The Conservation Division of the USGS has suffered from understaffing in its oil and gas royalty accounting division. This has resulted in what some consider to be an inadequate level of post audits of producing accounts.</p>	<p>Although more staff positions have been authorized for the royalty accounting section, the current hiring freeze in the DOI has limited the number of the positions that have been filled. Thus, the staff still must emphasize the mandated tasks such as maintaining accounts rather than the post-audit activities that would increase the quality of lease management.</p>
<p><u>Service Programs</u></p>	
<p>Despite some references to the need for increased tribal services in the event of large scale minerals development, DOI has not developed programs to assist the tribes in meeting the demands created by such energy projects.</p>	<p>BIA will be required to analyze demands on tribal service delivery prior to awarding contracts. If the Environmental Impact Statements are a precedent, these assessments may be expected to identify impacts but not facilitate an implementation plan.</p>

ALTERNATIVE METHODS

After evaluating the effectiveness of current programs, tribal leaders should select the areas where the tribe will rely on the existing activities and the areas where special tribal programs are needed. In areas where a tribal initiative is desired, the tribe may follow one of two general approaches:

- (1) Strengthen the tribe's use of the existing programs (e.g., request technical assistance from GS and BIA more frequently, increase participation in the project assessment process, and/or notify GS of probable contract violations, etc.); and
- (2) Supplement the existing activities with independent tribal programs (e.g., fund planning studies and contract analyses of, create a tribal inspections, and auditing and enforcement capability, etc.)

The specific alternatives available to the tribe will derive from the tribe's legal authority to implement them. The following discussion highlights some of the broad legal factors that must be addressed in each of the program areas. Before preparing plans for any program the tribe should consult with its attorneys to clarify the legal opportunities and constraints.

Planning

Because the BIA has no comprehensive planning program, tribes that need this information must implement independent programs. There are no legal constraints on such initiatives by the tribe. Instead, the major constraint will be the funding and staffing of a planning project (these are discussed in the next subsection).

Development Decisions

The existing laws and regulations provide the tribe with opportunities to increase tribal participation in the preparation and review of all analyses of contracts or projects. The BIA's mineral leasing regulations require the Bureau to obtain tribal input when preparing the studies. Also, they specifically state that all contract assessments are to be made available to the tribe before decisions are made.

As is true for the planning programs, there are no legal constraints on the tribe doing independent analyses. Funding and staffing would be the critical limitations.

Controls on Operations

These programs essentially involve three activities: setting performance standards for operations, monitoring the operation, and enforcing the standards. These basically imply a tribal regulatory function and as such, involve complex legal questions. Therefore, it is especially important for the tribe to obtain legal counsel before taking any action in the area.

If a tribe chooses the strategy of strengthening the use of existing programs, the revised regulations provide numerous opportunities to do so. The BIA regulations emphasize GS and BIA's responsibilities to consult the tribe when renewing operating plans, setting stipulations on the plans, and performing inspections. They also provide for tribal consent in major decisions and require GS to respond to notices from the tribe on probable violations of the contract. In essence, the new regulations provide the tribe with an opportunity to set standards (for new contracts) and participate in enforcement without asserting any independent authority or jurisdiction.

If the tribe wants to establish controls (standards, monitoring, and/or enforcement) independent of DOI, at least three legal matters must be resolved: (1) the tribe must ascertain the source of its authority to impose the controls; (2) the tribe must clarify the scope of that authority over the energy operators; and (3) the tribe must implement the codes (or contracts) and procedures that are required to make the program legally enforceable. General considerations are as follows:

Source of Authority.^{1/} The principal sources of tribal authority are: (1) contract stipulations (e.g., terms on leases, agreements, right-of-way permits); (2) authority delegated to the tribe by Congress; and (3) tribal ordinances (e.g., land use, reclamation, taxation codes). Explicit contract terms would provide the clearest legal justification for tribal performance standards, reporting and other monitoring requirements, and/or enforcement. Provisions for regulatory oversight and/or participation may be made when approving/reapproving a contract, and when approving the operating plans. Another legal basis for these programs occurs when Congress expressly delegates authority to the tribe. The only current example of this approach is the Surface Mining Control and Reclamation Act. Under this law, the tribes will be delegated responsibility for administering and enforcing surface coal mining regulations on Indian lands. Tribes may be expected to adopt codes or regulations to implement this authority. Finally, tribes may exercise their legislative powers to adopt ordinances or codes that establish tribal standards and enforcement prerogatives for activities on the reservation. A common example of their approach are tribal land-use and zoning codes.

^{1/} See Volume IV, Part IV for additional discussion of these options.

Tribal ordinances do govern the activities of tribal members within the reservation. However, the question of tribal civil jurisdiction over non-Indians, especially where the regulation is concurrent with state laws (as is the case with most taxation and environmental matters), has not been resolved by the courts at this time. The uncertainty may limit the usefulness of this strategy for programs that would go into effect before the courts issue a final ruling on this matter.

Scope of Authority. It is important to acknowledge the limited applicability of these three options for specific programs. At least two areas warrant attention. There are possible limitations on controlling existing operations. For example, contract-related authority will be available only for new agreements on when renegotiating existing leases and permits. Similarly, some contracts specifically exempt the operation from complying with certain tribal codes and ordinances. The only broad source of authority over existing operations will be to administer and enforce regulations for coal mining under the Surface Mining Control and Reclamation Act. In light of these jurisdictional questions, detailed legal analysis of tribal authority should be prepared as part of the minerals program proposal. Second, applicability of ordinances and codes to non-Indian activities is uncertain as noted above.

Implementation Factors. Finally, these tribal programs must include certain standards and procedures in order to be legally enforceable. Either contract terms or tribal codes should include the following:

- A statement of tribal policies and goals for the particular program. For example, an air quality program may specify maximum levels for various pollutants based on public health factors

- Performance standards and criteria with which the operator must comply. These standards should include criteria used for evaluating the performance and for assessing penalties for failure to meet the performance standards.
- Designation of the court having jurisdiction over any appeals and/or enforcement actions (e.g., tribal court, federal, etc.)
- Procedures for (1) tribal adoption and revision of the standards and criteria; (2) submission of payments, or permit and plan applications; (3) monitoring and reporting and inspections; (4) evaluating reports and inspections; (5) appeals (by operator, tribal members, etc.) of all tribal actions; and (6) coordination and liaison with federal and state authorities..

The implementation of these programs also may require additional staff and funds.

The following exhibits highlight the alternative approaches available for a minerals program. Exhibits III-5 and III-6 note the provisions in the regulations that provide opportunities for the tribe to strengthen the use of the DOI programs. Exhibit III-7 summarizes the options for programs that are independent of the existing DOI programs.

OPPORTUNITIES TO STRENGTHEN EXISTING DOI PROGRAMS: OIL AND NATURAL GAS

Pgr. Area	Tribal Options	Code Citation
Tract Selection	Request needed technical advice from GS, BIA	25CFR182.11(b)
	Approve/deny applications for geological and geophysical permits	182.90
	Nominate tracts for leasing	182.13 (a)
	Receive GS notices of tracts nominated by industry	182.13 (a)
	Decide whether to proceed with lease sale or negotiations	182.13 (a)
Select Contracting Method	Request needed technical advice from GS, BIA, especially for profit sharing and other special contractual arrangements	182.40
	Tribes organized under the 1934 IRA may select to award contracts by means other than competitive bidding	182.12 (a)
	Notify BIA/GS if method selected is other than competitive bidding	182.12 (d)
	Determine any special terms of contracts prior to advertising for bids	182.12 (c)
Award Contracts	Accept/reject bids or terms of negotiated leases	182.12 (e)
	Obtain Secretarial approval	
Approve Operating Conditions	Approve any assignments that would involve a legal sub-division of a contract or interest in separate horizons	182.19 (a)
	Approve and/or require cooperative and unit agreements	182.21
	Approve/deny contracts for storage facilities	182.22
	Determine adequacy of the indemnity bond	182.23 (e)

EXHIBIT III-5 (Cont.)

Program Area	Tribal Options	Code Citation
Supervise Operations	Authorize suspension of operations	182.20 (b)
Supervise Accounting Practices	<p>Receive GS/BIA royalty and rental reports</p> <p>If the contracts involve profit-sharing a method of payment other than royalties, then GS is not responsible for collecting, accounting for, or monitoring the flow of funds</p>	<p>30CFR211.63</p> <p>25CFR182.4</p>
Enforce Conditions	Notify GS of instances of non-compliance by operator or permittee	25CFR182.23(e)

OPPORTUNITIES TO STRENGTHEN EXISTING DOI PROGRAMS: ENERGY MINERALS OTHER THAN OIL & NATURAL GAS

Pgr. Area	Tribal Options	Code Citation
Tract Selection	Request needed technical advice from GS, BIA	25CFR171.3b
	Nominate tracts for leasing/contracting	25CFR171.4
	Receive GS notice of tracts nominated by industry	25CFR171.4a
	Decide whether to proceed with contracting	25CFR171.4a
Select Con-tracting Method	Request needed technical advice from GS, BIA	25CFR171.3b
	Select form of contract award (competitive leasing, negotiation)	25CFR171.4
	If utilizing an approach other than competitive leasing, notify BIA, GS	25CFR171.4a
	Determine any special contract terms prior to advertising for bids	25CFR171.4(c)
Award Contracts	<p>Receive and evaluate the economic assessment prepared by the Area Director for Secretarial approval regarding terms for</p> <ul style="list-style-type: none"> - diligent development - water supply - royalties or other income - income payment and enforcement schedules 	25CFR171.6(a)

EXHIBIT III-6 (Cont.)

Pgr. Area	Tribal Options	Code Citation
Award Contracts	Receive and evaluate economic assessment (continued)	25CFR171.6(a)
	<ul style="list-style-type: none"> - training and employment of tribal members - determination of a compact mining unit and - reputation of the operator 	
	Evaluate the Area Director's assessment of the legal and economic impacts of several land and subsurface ownership	25CFR171.6(b)
	<p>Receive and evaluate the environmental and cultural impact assessment prepared by the Area Director, regarding</p> <ul style="list-style-type: none"> - prevention and control of flooding, erosion - control of air, water, and other impacts - revegetation plans - land-use impacts - impacts on fish and wildlife - health and safety impacts - impacts on science, archeological, and religiously valuable areas - impact on the local Indian population (dislocation, influx of non-Indians, cost of living, religion, cultural, etc.) 	25CFR171.4

EXHIBIT III-6 (Cont.)

Pgr. Area	Tribal Options	Code Citation
Award Contracts	<p>Request any technical advice needed from GS, BIA</p> <p>Review GS/BIA determinations</p> <p>Approve/deny contracts; accept/reject bids</p> <p>Obtain approval of Secretary</p>	<p>25CFR171.9(c)</p> <p>25CFR171.9</p> <p>25CFR171.4c</p> <p>25CFR171.4c</p>
Approve Operating Conditions	<p>Request any needed technical advice from GS, BIA, regarding mining plans, variances, loans, and other provisions</p> <p>Review and evaluate operator's mining plan, submit recommendations to GS</p> <p>Review and evaluate mining plans for "partial" development; submit recommendations to GS</p> <p>Review and approve the location and marking of access roads for coal mine operations</p> <p>Receive all determinations by the mining supervisor</p>	<p>25CFR171.9(c)</p> <p>25CFR171.5(a)</p> <p>25CFR171.5(f)</p> <p>25CFR177.21a(12)</p> <p>25CFR171.9</p>
Supervise Operations	<p>Request any needed technical advice from GS, BIA</p> <p>Submit any desired waivers to the regulations</p> <p>Review any proposed revisions to mining plan, submit recommendations to GS</p> <p>Co-sponsor (with the operator) desired variances from the regulations</p>	<p>25CFR177.9</p> <p>25CFR177.11</p> <p>25CFR177.5(e)</p> <p>25CFR177.6</p>

EXHIBIT III-6 (Cont.)

Pgr. Area	Tribal Options	Code Citation
Supervise Operations	Receive copies of non-coal operator's geological reports	25CFR177.6
	Receive GS evaluations of operator's grading and backfilling efforts	25CFR177.9b
	Inspect operator's grading and backfilling efforts	25CFR177.9b
	Receive GS evaluation of operator's revegetation results	25CFR177.9c
	Receive notice of operator's intention to cease/abandon operations	25CFR177.9d
Supervise Accounting Practices	If contract gives the tribe authority to oversee or participate in the management of the project, the tribe may receive all assistance needed from BIA and GS to insure that tribal participation accords with the Contract	25CFR171.9d
Surface Conditions	Receive notice of any failure to comply with the partial receiving plans	25CFR177.58
	Receive notice of any violations of 25CFR177	25CFR177.10
	Evaluate operations to determine whether bond liabilities should be terminated, or extended, decreased, or increased	25CFR177.8

EXHIBIT III-7

OPTIONS FOR INDEPENDENT TRIBAL PROGRAMS

Source Authority	Applicability	Implementation Factors
<u>Planning</u>		
Rights as manual owner	Tribal planning programs	<ul style="list-style-type: none"> • funding and staffing
Rights as unit of government		<ul style="list-style-type: none"> • eligibility for programs funded by outside source • liaison with DOI
<u>Development Decisions</u>		
Rights as manual owner	Tribal analyses and negotiation	<ul style="list-style-type: none"> • funding and staffing
Rights as unit of government		<ul style="list-style-type: none"> • eligibility for programs funded by outside source • liaison with DOI
<u>Controls on Operations</u>		
1. Contract Terms	1. Only new or re-negotiated contracts	<ul style="list-style-type: none"> • Codes or contracts with
2. Congressional delegations	2. Coal operations on Indian lands	<ul style="list-style-type: none"> - statement of government
3. Tribal codes and ordinances	3. May apply to future development; uncertain applicability to existing developments	<ul style="list-style-type: none"> - standards and criteria - administrative tribunal procedures
		<ul style="list-style-type: none"> • funding and staffing • liaison with DOI

RESOURCE REQUIREMENTS

Any program implemented by the tribal government will require funding and staffing. The proposals for a minerals program should specify the skill requirements, staffing workload, and costs of each task that is recommended. These factors will influence the feasibility, cost-effectiveness, and timing of implementing particular programs. The following discussion presents information which may be used to estimate these requirements for the different types of programs.

Skill Requirements

There are three basic steps involved in determining what skills will be needed: (1) identifying the areas of expertise related to each task; (2) deciding whether to use an in-house staff or to retain outside consultants; and (3) where an in-house capability is desired, determining the need for training programs for tribal members. In general, energy planning and management activities can involve a wide spectrum of skills in the physical sciences (e.g., geology, petroleum or mining engineering, environmental planning), in business matters, and in the social sciences (e.g., economics, sociology, education and manpower training, and other policy areas). Existing federal, state, and private minerals programs can provide a quick indication of which types of skills will be needed for the proposed tasks. The second and third steps involve more complex considerations.

The choice between relying on an in-house staff or outside consultant will depend on at least three factors: the technical complexity of the task, the existing skills within the tribal government, and the workload.

First, certain programs require a degree of technical expertise that usually is not found in the staff involved in the day-to-day operations of the tribal government. Examples of tasks that could require retained specialists include the legal, economic, financial, and environmental analyzes and negotiation of proposed contracts. An internal staff may prepare land-use plans, process and review reports, perform inspections and audits, and maintain liason with BIA and GS. Second, if the tribal staff does not have the skills needed for the minerals program, it may be necessary to hire outside consultants until tribal members can be trained and hired for these positions. The third factor affecting this choice is the duration of the workload for particular types of staff. If the workload warrants only a few staff-workers per year, the tribe would be likely to retain the personnel. Other areas may justify several full-time positions.

Finally, most tribes will want to hire tribal members to fill the minerals positions created within the tribal government. It is important to note, however, that tribal members typically are not skilled in the minerals areas. Most of the in-house staff will need to have at least a four-year college degree or related technical training with equivalent experience. For example, federal mine safety inspectors commonly have five years of field experience in addition to their degrees. Many states require a similar background. Volume III of this study provides a detailed review of the education and training programs that are available to prepare tribal members for these jobs.

The following exhibits provide a general reference on the skills required to perform minerals planning and management tasks. Exhibit III-8 indicates the types of expertise needed for different activities. It also indicates whether these tasks typically are done by tribal staff or outside consultants. Exhibit III-9 gives examples of the types of skills that would be required for the in-house positions.

SKILLS REQUIRED FOR MAJOR PROGRAM TASKS

	In-house Tribal Staff Skills								Outside Consultants		
	Mining and Petroleum Engineer	Land-use or Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
<u>Policy Planning</u>											
Inventory of Resources											
Review existing data on tribal mineral resources	X										
Review existing data on other tribal resources such as lands, forests, vegetation, wildlife, etc.		X			X						
Unit Resource Analysis											
Prepare physical profile of reservation climate, topography, soils, vegetation, water resources, and other factors	X	X			X						
Prepare overview of existing resource trends for minerals and other resources	X	X	X		X						
Prepare overview of major opportunities to develop existing resources	X	X	X		X						
Prepare special analysis of reservation ecology (i.e., interrelationships among certain resources)		X			X						
Prepare maps indicating tribal surface and subsurface ownership	X				X						
Planning Area Analyses											
Prepare analyses of demands for resources such as minerals	X		X								
Prepare analysis of general economic trends on reservation			X								

EXHIBIT III-8 (Cont.)

	In-house Tribal Staff Skills							Outside Consultant			
	Mining and Petroleum Engineer	Land Use or Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
Prepare socio-economic profile of reservation			X		X						
Evaluate basic infrastructure demands			X								
Estimate likely income that would be generated by minerals development	X		X								
Estimate likely environmental impacts of minerals development		X									
Estimate likely employment impacts of minerals development				X	X						
Estimate likely infrastructure demands from minerals development			X								
Management Framework Plans											
Identify development objectives for each resource	X	X	X		X						
Prepare recommendations for development of each resource	X	X	X	X	X		X				
Identify minor & major conflicts among development options							X				
Select and Evaluate Tracts											
Process & interpret geologic & geophysical data submitted by prospectors for estimates of resource quantity & quality	X										
Identify tracts for lease sale or other development venture	X										
Identify conflicts between lease tracts & environmentally or culturally sensitive areas	X	X			X						

EXHIBIT III-8 (Cont.)

	In-house Tribal Staff Skills							Outside Consultant			
	Mining and Petroleum Engineer	Land-use or Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
Determine minimum-bids	X										
<u>Select Contracting Method</u>											
Evaluate economic flows under alternative contractual arrangements			X							X	
Evaluate oversight & control options under alternative contractual arrangements							X	X			
<u>Analyze and Negotiate Contracts</u>											
Prepare environmental assessment of proposed contracts or developments		X			X					X	
Prepare income & financial analyses of proposed contracts			X						X		
Prepare analyses of economics, employment training impacts of proposed contracts				X						X	
Prepare analyses of accounting & tax provisions of special contractual arrangements								X	X		
Prepare analyses of infrastructure impacts of the proposed contract			X							X	
Develop contract stipulations on tribal objectives (e.g. environmental, income, employment, etc.)	X	X	X	X	X		X	X	X	X	X
<u>Approve Operating Conditions</u>											
Review & approve/deny operator's mining, abandonment, & reclamation plans	X	X									

	In-house Tribal Staff Skills								Outside Consultant		
	Mining and Petroleum Engineer	Land-use or Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
<u>Supervise Operations</u>											
Process assignments & other contract forms, & reports	X										
Perform on-site inspections of operations to monitor compliance with lease stipulations for efficient recovery, operating procedures, environmental production abandonment & reclamation	X	X									
<u>Supervise Accounting Practices</u>											
Maintain other income accounts							X				
Perform audits of lease accounts to verify accuracy of payments							X				
<u>Enforce Conditions</u>											
Issue notices, orders & levy fines for non-compliance with conditions	X							X	X		
<u>Services Programs</u>											
Develop implementation plan for energy-related education & training program				X			X				
Develop implementation plan for energy-related capital facilities program			X				X				
Develop implementation plan for energy-related housing program			X				X				
Develop implementation plan for energy-related social services program			X		X		X				

	In-house Tribal Staff Skills							Outside Consultant			
	Mining and Petroleum Engineer	Land-use of Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
Assist authorities responsible for education & training, capital facilities, housing, & social services to implement energy-related programs							X				
<u>General Management Functions</u>											
<u>Planning</u>											
Coordinate formulation of goals, plans and policies for tribe and tribal government consideration; implement upon approval.							X				
Plan and implement an effective energy program including administration of budget, obtaining of funds and application of performance standards.							X				
<u>Organizing</u>											
Maintain an effective staff; select, develop and evaluate performance of staff.							X				
Provide for necessary space, facilities, equipment and supplies.							X				
<u>Coordinating</u>											
Coordinate energy programs and activities with other units of Tribal government, state and regional agencies and relevant Federal agencies; serve as major link between Tribe and outside energy related groups.							X				

	In-house Tribal Staff Skills								Outside Consultant		
	Mining and Petroleum Engineer	Land-use or Environmental Planner	Economic Development Planner	Education & Training Specialist	Other Planners	Accountant	Program Manager	Lawyer	Economic/Financial Expert	Environmental Specialists	Geologists
Provide necessary coordination within the office of its programs and activities (land acquisition, environmental audits, etc.) Represent program interests and concerns on tribal committees and special authorities.							X				
Measuring/Evaluating Evaluate performance to planned targets, goals, objectives.							X				
Communicating Inform tribal government and tribal members about regular and special energy resource developments; prepare communication material for use in explaining energy resource issues, opportunities and conflicts.							X				
Assure that tribe's Minerals Code and other policies are implemented, publicized.							X				

EXHIBIT III-9

SKILLS REQUIRED FOR KEY STAFF POSITIONS

- Petroleum Engineer. Education and training in geology and petroleum engineering; ability to analyze exploration data to evaluate proposed lease tracts; ability to analyze operating plans to insure best engineering practices, prevention of waste and other resource engineering considerations; understanding of physical environmental impacts oil and gas operations and methods to prevent or remedy surface or subsurface damages ability to prepare reports to advise the tribe on tract selection, minimum bids, operations abandonment, and enforcement.
- Mining Engineer. Education and training in geology and hard minerals engineering, specializing in the tribal resources (e.g., coal, uranium, oil shale); ability to analyze core samples, etc. to determine quality and quantity of tribal reserves; ability to review operating plans to ensure best engineering practices; ability to determine mine reclamation and revegetation requirements; ability to monitor operations through reports and inspections to guarantee compliance with all regulations; ability to prepare reports to advise the tribe on tract selection, minimum bids, operations, abandonment, reclamation, and enforcement.
- Land-use Planner. Education and training in land, water soil, forestry or related physical sciences; ability to review operating plans and develop stipulations to protect surface environment; ability to monitor operations through reports and inspections; ability to prepare reports to advise the tribe on plan regulations, reclamation, and enforcement.
- Planner. Education and training in fields associated with land, minerals, and economic planning; ability to prepare technical materials to support such as energy planning activities; mapping and lease and title searches; ability to develop physical,

cultural, economic, and social baseline data; ability to analyze trends in demand for tribal resources; ability to evaluate the environmental, economic, fiscal, and social services impacts of minerals development; ability to identify conflicts among uses and recommend alternative control measures; working knowledge of basic operations, activities, problems, and issues related to tribe's energy resource(s); skill in understanding contents of documents such as deeds, contracts, leases, permits, operating reports, and exploration and mining plans.

- Accountant. Education and training in accounting principles and practices; understanding of minerals industry practices in production and record keeping; considerable understanding of tribe's accounting system including procedures and methods related to accounting for energy resources transactions; ability to work with numbers accurately and to prepare financial reports and audits; skill in use of adding machine, calculator.
- Coordinator or Manager of Energy Resources. Ability to analyze and assess difficult, varied, sometimes conflicting concepts, proposals and options and to organize findings and conclusions into understandable and practical alternatives; skill in planning, directing and evaluating work efforts of self and others as part of larger resource management function; ability to communicate orally or in writing on technical subjects which may involve issues; skill in understanding basic aspects of economics of energy resource development; ability to apply fundamentals of mining or petroleum engineering and geology to control of tribe's energy resource(s); comprehensive knowledge of planning methods and techniques; and, basic skills in accounting and financial analysis.

Staff Workload

The proposal for a minerals program should include data on the workload involved in each task. To prepare these estimates, information will be needed on the following three factors:

First, tribal leaders must determine what level of effort is intended. The tribe must decide on the scope of all planning programs or analyses of individual projects before they are started. In the regulatory areas, there must be agreement on how often to inspect or audit leases. These basically are policy matters. However, federal agencies, state governments, and private companies may be able to make suggestions based on their programs and experience. For example, BLM has standards for planning programs as GS has norms for regulatory programs. Guidelines for analyzing and negotiating on specific projects are not available. This is because the level of effort needed to measure and assess impacts, prepare contract stipulations or ordinances, and to negotiate contracts or enact codes vary according to the complexity of the issues. For example, according to the BLM budget data, the environmental analyses for a decision on a multi-million ton/year coal move could involve:

- (1) Environmental Impact Statement, at an average cost of \$300,000 to prepare
- (2) A study of the reclamation potential of the site, at an average cost of \$170,000
- (3) A revegetation study, at an average cost of \$13,000
- (4) A mine development plan review, a task estimated to take a minimum of 0.25 staff-years for the technical work and up to a year or longer to finalize.

On the other hand, an oil and gas Environmental Impact Assessment (EIA), tract evaluation, and review of development plans would involve approximately 0.03 staff years at average total cost of \$1,100. Furthermore, the political processes involved in approving contracts or codes make it difficult to judge what level of effort will be needed.

Second, data must be collected on the number of work units in each task. For example, the workload for inspections or audit programs will depend on the number of producing wells and mines, the number of producing leases, and similar components. The BIA and GS records on the minerals activity on the reservation contain much of the information that the tribe will need to calculate this workload.^{1/} The workload for planning programs will depend on the specific items and areas to be studied.

The final step in calculating workload is to estimate the staff-time required per work unit. Federal and state agencies do have general "rules of thumb" for the staff-hours needed to perform planning and regulatory tasks. The BIA and GS will make these statistics available to each tribe upon request. They also may assist the tribe in tailoring the figures to the specific circumstances on the reservation. Because of the wide range in the level of effort for "development decision" activities, there are no standard estimates of required staff-time. These estimates must be prepared on a case-by-case basis.

Exhibit III-10 presents sample staffing estimates for planning programs. Exhibit III-11 provides similar estimates for regulatory programs. These tables are based on BLM and GS assumptions regarding the appropriate

^{1/} Note: This information is confidential for each tribe.

level of effort and staff-hours for each work unit. For the regulatory program, the exhibit uses a sample range for work units for a hypothetical tribe with oil and gas development and a hard minerals (e.g., coal) mine.

EXHIBIT III-10

ANNUAL STAFF AND COST REQUIREMENTS FOR TRIBAL RESOURCE PLANNING ACTIVITIES

Comprehensive multiple land use planning analyses

<u>Plan Component</u>	<u>Staff-Year Estimates</u>	
	<u>Low</u>	<u>High</u>
Planning profiles (BLM's unit resource analyses)	2.00	2.50
Trend Analyses (BLM's planning area analyses)	.17	.25
Socio-economic Profiles	.25	.50
Policy Decisions (BLM's management framework plans)	<u>1.00</u>	<u>1.25</u>
	3.40	4.50
TOTAL COST ^{1/}	\$81,600	\$108,000

Minerals component only of multiple land-use planning analyses

<u>Plan Component</u>	<u>Staff-Year Estimates</u>	
	<u>Low</u>	<u>High</u>
Unit resource analyses	.30	.35
Planning area analyses	.02	.04
Socio-economic profile	.03	.07
Management framework analyses	<u>.14</u>	<u>.18</u>
	.50	.60
TOTAL COST ^{1/}	\$12,000	\$14,400

^{1/} Based on BLM estimate per staff year (includes direct and indirect costs) for its planning programs.

EXHIBIT III-11

STAFFING AND COST ESTIMATE FOR REGULATORY ACTIVITIES

Task	Level of Effort	Workload Units	Sample Workload Units	Staff-Hours Per Unit	Staff-Years Needed
<u>Development Decisions</u> (Oil & Gas)					.6
Tract Evaluations	100%	# lease tracts offered	22	*	
Environmental Assessments	100%	# drilling proposals	39	*	
		# proposals related to energy development	1	*	
Contractor Operating Plan Stipulations	100%	# drilling proposals	39	*	
<u>Oil & Gas Reports</u>					1.26
Predrilling Review	100%	# exploratory wells	4	*	
		# development wells	35	*	
Abandonment Review	100%	# abandonments	6	*	
Workover reviews	100%	# workovers	33	*	
Other	100%	# proposals & reports	115	*	
<u>Oil & Gas Inspections</u>					3.2
Inspections of Abandonment Operations	100%	# abandonments	6	*	
Inspections of Abandoned Wells	100%	# abandoned wells	6	*	
Inspections of Exploratory Wells	regular & random	# exploratory wells	4	*	
Inspections of Development Wells	regular & random	# development wells	35	*	
Inspections of Workovers	50%	# workovers	16	*	
Inspections of Producing Leases	quarterly	# producing leases	115	*	
Pollution Inspections	semi-annually	# producing leases	115	*	
Surface Inspections	semi-annually	# producing leases	115	*	
Production Equipment Verification	semi-annually	# producing leases	115	*	
Mini Inspections	monthly	# producing mines	2	*	.35
<u>Minerals Accounting</u>					1.3
Maintain Accounts	monthly	# producing & non-producing accounts	204	*	
Audit Producing Accounts	annually	# producing accounts	204	*	
Support Staff	100%	10% of total staff-years needed	10%	*	.7

Total staff-years 7.4
Total average cost \$231,877

Indicates "Number of"

* These data are not public information. However, tribes may request such information from the Department of the Interior, U.S. Geological Survey, Conservation Division.

Costs

Estimates of the funding needed for a minerals program should specify the direct costs (e.g., staff salaries), and the indirect costs (e.g., office space, equipment, vehicles, travel and other overhead expenses). Each salary will depend on the specific level of expertise and responsibility of the positions. The salaries for in-house staff would at least have to be competitive with BIA and GS pay scales in order to attract competent personnel (e.g., a GS-5-7 for petroleum engineering technician, GS-13-15 for experienced petroleum or mining engineers). Salaries for outside consultants will be at the discretion of the tribe. The indirect costs will depend on the type of programs undertaken and the characteristics of the reservation.

Exhibits III-10 and III-11 have included indications of program costs by including the average cost figures used by GLM and GS in their budget preparations. It is important to emphasize that these data are national averages: they are based on trends in all regions, for the salaries and indirect costs. They do provide a "ballpark" estimate of cost, but a tribe's proposal should be based on salary and other cost information that are suited to the reservation.

IV. DESIGN OF RESOURCE MANAGEMENT PROGRAMS

INTRODUCTION

Once the alternative programs have been evaluated, tribal officials must decide three issues: (1) Which activities should be implemented by the tribal government; (2) What level of funding is appropriate for these activities; and (3) How should these programs be integrated into the existing tribal government organization? The purpose of this section is to highlight some of the criteria that may be used to resolve these questions. The first subsection identifies several factors for determining the priority assigned to alternative programs. This is followed by brief discussions of funding considerations, and criteria that may influence the organizational format chosen for these programs. The final subsection presents three "organizational models" to illustrate the different program designs that could result from the decisions made on activities, funding, and organizational structure.

PROGRAM SELECTION

At this stage in the implementation of a minerals program, tribal leaders face the difficult task of deciding the priority of each of the programs that were evaluated. It may be useful for policy-makers to identify the

criteria that will be used to select the activities. At least four criteria can influence the ranking: (1) tribal discretion; (2) specific deficiencies in the current level of activity; (3) tribal fiscal constraints; and (4) general tribal policies. Each of these factors is described below, followed by a sample format for presenting the final program activity summary.

Tribal Discretion

Certain tribal activities may be mandated by either the lease management regulations or tribal minerals or other codes. Under existing trust regulations, the primary tribal role is to approve major contracts and operating plans, and to monitor activities. Most activities that would necessitate new staff, such as environmental impact studies or on-site inspections, are optional. (Refer to Exhibits III-5 and III-6 in Section III for an overview of tribal roles and responsibilities under the proposed revisions of the BIA minerals regulations.) If a tribe elects to codify certain contract stipulations (e.g., a minerals code, mining reclamation code), that ordinance may either require enforcement by tribal officials or may be included as a contract stipulation to be enforced by DOI. The codes adopted to date include provisions for tribal enforcement, and will necessitate staff and funds.

A tribe that opts for financial and/or management participation in a resource development project may be required to assume financial management responsibilities.^{1/} The tribal skills and staffing required will depend on the particular terms of each contract. As may be seen in Exhibit III-3 page III-17, the BIA and USGS are required to provide the tribe with the assistance needed to carry out its special management responsibilities

^{1/} See Part II of this volume for more details on such responsibilities.

with respect to mining activities (25 CFR 177). In oil and gas developments, if the tribe uses revenue terms other than a percentage royalty for establishing contract specifications, then the USGS is not responsible for maintaining the income accounts (proposed 25 CFR 182.4).

Specific Deficiencies in Current Programs

It is possible that the current level of effort performed by the BIA and USGS may be less than the "minimum" level needed to accomplish particular objectives. As was noted in Section III, the understaffing of the Conservation Division of the USGS results in an insufficient completion of certain tasks. Such deficiencies vary among BIA and USGS regions, area, district, and agency offices. A tribe affected by such shortcomings may want to give priority to these areas by implementing supplemental programs in the early stages of the tribal program.

Tribal Fiscal Constraints

The tribe must appropriate funds in accordance with its other budget priorities in order to establish a minerals office. A proposal to fund the minerals office must either compete with demands on the tribe's limited revenues or include a provision for revenues specifically earmarked for these activities (e.g., from energy-related royalties or special taxes). The programs may need to be evaluated within a pre-determined budget "ceiling." In this way, tribal leaders may compare the effectiveness of each alternative program under a limited level of funding. For example, assume the oil and gas tribe (example used in Exhibits III-10 and III-11) wants to (1) begin a tribal planning program, and (2) correct the major deficiencies in the current supervision of oil and gas operations.

However, it has only \$15,000 to appropriate to minerals activities. Tribal leaders would have to judge the effectiveness of the following alternatives and select a program or programs within their budget.

Planning programs

- (\$7,700) the minerals component of the profile studies of the reservation
- (\$360)^{1/} the minerals component of the socio-economic profiles
- (\$240)^{1/} the minerals component of the trend analyses
- (\$168)^{1/} the minerals component of the policy decision framework

Supervision (oil and gas)

- (\$00) BIA and USGS supervision
- (\$15,000) 120 detailed inspections of producing leases. This is equivalent to quarterly inspections of 30 leases (26% of the assumed workload).
- (\$15,000) 780 pollution inspections of producing leases. This is equivalent to bi-monthly inspections of all producing leases.
- (\$15,000) 312 equipment verification inspections. This is equivalent to 3 inspections/year of 100% of the producing leases.
- (\$15,000) 78 surface inspections of producing leases. This is equivalent to quarterly inspections of 20 leases (17% of the assumed workload).

General Tribal Policies

Most of the program activities under consideration will be discretionary rather than mandatory tribal initiatives. For this reason,

^{1/} As noted in Section II, these tasks build from the profile studies. Therefore, the costs indicated are increments to the basic cost of \$7,700.

general policy considerations are likely to influence which tasks are selected. As was noted in Section II, the decisions will reflect the relative weight that is given to different tribal goals (e.g., revenue versus environmental priorities). In addition, the tribe's political positions will also affect the decision. Each tribe will differ in the extent to which it wants to rely upon the DOI for support in managing resources. The level of tribal oversight or control over energy projects also will be affected by a political concensus on how much regulation of developers is appropriate.

APPROPRIATION OF FUNDS

Tribal governments may need to appropriate funds to implement resource planning and management programs. These funds would be used for three different purposes:

- Hiring in-house staff for the day-to-day tasks associated with minerals development
- Training tribal members to fill the staff positions
- Retaining specialists to perform special studies associated with the tribe's development options.

Appropriations for these purposes should be integrated into the tribe's normal budget-cycle so that the programs and staffing will be consistent with the other functions, priorities, and management directives of the tribal government.

Sources of revenue for these purposes may include general tribal revenues, royalties or other income generated by minerals production, or special tribal fees. Trust programs, such as BIA's self-determination grants under PL 93-638, may be appropriate for some activities.

Likewise, other Federal assistance programs may be applicable. These include the Department of Labor's CETA program, HUD's Community Development Discretionary Block Grants, EDA's economic development planning grants, EPA's environmental planning and management programs, and the Civil Service Commission's intergovernmental personnel programs. The resulting patchwork of programs may not match the tribe's priorities and may be difficult to integrate into a comprehensive, viable program for resource planning and management. Recently, general assistance funds for such programs have been made to certain tribes collectively through the Council of Energy Resource Tribes (CERT). The extent to which funding of such groups can compensate for the limited financial capability of individual tribes will depend on the funding level and the way in which the funds are allocated.

ORGANIZATIONAL FORMAT

The organizational placement of the minerals program in the tribal government will be influenced by at least four variables:

- (1) The size of the staff (e.g., a need for 10 staff-years may justify a separate unit, whereas a half-staff-year would not)
- (2) The type of tasks performed (e.g., production oversight activities may readily be isolated from other tribal functions, whereas planning or accounting tasks may not be separable)
- (3) The desired level of staff accountability to the tribal decision-makers (e.g., if a tribe wants the minerals staff to report directly to the governing body, an independent unit may be established; if direct oversight is less important, the minerals functions may be integrated into another department)
- (4) The tribe's unique organizational needs and preferences (e.g., a tribe without full-time salaried personnel will approach minerals organizational issues differently than a tribe with a larger staff that organizes tasks according to function or grant type).

These four factors will result in very different styles of minerals management. For example, tribes that have very limited tribal government staffs and few energy staff demands may wish to incorporate any minerals personnel into an inter-tribal group, such as the All Indian Pueblo Council. Three tribes that have a relatively large minerals staff -- the Osage, Northern Cheyenne and Crow -- have established identifiable "offices" (the Osage deal exclusively with oil and gas leasing operations; the Crow and Northern Cheyenne deal primarily with coal research). Conversely, the Navajo presently place their minerals staff within the Office of Program Development, which also includes economic development and land-use planning. Similarly, the Uintah and Ouray tentatively plan to include such staff within a Division of Resource Development.

Also, policies and procedures for liaison between the tribal minerals staff and BIA and USGS should be established. Many tribes already have a working relationship with these agencies for preparing minerals policies and decisions, but few have tackled the problem of conducting administrative and enforcement activities. Those tribes that plan to exercise their option to perform inspections, audits, or similar tasks^{1/} should work with BIA and USGS to delineate their respective areas of responsibility. By clarifying task assignments, the tribe may prevent unnecessary duplication of effort and channel its resources to the most needed program areas.

^{1/} This authority may stem from either the revised trust regulations, the tribe's rights and lessor, and/or the right to implement tribal codes and ordinances.

ALTERNATIVE PROGRAM DESIGNS

Each tribe that establishes a minerals' program will select the activities and organizational format that are suited to its unique needs and constraints. The decisions made will produce different approaches to tribal resource management programs. The purpose of this subsection is to illustrate some of the different program designs that could result from the decisions on the purpose of the functions, the activities selected, the resources required, and the preferred organizational format.

Three alternative energy resource program organization models have been developed on the basis of whether the tribe prefers to accept, augment, or supersede the management support activities currently provided by the DOI. The models stem from the following premises:

- Model I assumes that the existing (or revised) resource management activities under BIA and USGS regulations provide sufficient protection of tribal interests in resource development. In this case, the tribe would utilize only these services with very little or no increase in its staff workload or budget expenditure.
- Model II assumes that a tribe decides to participate more fully in planning and management activities either because it concludes that existing practices need to be upgraded or because it wishes to better exercise its discretion and decision-making powers under the revised regulations (e.g., review contract impact analyses, perform inspections or audits of operations). This model implies variable increases in workload and costs depending on the capabilities developed.
- Model III assumes that a tribe has codified its own set of minerals-related standards (e.g., Mine Reclamation Codes, Zoning Ordinances, Taxation Codes) to supersede the Interior Department regulations. While it is recognized that the tribe could incorporate these codes

into a contract thereby shifting the enforcement tasks to DOI, this model assumes that the tribe plans to assume responsibility for implementing its own standards. Consequently, certain tasks are made mandatory rather than discretionary under this approach.

Each model is discussed within the framework of the four decisions to be made on the proposed minerals office: (1) the purpose of the programs selected for a tribal government staff (e.g., assumptions regarding the program needs based on criteria noted in Section II); (2) the activities associated with those programs (e.g., the functional tasks listed in Exhibits II-4 to II-7); (3) the in-house resources required to perform the selected tasks (e.g., personnel needs implied by Exhibits III-10 and III-11) and estimated annual cost;^{1/} and (4) possible organizational formats for the minerals office.

Organizational Model I

Purpose of Program. This model has been designed to reflect those instances where a tribe develops a very limited in-house capability in the minerals area. The decision to follow this course of action may be based on several of the criteria noted in earlier sections. For example, a tribe that has not experienced demand pressures for its resources--perhaps due to insufficient quantities or quality--will have little need for staff to monitor operations. Relatedly, such tribes may have little or no income from energy production. And this lack of special revenues may impose a fiscal constraint on a minerals program. Another tribe may opt for Model I if it feels that the BIA/USGS activities adequately meet tribal energy development needs.

^{1/} Includes direct and indirect (e.g., space, supplies, equipment) cost factors.

Selected Program Activities. Conceptually, Model I could imply no energy-related activities above the current level of support provided by the DOI. The model assumes that most tribes want to adopt policies regarding energy resource management on the reservation even if they do not intend to develop their resources. At a very minimum, tribes may be expected to assign staff-time to monitoring such inter-tribal groups and to send delegates to their functions. In addition to this activity, the development of tribal policies may involve the following planning and administrative functions:

- Participate in the CERT or other inter-tribal policy groups
- Prepare minerals component of tribal resource inventory
- Prepare minerals baseline analyses of existing and anticipated uses of tribal resources
- Prepare minerals planning analyses to identify development impacts and options
- Prepare objectives and recommendations for development of mineral resources
- Identify major and minor conflicts between minerals and alternative resource development alternatives
- Adopt tribal decision-rules for minerals development
- Process, if production occurs, all forms and payments forwarded to the tribe by BIA.

Resource Requirements. This model does not necessitate any additional positions in the tribal government, but it could be expected to modify the responsibilities of tribal officials and any salaried staff. First, delegates to CERT will need to devote time to council meetings, in-house tribal policy sessions, liaison with BIA and USGS, and general energy research. Second, if the tribe chooses to prepare planning analyses

to support its minerals policies, this task, as suggested in Exhibit III-10, could require up to one-half staff-year of effort at an average annual cost of \$12,000-\$14,000.^{1/} If the tribal government already has a person or persons performing economic or related planning functions, it may be possible to modify the job description to include the minerals component. Third, if the tribe has an accounting/bookkeeping staff, any workload from production may be performed by those personnel. Finally, even the minimal level of effort will increase the clerical demands. Because costs of these positions will not be entirely charged to the energy management program, the accounting system should allow for recording of minerals workload so that costs will be distributed fairly.

Organizational Format. Tribes that follow the patterns suggested by Model I may need to alter job specifications and certain reporting relationships, but may not need to change their basic organizational structure.

Organizational Model II

Purpose of the Program. Model II has been designed to illustrate those instances wherein a tribe opts to develop an in-house planning and management capability to supplement the support provided by BIA and/or USGS. As was true for Model I, the selection of this approach could depend on several considerations. In general, this model assumes that the tribe either

^{1/} This estimate excludes the mineral resources inventory task since it currently is being performed by the BIA. The term "average" is used because USGS data are averaged over a number of tribes in different regions.

has or expects to experience energy development and that it has the fiscal capacity to undertake selected functions. A tribe could follow this approach if it adopts the policy position that the existing trust practices are insufficient to meet its needs and that tribal initiative is the only viable way to insure its objectives are achieved. Alternatively, the tribe may be satisfied with current practices but, in keeping with a policy of greater self-determination, wants to maximize the opportunities to oversee and manage developments that are provided in the regulations.

Selected Program Activities. In this model, all of the tasks performed represent discretionary expenditures, not mandatory ones. As for Model I, it is assumed that many of the tribes at least will participate in an inter-tribal policy group. At the upper end of the scale, the tribe could perform all of the activities listed in Exhibits III-10 and III-11. For the purpose of this presentation, the model assumes that the tribe will prepare analyses needed to develop policy goals and focus on those programs where USGS or BIA are especially deficient. This premise implies that the following tasks will be undertaken:

General

- Participate in inter-tribal policy group; hold tribal council or business committee policy meetings

Planning

- Prepare minerals component of tribal resource inventory
- Prepare minerals baseline of existing and anticipated uses of tribal resources

- Prepare minerals planning analyses to identify development impacts and options
- Prepare objectives and recommendations for development of minerals resources
- Identify major and minor conflicts between minerals and alternative
- Adopt tribal decision-rules for minerals development

Contracting

- Retain and work with financial, economic, environmental, and other experts
- Review contract impact analyses
- Prepare tribal inputs for specialists to prepare contract stipulations.

Oil and Natural Gas Operations

- Review development plans, prepare stipulations
- Perform detailed quarterly inspections of producing leases
- Perform semi-annual pollution inspections
- Perform semi-annual verification of production equipment
- Perform surface compliance checks
- Perform post-audits of lease accounts

Coal or Other Minerals Operations

- Review mine plans, prepare stipulations
- Perform detailed quarterly inspections
- Perform surface compliance checks
- Perform post audits of lease accounts.

Resource Requirements. If the workload parameters in Exhibits III-10 and III-11 are applied to the functions listed above, the in-house minerals program would require the following work levels:

- Tribal officials: assigned to tribal and inter-tribal policy and decision-making functions
- Planners: one-half staff year every three to four years to prepare the minerals component of the multiple-use planning and policy program^{1/}
- Petroleum engineers: approximately two staff-years to perform quarterly inspections of leases, pollution inspections, and equipment verifications (it may be more feasible to train the petroleum engineer or surface specialist in these areas)
- Mine engineers: approximately 0.3 staff-years to perform monthly inspections of leases, pollution inspections, and equipment verifications (it may be more feasible to train the petroleum engineer or surface specialist in these areas)
- Land-use planner: approximately 1 staff-year to review oil, gas, coal, or other development plans; prepare stipulations; and perform inspections
- Energy accountant: approximately one-half staff-year to perform monthly post-audits of oil, gas, coal, or other producing mineral lease accounts
- Support staff: approximately one staff-year to provide clerical and administrative support for the technical staff.

This basic workload would imply a staff equivalent to approximately five persons, for an annual cost of about \$173,000. At this level of effort, it may be appropriate for the tribe to include a position of "coordinator" or "manager" of energy planning and management activities. This individual would be responsible for integrating the diverse policy,

^{1/} This estimate excludes the task of preparing a minerals resource inventory since it currently is being done by the BIA.

planning, and operations activities into a consistent tribal program. The person could be assigned the following tasks:

- Prepare and present studies to assist tribal leaders in the preparation of energy goals and objectives. This would involve overseeing or synthesizing the planning analyses noted above.
- Serve as liaison between the tribe and BIA, USGS, and other federal and state agencies in minerals matters
- Coordinate all minerals-related studies prepared by the mining and petroleum engineers, economic development planners, education and training specialists, air and water quality planners, land-use planners, and tribal finance officers, and any other staff assigned such tasks
- Provide planning and technical assistance in energy matters to the tribe's financial officers and planners
- Maintain contact with appropriate persons in contractor organizations to learn about important events, trends, and decisions, and to use information to benefit tribal members and the tribe as a whole
- Develop procedures for inputs of individual tribal members in energy-related policy decisions.

The workload for these management activities will determine whether an additional staff-person is required or whether one of the technical personnel should simply be assigned these duties.

Finally, several other positions within the tribal government may be assigned energy resource tasks. They are:

Chief Financial/Accounting Position

- Review proposed royalty or other contract formulas; suggest alternative income sources
- Assure adequacy of performance bonds
- Review or supervise collection of and accounting for various forms of revenues

- Prepare capital and operating budgets and other financial data related to development and operations of support facilities; contribute to determination of infrastructure requirements
- Evaluate investment options for income from energy resource development
- Coordinate the development of procedures and provisions related to energy resource management activities--accounting and tax; monitoring and enforcement, (limited in scope); collection, distribution, investment, and use of various income sources
- Provide for bookkeeping, accounting and reporting of energy resource income and expenditures; supervise maintenance of accounts and records and preparation of regular and special reports
- Assist in audit of operations of companies that have contract(s) with tribe.

Personnel Director

- Establish and maintain a minerals-related skills inventory system.
- Coordinate development of and administer training/employment plans with contracting organizations; suggest content of employment and training provisions.
- Arrange for and carry out programs that inform tribal members of training, employment and income opportunities in energy resource fields
- Set up standard or special skill development programs for target occupations

Tribal Communications Officer

- Assist coordinator or manager of energy resources to communicate to tribal members about energy resource development matters including issues and conflicts in a clear, timely and reliable way
- Prepare written material on pertinent energy resource subjects for release to public and communication to tribal members.

Organizational Format. A tribe that parallels the Model II approach will select its organizational structure according to its workload in particular areas, its preferred line-of-responsibility, and similarly unique factors. Under the hypothetical workload assumptions presented above, a tribe would need a one-half staff-year effort in three areas that require very different skills: planning, accounting, and clerical activities. They would also need approximately two full staff-years in petroleum and mining engineering, and an undetermined work effort for general management.

This mix of personnel could be merged into the tribal government structure in at least two ways. First, the tribe may wish to make minerals activities a subset of its overall economic or land-use planning and management effort. In this case, the tribe could create a Department of Natural Resource and Economic Development (DNRED) that would include the minerals planning, engineering, and management activities. Accounting functions could be assigned to the tribal finance or accounting office. Exhibit IV-1 illustrates this concept of distributing staff among existing tribal departments. Second, if the tribal officials want to have more direct oversight and control over the energy activities, it may be appropriate to set up an identifiable energy resources department (minerals office) in addition to DNRED. However, under the staffing levels used herein, several staff would be assigned to the minerals office from DNRED on a part-time basis only. Exhibit IV-2 illustrates this alternative concept.

EXHIBIT IV-1

EXAMPLE OF AN ORGANIZATIONAL FORMAT FOR MODEL II:
DISTRIBUTION OF MINERALS TASKS AMONG FUNCTIONAL AREAS

* Connates some staff time devoted to energy resources tasks.

-- Dashed line connates optional organizational unit.

EXHIBIT IV-2

EXAMPLE OF AN ORGANIZATIONAL FORMAT FOR MODEL II:
CONCENTRATION OF MINERALS TASKS WITH DIRECT LINE AUTHORITY

* Connotes part-time positions.

-- Dashed line connotes optional organizational unit.

Organization Model III

Purpose of the Program. Whereas Model II focuses on a tribal planning and management program, the third model focuses on establishing a tribal regulatory role in the energy area. As an owner of minerals, the tribe may serve both as a resource manager and as a regulator. Therefore, the two models need not be mutually exclusive.

In this scenario, the tribe exercises its legislative authority by codifying a certain set of standards in a tribal ordinance that must be met by all developers and operators on the reservation. These tribal codes may set forth environmental, zoning, engineering, or other controls depending on the tribe's policy decisions. Once a tribe has adopted a minerals-related ordinance, it may assume total responsibility for enforcing the code or shift the burden to the trustee by including it as a contract stipulation.^{1/} To date, most of the environmental codes that have been adopted authorize tribal enforcement.^{2/}

Selected Program Activities. Model III entails a two-part process: the legislative activities associated with formulating or adopting a tribal ordinance and the executive or administrative activities needed to implement the code. The legislative functions may include preparing the policy guidelines, legal analyses, and technical studies needed to support the code stipulations. The political procedures needed to adopt the ordinance

^{1/} For example, the Navajo Minerals Code primarily is enforced by the Department of the Interior; likewise, the Crow's Environmental Health and Sanitation Ordinance is enforced by both the tribal police and the Indian Health Service.

^{2/} See Navajo Environmental Code and the Crow "Coal and Mining and Reclamation Ordinance;" the Crow "Land Use Zoning Ordinance;" and, in part, the Crow Environmental Health and Sanitation Ordinance.

are also included. If the ordinance delegates the responsibility and authority for enforcing the code provisions to the tribe, then the tribal administrators must develop the staff capability needed to implement them. The specific tasks and associated workload naturally depend on the type and content of the tribal regulations. For the purposes of illustrating this model, it will be assumed that a tribe has adopted a minerals code that requires tribal review of development plans, monitoring of operations, collection of revenues, auditing of operators activities, and enforcement of any other terms of the ordinance. In this case, the primary distinction between Models II and III is that, under Model III, the tasks in Model II are mandatory rather than discretionary. Also, the tribe will undertake the "plan review," "supervision," and account maintenance tasks currently performed by BIA and USGS (refer to Exhibit III-11) in addition to functions used in the Model II scenario. Similarly, if a tribe adopts an environmental or land-use code, then tribal funds and manpower must be allocated to those activities.

Resource Requirements. As is true for negotiating contracts, the staff capability needed for the legislative aspects of Model III will depend on the complexity of the technical issues and the tribe's own political process. If the tribe simply wishes to codify frequently used contract terms, the incremental effort may only involve adopting a resolution incorporating the desired provisions. Conversely, a tribe that wants to adopt a mining and reclamation code may need to retain legal, environmental, economic, or other experts who can tailor the provisions

to the tribe's unique authorities and jurisdiction, the reservation ecology, and production and reclamation economics of the tribe's mineral reserves. Furthermore, the political processes involved in adopting a code (e.g., council meetings, public hearings, and drafting sessions) may take an indeterminant length of time, and will affect the costs of the retained experts. In light of the uncertainties and variations associated with the legislative component of Model III, no staffing or cost estimates have been prepared for this phase of implementation.

For the hypothetical tribe used in this report, the monitoring and enforcement aspect of a minerals code could necessitate a staff of approximately four petroleum engineers, one full-time and one-half time accountant, one surface specialist, and either a part-time mine inspector or the petroleum engineer or surface specialist trained in this minerals area.^{1/} This staff would be in addition to any other minerals personnel needed for tribal planning, contracting, or policy functions. Based on Exhibit III-11, the total cost of these activities would be approximately \$232,000. If the planning and general management activities are added to these tasks, the total annual cost of the in-house capability would approach \$246,000.

Organizational Format. While it is important again to note the tribe's discretion in structuring its staff, the workload level and the regulatory nature of the tasks under Model III may further warrant that an independent "Code Commission" be established. Two trends weigh in favor of this approach. First, once the tribe has exercised its legislative

^{1/} This represents a 2 staff-year increase over Model II.

prerogative to adopt the ordinance, it may be desirable for the staff to be able to carry out the tribal mandate free from the discretion and political pressures that govern "executive" functions. At the same time, the tribal governing body has a continuing responsibility for devising code(s) (e.g., for minerals operations; for environmental protection) to meet tribal needs. And the tribe may want to guide and oversee code administration. One approach to reconciling the need for independence with the need for oversight is to establish a "commission" consisting of both technical experts and tribal officials. This commission would set policies and decide major cases, and have its own support staff (e.g., the engineers and accountants).^{1/} Energy planners or other staff may remain in an executive department, such as DNRED. Secondly, the size of the staff and its specialization in one particular area may justify functional separation from other areas, even from the energy planning activities. Exhibit IV-3 illustrates this proposed approach to placing code authorities (e.g., minerals environment, land use, etc.) within the governmental structure. Finally, it is important to note that such a separation of the regulating from the policy functions may either increase the code group's effectiveness by maintaining independence or decrease its effectiveness if the office becomes isolated from the mainstream of tribal policy.

^{1/} One example of this approach is the Navajo Environmental Protection Commission (NEPC).

EXHIBIT IV-3

EXAMPLE OF AN ORGANIZATIONAL FORMAT FOR MODEL III

V. ASSESSMENT OF ALTERNATIVE CONTRACTUAL ARRANGEMENTS
AND CONTRACT MANAGEMENT REQUIREMENTS

INTRODUCTION

This analysis of alternative contractual arrangements examines issues and suggests options tribes might pursue. Until the past few years, mineral leasing of tribal lands was carried out principally by the Bureau of Indian Affairs (BIA) with assistance from the U.S. Geological Survey (USGS). Although tribal approval of leases was required, tribes were discouraged from making any substantive contribution about the terms and conditions of agreements. Now, at the same time that tribes are exploring ways to exercise more control over mineral development on their reservations, BIA has issued proposed revisions to the regulations governing mineral development. The revisions are based on a recognition of the authority of Indian mineral owners, both tribal and individual, to exercise greater responsibility in the development and management of their minerals and other natural resources.^{1/} The proposed regulations offer tribes more flexibility in structuring agreements with mineral companies. Instead of the almost exclusive use of form leases, there is greater emphasis on negotiated agreements. In terms of operating and environmental stipulations, the proposed regulations also recognize the authority of tribes to issue regulations and to enforce contract provisions. An important point for tribes to recognize about this policy shift is that the former inadequacy of

^{1/} Federal Register, "Proposed Rules - Department of the Interior, Mining on Indian Lands (25 CFR Parts 171, 177, 182 and 183)," April 15, 1977. pp. 18083-18099.

the regulations is being replaced by open-endedness under the proposed revisions. As a result, tribes choosing to exercise their prerogative for greater involvement and control may be faced with a great many decisions, some highly technical in nature. This section highlights those decisions without making specific recommendations to the tribes.

The material in this section is intended to provide tribes with information that is general in nature. In drafting and negotiating specific agreements and regulations, tribes should consult mineral experts for advice. These experts include lawyers specializing in oil and gas or mining law, accountants familiar with the energy resource industries, geologists, and mining and petroleum engineers.

MINERAL INVENTORIES

Tribes having energy resources need mineral inventories of their reservations to adequately evaluate their development options. Without such inventories, tribes are at a disadvantage in several respects:

- They are limited in their planning to basing decisions on very rough estimates of both the extent and the value of their resources.
- Tribes are unable to stimulate competition among potential developers of their minerals.
- Tribes that choose to hold lease sales are unable to establish minimum acceptable bids before the sale is held.
- In their attempts to negotiate agreements with mineral companies, tribes run the risk of asking for too much or too little in return for development rights because they do not know the market value of those rights.

Because many tribes are currently parties to lease agreements that provide them with unsatisfactory financial returns, there is now a tendency for some to go to the opposite extreme and demand returns that will make their resources

uneconomical for companies to develop. Until tribes have access to more objective information on the nature of their resources and market conditions, this is likely to continue. A frustration repeatedly expressed by representatives of tribes that have had experience with mineral development was that of constantly being placed in a position of dealing with companies that have more information about the tribe's resources than the tribes themselves have.

In 1975, the Bureau of Indian Affairs (BIA) began a Mineral Inventory Program to be carried out under an interagency agreement with the Bureau of Mines and the U.S. Geological Survey. The program was structured as follows:

- Phase I - literature search and summaries of mineral potential by reservation
- Phase II - detailed field investigations on selected reservations (i.e., those that showed mineral potential in Phase I)
- Phase III - qualification of occurrence, quantity, grade, metallurgical recovery, and marketing potential of resources on selected reservations.

The projected completion date of the program is the mid-1980's. Not all of the tribes that have been approached by mineral companies will be getting inventories. Even among those tribes that will receive them, the timetable for program completion was of concern to tribes faced with major development decisions at the present time. Many tribes indicated they would prefer to have funds allocated directly to the tribes and contract for exploration themselves. Some tribes have contracted for exploration of small areas of their reservation using tribal funds; however, most tribes simply do not have the financial resources to explore the entire reservation.

One way to deal with this problem might be to model a fund after one established by the United Nations Development Program. A number of developing nations faced problems similar to those of the tribes because of their inability to finance exploration. In response, the United Nations established a revolving loan fund through which the developing nations' governments could borrow exploration funds. Repayment was based on the premise that these countries would be able to negotiate better financial agreements with mineral companies if they had more information about their minerals. Also, it was anticipated that the countries' tax base would expand as a result of mineral development, providing a source of funds for loan repayment. In the latter respect, tribes differ from developing countries. The issue of company taxation by tribal governments is now in the courts, and at present an increased tribal tax base does not result from mineral development. Until the courts rule on this issue, a combination of Federal grants and loans might be a more appropriate method of financing tribal mineral inventories.

EXPLORATION AGREEMENTS

In the absence of funding for exploration purposes, tribes are forced to rely on exploration permits with mineral companies as their only means of selecting tracts for development. This has the effect of placing tribes in a reactive position instead of one in which they are able to initiate tract selection for development.

There are two types of exploration permits--non-exclusive and exclusive. A non-exclusive permit allows several companies to perform basic geological investigations in specific areas. Any of the companies can then request that a lease sale be held. An exclusive permit allows one company to conduct a broad range of geological exploration, including drilling. It usually includes an option to lease. Since non-exclusive permits do not

give an exclusive leasing option, there is little incentive for a company to invest in exploration. On the other hand, under an exclusive permit, a tribe is in the position of having to make a long-term decision to lease without adequate information about the minerals on the tract.

One approach that some tribes are using to avoid the latter problem is to limit the company's development option to a specified acreage or require that the development agreement be in a checkerboard pattern. In other words, the tribe requires the permittee to provide data about the entire permit area, but does not allow the permittee to develop more than a specified acreage. The tribe is then in a more advantageous position to negotiate a better contract on the land not taken up under the exclusive option. Exhibit V-1 presents advantages and disadvantages of the two types of permit as they are presently used.

EXHIBIT V-1

COMPARISON OF ALTERNATIVE EXPLORATION PERMITS

Type of Exploration Permit	Advantages	Disadvantages
<p><u>Non-Exclusive</u></p> <p>Allows several companies to perform basic geological investigations in specific areas.</p>	<p>(1) Tribe doesn't have to make an immediate commitment to a company for development rights.</p> <p>(2) Agreements can be quickly drafted and signed.</p> <p>(3) Tribe receives exploration fees without making a commitment to develop its land.</p>	<p>(1) Historically, companies have been unwilling to share with tribes information obtained through non-exclusive permits. There is no reason, however, that tribes should not stipulate in every exploration permit requirements for quarterly reports on holes drilled, geological and geochemical analysis, seismic tests, etc. In some cases, tribes may even want to have core samples analyzed by their own specialists.</p> <p>(2) Companies are unwilling to make a substantial investment in exploration.</p>
<p><u>Exclusive</u></p> <p>Agreement with one company to conduct broad range of geological exploration, including drilling. Usually includes an option to lease.</p>	<p>(1) Usually provides for all geological and geophysical information to be available to the tribe.</p> <p>(2) Usually requires the company to spend a minimum annual amount on exploration. This helps to avoid speculative holding if the required expenditure is large enough.</p> <p>(3) Tribe can limit the lease option to a specified acreage or require the development agreement to be in a checkerboard pattern.</p>	<p>(1) If a mineral-rich area is found, the tribe will probably receive lower royalties than if the tract had been offered competitively.</p> <p>(2) Tribe is making a long-term decision to lease without adequate information about minerals on the tract.</p>
<p>Note: Some of the observations contained in this chart are drawn from Tom Luebben, "Mining Agreements with Indian Tribes," <u>American Indian Journal</u>, May 1976, pp. 3-4.</p>		

Under the proposed revisions to 25 CFR 171, exploration permits conferring mining rights or options to such rights may be approved in two steps: Approval may first be given to that part of the permit relating to exploration, with approval of the mining aspects being delayed until the option to mine is exercised. ^{1/} While this provision seemingly addresses the tribes' problems with exclusive permits, from the company's perspective the value of an exclusive permit is diminished. The company is likely to believe that it is risking money for exploration without knowing what kind of demands (financial and otherwise) a tribe might make on the company as a condition of allowing the mining option to be exercised. In the case of tribes believed to have very extensive deposits, companies may feel the risk is worth taking. Companies have accepted exploration agreements without exclusive options in some developing countries. However, in the case of tribes believed to have more limited resources, companies may feel the potential discovery is not worth risking exploration funds.

In the latter case, both the company and a tribe seeking to develop its resources are in somewhat of a dilemma. Although it would probably be useful for each party to discuss the terms it is seeking under alternative assumptions about the results of exploration, this solution is far from satisfactory. The possibility exists that by the time exploration is completed and exercise of the mining option is imminent, a new tribal government may be in office with significantly different ideas about mineral development. Tribal mineral inventories would help alleviate the need for exploration permits so that this problem, as it affects both the tribe and the company, could be avoided.

^{1/} Ibid. p. 13086, S.171.6(c). It should be pointed out that this does not apply to oil and gas contracts. Under proposed section 182.9 of the Regulations, no preferential right to lease or develop may be included in a prospecting permit.

A final point concerning exploration agreements is that tribes should insist on having any information generated through exploration activity, whether under an exclusive or non-exclusive permit. The "Reports" clause in standard BIA exploration permits (except oil and gas) does not require a company to submit a report on its findings until after the permit terminates. While oil and gas exploration permits require monthly reports to be submitted to the BIA Superintendent, the only information required concerns the location of exploration activity. Reports on findings are not even mentioned. Tribes may want to strengthen this clause to require submission to the tribe of monthly (for oil and gas) and quarterly (for other minerals) reports detailing the location of all core and shot holes, results of core samples analyses; results of seismic tests; and reports on all geological, geochemical, and other analyses completed during the period. Companies may balk at supplying tribes with interpretive reports of their findings. In such cases, tribes can have the raw data submitted by the company interpreted by their own geologist or mining or petroleum engineer hired on a consultant basis. It may also be worthwhile for the tribe to consult with such technical specialists before signing an exploration agreement, in order to ensure that all useful documents are specified under the reporting requirements provision.

LEASE SALES VS. NEGOTIATED CONTRACTS

The most common method of arranging for mineral development on reservation lands is through competitive bid lease sales. A company (often one that conducted exploration under a non-exclusive permit) requests the tribe to hold a lease sale for particular tracts of land. If the tribe

agrees, the sale will be advertised 30 days in advance. Lease terms are typically standardized. Interested companies then submit competitive bonus bids, with the lease awarded to the highest bidder.

Negotiated contracts involve an attempt by a company and a tribe to arrive at a mutually satisfactory agreement. In the past, tribes have had to secure permission from the BIA Commissioner before entering into negotiations. Under the proposed revisions to 25 CFR 171, tribes may negotiate agreements with companies without having to secure such permission from the Assistant Secretary for Indian Affairs.^{1/} Alternatively, tribes may continue to rely on competitive bid lease sales, although bidders may now compete on such terms as rental and royalty rates, in addition to bonuses.

Competitive bid lease sales are most suitable for tribes that prefer not to take an active role in mineral development. Otherwise, tribes may want to rely on competitive bidding primarily as a means to identify companies offering acceptable financial provisions and with which the tribe can negotiate non-financial provisions.

Lease sales have the advantage of being less expensive in the short run than negotiation as a means of contracting with a mineral developer. In addition, tribes do have the option of adding stipulations to a form lease and for some tribes, this may provide an adequate means to address tribal concerns in the contract. For cases in which the tribe contemplates major revisions of the provisions contained in a standard form lease agreement, it has the following options:

^{1/} Under the proposed revisions, oil and/or gas leases by tribes not organized under the 1934 Reorganization Act are to continue to be offered through competitive bidding. If a satisfactory agreement cannot be arrived at through the lease sale, negotiation is then permitted.

- Oil and Gas: (1) The tribe can retain a minerals lawyer to draft a revised form lease for the exclusive use of the tribe on a standardized basis. The tribe can then stipulate provisions for operations, reporting, environmental protection, etc., which reflect local conditions and circumstances and with which it wants all future operators on its lands to comply. This lease would replace the standard BIA form lease for oil and gas mining in any subsequent advertisements for lease sales on reservation lands.

(2) The tribe can negotiate agreements with companies on a case-by-case basis.^{1/}
- Coal and Uranium: Because there is less room for standardization of provisions in coal and uranium agreements (particularly environmental protection and reclamation provisions), tribes that want to avoid use of the standard BIA mining lease have little choice but to negotiate agreements with companies. Through negotiation there is assurance that the tribe's specific concerns relative to the area to be mined will be addressed.
- Geothermal and Oil Shale: Because these two resources involve the use of relatively new technologies, tribes should probably consider avoiding the use of standardized BIA forms for mining and negotiate development agreements with the assistance of specialists familiar with these resources.

Exhibit V-2 compares advantages and disadvantages of lease sales and negotiated agreements.

^{1/} See footnote 1 on page V-10 with reference to the continuing prohibition against negotiated oil and gas contracts with unorganized tribes.

EXHIBIT V-2

COMPARISON OF LEASE SALES AND NEGOTIATED CONTRACTS

LEASE SALES		NEGOTIATED CONTRACTS	
Advantages	Disadvantages	Advantages	Disadvantages
<p>Less expensive than negotiation</p> <p>Tribes can add relatively minor stipulations to a BIA form lease.</p> <p>Tribes can develop their own "form leases" with standard terms and offer them for bids</p> <p>Lease sales using tribally developed forms may be most cost-effective for oil and gas development.</p> <p>Royalties, bonus, and rentals may be subject to competitive bid. Development requirements may be negotiable.</p>	<p>Terms of BIA form leases tend to be standardized so that they do not always reflect conditions on different reservations or different parts of a reservation.</p> <p>Not good for such resources as geothermal or oil shale, which involve the use of new technologies.</p> <p>Not good for coal and uranium, which often involve major changes in reservation life-styles that must be addressed and may require special environmental and reclamation provisions.</p> <p>It is difficult to include non-resource-related benefits, such as employment and training, under this procedure.</p>	<p>Tribes with significant resources may be able to secure better financial terms than are available through lease sales.</p> <p>Training/employment and environmental provisions can be tailored to fit the needs of particular reservations.</p> <p>Tribes can further their development objectives by negotiating specific provisions to achieve them.</p>	<p>Requires a financial outlay by the tribe to retain negotiators (mineral specialists, lawyers)</p> <p>Does not work well where there are strong tribal factions opposing mineral development.</p> <p>If the tribe does not have good information on its minerals and the company does, the tribe will be in a disadvantageous negotiating position.</p>

Negotiation of Agreements

The single most important point to be made concerning negotiation by tribes is that it should not be attempted without technical advisors. Tribes that balk at paying for the necessary expertise may end up short-changing tribal interests in the long run. A well-drafted, balanced agreement will more than compensate the tribe for the expense incurred in negotiating it. Mineral companies have more experience than tribes in negotiating agreements and they do not hesitate to use legal, engineering, and financial specialists. Tribes should follow their lead. Particular care should be taken in selecting a lawyer to represent tribal interests. At a minimum, this lawyer should be an expert in the area of mineral development. Many tribes have found that the lawyers they generally use for tribal business are not able to provide adequate legal advice in such a technical area as energy resource development.

Studies of developing nations have identified a number of factors that affect a country's position in negotiating with mineral companies.^{1/} Some of these factors are paraphrased below to reflect a tribal perspective:

- Stability and unity of tribal government. The presence of strong tribal factionalism will weaken the tribe's position. Some companies will perceive too much risk and pull out, while others may attempt to play one faction against another.
- Knowledge of the industry and access to industry specialists. These will strengthen the tribe's position.
- Cost to the company of developing resources on tribal lands, relative to costs associated with development on non-tribal lands. The tribe

^{1/} Smith, David, and Louis Wells, Jr., Negotiating Third World Mineral Agreements: Promises as Prologues, Ballinger Publishing Co., Cambridge, Massachusetts, 1975, p. 15.

should consult with financial experts to assist the tribe in identifying the financial provisions that would maximize financial returns to the tribe while providing the company with an attractive profit.

- Grade and quantity of minerals that the tribes own. Tribes with large, high-grade deposits are in a stronger negotiating position than tribes owning lower grades and/or smaller quantities of minerals.
- Risk and uncertainty associated with development. Tribes holding proven reserves (i.e., those that have been located and determined to be recoverable) are in a stronger position than tribes having only potential reserves.
- A clear identification of tribal priorities and a range of acceptable terms for key provisions sought in the mineral development contract. The priorities should remain fixed, while the provisions should be negotiable. To paraphrase an observation made about developing nations, "tribes have a better chance of getting what they want if they have identified some specific things they would like to have" prior to the start of the negotiations.

To carry the idea of specificity a step further, the agreement itself should be as precise and specific as possible. Another Third World analogy that applies:

Attempts to negotiate precise, balanced provisions have had the advantage of testing the parties' good faith at the outset of the arrangement. If there are differences in expectations, efforts to be precise in the agreement will help to flush them out early. Moreover, there has probably been a certain amount of self-enforcement built into provisions that are specific. Companies are almost certainly less likely--even when government administration is poor--to violate clear provisions than they are to violate the spirit of provisions that are ambiguous. This same pressure probably operates on the government side. 1/

1/ Ibid., p. 165.

An example of this concept would be the issue of employment of tribal members in mining projects on the reservation. A provision as vague as, "the company will give preference in hiring to qualified tribal members" requires nothing more than a "best efforts" attempt by the company. On the other hand, a stronger provision would be one where the company agrees to undertake training of tribal members, in coordination with a certified apprenticeship program,^{1/} with plans for training a specified number of tribal members to be submitted to the tribe for approval by an agreed-upon date. Additionally, the provision might require the tribe: (1) to identify candidates for training based on criteria mutually agreed upon by the company and the tribe; and (2) to furnish a tribal training coordinator to work with the company to implement the program. The tribe might want to have the company provide quarterly or semi-annual reports on the progress of the program.^{2/}

Another technique that some tribes may want to explore as a means of improving their negotiating position involves making an effort to provide the first draft of a contract agreement rather than always using a company's first draft as a basis for negotiation.^{3/} Although this requires an "up front" investment by the tribe (since it will require the assistance of someone expert in drafting minerals contracts), it is generally acknowledged that the party presenting the first draft of the contract has an edge in negotiations that will justify the cost involved. Further, by going through the process of identifying its priorities and establishing ranges of acceptable contract provisions within each priority area, the tribe is in a better position to

^{1/} Certified by the U.S. Department of Labor, Bureau of Apprenticeship Training.

^{2/} Volume III of this study addressed resources available for training in greater detail.

^{3/} Smith and Wells, op cit., p. 157.

clarify its position and identify areas of internal conflict. Areas in which tribal officials have disagreements should be resolved before beginning negotiations with a company.

ALTERNATIVE CONTRACTUAL ARRANGEMENTS

Tribes can structure their contractual relationships with mineral development companies by using leases and variations thereof (such as operating agreements), joint ventures, and service contracts.^{1/} It has been the case with developing countries, and will probably hold true for tribes as well, that the form chosen often has more political than economic or management significance.^{2/} Partial ownership of an operation may be an important goal politically, even where tribal control of the operation remains more of a regulatory than actual management nature. Management control implies tribal involvement in decisions concerning such matters as rate of development and day-to-day operations. Regulatory control, however, is oriented toward approval of operating plans and reclamation plans and toward enforcement of performance standards with which companies are to comply. Unless the tribe's goal is eventual full ownership and management of an operation, it would probably better serve the tribe's interest to invest its human and financial resources in strengthening tribal capability to evaluate proposed projects and work plans and monitor company operations through a tribal minerals office. If a tribe lacks the capability to evaluate and monitor projects proposed by outside companies, it surely will not be in a position to successfully initiate and manage its own ventures.

^{1/} Unorganized tribes may not negotiate operating agreements, joint ventures, or service contracts to develop oil and gas.

^{2/} For a discussion of this concept, see Raymond F. Mikesell, Foreign Investment in the Petroleum and Mineral Industries, Baltimore: The Johns Hopkins University Press, 1971, p. 30.

Leases and Operating Agreements

Under the simplest form of lease agreement, the tribe grants a company mining or development rights in return for a royalty payment on the minerals extracted. A more complicated variation of a lease is an operating agreement where, in addition to a royalty interest, the tribe receives a net profits interest (i.e., it shares in the profits generated by the operation). It is important to note that leasing does not have to be limited to BIA standard form agreements. Leasing can provide for a great deal of flexibility in financial provisions, as well as control of operations by the tribe. Exhibit V-3 suggests a range of alternative ways that financial provisions can be handled in a lease. Under the proposed revisions to 25 CFR 171, tribes are essentially free to negotiate any lease terms, financial or otherwise, that they can get the Secretary of the Interior to approve and to which they can get a company to agree.

EXHIBIT V-3

VARIATIONS OF LEASE CONTRACTUAL FORM

Financial Provision	Method of Computation	Factors To Be Considered	Required of Tribe	Risks
(1) Percentage of Market Value	Market value is a figure calculated to reflect: the highest price paid for production of like quality in the same field, assuming a transaction between independent parties; posted prices (i.e., those offered by refineries for certain grades of crude oil) and FPC prices (for natural gas). This provision is most frequently used with oil and gas leases. Great care must be taken to specify the value on which the percentage is to apply.	<ul style="list-style-type: none"> Tribe benefits from increases in the market value of its resource but will experience declining revenues if market value falls. Integrated companies producing for sale to affiliates are likely to balk at market value royalties since they may be selling at artificially low prices. 	<ul style="list-style-type: none"> Tribe can rely on market valuation calculated by USGS and hire its own auditors annually to verify valuation accuracy and payments. If the tribe does not want to rely on USGS valuation, it will have to establish its own royalty accounting office with access to a market valuation team. 	<ul style="list-style-type: none"> Fluctuations in market value. High royalty rates will discourage extraction of marginal resources having low market value.
(2) Percentage of Price Received By Developer Company	Contracts are usually structured so that the tribe would receive the greater of: a specified percentage of the price received by the developer for the tribe's minerals or a minimum royalty per ton, barrel or thousand cubic feet of minerals extracted. Applies mostly to minerals sold to a purchaser under a long-term contract. A tribe would not want to use this method if the purchaser was an affiliate of the developer (e.g., a utility that owned the mining company because the purchaser may be paying the mining company less than market prices).	<ul style="list-style-type: none"> Price received by a company under a long-term contract may be lower than market value, reflecting non-price concessions in the contract. When using this form of royalty, the tribe should pay particular attention to the price formula being used by the company--price escalation clauses should be analyzed by a minerals accountant. A well-structured price escalation clause can assure the tribe of a gradually increasing income stream that reflects inflation. 	<ul style="list-style-type: none"> Where numerous shorter term contracts with purchasers exist, continuous monitoring of transactions and verification of prices is necessary. Regular post audits of transactions are needed even with long-term purchase contracts. Tribe will have to assume this function or hire auditors. 	<ul style="list-style-type: none"> During later years of a long-term contract, the purchase price may fall below market value (a trade-off for the security of a long-term purchase contract). High royalty rates will discourage extraction of marginal resources having low market value.

EXHIBIT V-3 (Cont.)

Financial Provision	Method of Computation	Factors To Be Considered	Required of Tribe	Risks
(3) Percentage of Market Value or Price Plus a Tax on Company Profits	Either of (1) or (2) above plus a specified percentage of company profits on the reservation operation. A graduated percentage schedule where the company pays a higher percentage on profits over a given amount may be included.	<ul style="list-style-type: none"> While tribes as sovereign entities have the right to tax, attempts by tribes to preempt state taxation of company income will surely be challenged in the courts. Unless tribal taxation is upheld, the resulting double taxation will discourage development on the reservation. Taxation can yield significant increases in revenue to the tribe. Company profits are difficult to calculate when overhead covers not only the operation on tribal lands, but other company projects. 	<ul style="list-style-type: none"> Administration of taxation requires an expert staff of monitoring and audit personnel to verify company transactions, audit financial statements, and calculate taxes. 	State government court challenges of tribal taxation, probably requiring a Supreme Court decision ultimately. Litigation expenses may be high. Development may be delayed until a decision is reached.
(4) Percentage of Market Value or Price Plus A Severance Tax	Either of (1) or (2) above plus a specified price per ton, barrel, or thousand cubic feet extracted or a tax on the value of the resource.	<ul style="list-style-type: none"> If the state also imposes a severance tax, companies will balk at double taxation. Tribes imposing severance taxes have been challenged in court by companies. No decision has yet been reached on this issue. Provides an additional fixed revenue source not contingent on the market. 	<ul style="list-style-type: none"> Moderate administrative machinery, primarily a special accounting system and some auditing. 	Company resistance to being taxed by a tribe and the state. Litigation expenses.

EXHIBIT V-3 (Cont.)

Financial Provision	Method of Computation	Factors To Be Considered	Required of Tribe	Risks
(5) Percentage of Market Value or Price Plus Production Sharing	Either of (1) or (2) above plus a specified in-kind percentage of the mineral produced.	<ul style="list-style-type: none"> Provides tribal members with an energy source for their own use. Provides a fuel source for tribal manufacturing enterprises. Tribes could potentially take production in-kind and market it themselves if there is a wide discrepancy between the value they are being paid and the market value of their resource. 	<ul style="list-style-type: none"> Provision for transportation and storage of fuel. Monitoring of production quantity in order to assure tribe is receiving all fuel due. 	None on production sharing.
(6) Flat Rate Based on Production Volume	Production company pays a stipulated amount on each ton, barrel, or thousand cubic feet extracted.	<ul style="list-style-type: none"> Does not maximize revenues to the tribe 	<ul style="list-style-type: none"> Minimal administration, chiefly monitoring production volume of company. 	Tribe has no protection from inflation or increases in market value of its resource.
(7) Royalty Plus a Percentage of Profits	Tribe elects to receive a standard royalty during the period the operating partner recoups its investment. Once the venture begins to generate profits, the company and tribe divide profits (on a 50-50, 60-40 or other percentage basis).	<ul style="list-style-type: none"> In contrast to joint ventures, the tribe does not have to go through a several-year period during which no revenues are coming in. Accounting provisions are critical in determining when profits are generated. They should be carefully reviewed by accountants familiar with accounting practices of the minerals industry. 	<ul style="list-style-type: none"> A minerals office staff of accountants; financial consultants and industry specialists to advise the tribe. 	Unless the financial records of the operating company are closely scrutinized, the expenses charged to the operation by the company may be inflated, reflecting lower profits than are actually being made.
(8) Sliding Scale Royalty	Royalty percentage to the tribe increases as the price of the resource increases, as volume of production increases, or both. Often includes a minimum guaranteed royalty in addition to sliding percentages.	<ul style="list-style-type: none"> This type of provision is a useful tool for maximizing tribal income on the theory that the greater the production or the higher the price of the resource, the more likely there will be a geometric increase in profits, which should be tapped by a higher royalty. Company expenses increase over time, so market value increases due to inflation will be partially offset by increased costs. 	<ul style="list-style-type: none"> Regular audits to verify sales prices and volume of production reported by companies. 	As long as the tribe has a minimum guaranteed royalty, it is assured of some income. Tribe benefits from increases in value.

Operating agreements are relatively new to tribes, so it may be some time before an evaluation can be made of whether they significantly increase tribal minerals income. Operating agreements, unlike joint ventures, require no equity investment by the tribe. Instead the tribe typically receives a standard royalty payment during the initial stages of operation. This is supplemented or replaced by a profit share once the project begins to generate profits (i.e., the company has recouped its investment plus expenses of operation). The accounting provisions of an operating agreement are of critical importance in determining whether and when the operation becomes profitable and the tribe can begin collecting its share of profits. Tribes need accountants familiar with practices of the minerals industries to review their agreements, giving particular attention to all overhead charges and the treatment of equipment costs. Even though the tribe is not making a financial investment in the operation, its return, over and above the royalty payment, is determined by the methods used by the company to account for its investment and expenses. Two examples should illustrate the importance of the accounting provision:

1/
Salvage Value of Equipment. Proceeds from the sale of equipment used in an operation are typically treated as income to the operation. In many businesses, the salvage value of equipment is small relative to its original cost. This is not the case, however, for some of the equipment used in mining and oil and gas operations. Drilling rigs, for instance, actually appreciate in value because there is such a shortage of them. Tribes should, therefore, question a clause to the following effect if it appears in an agreement proposed to them:

1/ Salvage value refers to the actual or prospective selling price of equipment that is used (or secondhand), less any cost, actual or estimated, of disposition.

Proceeds from the sale of equipment acquired for the operation are to be credited against unrecovered costs of operation in calculating net profits. Such proceeds will not exceed the actual cost of the equipment.

What this means is that the company does not have to credit any profit made from the sale of equipment to the operation, even though it charged the operation with the cost of that equipment. Where the tribe's interest in an operation is being charged with equipment costs, provisions like the above should be avoided.

Interest on Credit Balances. Once an operation begins generating profits, provision for their distribution may be on either a monthly or quarterly basis. This has the effect of providing the company with use of the tribe's share of profits until payment is made to the tribe. In order to maximize the financial return to the tribe, a provision may be inserted in the agreement to ensure that all funds that are not needed for disbursement for 10 days or more will be invested in an interest-bearing account with interest earned on the tribe's share to be payable to the tribe.

Operating agreements typically provide for a Management or Review Committee composed of tribal representatives. The Committee's function is essentially one of reviewing proposed work plans and acting as a liaison with the tribal council. Under operating agreements we have reviewed, the Committee is generally not given veto power over specified decisions, as might be found in a joint venture agreement. Again, because tribes have had minimal experience with operating agreements, it is difficult to judge whether the role of Management or Review Committees should be strengthened in future agreements. Tribes that are parties to such agreements could render a significant service to other tribes by sharing their observations and experiences over the next few years.

In drafting operating agreements, particular attention should be given to provisions for the following:

- Water
- Rights-of-Way
- Easements
- Reclamation
- Eminent Domain
- Roads and Pipelines
- Conservation of Resources
- Environmental Protection
- Multiple Uses of Land.

Before deciding whether an operating agreement is likely to be in the tribe's best interest, financially and otherwise, the tribe should have the company submit a development proposal that includes:^{1/}

- Development and operation procedures
- Plans for treatment and handling of the mineral
- Transportation of the mineral and operating supplies needed
- Power, fuel, and water requirements
- Marketing plans
- Program and capital budget
 - An itemized budget of capital expenditures
 - An itemized forecast of operating costs
 - Itemized estimated cash requirements and expenditures
 - Costs of any construction program
 - Itemized estimates of mineral production.

^{1/} Zorn, Steve, "Developing Mineral Policies" in Hard Choices: Development of Non-Energy, Non-Replenishable Resources, published by Americans for Indian Opportunity, Albuquerque, N.M., pp. 77-78.

If a tribe does not have financial analysts on its staff, it should have access to them through either its accountants or university business schools. Companies do not propose agreements to tribes without analyzing the numbers to estimate when the operation can be expected to become profitable. Tribes should not sign an agreement without doing the same.^{1/}

Joint Ventures

Definitions of what constitutes a joint venture vary. For purposes of this report, we define a joint venture as an agreement requiring a monetary investment by the tribe. Operating agreements are similar to joint ventures, but as we have defined them, they require no monetary contribution by the tribe. Some of the materials written on tribal resource development refer to operating agreements as joint ventures, suggesting that a tribe does not have to make a monetary investment to become a joint venture partner. The discrepancy is due to the fact that "operating agreement" and "joint venture" are broad terms, each encompassing a variety of deals, and in some cases they may overlap. What is more important than the term used to classify the agreement are the terms or provisions stipulated in the agreement.

Exhibit V-4 describes alternative financing provisions for two broad categories of joint venture agreements -- working interest and carried interest. Under a working interest, the tribe invests capital in the project

^{1/} For more detailed discussions of operating agreements, see: Robberson, R. T., "Mining Joint Operating Agreements," in Rocky Mountain Mineral Law Institute, 1968, Boulder, Colorado, pp. 309-381, and R. T. Robberson and William Van Bebber, "Whatever Happened to the Model Form Joint Operating Agreement," Rocky Mountain Mineral Law Institute, 1972, pp. 410-433.

and shares in profits and losses in proportion to its investment. The tribe must have access to substantial funds for investment in order to receive a working interest. A carried interest may be used in cases where the tribe does not have substantial equity funds available. In this situation, the company advances all of the funds needed for exploration and development. Once the venture begins to generate a profit, the tribe's share of the profits goes to the company until such time as the company has been reimbursed for the share it advanced to the tribe.

EXHIBIT V-4

JOINT VENTURE VARIATIONS

Financing Provisions	Structure of Agreement	Factors To Be Considered	Required of Tribe	Risks
(1) Working Interest	Proportionate shares of capital contributed by each partner. Tribe elects the proportion of equity it wishes to contribute (0%-50%) to the venture. Tribe shares in profits and losses proportionately.	<ul style="list-style-type: none"> • Tribe must have access to substantial funds for investment. • Tribe is risking funds on an unproven venture. • Tribe will not receive revenues during a several-year period before profits begin. 	<ul style="list-style-type: none"> • A minerals office staff of accountants, financial analysts, and industry specialists to monitor operating partner's operation and protect tribal interests during joint venture negotiations and after an agreement has been signed. 	Loss of capital if venture is a failure.
(2) Carried Interest	If tribe does not have equity funds available, it may contribute its share of equity out of income generated by the mine. After its equity share has been paid to the operating partner, tribe begins to receive share of income.	<ul style="list-style-type: none"> • Does not require the tribe to have funds immediately available for investment. • Tribe will not receive revenues during start-up years or early years of profit generation. 	<ul style="list-style-type: none"> • Same as above. 	If the venture is marginal, operations may cease before the tribe ever receives profits.

Some developing nations have successfully entered into joint venture agreements with mineral companies; however, the circumstances under which they were able to do so differ considerably from those that the energy tribes are in. Developing nations have access to significant pools of development capital supplied by such organizations as the World Bank, the U.S. Agency for International Development, and government agencies of European countries and Canada.^{1/} Tribes do not have access to such funds. Further, such joint ventures have typically been only one part of a larger plan for industrialization of the country and it is not at all clear that most tribes are interested in industrializing their reservations.

Given competing demands for capital on all of the CERT reservations, it is questionable whether an equity investment of the magnitude required for a joint venture interest would be justified even if the funds were available. If a tribe had excess funds to invest, they might be better spent in financing an enterprise more labor intensive and less dependent on depletable resources than most energy projects. In this way, tribal employment and income could be maintained over a longer time period.

Assuming, however, that a tribe has made a decision to involve itself in a joint venture, it should be concerned with developing improved business management capabilities. In making a significant equity investment in an operation, a tribe is entitled to exercise some management control over the operation that uses its funds. However, such control can be exercised

^{1/} Lipton, Charles, "Dealing with Developers: Forms of Agreement," paper published by Americans for Indian Opportunity, Albuquerque, N.M., p. 6.

effectively only if the tribe has access to sophisticated business, engineering, and legal expertise by which to evaluate, influence and, indeed, make management decisions.

In examining the experiences developing nations have had with joint ventures, the following are decisions that the tribe may want to stipulate as requiring majority approval of the Management Committee (assuming a 50-50 joint venture with equal company/tribal representation on the Committee):^{1/}

- Appointment of joint venture company officers--selection of president, vice-presidents, and controller of the operation.
- Choice of auditors--selection of firm to audit financial statements of the operation.
- Transfer of stock shares--Before any stock shares held by the company or tribe are transferred to outside interests, the transfer must be approved.
- Issue of new stock shares--Because new shares dilute the control of existing stock held by the tribe and the company, issue of new shares must be approved.
- Loans by the company to shareholders--In order to avoid use of joint venture assets for personal use, loans to shareholders require approval.
- Sales of a substantial portion of assets of the joint venture company--Involvement of a second company in the operation could dilute control of the company and tribe.
- Purchase or sale of goods and services from or to a partner or an affiliate of the company partner in the joint venture--The joint venture company might be purchasing goods and services at inflated prices or selling them at below market prices. This would benefit the company partner but siphon earnings from the tribe.

^{1/} Smith and Wells, op. cit., pp. 42-45.

- Annual exploration, development, investment, production and budget plans
- Accounting methods--procedures used to account for expenses, calculate depreciation, taxes, etc.
- Mortgaging of joint venture assets--use of joint venture assets as security for loans
- Marketing policies--to whom the resource will be sold and under what terms and conditions.

In addition, the tribe itself would retain regulatory authority over such things as:

- Approval of work plans
- Approval of provisions for environmental protection and reclamation
- Geographic location of facilities
- Training and hiring of tribal members.

In structuring the joint venture from an operational perspective, the tribe would probably want to establish a tribally owned corporation that would be responsible for representing the tribe's interest in the day-to-day activities of the operation. The value of establishing a corporation separate from tribal government^{1/} is to minimize political influence over business decisions. In addition, it serves as an entity that remains constant as tribal governments change.

While the tribal corporation would handle business activities, the Tribal Minerals Office would be responsible for monitoring activities of the venture and regulating its operations in the same manner that any other company conducting operations on the reservation would be treated. Minerals

^{1/} Such a corporation could report to an independent board on which the members serve staggered terms.

Office Model III (described in the preceding section) would be the most logical organization for a tribe involved in joint ventures. This is because of Model III's assumption that a tribe adopting it seeks to assume complete responsibility for managing its mineral development. It would be bad judgment on the tribe's part to enter a joint venture agreement before developing the capability to assume complete responsibility for all mineral development on its lands.

Service Contracts

Under a service contract, a tribe forms its own mineral development company and then contracts with experienced operators to carry out the mining. As with joint ventures and operating agreements, the term "service contract" can encompass a variety of agreement formats. It may involve exploration financing provided by the tribe or by the company. One alternative might be for the company to supply exploration and development capital as an interest-bearing loan to the tribe, repayable in cash or in-kind (minerals). In some cases, contractors will expect reimbursement of their expenses as they are incurred, while in others, the contractor will agree to recoup its investment from revenues generated by the operation. Essentially, there are probably as many ways of structuring a service contract as there are service contracts in existence.

In developing nations, service contracts have been used primarily for political reasons (e.g., ownership of the resources remains with the country). In the case of tribes, however, service contracts have been suggested for a different reason: tax minimization.^{1/}

^{1/} The following discussion draws heavily upon a section on tax planning in Maxfield, Peter, Mary Frances Dietrich, and Frank Trelease, Natural Resources Law on American Indian Lands, Rocky Mountain Mineral Law Foundation, Boulder, Colorado, 1977, pp. 74-76.

With regard to federal taxation, Maxfield et al. suggest that the means by which maximum advantage can be obtained from the tax law is to set up a mineral project with the Indians as mineral owners and the non-Indian mining company as a mining contractor--essentially a service contract. They note that for protection of the tribe's economic interest, the company's relationship to the tribe should have not only the formal but also the substantive appearance of a contractor. Additionally, they suggest that the relationship have the following characteristics:

- That the mining contractor's rights are terminable on short notice, e.g., 60 or 90 days, with a right to remove company equipment
- That the tribe, as owner of the mineral, be given ultimate control over the operation
- That the mining contractor be compensated not in mineral production directly, but in money (e.g., as a fixed dollar amount per unit mined)
- That not only the mineral in the ground but also the mined mineral remain owned by the tribe (which would then be responsible for marketing the mineral).

Resulting tax savings could be divided between the tribe and the contractor. Maxfield et al. caution, however, that from a company's perspective, this may not be an economically viable arrangement. Further, they suggest a ruling from the Internal Revenue Service before entering into such an arrangement.

Regarding the use of service contracts to avoid state taxes,^{1/} Lipton notes that state taxation of mineral development on tribal lands has been based on the transfer of a leasehold interest or property right from

^{1/} Lipton, Charles, "Dealing with Developers," in Hard Choices: Development of Non-Energy, Non-Replenishable Resources, published by Americans for Indian Opportunity, Albuquerque, New Mexico, 1977, p. 69.

the tribe to the company.^{1/} He notes that even under a joint venture, the tribe must lease mineral rights to the joint venture company. He suggests, therefore, that if an agreement were structured with the tribe as the sole owner of the mining venture, the state would have no basis for taxing. This is because ventures that are entirely tribally owned cannot be taxed.

A final point to be made regarding service contracts concerns their management. It has been suggested that an advantage of the service contract is that the tribe retains greater control over operations compared with other forms of agreements.^{2/} Suggestions such as this give little consideration to the fact that a significant level of management expertise is required to perform the role of general contractor for a mining operation. In addition to contracting for exploration, development of mine plans and specifications, mining, processing, and marketing of the mineral, the tribe must be able to adequately evaluate, from a management perspective, how well the contractors are performing and take action where performance is inadequate. We believe that service contracts will not provide tribes with the financial windfalls sometimes suggested if the tribe does not possess the managerial and technical (legal, accounting, mining) expertise necessary to maintain close control over operations.

CONTRACT TERMS

Regulations under 25 CFR and 30 CFR tend to be general in nature and fall short on the establishment of performance standards. Further, they

^{1/} State authority to tax production under reservation leases is found in 25 USC 398.

^{2/} See, for example, Lipton, op. cit., p. 69.

do not take into consideration local conditions or individual tribal concerns. Tribes have the option of either drafting their own, more specific, mineral codes or adding more detailed operating provisions and performance standards to each agreement they enter into.

This subsection addresses provisions that could potentially be added to development agreements. Alternatively, most of the operating and environmental provisions could be incorporated into a tribal mineral code. It is beyond the scope of this report to provide an exhaustive review of the hundreds of potential agreement clauses that tribes may want to consider. This subsection highlights agreement terms that address specific problems that one or more tribes indicated to be of concern during the site visits. It suggests both general and resource-specific provisions for tribes to consider in drafting mineral agreements. Tribes should consult lawyers specializing in mining or oil and gas law about specific provisions for their agreements.

Oil and Gas.^{1/}

- Term--The primary lease term under a BIA form agreement is ten years and as long after that as production occurs in commercial quantities. On private lands, the primary term of an oil and gas lease is typically 5 years, although as few as 3 years is not uncommon. If the company does not begin producing in that amount of time, the lease expires. If production does begin, the lease continues in effect as long as "production in commercial quantities" occurs. "Commercial quantities" refers to production in quantities sufficient to yield the company a return in excess of its operating costs. Some leases contain reference to the quantity of production required to keep the lease alive.

^{1/} Some of the material in this section is drawn from Williams, Howard, and Charles Meyers, Oil and Gas Law (abridged edition), New York: Matthew Bender Co., 1975.

- Financial Provisions--Oil and gas royalties of one-eighth (12-1/2%) of value are most common on private lands but one-sixth (16-2/3%) royalties are not unusual. In known producing areas, a tribe may be able to obtain an even higher royalty rate. Under the proposed revisions to 25 CFR pertaining to oil and gas, 16-2/3% is to be the minimum royalty payable to tribes on oil and gas agreements, unless otherwise provided by the Secretary of Interior. It should be kept in mind that a 16-2/3% royalty rate will discourage extraction of marginal resources having low market value. In such cases, tribes may want to consider a lower royalty rate.

Compensatory royalties are another royalty form and may apply to a provision for payments on shut-in wells (i.e., wells capable of producing gas in paying quantities but that are closed off for lack of a market), or payment in lieu of the company drilling an offset well to prevent drainage of tribal land by a well on adjoining property. Clauses addressing the latter situation will be particularly important for situations in which checkerboard land ownership patterns exist. Compensatory royalties may be either a flat sum or a percentage figure. Although royalties are typically based on market value, in practice heavy reliance is placed on the price received by the lessee company. This price may fluctuate above or below quoted oil prices based on the quality of the oil. The tribe may want to retain a petroleum engineer to analyze such factors as sulfur content, which affect market value. The tribe can then better compare the price it is receiving with quoted prices published in Oil and Gas Weekly.

In cases where gas by-products (e.g., propane, butane, etc.) are significant, the agreement should indicate that they are to be accounted for separately and the manner in which this is to be done. Although separate accounting for by-products is required under the regulations, it is not always done. Making it a specific contract provision may help alleviate this.

Under Notice to Lessee's 1A (NTL-1A) issued by USGS in April 1977, a clarification was made of the manner for accounting for liquid by-products. Lessees and operators are to compute by-product royalties based

on (1) the value of the net gas produced from the lease adjusted for its Btu content; (2) the value of the separate components after processing and adjustment for the approved manufacturing allowance; and (3) the gross proceeds accruing to the operator. The method that yields the highest royalty to the tribe is to be used.

The agreement should also stipulate that prompt payment of royalties and other fees is expected and that a specified fine will be levied on overdue payments. In cases of nonpayment of royalties, leases should include a clause to provide for forfeiture or automatic termination of the lease.

In some cases, bonuses paid to the tribe by the company may be a significant financial provision. While large bonuses may be obtainable for proven areas, they may not be the best route to encourage development of wildcat (unproven) areas.

Land rentals are another financial provision. The standard rate is \$1-2/acre annually, although it may range up to \$10. The exception is proven territory in which case rentals are likely to skyrocket because the demand for that area increases.

- Operating Provisions

- Well-spacing requirements--In cases where state well-spacing regulations do not apply to development on reservations, spacing requirements should be incorporated into the agreement. The tribe may want to retain a reservoir engineer to determine reasonable economic spacing requirements. While 40-60-acre spacing is fairly standard, an engineer may determine that, for example, 80 acres would be reasonable.
- Diligent development--In order to avoid speculative holding of resources by a company, the tribe may want to include specific provisions to encourage diligent development. This can be done in one of two ways: (1) Stipulate required minimum annual development expenditures per acre that escalate each year. In determining base and escalation rates, the tribe should consult with a petroleum engineer to arrive at reasonable figures. A clause such as this should stipulate that the company is to submit annual itemized statements to the tribe showing

expenditures made for the development of the acreage.^{1/} (2) Alternatively, the tribe could require a minimum annual royalty creditable against production. The minimum royalty should be large enough that it is an incentive to produce. In addition, rental payments should be required if the company does not drill.

- Water wells--Because water is a scarce resource in the West, it is not unusual to include an obligation on the lessee to develop or condition (at the tribe's expense) any well drilled that is capable of providing potable water, but is not capable of producing oil and gas.
- Access roads--Tribes with extensive oil and gas development frequently have problems with operators creating an excessive number of access roads to well sites. The agreement should stipulate that the company and the tribe will agree on the location of any access roads constructed.
- Reports--The agreement should stipulate reports required to be submitted by the company to a specified tribal office. These may include: printouts of daily runs; well logs; drilling reports; tank tables; and reports on wells plugged.

This clause should specify the basis (i.e., daily, weekly, monthly, etc.) on which the reports are to be submitted.

- Resource conservation--In order to avoid waste of the tribe's resources, provisions addressing such things as maintenance of well pressure and blow-out prevention should be included. A petroleum engineer can suggest other provisions related to resource conservation as they apply to specific areas.

- Environmental Provisions

- Environmentally sensitive areas--The agreement should stipulate that in planning drilling activities, the company should avoid environmentally sensitive areas (such as stream or river banks). Tribal approval of all drilling sites should be required.

^{1/} Berger, Edward, "Indian Lands-Minerals-Related Problems," Rocky Mountain Mineral Law Institute, 1968, p. 118.

- Ground water pollution--The agreement should stipulate measures to be taken by the operator to avoid contamination of ground water. In cases of water contamination from the operation, the tribe can go to court for damages on grounds of negligence.
- Noise--Since the noise caused by drilling of wells can be significant, provision should be made that mufflers will be used to reduce noise.

Because of geographic differences in the Southwest and Plains states, tribes should consult with petroleum engineers who can advise them of specific actions that should be required of operators to protect the environment.

Coal.

- Term--Under the proposed revisions to 25 CFR 171, there would no longer be a specified primary term of 10 years for mining agreements. Because of the capital investment required to develop coal, it is more likely that a tribe will ultimately sign long-term development agreements with only one or several companies, as compared with dozens of companies with which an oil and gas tribe might have agreements. Typically, a coal agreement will range from 20 to 30 years, depending on the anticipated economic life of the deposit.
- Financial Provisions--Because coal agreements extend over a long time period, tribes may want to consider adding a stipulation to the agreement that the royalty rate will be renegotiated periodically (stipulating the length of intervals). Alternatively, escalator clauses could be incorporated into the agreement, providing that the tribe's financial return would be automatically increased at regular intervals.

Western coal is typically sold to utilities under long-term purchase contracts. Because the mining company faces cost increases over the life of the contract, it is typical to have a price escalation clause in the purchase agreement. Therefore, if a tribe is to receive a stipulated percentage of the price received by the mining company, an escalator clause in the purchase agreement will minimize the extent to which the tribe's return is eroded by inflation. Such escalators, however, do not necessarily reflect increases or decreases in the market value of the coal. Tribes should have their financial advisors carefully review the price formula being used in such agreements.

In addition to the royalty, a bonus may be a part of the financial return. As with oil and gas, rentals ranging from one to several dollars per acre are standard. A tribe with rich deposits may be able to get a higher rental rate.

In cases where power and/or rail lines are anticipated, provision for rights-of-way payments should be included.

- Operating Provisions--Tribes should review the operating standards for coal mines under the proposed revisions to 25 CFR 177. Local conditions will usually suggest additional provisions that should be added. Because of the scale of project involved, most tribes would do well to retain a mining engineer/mineral lawyer team to advise them on both operating conditions and environmental concerns that should be addressed in the agreement.
- Environmental Provisions
 - Water--Since coal beds are often aquifers (i.e., water-bearing rock formations) provisions for preventive measures to ensure that the tribe's water supply is not contaminated by the mining operation should be included.
 - Facilities--If the project involves construction of generating or coal conversion facilities, or if large influxes of workers are anticipated, the agreement should include a provision that no facilities will be constructed or mobile homes located on the reservation without tribal consent.
 - Reclamation-- Since the restoration of strip-mined land to its original contours is an expensive process, a cost-based performance bond for reclamation should be included in the agreement.
 - Revegetation-- The tribe may want to specify the number of years that the company is to remain responsible and liable for the effectiveness of revegetation (e.g., two growing seasons for agricultural land; 5-10 years for lands in general).

Uranium.^{1/}

- Term--Uranium agreements typically run up to 20 years or more in length because of the lengthy start-up period involved in developing a mine. As with all long-term leases, a provision for periodic renegotiation of financial provisions should be included.
- Financial Provisions--Royalties on uranium may be calculated on the basis of either the uranium concentrate before it is removed from the ore (uranium ore) or after it has been removed and processed (yellowcake). Regardless of the basis on which the royalty is to be computed, procedures for weighing, sampling, assaying and moisture determination should be specified in the agreement. The tribe should also have access to data on which yellowcake content is based (since the royalty payable is based on a sampling), and a method for settling any disputes concerning valuation should be included.

The agreement should be very specific about the point at which the royalty is to be paid (e.g., when it is mined, when it is shipped, or after it has been sold). It is also important to stipulate that when royalties are to be paid on the basis of price received by the developer, an arm's length transaction is assumed. A provision should also be included to cover the method for computation of royalties in the event that solution mining is used.

In cases where the granting clause includes minerals other than uranium and the minerals associated with it, a royalty provision for the other minerals should be stipulated. Alternatively an express agreement can be included to negotiate a royalty provision in good faith if other minerals are found to be commercially recoverable.

- Operating Provisions--Uranium development on tribal lands is governed by provisions of 30 CFR 231. Since the exploration and mining plans required under these regulations do not establish performance standards, tribes may want to consider setting their own and making them conditions of the lease. These could be drafted by a mining engineer/minerals lawyer team to reflect local conditions and tribal concerns.

^{1/} The material in this section is drawn primarily from "Uranium Exploration and Development Institute," Rocky Mountain Mineral Law Foundation, Boulder, Colorado, 1976.

- Environmental Provisions

- Waste Treatment--Provisions for mine water treatment and discharge should be included, since they are addressed by the regulations only in general terms.
- Safety--Since requirements for protection against mine safety hazards are also addressed in general terms only, the tribe may want to make them more specific agreement conditions.
- Tailings--Provisions regarding the sealing of tailing ponds to prevent contamination of ground water should be included in the agreement.
- Reclamation--A cost-based performance bond for reclamation should be required as a part of the agreement.

Geothermal.^{1/}

- Term--The primary term of geothermal leases may run from 10 to 20 years. Ten-year terms will often provide for entry into a secondary term if there has been a discovery and the company is working diligently toward additional discoveries. The reason that production in commercial quantities within the ten-year primary term may not be required relates to the economics of geothermal production. Since heat loss makes it impractical to transmit geothermal energy great distances, producers usually sell it to utilities, which then construct a power plant and transmission lines near the source. Before a utility will have an interest in an area, however, the producer has to have accumulated sufficient geothermal resources to adequately fuel a power plant. This may require development of up to a dozen or more producing wells before any sale occurs. Even after a utility has made a conditional commitment to purchase the geothermal energy, power plants have to go through a certification process that can be quite lengthy. For this reason, a developer can be working diligently and yet not have production in commercial quantities for a number of years.

^{1/} The material in this section is drawn primarily from "Geothermal Resources Development Institute," Rocky Mountain Mineral Law Foundation, Boulder, Colorado, 1977.

- Financial Provisions--Most of the available information on financial provisions deals with state and federal geothermal leases. Such figures can be useful, however, in establishing a minimum base for financial provisions. The standard royalty is 10-15% of value (although a more specific clause would be 10-15% of the gross proceeds received by the lessee, assuming an arm's length transaction). In addition, a royalty of 2-10% of the value of by-products (commercially demineralized water, precipitated minerals) is standard, along with \$1.00 per acre rental and a bonus.

The State of California obtains additional revenues by charging fees for drilling permits. These range from \$25 for shallow observation wells to \$1,000 for exploration wells of any type.

Geothermal leases should include provisions for payment of shut-in royalties, since wells capable of producing will generally be shut-in while arrangements with utilities are being made.

Because geothermal leases tend to be long term, they should include a provision authorizing periodic renegotiation of royalty and rental rates.

- Operating Provisions--Since the regulations governing geothermal development are general mining regulations (i.e., nothing in them is specific to geothermal), tribes may want to extract provisions of the geothermal operating regulations governing public lands for addition to their agreements.
- Environmental Provisions
 - Ground Water--In some instances, geothermal development has produced detrimental effects on ground water (e.g., contamination, thermal pollution). The likelihood of such an occurrence is determinable only on a case-by-case basis. Tribes may want to retain a hydrologist to provide them with a report on potential problems. In any event, the agreement should address the issue of responsibility in case ground water damage does occur.
 - Noise--Since the noise caused by drilling of wells can be significant, provision should be made that mufflers will be used to reduce noise.

- Air Quality--Geothermal power plants have the potential to emit non-condensable gases. This may not be a significant problem given the long lead time before power plant construction begins and the improvements being made in emission control technology. The tribe may want to stipulate, however, that in the event power plant construction is contemplated, tribal approval of plans to maintain air quality will be required.

Oil Shale.

Prototype leases and operating regulations for oil shale are being developed by the Department of the Interior. At present, there are no oil shale agreements upon which to base suggested provisions.

General Agreement Provisions (Applicable to All Minerals).

- Taxation--Because of the controversy concerning state taxation of mineral production on tribal lands, agreements should include express provisions addressing each party's responsibility for state gross production and severance taxes (i.e., whether any taxes are to be subtracted from the tribe's royalty payment).
- Training and Employment of Tribal Members--Agreements should include specific provisions on the number of tribal members to be trained and in what skills, and on the manner in which training is to be carried out. Both the tribe's and the company's role in the training program should be specified.
- Forfeiture--Forfeiture is the loss or cancellation of a contract as a result of either party's failure to meet the terms of the agreement. Lax enforcement of operating regulations and contract provisions has in some cases resulted in companies blatantly violating their agreement with the tribe. A forfeiture clause is one means of dealing with company violations of any of the substantial terms or conditions of a lease. Among specific grounds for forfeiture specified by some clauses are:
 - Attempted withholding of payments due
 - Defaults in royalties and other payments due
 - Making false returns or reports
 - Failure to provide information required
 - Failure to drill or to pay rentals

- Failure or refusal to drill offset wells
- Insolvency or bankruptcy of the company.

It should be noted that agreements drafted for or by lessee companies will usually contain provisions to protect the company against loss of its interest by forfeiture.

- Force Majeure Clause--A force majeure is an unavoidable occurrence (e.g., flooding, governmental actions) that prevents either party from complying with the terms of the agreement. Leases may include a force majeure clause to protect the interest of a company when situations beyond its control interfere with drilling and production operations. By reason of such situations, the company may be in violation of lease terms and therefore liable for damages. While the concept of a force majeure clause is a reasonable one, the lease should specifically state which situations constitute a force majeure. The lease should also be specific about whether or not delay rentals are to be paid by the company under such circumstances and what effect a force majeure will have on the term of the lease (i.e., whether the primary term is extended).
- Assignment of Leases--Assignment refers to the transfer of a lease interest from one company or party to another. Under the standard BIA form lease, there was no requirement that a company inform the tribe if it decided to assign its interest in the lease to another party. In at least one case, a lease for tribal minerals was assigned to a third party at a substantial profit to the lessee. To avoid situations such as this in the future, a tribe may want to stipulate that a lease cannot be assigned without the tribe's consent.
- Environmental Protection--A provision that operations comply with all applicable Federal and/or state environmental laws and regulations should be included in the agreement. These are set forth in Volume IV, Section IV, of this study.
- Surface and Sub-Surface Easement Rights--The company's rights and obligations regarding use of property for access roads, pipelines, etc. should be specified in the agreement.
- Water--The agreement should specify activities and conditions under which water may be used, and charges, if any, to be paid by the company.

REGULATION OF DEVELOPMENT

Appendix B of this volume describes Federal regulations governing mineral development on tribal lands. The following regulations apply to leases, operating agreements, joint ventures, and service contracts:

- Leasing of Tribal Lands for Mining (25 CFR 171)
- Surface Exploration and Reclamation (25 CFR 177)
- Oil and Gas Contracts (Proposed 25 CFR 182)
- Oil and Natural Gas Operating Regulations (30 CFR 221)
- Operating Regulations for Exploration, Development and Production (for minerals other than coal, oil or natural gas) (30 CFR 231).

These should be reviewed by the tribe to determine whether their coverage is adequate. Where the tribe feels coverage is inadequate, additional or stronger provisions may be added to the contract.

Under the proposed revisions to 25 CFR 177 (Prospecting and Mining Plans and Reclamation), specific recognition is given to the right of tribes "to promulgate rules, regulations or ordinances governing mineral development or reclamation of mineral lands." In cases where a tribe is contemplating a significant level of energy resource development, an assessment should be made as to whether tribally imposed regulations or controls are needed to either supplement or supersede those of DOI. Tribal regulations may supersede those of DOI only if they are more, not less, restrictive.^{1/}

In deciding whether to strengthen tribal control over company operations on the reservations, a tribe's first step should be to closely analyze the new BIA regulations on mineral leasing and decide whether the revisions adequately address the tribe's concerns. If the tribe has had

^{1/} Proposed revision 25 CFR 177.7(b).

experience in mineral leasing, it should evaluate how effectively it feels BIA and the U.S. Geological Survey (USGS) have enforced regulations governing mineral leasing in the past. If the tribe has not leased minerals in the past, its representatives should discuss with neighboring tribes their experience with regulation enforcement. Our discussions with tribal representatives revealed that there are varying opinions about the adequacy of BIA and USGS assistance to tribes in mineral leasing.

If the tribe decides that the new regulations either serve its purposes adequately in the present form or could do so with some minor revisions or additions, the next step is to determine how actively it wants to become involved in working with BIA and USGS in monitoring company operations, approving mining plans, and establishing environmental protection standards and reclamation plans. Through discussions with BIA and USGS, plans can be developed to implement improved control over operations by hiring and training tribal government staff to supplement the services provided by the agencies.

If the tribe decides that the new regulations are inadequate or it has not had effective working relationships with the government agencies in the past, it has the option of developing its own tribal mineral code and enforcing it.^{1/} This option can become expensive if there are large-scale projects to regulate because the tribe will probably have to hire outside specialists (minerals engineers, environmental specialists, accountants, etc.) for many positions while tribal members are being trained. However, mineral rich tribes planning extensive development may find this option the

^{1/} The tribe can enforce its own mineral code only if it is more restrictive than the BIA regulations. The tribe's contract with the developer should call for tribal enforcement as a contract right.

only viable one, given their need for extensive monitoring, the chronic understaffing of USGS, and the general lack of mineral development expertise within BIA.

The three tribal minerals office management models discussed in Part I of this volume are in large part based on the level of regulatory control a tribe wishes to assume. Model I is oriented to tribes that prefer to have BIA and USGS remain responsible for regulating mineral development on their reservation. Model II assumes the tribe wishes to take an active role in regulatory matters, with continued assistance from BIA and USGS. Model III is oriented to tribes wishing to develop and enforce their own regulations governing mineral development. A more detailed discussion of the functions involved in each model will be found in Section IV of the first part of this volume

STATE TAXATION OF MINERAL DEVELOPMENT ON RESERVATIONS^{1/}

State authority to tax the proceeds of mineral production on tribal lands has been based on express authorization contained in a May 29, 1924, act (25 USC 398). It is now argued, however, that the 1938 Tribal Mineral Leasing Act repealed this state authority to tax production by making no provision for it and because it repealed all prior provisions inconsistent with it.^{2/} This argument has been bolstered by a recent U.S. Solicitor

^{1/} For a more detailed discussion of this issue, see State Taxation of Mineral Deposits and Production: Interagency Energy-Environmental Research and Development Program Report, Office of Research and Development, U.S. Environmental Protection Agency, Washington, D.C. 20460, January 1977, Publication Number EPA-600/7-77-008.

^{2/} Maxfield, et al., op. cit., p. 102.

General's memorandum holding that any leases made under the 1938 Indian Mineral Leasing Act are not taxable by the state.^{1/}

The original purpose of this subsection was to provide an overview of state taxes that presently apply to mineral production and the extent to which those taxes are being applied to development on tribal lands within each state. However, our contacts with state officials on this question indicated that most of the states do not have a formal policy on the issue. As a result, Exhibit V-5 consists of charts describing taxes generally applicable to mineral development in the western states. The purpose of providing this exhibit is to alert tribes to those taxes that could conceivably be imposed on mineral development on Indian lands.

^{1/} U.S. Department of the Interior, Office of the Solicitor General, Subject: The tax status of the production of oil and gas from Fort Peck tribal lands, November 7, 1977.

ARIZONA

EXHIBIT V-5
STATE TAXES ON MINERAL PRODUCTION

Resource	Tax	Description	Basis of Tax	Rate of Tax
All Natural Resources	Transaction Privilege Tax	A tax on the gross proceeds of sales or gross income from the business upon every company engaged in the following businesses: a) mining, quarrying, smelting or producing for sale, profit or commercial use, any oil, natural gas, or other mineral product, b) felling, producing or preparing timber. The Arizona tax on natural resources is similar to severance taxes in other states.	The tax is based on the gross proceeds of sales or gross income from the business of mining within the state. Royalties paid are <u>not</u> deductible.	For mining the total tax is 2½%; for timbering the total tax is 1½%.
All Natural Resources	Property or Ad Valorem Tax	A tax on property that may be levied by political subdivisions of the state (county, cities, and towns)	Property is divided into five classes and assessed at between 15% and 60%. For mining property the tax is assessed at 60% of the market value. Market value of mining property is determined by an estimate of the present value of the annual net proceeds of a producing property.	Varies with location of property within the states

Source: Arizona Tax Reporter and State Office of Revenue.

Resource	Tax	Description	Basis of Tax	Rate of Tax									
Coal	License Tax	An annually imposed tax on a coal mine	The tax is based upon the production or potential production of coal in tons (by tons produced).	<table><tr><th>\$/Ton</th><th>Production</th></tr><tr><td>10.00</td><td>500 tons or less</td></tr><tr><td>25.00</td><td>500 to 1000 tons</td></tr><tr><td>50.00</td><td>1000 tons & more</td></tr></table>	\$/Ton	Production	10.00	500 tons or less	25.00	500 to 1000 tons	50.00	1000 tons & more	
	\$/Ton	Production											
10.00	500 tons or less												
25.00	500 to 1000 tons												
50.00	1000 tons & more												
	Tonnage Tax* (Severance)	An excise or privilege tax upon the coal mined in the state for the purpose of providing a fund for the inspection of mines by the state	The tax is based on the tonnage of coal produced.	.007¢/ton									
Oil and Gas	Conservation Tax	The tax levied on oil and natural gas is in the nature of a severance tax designed to create and maintain a state oil and gas conservation fund.	The tax is based upon the market value at the well of all oil and natural gas produced, saved, sold or transported from the field where produced.	.001% of value									
	Special Oil and Gas Tax* (Production)	The tax is a revenue tax based on the gross income from oil and gas production.	The tax is based on the gross income derived from the production of crude oil and natural gas. There is withholding of taxes on royalty payments in the amount of 3%.	<table><tr><th>%</th><th>Value</th></tr><tr><td>2%</td><td>Under \$25,000</td></tr><tr><td>3%</td><td>\$25 to \$100,000</td></tr><tr><td>4%</td><td>\$100,000 to \$300,000</td></tr><tr><td>5%</td><td>\$300,000 and over</td></tr></table>	%	Value	2%	Under \$25,000	3%	\$25 to \$100,000	4%	\$100,000 to \$300,000	5%
%	Value												
2%	Under \$25,000												
3%	\$25 to \$100,000												
4%	\$100,000 to \$300,000												
5%	\$300,000 and over												
All Natural Resources	Property Tax	Tax on property that may be levied by political subdivisions of the state	30% of market value is normally the taxable base.	Varies based upon location within the state									

Source: Colorado Tax Reporter and State Office of Revenue.

* The coal tonnage tax and the oil and gas production tax will be replaced by a severance tax in 1978.

Resource	Tax	Description	Basis of Tax	Rate of Tax	
Oil and Gas	Producer's Net Proceeds Tax	Property tax imposed on oil and gas wells (excludes all other property connected to the drilling operation)	Data unavailable	Varies	
	Producer's Severance Tax	Tax imposed on the removal of oil and/or gas from the land	Gross value of the lease	A graduated rate from 2.1% to 2.65% of gross value. Additional tax on leases 3/8 to 3/4 of 1¢ per barrel.	
Electrical Energy	Electrical Energy Producer's Tax		Gross sales of the company	1.483% of gross sales revenue plus a .025% surcharge	
Coal, Oil and Gas	Resource Indemnity Trust Tax	Tax enacted as a means of providing security against loss or damage to the environment from extraction of natural resources	Gross yield from the mine or well head value	½ of one percent of the gross value/yield of the production if it is in excess of \$5,000	
Coal	Severance Tax	Tax on the mining of coal	The greater of a flat rate per ton or a percentage of value (contract sales price)	There is an exemption for the first 5,000T of production each quarter. See footnote 1.	
Metalliferous Mines	License Tax	Fee for mining metals, precious or semi-precious stones or gems	License tax fee is based upon gross yield or value of production. Gross value is computed based on market quotations.	<u>Gross Value</u>	<u>Tax Rate</u>
				First 100,000	0.150%
				next 150,000	0.575%
				next 150,000	0.860%
				next 100,000	1.150%
				over 500,000	1.438%

1/

Heating Quality
(Btu per pound of coal)

Under 7,000
7,000 - 8,000
8,000 - 9,000
Over 9,000

Surface Mining

12 cents or 20% of value
22 cents or 30% of value
34 cents or 30% of value
40 cents or 30% of value

Underground Mining

5 cents or 3% of value
8 cents or 4% of value
10 cents or 4% of value
12 cents or 4% of value

Source: Montana Tax Reporter and State Office of Revenue.

Resource	Tax	Description	Basis of Tax	Rate of Tax
Coal and Uranium	Severance Tax	An excise tax that is levied upon the gross value of all natural resources (except oil, natural gas, or liquid hydrocarbon) that are taken from the soil	The tax is a per unit tax, without deductions, on the quantity of coal severed and saved.	38¢/ton of steam coal 18¢/ton of metallurgical coal .00125% for other resources
Oil and Gas	Severance Tax	A severance tax is imposed on every interest owner to the extent of his interest in the value of all oil, natural gas, or liquid hydrocarbon taken from the soil	The tax is based on the taxable value* of the oil, natural gas, or liquid hydrocarbon severed and sold.	As of July 1, 1977, 45¢/standard barrel 5¢/MCF at a pressure base of 15.025 lbs/sq. inch absolute and 60°F.
Oil and Gas	Ad Valorem Tax (Production)	A tax on all oil, natural gas or liquid hydrocarbon, severed and sold from each production unit is imposed on every owner.	The tax is based on the assessed value (9%) of oil, natural gas, or liquid hydrocarbon.	Varies by county
Oil and Gas	Privilege Tax	A tax imposed on the businesses engaged in the severing of oil, natural gas or liquid hydrocarbons; a tax is also imposed on natural gas processors based on the value of their products. An interest owner is liable for the extent of his interest.	The tax is based on the taxable value of oil, natural gas, or liquid hydrocarbon severed. The processor's tax is based on the value of the manufacturer's products.	2.55% of taxable value of oil, natural gas, or liquid hydrocarbon severed .045% of the value of the manufacturer's products.

* Taxable value is defined as the amount of money or the reasonable value of other consideration.

Resource	Tax	Description	Basis of Tax	Rate of Tax
Oil and Gas	Ad Valorem Equipment Tax	A tax imposed on oil and gas production equipment	The tax is based on a 27% assessed value of the equipment at each production unit.	Varies by location of equipment
All Natural Resources (unless otherwise specified)	Natural Resource Excise Tax	A tax imposed upon the privilege of severing and processing natural resources in New Mexico. The person engaged in the severing of a resource is responsible for the resources tax, the processor is responsible for the processing tax, and the person processing or severing for another person who is the owner is responsible for the service tax.	Both the resources tax and the processing tax are based on the taxable value of the natural resource severed or processed in New Mexico with certain deductions allowed by law.	<u>Resources Tax:</u> .75% on the taxable value of all natural resources except molybdenum and potash <u>Processing Tax:</u> .75% on all natural resources except timber, (.375%) potash, and molybdenum. <u>Service Tax:</u> is imposed at the same rate that would be imposed on the owner of the natural resources.
All Energy Resources	Conservation Tax	A conservation tax is imposed on every interest owner to the extent of his interest in the value of oil, natural gas, liquid hydrocarbon, uranium, coal, and geothermal energy.	The tax is based on the taxable value of oil, natural gas, liquid hydrocarbon, uranium, coal, and geothermal energy severed and sold.	.0019% of the taxable value of the oil, natural gas, liquid hydrocarbon, uranium, coal, and geothermal energy sold

Resource	Tax	Description	Basis of Tax	Rate of Tax
<u>Exemptions</u>	Severance Tax	Royalty and rental interests of New Mexico and the United States are not liable for tax.		
	Oil and Gas Taxes	Royalties paid or due the United States, the State of New Mexico, or any Indian tribe, Indian pueblo or Indian who is a ward of the United States, are exempt from the severance tax, production tax, conservation tax, and privilege tax.		
<u>Special Rulings</u>	Severance Tax	The severance tax may not be levied against operations on Indian reservations unless, from the determination of the facts, it is found that such operations are upon lands as described in Section 397 and 398 of Title 25.*		
	Oil and Gas Privilege Taxes	These taxes <u>are</u> to be paid by any Indian tribe, Indian pueblo, or Indian to the extent authorized or permitted by law (Sec. 72-20-4 NMSA).		
	1977 Severance Tax for Uranium	If taxable, value per pound of U ₃ O ₈ is: But Not Over Over The Tax per Pound Shall Be: \$0 \$ 5.00 1.0% \$ 5.00 \$ 7.50 \$.05 plus 1.6% of excess taxable value over \$ 5.00 \$ 7.50 \$10.00 \$.09 plus 2.0% of excess taxable value over \$ 7.50 \$10.00 \$15.00 \$.14 plus 3.0% of excess taxable value over \$10.00 \$15.00 \$20.00 \$.29 plus 4.0% of excess taxable value over \$15.00 \$20.00 \$25.00 \$.49 plus 5.0% of excess taxable value over \$20.00 \$25.00 \$30.00 \$.74 plus 7.0% of excess taxable value over \$25.00 \$30.00 \$40.00 \$1.09 plus 9.0% of excess taxable value over \$30.00 \$40.00 \$50.00 \$1.99 plus 12.5% of excess taxable value over \$40.00 \$50.00 and over \$3.24 ^{1/}		

* Title 25, Section 397 states that unallotted Indian-owned land, not needed for other purposes, may be leased for grazing or mining. Title 25, Section 298 states that the production of oil and gas and the mining of other minerals on unallotted, unrestricted land on Indian reservations that has been leased for such purposes may be taxed by the state except on the lands of the Five Civilized Tribes and the Osage Indian Reservation.

^{1/} State of New Mexico Bureau of Revenue Information Release, SEV 100, Initiated May 1977.

Source: New Mexico Tax Reporter and State Office of Revenue (unless otherwise specified).

Resource	Tax	Description	Basis of Tax	Rate of Tax
Oil and Gas	Severance	A tax levied on the producer of oil and gas	The tax is based on the gross value of production at the well, including the amount of royalty interest.	5% of gross value at the well
Coal	Severance	A tax levied from 7/1/77 to 6/30/79 for the privilege of severing coal from the state	The tax is based on tonnage.	65¢ per ton subject to an additional 1¢ per ton (of 2,000 lbs) tax for every 1 point increase in the wholesale price index for all commodities

Source: North Dakota Tax Reporter and State Office of Revenue.

Resource	Tax	Description	Basis of Tax	Rate of Tax
All Resources	Production Tax	Producers pay a gross production tax on the value of the natural resource they produce. The producer may deduct the tax in settlement with the royalty owner. This tax is a property tax used to provide a more efficient method of levying and collecting a property tax upon minerals and on all interest and inherent rights to them.	The tax is based on the gross value at the well or mine of the minerals or oil and gas produced. (For uranium the gross value of all ores bearing uranium is the basis.)	Ore - .0075%; petro, crude, or mineral oil and natural gas - 7%; uranium - 5%
Oil	Additional Tax	An additional tax attaches if oil is recovered from streams or natural depressions (runoff from a well held in escrow by state as a royalty until owner is identified)	The tax is based on the gross value of oil.	12½% of gross value
Oil and Gas	Excise Tax	An excise tax is imposed on purchasers of petroleum oil or natural gas, but when it is retained by the producer it becomes payable by him. This tax is put aside for conservation.	The tax is based on the gross value of every barrel of petroleum oil and on every 1,000 cubic feet of gas.	For oil - .00085% of the gross value. For gas 7¢ or 1/3 of gross value (less 7% of gross value)

* Exception: Only a 5% rate is imposed on the first \$150.00 of monthly gross production from a well producing less than 3 barrels of oil per day or less than 1-1/2 million cubic feet of gas a month.

Source: Oklahoma Tax Reporter and State Office of Revenue.

SOUTH DAKOTA

EXHIBIT V-5 (Cont.)

Resource	Tax	Description	Basis of Tax	Rate of Tax
All Minerals and Mineral Products	License Tax	A tax levied on persons engaged in the business of mining or extracting minerals or mineral products within the state for the privilege of engaging in that business. The tax is in lieu of occupational excise, income, privilege, and franchise taxes levied in the state but not in lieu of sales, use, and property taxes.	A tax based on the net profit* from the mineral or mineral products extracted.	4% of the net profit
Exemptions		Persons mining or extracting minerals with an annual market value of less than \$100,000 are exempt from tax.		

* Net profit is determined by subtracting from the gross yield of the business the following deductions for costs related to extraction, transition, refining, sale, marketing, and delivery of minerals: maintenance and repairs of mine machinery; interest and insurance costs; depreciation; cost of development and exploration work; state and local taxes; and general administrative expense.

Source: South Dakota Tax Reporter and State Office of Revenue.

Resource	Tax	Description	Basis of Tax	Rate of Tax
Oil and Gas	Occupation Tax (privilege tax)	An excise tax levied for the privilege of engaging in the business of producing oil and gas and hydrocarbons	The tax is based on the value at the well (determined either by the established purchase contract or, if none exists, by the value established by the U.S. for royalty purposes. If neither of the above methods applies, the Commission may determine the value at the well. The tax is based on the amount less the royalty paid (if any).	2% of the value at the well produced, saved and sold, or transported from the producing field. There is an annual exemption for payment of the occupational tax upon the first \$50,000 in gross value at the well of the oil, gas, or other hydrocarbons.
Oil and Gas	Oil and Gas Conservation Tax	A tax used for conservation purposes	The tax is based on the market value at the well of all oil and gas produced and saved or sold or transported from the place in Utah where it was produced.	.0015% of market value. The United States, states, and Indians are exempt from this tax
Metalliferous and Non-Metalliferous Resources	Property Tax	Tax levied by subdivision of the states	<u>Non-metalliferous mines:</u> Mining machinery and realty are taxed at 30% of reasonable fair cash value.	Varies upon location of mine and equipment

NOTE: There is no severance tax on coal or non-metallics in Utah.

Source: Utah Tax Reporter and State Office of Revenue.

Resource	Tax	Description	Basis of Tax	Rate of Tax												
All Natural Resources	Severance Tax	A severance tax levied on the privilege of extracting and the extractor is authorized to deduct the tax paid from any amounts due to the interest owners. (The tax expires when revenues produced equal \$250 million.)	Tax is based on the value of the gross product.	9.7% for coal in 1977 10.1% for coal in 1978 10.5% for coal in 1977 5½% for uranium in 1977 4% for petroleum, natural gas, oil shale or any fossil fuel 2% for petroleum, and natural gas from low-producing wells (not exceeding 10 barrels/day)												
Coal	Additional Severance Tax for Coal	In addition to the other taxes an excise tax is imposed. (The tax expires when revenue produced equals \$160 million.)	The tax is based on a percentage of the value of coal produced in the calendar year.	<table><tr><td>Coal Produced in Year</td><td>% of Value Produced</td></tr><tr><td>1974</td><td>.4%</td></tr><tr><td>1975</td><td>.8</td></tr><tr><td>1976</td><td>1.2</td></tr><tr><td>1977</td><td>1.6</td></tr><tr><td>1978 & later</td><td>2.0</td></tr></table>	Coal Produced in Year	% of Value Produced	1974	.4%	1975	.8	1976	1.2	1977	1.6	1978 & later	2.0
Coal Produced in Year	% of Value Produced															
1974	.4%															
1975	.8															
1976	1.2															
1977	1.6															
1978 & later	2.0															
Oil and Gas	Oil and Gas Conservation	A tax imposed on persons owning an interest in the oil or gas or the proceeds that may be passed on to the purchaser. It is levied for oil and gas conservation purposes.	The tax is based on the value at the well of all oil and gas produced, saved, sold, or transported from the premises.	The rate of tax is set by the state commission not to exceed .0004% of the value of oil and gas. The current rate is .003%.												
All Natural Resources	General Property Tax-Mines	A tax imposed by subdivisions of the states	Tax is based on gross product and value of surface improvements.	Varies depending on location of mine												
Exemptions	Oil & Oil Conservation Tax	Government interests, Indians, and oil used for repressuring and re-cycling are exempt.														

Source: Wyoming Tax Reporter and State Office of Revenue.

TRIBAL TAXATION OF MINERAL DEVELOPMENT COMPANIES

The issue of tribal taxation of mineral development companies involves two areas of concern to tribes:

- In some cases, states are the recipients of greater revenues through taxes than tribes are receiving in royalties from mineral development on reservations. These tax revenues go into the State general fund, and some tribes feel that the value of state services they receive is lower than the tax contribution made from their minerals. These tribes feel that, given their right as sovereign nations to impose taxes, the tax funds could be used to more directly benefit tribal members if the tribe exercised its sovereign powers and superseded state taxation with tribal taxation.
- Some tribes that are parties to leases entered into under financial provisions that do not reflect the market value of their minerals are exploring taxation as a means of increasing their financial return. The Jicarilla Apache Tribe recently enacted a severance tax to be paid on oil and gas extracted from their lands. Lessee companies have resisted paying it and have challenged the tribe in court.

The Navajo Tribe, through its Tax Commission, is attempting to enact two taxes and an emissions control fee. One tax is a possessory interest tax that treats as property the marketable value of a lease agreement. The marketable value is considered to be the difference between the present value of the royalty the company is committed to pay under the lease, and the royalty that would have to be paid for a similar lease in a free market operation.^{1/} Such a tax would be particularly applicable to coal leases that may be presently paying 15-20 cents per ton while the present value of the royalty that would have been paid is 50-80 cents per ton.

^{1/} Williams, Susan, and David Cole, "Resource Revenue and Rights Reclamation: The Tax Program for the Navajo Nation," unpublished paper, August 1977, p. 12.

The second tax is a business activity tax that permits deductions of wages paid to Navajo labor and goods and services purchased within the Navajo Nation. This tax includes a standard deduction of \$500,000 per year in order to limit its effect to larger businesses operating on the reservation. 1/

A proposed sulfur emissions control fee is designed to provide an incentive for all coal-burning facilities to install pollution control equipment on their facilities. This fee is set at a level of 10 cents per pound of sulfur emissions for the first year, increasing 10 cents per pound each year for the next four years. 2/ Companies that do not take action to limit emissions will be paying 50 cents per pound on those emissions by the fifth year.

As was the case with the Jicarilla severance tax, the sulfur control fee is being challenged in court by one of the companies that would have to pay it.

A professor at the University of California School of Law recently completed a study on tribal taxation of non-Indians.^{3/} Regarding the issue of tribal taxation preempting state taxation, the study noted that "in a case where a tribe makes no effort to regulate development and has no plans to provide for service needs arising from the development (education, sanitation, fire protection, etc.), it is unlikely that state taxation of the developer would be prohibited on grounds of infringement of tribal sovereignty."^{4/} It goes on to note that tribal taxation is more strongly suggested where a tribe has an ongoing interest in non-Indian activity on the reservation (as where the tribe is taxing the very same matters the state proposes to tax, the tribe has a major financial interest in the venture, the venture is integrally connected with tribal economic development, or the tribe is providing services or government support for the activity).^{5/}

1/ Ibid., p. 14.

2/ Ibid., p. 15.

3/ Goldberg, Carole, "The Prospects for Navajo Taxation of Non-Indians," University of California School of Law, Los Angeles, 1976.

4/ Ibid., p. 19.

5/ Ibid., p. 20.

A final point concerning taxation deals with its viability from an administrative perspective. Taxation would entail new financial responsibilities for tribes and create at least a temporary need for large numbers of skilled administrators. Such demands could conceivably place a significant strain on energy tribes that do not presently even have adequate means of auditing and enforcing lease and royalty obligations, let alone a whole new set of taxes.^{1/} While taxation is definitely an option that should be explored, the point to be stressed is the importance of establishing an administrative system to handle the existing workload before adding additional responsibilities. Otherwise, tribes may end up spreading their resources so thin that none of their financial and management functions are performed adequately.

^{1/} Ibid., p. 4.

APPENDIX A

SAMPLE FORMATS FOR SUMMARIZING EVALUATIONS OF MINERALS PROGRAMS

Summaries of the evaluations of alternative programs should be prepared in a way that will enable tribal leaders to set priorities. We are presenting a series of exhibits as an example of one way to present the information.

First, Exhibit A-1 suggests that the overview of each "activity" should include the following information:

- The goals and objectives of the tasks
- The minimum level of effort that is required to meet the objectives
- The current level of effort for that activity (e.g., DOI)
- The alternative methods of performing the tasks
- The alternative levels of effort available to the tribe.

Second, these activity summaries should be consolidated for each "program."

At this stage, it may be appropriate to identify all of the activities, objectives, workloads, and resources (staff and financial) associated with:

- The minimum level of effort required in order to accomplish the objectives (this may suggest an increase or decrease in the current level of activity) (Exhibit A-2)

- The current level of effort (e.g., the support activities performed by the BIA and GS) (Exhibit A-3)
- Any increment in the level of effort that may be desired (Exhibit A-4).

Finally, Exhibit A-5 suggests that the final program package should include a consolidated program summary that recaps the tribal goals and objectives; the activities needed to achieve these goals; and the current methods of performing the tasks. It also highlights the proposed activities and their resource requirements.

EXHIBIT A-1

ACTIVITY EVALUATION SUMMARY

Subject : Resource Planning and Management
Program Area : Supervise Oil & Gas Operations
Activity : Perform Oil and Gas On-Site Inspections

Long-Range Goals and Major Objectives

- Minimize physical impacts on the environment, especially water quality impacts
- Maximize revenues by ensuring maximum efficient recovery

Minimum Level of Output Needed to Accomplish Objectives

- Inspections of old pre-drilling and abandonment operations
- Quarterly "detailed" inspections of all producing leases
- Semi-annual pollution inspections
- Performance standards for all operations
- Standards for determining violations of regulations and levying penalties

Current Methods of Accomplishing the Objectives

- Geological Survey performance standards, 30 CFR 221
- Geological Survey district engineers perform on-site inspections for FY 1978 pre-drilling and abandonment inspections have a 100% performance rating, "detailed" inspections, about a 25% rating

Alternative Methods

- Adopt tribal ordinance setting forth performance standards for operations and assessment of compliance
- Hire tribal petroleum engineer to perform "detailed" inspections
- Report any instances of probable violations to BIA Superintendent for action by GS Supervisor.

EXHIBIT A-1 (Cont.)

Alternative Levels of Effort

- Minimum : Supplement DOI "current" activities to achieve "minimum" level of inspections by hiring a tribal petroleum engineer to perform inspections
- Current: Simply utilize "current" level of support provided by DOI at no direct cost to the tribe; report any instances of probable violations to BIA Superintendent for action by GS Supervisor
- Improvement: Augment "minimum" level of activity performance by hiring a tribal petroleum engineer to perform inspections more frequently (e.g., monthly rather than quarterly "detailed" inspections).
- Improvement: Adopt tribal ordinance setting forth performance standards for operations, inspections, and enforcement.

EXHIBIT A-2
PROGRAM EVALUATION SUMMARY

TITLE: Resource Planning and Management

PROGRAM AREA: Supervise Oil & Gas Operations

LEVEL OF EFFORT: Minimum

Activity Description

- Performance standards for operations
- Various inspections of producing leases, inspections of pre-drilling and abandonment operations (See Exhibit II-8)

Objectives to be Accomplished

- Ensure "maximum ultimate recovery"
- Protect the physical environment
- Enforce all regulations

Workload Tables

Per Exhibit III-11:

		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<u>Task</u>	<u>Units</u>					
predrilling reviews	#exploratory wells	4				
	#development wells	35				
.	.					
.	.					
.	.					
detailed quarterly inspections	#producing leases	115				
semi-annual pollution inspections	#producing leases	115				
semi-annual equipment verification	#producing leases	115				
surface compliance check	#producing leases	115				

EXHIBIT A-2 (Cont.)

<u>Resource Requirements</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Staff Years	4.46				
Personnel Costs	-				
Non-Personnel Costs	-				
Total Cost	\$ 154,124				
Department of the Interior Funding <u>1/</u>	\$ 100,561				
Total Cost to Tribe	\$ 53,563				

1/ This "funding" represents the average cost of the activities performed by DOI at no cost to the tribe.

EXHIBIT A-3
PROGRAM AREA EVALUATION SUMMARY

TITLE: Resource Planning and Management

PROGRAM AREA: Supervise Operations

LEVEL OF EFFORT: Current

Activity Description

- Geological Survey promulgates performance standards, 30CFR211
- Geological Survey petroleum engineers inspect producing lease operations
- BIA serves as liaison between the tribe and GS

Objectives to be Accomplished

- Insure "maximum ultimate recovery"
- Protect the physical environment
- Enforce all regulations

Workload Tables

Per Exhibit III-11: <u>Task</u>		<u>Workload Units</u>				
		<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
	<u>Units</u>					
predrilling reviews	# exploratory wells	4				
	# development wells	35				
.	.					
.	.					
.	.					
detailed quarterly inspections	# producing leases	115				
semi-annual pollution inspections	# producing leases	115				
semi-annual equipment verifications	# producing leases	115				
surface compliance check	# producing leases	115				

EXHIBIT A-3 (Cont.)

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<u>Resource Requirements</u>					
Staff Years <u>1/</u>	2.91				
Personnel Costs	-				
Non-Personnel Costs	-				
Total Cost					
Department of the Interior Funding <u>2/</u>	\$ 100,561				
Total Cost to Tribe	0				

1/ Staff-years are based on the workload data from Exhibit III-11 multiplied by the level at which each one is currently performed by GS.

2/ This "funding" represents the average cost of the activities performed by DOI at no cost to the tribe.

EXHIBIT A-4

PROGRAM EVALUATION SUMMARY

TITLE: Resource Planning and Management

PROGRAM AREA: Supervise Oil & Gas Operations

LEVEL OF EFFORT: Improvement

Activity Description

Perform minimum level, but increase detailed inspections of producing leases to monthly, and perform pollution inspections quarterly.

Objectives to be Accomplished

Strengthened enforcement

Workload Tables

See Exhibit III-11

Year 1

Year 2

Year 3

Year 4

Year 5

Resource Requirements

Staff Years	7.96
Personnel Costs	-
Non-personnel Costs	-
Total Costs	\$ 275,765
Department of the Interior Funding ^{1/}	\$ 100,561
Total Cost to Tribe	\$ 175,004

^{1/} This "funding" represents the average cost of the activities performed by DOI at no cost to the tribe.

EXHIBIT A-5

CONSOLIDATED PROGRAM SUMMARY

TITLE: RESOURCE PLANNING MANAGEMENT

ESTIMATED BUDGET CEILING: \$60,000

Long-Range Goals and Objectives

- Develop energy resources according to policies that account for tribal economic, environment, and cultural goals
- Minimize physical environmental impacts of existing and new oil and gas operations
- Maximize revenues from existing and new oil and gas operations

Level of Output Needed to Accomplish Objectives

- Tribal energy policy guidelines
- Performance standards for operations
- Supervision inspections to ensure compliance with performance standards
- Audits of lease accounts to ensure accuracy in royalty payments
- Multiple-use plans that include oil, gas, and other mineral development options

Current Methods of Accomplishing Objectives

- GS performance standards for operators
- GS reporting requirements for all operators
- GS inspections and audits of producing leases
- Tribal comprehensive economic development plans (OEDP) and land-use plans (HUD 701), for other than minerals issues

EXHIBIT A-5 (Cont.)

Proposed Programs and Accomplishments

- Create a minerals-related department within the tribal government
- Hire one full-time and one part-time petroleum engineer to perform on-site inspections so that "minimum" level is achieved (supplement GS effort)
- Hire one part-time accountant to perform post-audits of producing oil and gas lease accounts (supplement GS efforts)
- Include minerals component in tribal economic and land-use plans by year 2, adopt energy policies

<u>Resource Requirements</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Staff years	2.1	2.0			
Personnel costs	-	-			
Non-personnel costs	-	-			
Total cost to tribe	\$ 69,224	\$ 61,572			

APPENDIX B

REVIEW OF EXISTING FEDERAL REGULATIONS GOVERNING MINERAL DEVELOPMENT ON TRIBAL LANDS

Leasing of Tribal Lands for Mining (25 CFR 171).^{1/} These regulations address lease acquisition and rents and royalties for development of minerals on tribal lands. They provide that leases be issued by public auction or sealed bids after notice and advertisement at least 30 days prior to the lease sale, unless the Commissioner of Indian Affairs grants the tribe written permission to negotiate for a lease. Negotiated leases may be vetoed by the Secretary of the Interior. Winning bidders and successful applicants for negotiated leases are required to furnish lease bonds as follows:

- For less than 80 acres - \$1,000
- For 80 acres and less than 120 acres - \$1,500
- For 120 acres and not more than 160 acres - \$2,000
- For each additional 40 acres, or part thereof,
above 160 acres - \$500

The primary term of a lease is not to exceed ten years from the date of approval, but the lease automatically extends after that as long as the minerals specified in the lease are produced in paying quantities.

Lessees of oil and gas are to pay an annual rental of \$1.25 per acre in advance and a monthly royalty of 12.5 percent of the value of all oil

^{1/} Refer to the subsection immediately following this for proposed revisions to 25 CFR 171.

and gas produced on leased lands. The Secretary of the Interior is authorized to fix a higher royalty percentage prior to advertising an area for leasing. Lessees of minerals other than oil and gas are to pay an annual rental of at least \$1 per acre. Coal lessees must pay a quarterly royalty of at least 10 cents per ton of coal mined. Lessees of minerals other than coal, oil, and gas are to pay quarterly royalties of not less than 10 percent of market value.

Lessees are required to exercise diligence in drilling and operating wells for oil and gas on leased lands. Lessees of minerals other than oil and gas are to spend not less than \$10 per acre annually for development.

The regulations specify in general terms the manner in which development operations are to be carried out. (Operating regulations are spelled out in more detail in 30 CFR--described later in this appendix.)

Failure to comply with any provision of the lease subjects the lessee to a fine of up to \$500 per day, after notice and a hearing, or to cancellation of the lease.

Proposed Revisions to 25 CFR 171. The proposed regulations would govern contracts for the prospecting for and mining of Indian-owned (tribal and allotted) minerals, other than oil and gas,^{1/} that are approved after the rules are finalized.

The proposed revisions indicate a movement away from the almost exclusive use of a competitive bid lease sale administered by BIA. They emphasize the authority of Indian mineral owners to negotiate with mineral companies to develop their natural resources, and to enter into any lawful contractual arrangement (subject to the approval of the Secretary of the Interior as required by law). Special permission from the BIA Commissioner would

^{1/} Oil and gas would be governed by proposed 25 CFR 182, which is described below.

no longer be required for a tribe to negotiate an agreement with a mineral development company. In cases where a tribe chooses to use a lease sale approach, bidders would be permitted to compete on such terms as rental and royalty rates instead of just bonus payments.

The proposed regulations allow for increased flexibility in contractual arrangements subject to four major conditions. First, contracts may not exceed 10 years unless minerals are being produced in "paying quantities" as defined in the regulations. Second, rather than specify minimum rental or royalties, the Secretarial approval will depend on whether the specific provisions of each contract provide "fair and reasonable remuneration," and whether cultural and environmental impacts do not outweigh the benefits. To assist the Secretary in these case-by-case determinations, the BIA Area Director must prepare a written evaluation of the adequacy of the contract's provisions for the following:

- Diligent development
- Water use
- Income or financial return to the tribe
- Payment and enforcement of contract provisions
- Training and employment of tribal members
- Delineation of the area to be mined.

This assessment also must consider the reputation of the prospector or operator. Third, the BIA Area Director must provide written advice to the Indian mineral owner on any legal, economic, or other difficulties that might arise from cases where the mineral estate is severed from the surface estate.

Finally, the regulations provide special procedures for approving prospecting permits that would include options to lease. These preconditions stress flexibility: The prospecting aspect of the contract may be approved, but the mining provisions would be held back for approval until the option

was exercised. Likewise, no prospecting permits with exclusive mining options can prescribe either an inflexible royalty rate or a fixed return on production that is to be paid to the Indian mineral owner. All such permits will be subject to special scrutiny by the Secretary prior to approval.

The proposed revisions also provide stronger language concerning enforcement of orders, specifying that the (USGS) Mining Supervisor shall investigate all claims of the Indian mineral owner regarding a prospector's or operator's failure to comply with the provisions of the new regulations, other applicable laws or regulations, the terms of the contract, the requirements of an approved exploration or mining plan, or the orders of the Mining Supervisor.

Surface Exploration, Mining and Reclamation of Tribal Lands
(25 CFR 177).^{1/} These regulations specify measures to be taken by lessees to avoid, minimize, or correct damage to the environment and hazards to public health and safety. They do not apply to oil and gas leases or land for which the tribe holds only mineral rights (and not surface rights).

Technical examinations of the potential environmental effects of proposed exploration or mining operations are to be made by the BIA superintendent in consultation with the USGS Supervisor. Based upon the technical examinations, the superintendent is to formulate lease requirements to protect non-mineral resources and reclaim land or waters affected by the exploration or mining operation.

Before beginning any surface-disturbing operations for exploration, operators are to file an exploration plan for USGS approval. Operating plans (including reclamation) are also required to be submitted before surface mining operations are started.

^{1/} Refer to the subsection immediately following this for proposed revisions to 25 CFR 177.

Performance bonds (covering operations and reclamation) are to be filed by operators in an amount of no less than \$2,000.

Operators are to file annual performance reports describing the nature and extent of their operations during the preceding year. Reports are also required to document completed grading, backfilling, and planting undertaken by operators as well as plans to cease or abandon operations.

The regulations also provide for inspections of lessee operations to be carried out by the USGS Mining Supervisor and BIA superintendent to ensure compliance with lease terms and applicable regulations.

Proposed Revisions to 25 CFR 177. The proposed revisions would require the BIA Area Director to prepare a written environmental and cultural assessment in lieu of the technical examination currently required. Specific cultural impacts to be considered in the assessment include:

- The possible dislocation of Indian families from their homes or occupations
- The influx of non-Indians into the Indian community and its effect on the local cost of living, tribal government, housing, educational services, police protection, transportation and communication facilities, health care, and intercultural relationships
- Noise and aesthetics
- Threats to vegetation, wildlife, and natural or other monuments that play an important role in local Indian culture or religion.

This assessment is to be made available to the Indian mineral owner prior to contract approval.

The proposed revisions are more specific than the existing ones on the items to be addressed in exploration and mining plans. Notable is the requirement that operators list the anticipated number of persons to be employed in each occupation at an operation at any given time, and plans for

the training and utilization of the local Indian labor force. Approved plans are to be attached to and made a part of the mineral development contract. Also included in the proposed revisions is a provision that upon completion of prospecting operations for minerals other than coal, a prospector shall submit to the Indian owner (in addition to BIA and USGS) signed copies of records and geologic interpretations of all prospecting operations conducted on the lands, including calculations of recoverable mineral reserves.

The proposed revisions note that to the extent that any tribal law or ordinance addressing mineral development or reclamation is more stringent than the applicable federal regulations, tribal law shall supersede the federal regulations.

With regard to reports required of the operator concerning operations and reclamation, the proposed revisions are more specific in requiring that the BIA Area Director and USGS Supervisor advise the Indian mineral owners of reports received and reclamation inspections to be made.

The proposed revisions add a new subpart concerning coal operations to the regulations. Included are detailed performance standards for reclamation, revegetation, water use, waste disposal, blasting, construction of access roads, and abandonment of operations.

Proposed Addition of Part 182 to 25 CFR--Oil and Gas Contracts.

If adopted, this proposed addition will supersede all former regulations in 25 CFR Parts 171, 172, 173, and 174 governing oil and gas exploration and leasing. The new regulations would not apply to existing oil and gas leases.

The proposed operating and development standards may be superseded by the provisions of tribal laws or ordinances if the tribal law provides protection at least as stringent as that required in the federal regulations.

In the case of oil and gas contracts involving profit sharing or other than a percentage royalty method of payment, the USGS Supervisor shall not be responsible for monitoring, accounting for, and collecting the funds resulting from such contractual agreements.

Performance bond requirements are increased to a minimum of \$10,000 to be posted prior to the start of drilling operations. Annual land rentals are increased to a minimum of \$2 per acre and minimum royalties are increased to 16-2/3 percent (unless otherwise authorized by the Secretary).

In order to improve the system of verifying payments received by the lessee for oil and gas sold, lessee royalty payment statements are to be accompanied by a copy of the purchaser's settlement or pipeline statement. Previously, purchaser's statements were only required upon individual request of lessees by USGS.

Oil and Gas Operating Regulations (30 CFR 221).^{1/} Regulations under 30 CFR (Mineral Resources) essentially expand upon the USGS Conservation Division's functions related to management of mineral development on public lands. In several cases, they apply to tribal lands as well.

USGS functions extend to enforcement of compliance with lease terms, regulations and applicable laws; supervision of lessee operations and well abandonment; authorization of the capacity at which wells may be operated; determination of well spacing and well casing requirements; and determination of rental and royalty liability and maintenance of lease accounts. The regulations define each of these functions in greater detail.

The regulations also specify operating requirements for all lessees and operators. On a periodic basis, operating requirements are

^{1/} These regulations also govern operations for the extraction of oil shale by in-situ retorting.

expanded upon or clarified by the Conservation Division through the issuance of Notices to Lessees (NTL). On April 1, 1977, NTL-1A was issued, covering Procedures for Reporting and Accounting for Royalties. NTL-1A specifies a series of seven forms and reports that must be submitted to USGS by lessees or operators on a regular basis for use in computing and verifying royalty payments due Indian lessors. Also included is a clarification of the manner in which royalties are to be computed for crude oil and condensate, and gas and associated liquids. In the case of gas and associated liquids, lessees and operators are to compute royalties based on (1) the value of the wet gas produced from the lease adjusted for its Btu content; (2) the value of the separate components after processing and adjustment for the approved manufacturing allowance; and (3) the gross proceeds accruing to the operator. The method yielding the highest royalty to the tribe is to be used.

NTL-1A also states that "in those instances where the royalty interest in production from an Indian oil and gas lease is properly subject to State and/or local taxes and the lessee or operator pays these taxes on behalf of the Indian lessor, the lessee or operator may recover the taxes by withholding from current (royalty) payments an amount equal to the taxes paid."

On May 1, 1977, NTL-5 was issued, dealing with valuation of natural gas for royalty purposes. For intrastate sales and interstate sales subject to the price jurisdiction of the Federal Power Commission (FPC) from wells commenced prior to June 1, 1977, the base value for royalty purposes is to be established as the higher of:

- a. The price received by the lessee or operator in accordance with the provisions of the applicable sales contract, or
- b. A minimum value of not less than 18 cents per MCF at 14.73 psia and 60°F.

For interstate (FPC-regulated) sales from wells commenced on or after June 1, 1977, the base value for royalty purposes is to be established as the higher of:

- a. The price received by the lessee or operator in accordance with the provisions of the applicable sales contract, or
- b. The highest applicable ceiling rate then established by the FPC for the same vintage gas.

For sales from intrastate wells commenced on or after June 1, 1977, the base value for royalty purposes is the higher of:

- a. The price received by the lessee or operator in accordance with the provisions of the applicable sales contract, or
- b. The highest price paid or offered for a majority of like quality gas produced in the field or area. Provided, however, that if such information is not readily available, or the highest price paid or offered for said majority of like quality production does not reflect the reasonable value of the gas, the Supervisor may determine the base value as the highest applicable national rate then currently established by FPC for the same vintage gas.

Criteria for value adjustments based on gas quality are also included in NTL-5.

Other Notices to Lessees pertaining to operations on Indian lands include:

- NTL-2B--Requirements for Disposal of Produced Water
- NTL-3--Reporting Requirements for Pollution Occurrence and Accidents
- NTL-4--Royalty Payment on Oil and Gas Lost
- NTL-6--Requirements for Drilling Permit Applications and Operating Plans.

Operating Regulations for Exploration, Development and Production
(30 CFR 231). These regulations apply to operations for exploration, development, mining, and processing of uranium (among other minerals). They are to be administered by USGS Mining Supervisors.

The regulations provide for "frequent" examinations of exploration, development, and processing operations to ensure compliance with the terms and conditions of the permit or lease and the requirements of approved exploration or mining plans. The Mining Supervisor is also charged with verifying production, determining rents and royalties due lessors, collecting payments, and maintaining rental and royalty accounts.

The regulations under this part specify items to be included in exploration and mining plans; maps to be submitted by operators; procedures for drilling core holes for samples; and mining and milling methods to be employed by operators.