U.S. Department of Energy
Oak Ridge Operations
Environmental Management

Public Involvement Plan for the Oak Ridge Reservation

June 1996

MASTER

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This document supersedes the *Environmental Restoration Community Relations Plan for the Oak Ridge Reservation* (DOE/ORO-928) published in March 1991; the *Public Involvement Plan for the Oak Ridge Reservation* (DOE/ORO-928, Rev. 1) published in March 1995; and the *Public Involvement Plan for the Oak Ridge Reservation* (DOE/ORO-928, Rev. 2) published in September 1995.

Energy Systems Environmental Restoration Program

**U.S. Department of Energy
Oak Ridge Operations
Environmental Management
Public Involvement Plan
for the Oak Ridge Reservation**

Date Issued—June 1996

Prepared by
Science Applications International Corporation
Oak Ridge, Tennessee
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LOCKHEED MARTIN ENERGY SYSTEMS, INC.
managing the
Environmental Management Activities at the
Oak Ridge K-25 Site Paducah Gaseous Diffusion Plant
Oak Ridge Y-12 Plant Portsmouth Gaseous Diffusion Plant
Oak Ridge National Laboratory
under contract DE-AC05-84OR21400
for the
U.S. DEPARTMENT OF ENERGY

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Science Applications International Corporation

contributed to the preparation of this document and should not be considered an eligible contractor for its review.

Preface

This *Public Involvement Plan for the Oak Ridge Reservation* (DOE/OR/01-1445&D1) was prepared in accordance with requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) for writing community relations plans. The work was performed under Work Breakdown Structure 1.4.12.2.3.01 (Activity Data Sheet 8301). Publication of this document meets a Federal Facility Agreement milestone of March 15, 1996.

This document includes information on how the DOE Oak Ridge Operations Office prepares and executes Environmental Management community relations activities.

This document supersedes the following documents:

- *Community Relations Plan for the Environmental Restoration Program at the Oak Ridge Reservation, Oak Ridge, Tennessee* (DOE/ORO-928), March 1991
- *Public Involvement Plan for the Oak Ridge Reservation* (DOE/ORO-928 Rev. 1), March 1995
- *Public Involvement Plan for the Oak Ridge Reservation* (DOE/ORO-928 Rev. 2), September 1995

DOE provides a number of information sources for you

For More Information

For more information about the topics covered in this publication, please contact:

*Lockheed Martin Energy Systems
Community Relations Program*

1-800-382-6938 (576-4006 in the local Oak Ridge calling area)

Provides information on local public involvement opportunities and issues

Environmental Management Information Resource Center

105 Broadway Avenue

Oak Ridge, Tennessee 37830

(423) 241-4582

Houses official Administrative Records and other environmental reports for Oak Ridge Reservation environmental cleanup work

DOE Oak Ridge Public Information Office

200 Administration Road, Federal Building

Oak Ridge, Tennessee 37831-8502

(423) 576-0885

The point of contact for DOE's Environmental Management Community Relations Program

DOE Oak Ridge Public Reading Room

55 Jefferson Avenue

Oak Ridge, Tennessee 37830

(423) 576-1216

Electronic mail address: rothrockal@oro.doe.gov
Information center for many documents concerning DOE environmental cleanup and other decisions

Center for Environmental Management Information

1-800-736-3282 (1-800-7EMDATA)

A DOE national publication clearinghouse serving the public, educators and industry

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Join DOE in its local environmental decisions

A Letter to Stakeholders

Dear Stakeholder:

This *Public Involvement Plan* is your user's guide for getting involved in U.S. Department of Energy (DOE) environmental decisions in Oak Ridge, Tennessee. It outlines the many ways you can help DOE find solutions to its environmental challenges.

This plan also can help you find a level of involvement that is comfortable for you: You may wish to speak your mind on specific issues, or simply remain informed of developments and decisions. The plan tells you how to get involved and find the sources of information you need.

DOE's environmental work at Oak Ridge is a complex job involving millions of dollars, thousands of employees and dozens of companies. Your input on this work can help DOE make better environmental decisions—decisions that reflect your values and concerns. DOE has benefited from public input in several major decisions in Oak Ridge; some of these impacts are described in this plan.

If you would like to know more or give us your thoughts about the DOE public involvement process, please call the DOE Public Information Office at (423) 576-0885 or the Lockheed Martin Energy Systems Community Relations Office at 1-800-382-6938 (576-4006 within the Oak Ridge local calling area).

Sincerely,

Assistant Manager
Environmental Management
Department of Energy, Oak Ridge Operations

WHO IS A STAKEHOLDER?

You are.

In the early 1990s, as DOE broadened its public involvement efforts, it found that thousands of persons were interested in its environmental cleanup activities. The list included members of environmental groups, civic leaders, government and contractor employees, representatives of environmental companies, labor union representatives and members of the general public.

All have an interest in the outcome of DOE environmental decisions. For some it means jobs, others a cleaner environment. To describe this diverse group of interested citizens, DOE borrowed a phrase from Gold Rush days: Each person holds a stake—an interest—in DOE decisions; each is a stakeholder.

Section I: The Public Involvement Plan

Since it began its environmental program in the 1980s, DOE has listened to your opinions and concerns. As a result, DOE has refined and improved its approach to environmental issues and public involvement. Today, Environmental Management programs have come to depend on your input.

No two environmental projects are the same. And DOE tailors its public involvement approach for each project to ensure that you have ample time and information to express your views. Because of this, the *Public Involvement Plan* lists sources of information and describes commonly used public information methods.

A quick tour through the plan

Information on how the public involvement program evolved is included in Section II, along with an overview of the ways DOE works to keep you informed, hear your views and keep lines of communication open. Section III is a review of 1995 public involvement work. Throughout the sections, you will find short articles, maps and tables that provide condensed information or list sources for additional details.

The plan's appendixes include supplemental information. Refer to these for descriptions of the DOE Oak Ridge Environmental Management Program, the Oak Ridge region and the people DOE works with.

WHAT PROGRAMS DOES THIS PLAN COVER?

The *Public Involvement Plan* focuses on DOE's Environmental Management public involvement activities. Environmental Management is composed of the following programs:

- Environmental Restoration
- Technology Development
- Waste Management

These are explained in greater detail in Appendix A of this plan.

Oak Ridge is the center of other well-known environmental programs. For example, scientists at Oak Ridge National Laboratory conduct research on the environment, and some research results help improve DOE's approach to environmental cleanup and waste management. Generally, such programs are not part of the DOE Environmental Management organization and are not covered in this plan.

Where is the Oak Ridge Reservation?

The Oak Ridge Reservation is approximately 35,000 acres in East Tennessee. It includes portions of the city of Oak Ridge. The Clinch River surrounds the Reservation on its east and south. The land was entirely held by the federal government during the Manhattan Project effort to build the first nuclear weapon.

The Oak Ridge Reservation includes the Y-12 Plant, the K-25 Site and the Oak Ridge National Laboratory. Each of these facilities has ongoing environmental cleanup projects.

Other area cleanup sites include:

- East Fork Poplar Creek,
- Clinch River/Watts Bar Reservoir,
- Atomic City Auto Parts,

- David Witherspoon site,
- Solway drums,
- Oak Ridge West End Sewage Digester,
- Oak Ridge Associated Universities South Campus Facility,
- CSX Railroad, and
- Elza Gate site.

More information on the Reservation and the cleanup sites is available in Appendixes A and B.

Section II: Public involvement in Oak Ridge

Beginning in the early 1980s, events helped reshape DOE's approach to the Oak Ridge environment. As a result of these changes, DOE was able to give you and other interested persons a larger say in its environmental decisions.

One of the first steps toward an open public involvement program began in 1983. DOE announced that mercury from the Y-12 Plant had contaminated parts of East Fork Poplar Creek and its floodplain. Mercury had been used in the production of nuclear weapons components from the 1950s through the 1970s.

Then, in 1989, the Oak Ridge Reservation was placed on the National Priorities List, which is maintained by the U.S. Environmental Protection Agency. Sites on the list must be studied and cleaned according to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), often referred to as Superfund, which set national standards for cleaning hazardous waste sites.

To learn more about the National Priorities List, Superfund and other laws affecting the cleanup of Oak Ridge sites, see Appendix C of this document.

The resulting study of mercury in East Fork Poplar Creek was one of DOE's first large-scale, local cleanup efforts. By 1995, when DOE announced its plans for cleaning the creek's floodplain, the study had become a model for public input to DOE's decisions.

More detail about public involvement in the East Fork Poplar Creek cleanup appears in Section III of this document.

The global picture also shaped local events

International events also had effects locally. The breakup of the Soviet Union and the Warsaw Pact in the 1980s led to the end of the decades-old Cold War. As U.S. policy focused less on large nuclear weapons stockpiles and more on the peace dividend, DOE's work in producing weapons materials lessened and its emphasis on environmental cleanup increased.

As the Cold War wound down, the need for rigorous secrecy in many DOE programs decreased. DOE was able to talk publicly about environmental concerns created by years of local weapons study and production.

Question and answer session at a DOE public meeting.

The 1990s: Increased citizen participation

By 1990, DOE was squarely on the path to increased environmental public involvement. The benefit for you: more say in DOE environmental decisions that affect your home, health, business, or job. For DOE: better environmental decisions as it added your input to the already available information.

Today's approach: Inform, listen, decide

DOE public participation activities typically involve the following steps designed to help

you learn about and participate in environmental decision making.

Include public participation in the program plan.

DOE wants to hear from you. Whether the work is managing wastes, cleaning up a contaminated area, or adopting a new technology, DOE managers include ample time and opportunities for public input.

Inform you of the opportunity for involvement.

This generally involves announcing the opportunity through newspaper advertisements, mailings, news

releases and articles in DOE's *Environmental Update*. DOE frequently asks for comment on a specific project during a public comment period that may last 30 or more days.

Provide information to you.

For each environmental decision it faces, DOE creates reports, studies and data. These are available to you through various avenues. In most cases, DOE will send information to your home or office free or for a small fee.

DOE also publishes the *Oak Ridge Reservation Annual Site Environmental Report*. You can find these and other status reports in the Information Resource Center and the DOE Reading Room.

More information on the Information Resource Center and the DOE Reading Room is available on page 9.

DOE establishes Administrative Records for sites where environmental study and cleanup falls under Superfund regulations. Administrative Records are collections of documents that form the basis for DOE's decision about the actions required to clean the site. The Information Resource Center houses official public Administrative Records. You may obtain these at no additional charge. DOE announces the availability of Administrative Records in local newspaper advertisements.

Listen to your input.

DOE typically offers four ways you can provide input on its environmental programs:

1. Regular stakeholder meetings are held three to four times a year. Each meeting covers a variety of topics and consists of briefings by DOE program managers, a period for your comments or questions and poster sessions where you can learn more.
2. Meetings or hearings on specific projects are scheduled as needed or required, and are usually held during public comment periods. These meetings start with a short information session followed by a time for your views or questions. Meeting locations are usually near the affected site.
3. The Oak Ridge Reservation Environmental Management Site Specific Advisory Board, a citizen's panel advising DOE's Environmental Management Program, meets monthly at sites in or around Oak Ridge. Board meetings are open, and each meeting contains a time for public input.
4. Public comment periods are held as needed to get your input on a specific project. They are announced in newspapers, mailings and the *Environmental Update*. Often, DOE holds a public meeting during the comment period; if

one is not scheduled, the public can request a meeting during a public comment period. In every case, public comment periods give you an opportunity to express your views in writing.

More information on where DOE holds its Oak Ridge environmental public meetings is available on page 11.

Weigh your input.

Your perspective can help DOE see its programs and plans in a new light. DOE uses your input to make its final decisions about

environmental projects. Program managers weigh your views about project costs or goals along with technical data and regulatory requirements.

Announce the decision.

DOE wants you to know its decisions and how it considered your input. In some cases, an additional public meeting is held to explain the decision and the effect you had on it.

Many decision documents contain Responsiveness Summaries that show the range of comment and how their comments affected the decisions.

A public tour at the Y-12 Plant in Oak Ridge.

Other community relations methods

Several other approaches DOE uses to gain your input on environmental issues and projects are shown below. The approach may differ from project to project.

Advertisements

Announce environmental public meetings, comment periods or document publications. The advertisements appear in area newspapers.

Comment cards

Given out at public meetings; may be handed back to a community relations staff member or mailed to the community relations office.

Environmental Update

A newsletter of the DOE Environmental Management Program containing information on specific projects. DOE distributes nearly 40,000 copies by mail and in local newspapers. Call 1-800-382-6938 to have your name included on the mailing list.

Informal discussion

DOE managers want to speak with you directly to answer your questions or hear your views, and include time for informal discussions before and after public meetings.

Mailings

Announce environmental events or meetings. You may call 1-800-382-6938 to have your name included on the mailing list.

News releases

Information provided by DOE to local newspapers, radio stations and television stations.

Speakers bureau

A group of speakers available to speak to school, civic and community organizations about environmental work in and around Oak Ridge. You may call (423) 574-4163 to request a speaker.

Tours

DOE and its contractors will provide your group a tour of its environmental work sites. Call 1-800-382-6938 to request a tour.

Small group listening session at a DOE public meeting.

A meeting of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board.

Oak Ridge Vicinity Map

PUBLIC INFORMATION LOCATIONS

Where you can find reports and studies

DOE advertises in local newspapers when and where most new decision documents are available to you. Advertisements contain specific information on document titles, purpose and location. Generally, DOE places new and historical documents in one or both of the places listed below.

- **The DOE Reading Room**
55 Jefferson Avenue
Oak Ridge, TN
(423) 576-1216
Monday through Friday
8 a.m. to 11:30 a.m./
noon to 5 p.m.,

The reading room provides documents on the National Environmental Policy Act and other environmental topics.

- **Information Resource Center**
105 Broadway Avenue,
Oak Ridge, TN
(423) 241-4582
Monday, Wednesday and
Friday 9 a.m. to 5 p.m.;
Tuesday and Thursday
9 a.m. to 7 p.m.; and Saturday
9 a.m. to 1 p.m.

The center provides official public Administrative Records for Oak Ridge cleanup sites and other environmental documents.

Both locations provide indexes that you can use to find specific documents. DOE charges a small copying fee for some documents at the public reading room.

A range of comments

Your views and the views of others

Over the years, DOE has heard you and many others express a variety of views about its Oak Ridge environmental programs and practices. The public concerns and values are often very different and have led to lively debates among members of the public. Summarized below are many of the areas of concern that Oak Ridge stakeholders have expressed to DOE.

Human health and the environment

Stakeholders generally have agreed that DOE should ensure that the public has clean water to drink and clean air to breathe. But many sharply disagree about the effects of DOE work in Oak Ridge. While some stakeholders have stated that contamination has caused health problems in the general population and in people who work in Oak Ridge, others say they don't feel that the evidence points to adverse effects on health or the environment.

The cost of cleanup

When discussing its projected cleanup costs, DOE didn't hear only the expected "No cost too high." Instead, DOE more often heard "No. Cost too high." Persons worried about the high

cost of cleanup and the impact on taxpayers spoke loud and clear at meetings about plans for Waste Area Grouping 4 and East Fork Poplar Creek. (See "East Fork Poplar Creek" in Section III of this Plan.)

Money is not the only cost that concerned stakeholders. Many said proposed cleanup plans that call for removing large numbers of trees and large amounts of soil are more harmful to the environment than leaving some contamination in place; that the social effects of such cleanup, such as routing heavy trucks on public roads, would be a burden; and, that environmental studies are too long and needlessly lengthen cleanup schedules.

How to achieve a healthy balance between cost and effect? Stakeholders have made specific suggestions that include performing realistic cost and benefit analyses, ensuring that DOE protects and helps maintain property rights and values, performing risk assessments that used realistic assumptions, and shortening study times.

Private sector waste treatment

In 1995 and 1996, DOE asked for input on this issue and found a range of thoughts and convictions. While some said DOE should turn more of its

waste treatment over to private companies, others felt DOE should treat its waste on its property.

Coupled with these feelings were concerns about transporting waste on public roads, and emissions from private companies handling DOE waste.

DOE heard from many stakeholders who felt the location of waste treatment facilities, such as the Toxic Substance Control Act incinerator on the K-25 site, is part of a "waste corridor" that includes privately owned waste treatment facilities.

Needed: Your input on the process

Like any other DOE program, the public participation program can benefit from your input. If you have comments on how DOE approaches public outreach, or how it can do a better job of hearing or informing you, call the Lockheed Martin Energy Systems Community Relations staff toll free at 1-800-382-6938 (576-4006 within the Oak Ridge local calling area). Or, you can call or write the DOE Oak Ridge Operations Public Information Office at (423) 576-0885; P.O. Box 2001, Oak Ridge, TN 37831-8502.

Oak Ridge Vicinity Map

PUBLIC MEETING LOCATIONS

Where DOE holds public meetings

DOE holds public meetings at or near sites affected by its environmental decisions. For example, 1995 meetings concerning plans for the Lower Watts Bar Reservoir were held in Kingston and Spring City, Tennessee. Most meetings are held in and around Oak Ridge.

Announcements for DOE public meetings include the time and location and provide a telephone number you can call for additional information. DOE chooses meeting locations with access for persons with disabilities.

Your ideas made an impact in 1995. Two major projects—East Fork Poplar Creek and formation of the Site Specific Advisory Board—and several smaller efforts were completed.

Your views helped shape DOE

Clinton & Spring City Maps

PUBLIC MEETING LOCATIONS

PUBLIC MEETING LOCATIONS

- A Clinton Community Center
- B Spring City Elementary School

Roane County Area Map

PUBLIC MEETING LOCATIONS

PUBLIC MEETING LOCATIONS

- A Harrison Holiday Inn
- B Kingston Community Center
- C Kingston Elementary School

Section III:

Public involvement in 1995

East Fork Poplar Creek

DOE listened closely to stakeholder views as it neared a final decision about how it would clean mercury from the creek's floodplain. DOE's studies had shown where the creek and its floodplain were contaminated with mercury; the decision centered on cleanup levels.

Throughout the process, DOE had actively sought public comment. DOE had established a special citizen's working group to provide input on East Fork Poplar Creek cleanup and had held public listening sessions to hear issues.

More than 175 people attended a public meeting in January 1995 where representatives from DOE, the Tennessee Department of Environment and Conservation and the U.S. Environmental Protection Agency announced a plan for removing mercury from the floodplain. Stakeholders at the meeting reacted to the plan as taxpayers, property owners and persons worried about the environment. The overwhelming message: DOE should remove high levels of mercury from the creek but not incur huge project costs or cause additional environmental harm.

DOE rethought its proposed plan and continued work to hear public views. Three tours of the creek were scheduled for February 1995.

DOE also completed a risk analysis that considered the type and toxicity of the floodplain mercury; the data showed the potential health effects were not as severe as originally thought. This study, in tandem with public comment, led DOE to a new plan: It proposed to clean only those areas of the floodplain where mercury levels exceeded 400 parts per million. The resulting changes would mean the work could be completed faster, cheaper and with less impact on the local environment while protecting people's health and the environment. While some stakeholders at a June public meeting asked DOE to keep the originally planned stringent cleanup levels, many others lauded the new plan. DOE and its environmental regulators signed a Record of Decision in September 1995 that used the 400 parts per million cleanup standard..

Site Specific Advisory Board

In early 1995, DOE held a series of information meetings aimed at creating a new Site Specific

Advisory Board. The local board would be one of many citizen's boards formed around the nation to advise DOE environmental managers.

The information meetings allowed DOE to talk about its expectations for the board and to hear the public's views on potential board members and future agenda topics.

To select board members, DOE took applications from interested persons and created a seven-member screening panel. The screening panel reviewed applications to ensure makeup of the board met diversity standards of the Federal Advisory Committee Act.

By late 1995, DOE and the screening panel had done their work. A 20-member board had been formed and was holding organizational meetings. The board holds public meetings monthly on or near the Oak Ridge Reservation. Meetings are advertised in local newspapers, the Federal Register, and through mailings.

Other agencies participating in local public involvement

DOE shares the Oak Ridge environmental public involvement stage with state and local boards and agencies. Some of the other groups that hold public meetings in Oak Ridge include:

Tennessee Department of Environment and Conservation

DOE Oversight Office

State agency with regulatory and review roles over many Oak Ridge Environmental Management activities. Holds regular meetings on local environmental issues.

Oak Ridge Reservation Local Oversight Committee

Independent committee composed of elected officials and citizens from the Oak Ridge area and adjacent counties. Seeks to improve public understanding of Environmental Management activities on the Oak Ridge Reservation. Also, identifies issues of local concern regarding Oak Ridge environmental management activities.

Oak Ridge Environmental Quality Advisory Board

Committee that makes recommendations on environmental issues to the Oak Ridge City Council.

Roane County Environmental Review Board

Independent board advising the Roane County Commission on environmental matters.

Other Activities

In 1995, a number of other environmental public involvement efforts were conducted.

- DOE held three public meetings covering several environmental topics (April, July, November).
- DOE held waste management stakeholder information session on proposed site treatment plan (January).
- DOE mailed three issues of the *Environmental Update* (April, July, November).
- DOE sponsored a workshop to get input on cleaning up contaminated ponds at Oak Ridge National Laboratory (March).
- DOE held two public meetings on plans for cleaning contaminants from Lower Watts Bar Reservoir (April).
- DOE held a public meeting for waste management stakeholders; topics included private sector involvement in treating DOE waste (April).
- DOE started its toll-free telephone line service, 1-800-382-6938 (March).
- DOE held a scoping meeting on the Programmatic Environmental Assessment for private-sector treatment of DOE mixed waste (June).

Students at the 1995 EnvironMENTAL Fair.

- DOE ran an announcement and held a public comment period for the Chestnut Ridge Filled Coal-Ash Pond Proposed Plan. The topic was also discussed in a stakeholders meeting (July).
- DOE held a public workshop on the Baseline Environmental Management Report (August).
- DOE held a workshop on the Molten Salt Reactor Experiment remedial action program at Oak Ridge National Laboratory (October).
- DOE held the fourth annual EnvironMENTAL Fair for students from local elementary and middle schools (October).
- DOE sponsored a video conference on the Draft Waste Management Programmatic Environmental Impact Statement (October).
- DOE held meetings with members of the Merriwater Homepark Association concerning testing of ground water in their neighborhood (December).

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APPENDIX A

Environmental Management In Oak Ridge

Environmental Management in Oak Ridge

Hazardous and radioactive wastes have been and are still being generated at the three principal sites comprising DOE's Oak Ridge Reservation—Oak Ridge National Laboratory, the Y-12 Plant and the K-25 Site. In some cases, contamination has traveled away from these sites to areas that are not part of the government lands in Oak Ridge. DOE's efforts to reduce or eliminate risks posed to human health and the environment from both on- and off-site contamination fall into three categories—environmental restoration, waste management and development of new technologies to solve environmental problems. DOE is now aggressively facing the challenge of cleaning up its Oak Ridge Reservation while conducting environmentally responsible operations.

Oak Ridge National Laboratory

From its original war-time objective of demonstrating that plutonium could be produced from uranium, ORNL's mission has evolved to performing basic scientific research in the physical and life sciences. ORNL now has

more than 200 sites on its 2,900 acres that are contaminated with hazardous waste, transuranic (heavier than uranium) waste and liquid and solid low-level radioactive and mixed (both radioactive and hazardous) wastes. Sixteen of ORNL's buildings are on the list to be cleaned up and either used for another purpose or torn down.

The Y-12 Plant

The Y-12 Plant processed the first uranium-235 for use in nuclear weapons and continued to manufacture nuclear weapons components throughout the Cold War and into the late 1980s. With the end of the Cold War, the plant's 811 acres are now devoted to dismantling and

Oak Ridge National Laboratory

storing nuclear weapons components, maintaining a storehouse of weapons-grade nuclear materials and the nation's nuclear weapons production capability and applying its unique manufacturing expertise to private, nonmilitary endeavors. It was mercury from Y-12 that migrated through East Fork Poplar Creek into the city of Oak Ridge. On-site waste disposal areas, storage tanks and spill sites, along with the 4.5-acre "Alpha-5" building, are also slated for cleanup or continuous monitoring.

Y-12 Plant

K-25 Site

The K-25 Site

Formerly known as the Oak Ridge Gaseous Diffusion Plant, the K-25 Site housed the world's first uranium enrichment facility

that used the gaseous diffusion process. After World War II, K-25 supplied enriched uranium for the nation's defense and later for the nuclear power industry. When its production was shut

down in the mid 1980s, the site's 4,845 acres became the headquarters for DOE's Environmental Management Program and home to the only waste incinerator in the country licensed to burn both hazardous and low-level radioactive wastes. About 86 of the site's 340 buildings are scheduled for cleanup and reuse or demolition. K-25's waste sites include burial grounds, storage facilities, underground tanks, waste ponds and treatment facilities.

Environmental Restoration

Low-level radioactive, hazardous and mixed wastes are present in soil, ground water, surface water, buildings and equipment throughout DOE's Oak Ridge Reservation. Since 1989, when the Reservation was placed on the U.S. Environmental Protection Agency's Superfund list of sites most in need of cleanup, a number of projects have been successfully completed. DOE has

- placed caps on 114 contaminated acres to prevent rainwater from carrying the contaminants away from the Reservation;
- closed 28 surface storage areas;
- developed 503,556 square feet

of waste storage space;

- removed 13 miles of asbestos pipe insulation;
- cleaned or disposed of 13,867 pieces of equipment contaminated with PCBs (polychlorinated biphenyls);
- removed 700,000 cubic feet of contaminated soil;
- recycled 5 million pounds of scrap metal; and
- treated and cleaned 50 million gallons of surface and ground water.

Waste Management

In addition to cleaning up wastes from past operations, DOE works to minimize waste generation in its current operations, reduce wastes, decrease waste storage and disposal costs and reduce health risks to its workers. The Waste Management Program also

directs the safe treatment, storage and disposal of wastes generated by past and current operations and from environmental restoration projects.

To minimize waste generation, DOE is

- increasing the use of nonhazardous chemicals;
- designing or redesigning products, processes and facilities to produce less waste;
- reusing and recycling items whenever possible; and
- educating employees on ways to create less waste.

Technology Development

The challenge of cleaning up and managing DOE's hazardous and radioactive wastes often demands developing new or modifying existing technologies. For example, researchers are developing microorganisms to degrade or stabilize certain organic contaminants such as PCBs and inorganic elements such as uranium, chromium and lead. Robotic systems are being studied as a way to characterize and clean up waste without exposing workers to the hazardous environment. New sensing and monitoring devices, new ways to package waste for transportation and storage and new methods to treat and store wastes are being researched and demonstrated. DOE is also looking at ways that these new technologies can be applied in its Environmental Management Program, private industry, academia and with other federal agencies.

Answering stakeholder questions at a DOE public meeting.

APPENDIX B

Community and Regional Overview

Community and regional overview

Fifty years ago, the federal government bought 59,000 acres of farmland in Anderson and Roane counties to house portions of the government's secret World War II Manhattan Project. In the 1950s, some of that land was released from federal ownership and became the city of Oak Ridge. Today, more than half of that remains as DOE's Oak Ridge Reservation, which includes the Y-12 Plant, Oak Ridge National Laboratory and the K-25 Site.

The Reservation extends 11 miles east-to-west and eight miles north-to-south and is bordered on its south and east by the Clinch River. Eight counties (Anderson, Blount, Knox, Loudon, Meigs, Morgan, Rhea and Roane) surround the Reservation. Most of the land close to the Reservation (including land within the cities of Oak Ridge, Oliver Springs, Clinton, Farragut and Knoxville) is used for housing and commercial purposes.

Of the 618,000 people who live in the eight counties surrounding the Reservation, more than 340,000 are

concentrated in the Knoxville/Knox County area. More than 27,000 live in Oak Ridge. The average person living in the area is 35 years old with an annual individual income of \$11,272. Average household income is \$23,241. About 30% of persons 25 and older are high school graduates; about 12% are college graduates.

Almost 300,000 people comprise the area's work force. The three largest employers are Lockheed Martin Energy Systems, Inc., and Lockheed Martin Energy Research, which operates Oak Ridge National Laboratory; the Knox County School System; and the University of Tennessee.

The area's economic base supports a large number of high-tech industries that conduct business with DOE. In 1994, DOE and the companies it contracted employed about 20,000 workers who together earned about \$891 million annually. More than 90% of these workers lived in Anderson, Knox, Loudon and Roane counties.

APPENDIX C

Key Laws, Agreements and Policy

Key laws, agreements and policy

Federal laws

CERCLA, also referred to as Superfund,

- requires companies and federal agencies to investigate and remedy abandoned or uncontrolled hazardous waste sites;
- sets standards for studying and cleaning contaminated sites;
- requires the U.S. Environmental Protection Agency to maintain the National Priorities List;
- requires the agency or company performing the cleanup to write a community relations plan and have a community relations program for ensuring public input; and
- requires an Administrative Record and information repository (in Oak Ridge, the Information Resource Center).

Resource Conservation and Recovery Act (RCRA)

- sets standards for managing hazardous waste facilities,
- sets standards for dealing with hazardous waste releases,
- establishes a permitting system for handling hazardous wastes,
- encourages permit applicants to develop public involvement programs, and
- gives states authority to regulate hazardous wastes,

National Environmental Policy Act (NEPA)

- requires federal agencies to consider and document environmental consequences of their actions and
- requires federal agencies to perform environmental assessments and write Environmental Impact Statements for work posing potential harm to the environment.

Federal Facilities Compliance Act

- amends the Resource Conservation and Recovery Act and
- requires state regulators and federal agencies to develop a consent order for treating and storing mixed waste (see following).

Making a point during a public meeting.

Agreements and policy

Federal Facility Agreement

- is signed by DOE, the Tennessee Department of Environment and Conservation and the U.S. Environmental Protection Agency;
- sets requirements and schedules for environmental restoration work on the Reservation; and
- requires a community relations plan.

Consent Order

- is required by the Federal Facilities Compliance Act and
- specifies a schedule for treating and storing mixed wastes on the Oak Ridge Reservation.

Presidential policy on Environmental Justice

- directs all federal agencies to "identify and address disproportionately high and adverse human health or environmental effects of its programs, policies and activities on minority populations and low-income populations. . ."

APPENDIX D

Principal Contacts

Principal contacts

This appendix lists officials and organizations frequently contacted by the Environmental Management Community Relations staff. The appendix does not include the complete Community Relations mailing list. For example, the names of private citizens are not provided here. Organizations wishing to appear in future revisions of the Community Relations plan, or persons wishing to be added to the Community Relations mailing list, should call 1-800-382-6938 (576-4006 in the Oak Ridge local calling area).

United States Senators

Bill Frist
U.S. Senate

Fred D. Thompson
U.S. Senate

United States House of Representatives

James J. Duncan
House of Representatives
Tennessee Second
Congressional District

Zach Wamp
House of Representatives
Tennessee Third
Congressional District

Van Hilleary
House of Representatives
Tennessee Fourth
Congressional District

Tennessee Governor

Donald Sundquist
Governor of Tennessee

Tennessee State Senate

Randy McNally
Fifth Senate District

Anna Belle O'Brien
Twelfth Senate District

Gene Elsea
Thirteenth Senate District

Tennessee State House

Chris Newton
Twenty-second House District

David Coffey
Thirty-third House District

Bruce Cantrell
Thirty-second House District

Jerry Cross
Thirty-sixth House District

County Executives

David Bolling
Anderson County Executive

Thomas Schumpert
Knox County Executive

George Miller
Loudon County Executive

Garland Lankford
Meigs County Executive

Tommy Kilby
Morgan County Executive

Billy Ray Patton
Rhea County Executive

Kenneth E. Yager
Roane County Executive

Tennessee City Contacts

Sam Swafford, Mayor
City of Dayton

Garland Carpenter, Mayor
Town of Decatur

Edward Ford, Mayor
City of Farragut

Andy Beene, Mayor
City of Graysville

Harold Wester, Mayor
City of Harriman

Don Woody, Mayor
City of Kingston

Victor Ashe, Mayor
City of Knoxville

Kathleen D. Moore, Mayor
City of Oak Ridge

Stanley Justice, Mayor
City of Oliver Springs

Mike Miller, Mayor
City of Rockwood

Mike Swafford, Mayor
City of Spring City

Ellen Smith
Environmental Quality
Advisory Board
City of Oak Ridge

Department of Energy, Oak Ridge Operations

James C. Hall, Manager
Oak Ridge Operations

R.R. Nelson
Assistant Manager for
Environmental Management

Steven L. Wyatt
Assistant to the Manager for
Public Information

Walter Perry
Community Relations
Manager

Sandy Perkins
Site Specific Advisory Board
Coordinator

Patty Phillips.
National Environmental
Policy Act Compliance Officer

**Federal, State and Local
Agencies**

Jack Hanley
Agency for Toxic Substances
and Disease Registry
U.S. Public Health Service

Jon Johnston
U.S. Environmental
Protection Agency
Region IV, Atlanta, GA

Earl Leming
Tennessee Department of
Environment and
Conservation
DOE Oversight Division
Oak Ridge, Tennessee

David McKinney
Tennessee Wildlife Resources
Agency
Crossville, Tennessee

Pat Turri
Tennessee Department of
Health
Nashville, Tennessee

Amy Fitzgerald
Oak Ridge Reservation Local
Oversight Committee
Oak Ridge, Tennessee

Elgan Usrey
Tennessee Emergency
Management Agency
Nashville, Tennessee

**Civic, Environmental, Labor
and Stakeholder
Organizations**

Atomic Trades and Labor
Council (ATLC)

Citizens Against Remediation
Extremes (CARE)

Citizens for Better Health

League of Women Voters

Nashville Peace Action—SANE/
FREEZE

Oak Ridge Environmental Peace
Alliance (OREPA)

Oil, Chemical, & Atomic
Workers Union (OCAW)

Save Our Cumberland
Mountains (SOCM)

**Local Media Outlets
Wire Services**

Associated Press
Knoxville, Tennessee

Newspapers

Clinton Courier
Clinton, Tennessee

Clinch Valley Chronicle
Lake City, Tennessee

Dayton Herald -News
Dayton, Tennessee

Farragut Press Enterprise
Farragut, Tennessee

Harriman Record
Harriman, Tennessee

Jefferson County
Standard-Banner
Jefferson City, Tennessee

The Knoxville
News-Sentinel
Knoxville, Tennessee

Lenoir City News-Herald
Lenoir City, Tennessee

Metro Pulse
Knoxville, Tennessee

The Oak Ridger
Oak Ridge, Tennessee

Rhea County Reporter
Dayton, Tennessee

Morgan County
Wartburg, Tennessee

Roane County News
Kingston, Tennessee

Rockwood Times
Rockwood, Tennessee

Scott County News
Oneida, Tennessee

The Standard
Kingston, Tennessee

Union News Leader
Maynardville, Tennessee

UT Daily Beacon
University of Tennessee,
Knoxville

Watts Bar Lake Observer
Spring City, Tennessee

Radio Stations
WIVK-FM&AM
Knoxville, Tennessee

WOKI-FM
Knoxville, Tennessee

WMYU-FM
Knoxville, Tennessee

WLOD-AM
Loudon, Tennessee

WBLC-AM
Lenoir City, Tennessee

WUTK-FM
Knoxville, Tennessee

WYSH-AM
Clinton, Tennessee

WEZK-FM
Knoxville, Tennessee

WXVO-FM
Clinton, Tennessee

WNOX-AM
Jefferson City, Tennessee

WLIL-AM and FM
Lenoir City, Tennessee

WATO-AM
Oak Ridge, Tennessee

WIMZ-FM
Knoxville, Tennessee

WOFE Radio
Rockwood, Tennessee

WRGZ-FM
Harriman, Tennessee

WWBR-AM
Harriman, Tennessee

Television Stations
Oak Ridge Community
Television, Channel 12
Oak Ridge, Tennessee

WATE-TV, Channel 6
Knoxville, Tennessee

WBIR-TV, Channel 10
Knoxville, Tennessee

WKCH-TV, Channel 43
Knoxville, Tennessee

WKXT-TV, Channel 8
Knoxville, Tennessee

DISTRIBUTION

1. L. V. Asplund
2. M. F. P. Delozier
3. D. M. Matteo
4. T. W. Morris
- 5-6. M. E. Musolf
- 7-8. P. T. Owen
9. A. S. Quist
10. D. C. White
11. Central Research Library
12. ER Document Management Center—RC
13. R. L. Nace, Team Leader, Fernald/Ohio Team, Office of Environmental Restoration, U.S. Department of Energy, Cloverleaf Building, EM-425, 19901 Germantown Road, Germantown MD, 20874
- 14-15. R. C. Sleeman, Director, Environmental Restoration Division, DOE Oak Ridge Operations Office, P.O. Box 2001, Oak Ridge, TN 37831-8541
16. J. W. Wagner II, Team Leader, Portsmouth/Paducah/Weldon Spring Team, Office of Environmental Restoration, U.S. Department of Energy, Cloverleaf Building, EM-424, 19901 Germantown Road, Germantown, MD 20874
- 17-18. T. Teague, Science Applications International Corporation, 301 Laboratory Road, Oak Ridge, TN 37831