



PUBLIC INVOLVEMENT PLAN
for CERCLA Activities at the
U.S. Department of Energy
Oak Ridge Reservation



Both the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and the Federal Facility Agreement require U.S. Department of Energy Oak Ridge Operations (DOE-ORO) to prepare and publish a community relations plan. Publication of *Public Involvement Plan for CERCLA Activities at the U.S. Department of Energy Oak Ridge Reservation* meets that requirement and meets a Federal Facility Agreement milestone of July 15, 2004.

DOE-ORO also publishes this Plan in support of the goals of DOE's Public Participation and Community Relations Policy, (DOE P 141.2), and in support of the critical elements identified in that policy.

This Public Involvement Plan is updated every three years to ensure the timeliness and usefulness of the information and resources provided.

**Public Involvement Plan for CERCLA Activities
at the U.S. Department of Energy
Oak Ridge Reservation**

Date Issued—July 2004

Prepared by
Science Applications International Corporation
under subcontract 239-00-BA-BM002F

Prepared for the
U.S. Department of Energy
Office of Environmental Management

BECHTEL JACOBS COMPANY LLC
managing the
Environmental Management Activities at the
East Tennessee Technology Park
Y-12 National Security Complex Oak Ridge National Laboratory
Under contract DE-AC05-98OR22700
for the
U.S. DEPARTMENT OF ENERGY

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Preface

This report describes public involvement in U.S. Department of Energy Oak Ridge Operations (DOE-ORO) Environmental Management activities performed under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). DOE-ORO, the U.S. Environmental Protection Agency (EPA), and the Tennessee Department of Environment and Conservation (TDEC) are committed to fostering meaningful public involvement in all aspects of environmental remediation decision-making.

The public is entitled to participate in DOE decision-making processes, and DOE encourages such participation. Effective public involvement and good community relations rest on a foundation of positive relationships; DOE managers and staff will seek to build and nurture such relationships.

Methods used to encourage public involvement vary widely and may include informal conversations, electronic communication, scheduled meetings and workshops, legally required hearings, and stakeholder advisory groups. DOE-ORO Environmental Management actively seeks, considers, and incorporates or otherwise responds in a timely manner to the views of its stakeholders, thereby providing the opportunity to influence decisions. Stakeholders include individuals, groups, host communities, and other entities in the public and private sectors that are interested in or affected by CERCLA activities and decisions.

The goals of the DOE-ORO Environmental Management Public Involvement program are as follows:

- to identify stakeholders, consider public input, and incorporate or otherwise respond to the views of stakeholders in making decisions;
- to inform in a timely manner and empower stakeholders to participate in CERCLA decision-making processes. Such processes will be open, understandable, and consistently followed. Managers will define clear access points for public input from the earliest stages of a decision process and will provide adequate time for stakeholders to participate;
- to solicit continual feedback of its public involvement efforts; and
- to provide access to the public to all available information concerning the cleanup initiatives and the administrative records of actions being considered or decided, and to provide a place where questions can be asked (DOE Information Center).

Cleanup activities are conducted as part of a Federal Facility Agreement, a legally binding interagency (DOE, EPA, and TDEC) agreement to establish timetables, procedures, and documentation for remediation of the Oak Ridge Reservation.



Introduction

Chapter 1

Why Should You Be Involved?

Sharing your concerns, opinions, and perspectives on environmental remediation fosters better decision-making. By providing you with access to environmental data and DOE decision-makers, we provide you with the tools you need to more fully participate in environmental decision-making.

This Public Involvement Plan is prepared and published by U.S. Department of Energy Oak Ridge Operations (DOE-ORO) to communicate to you, as a member of the public, the opportunities you have to participate in decisions and information exchange regarding remediation of contaminated areas on the Oak Ridge Reservation. DOE is committed to public participation in the decision-making process, as detailed in its Public Participation and Community Relations Policy (see Appendix A). The Reservation is now being cleaned up on an accelerated schedule, with remediation activities described in the Melton Valley Interim Record of Decision to be completed by 2006, remediation of East Tennessee Technology Park (ETTP) to be completed by 2008, and remediation of the balance of the Reservation to be completed by 2015. The accelerated cleanup focuses on remediating identified high-risk areas first.

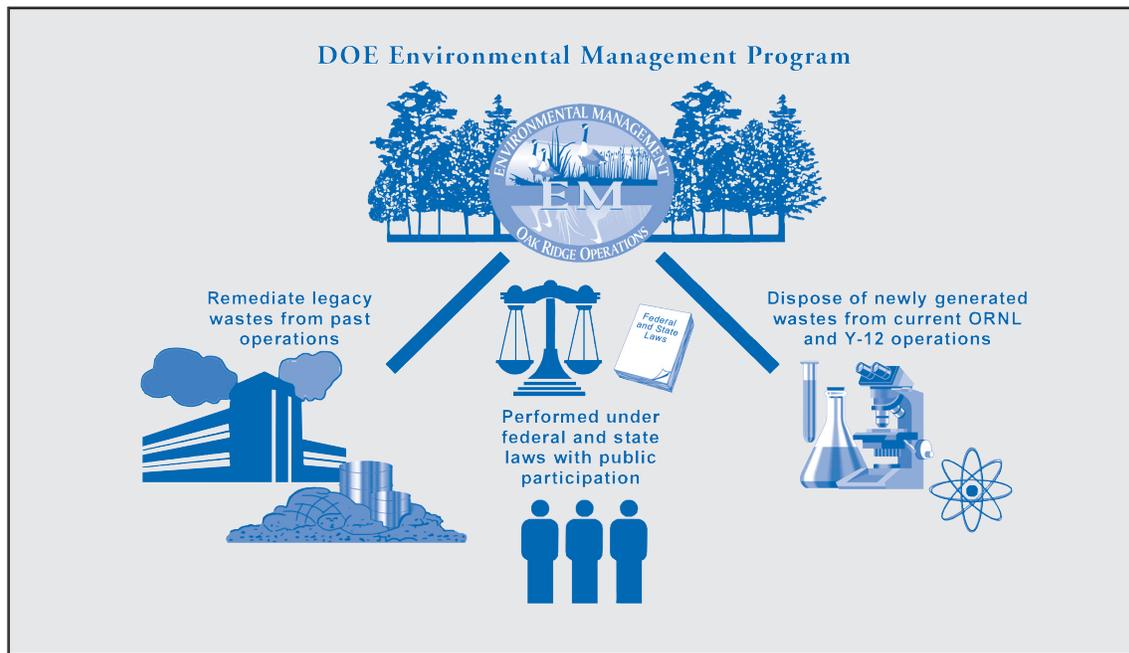
What Is In This Plan?

This Plan provides you with information about Environmental Management Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) remediation activities planned on the Oak Ridge Reservation, the ways in which that information is distributed, and where and how it can be found and accessed. The Plan describes the role of the public in environmental remediation and the variety of ways you can become involved.

Also included is contact information for government agencies and local stakeholder groups. The Plan provides background information that will be helpful in understanding the history of the site and the remediation activities. This includes:

- Public involvement history
- Environmental challenges
- The Environmental Management Program
- Opportunities and challenges of public involvement
- CERCLA public involvement requirements

This Plan does not address the operational waste management or technology development programs. Although integral parts of Environmental Management program, these activities are not covered by CERCLA or included in the Federal Facility Agreement. If a RCRA permit modification is necessary for DOE operational activities on the Reservation, a notice will appear in the appropriate local newspapers conveying the applicable information to the public to allow them to participate. (See Appendix B.)



How Can You Participate?

How can you learn more about Environmental Management?

There are many ways to learn more. Public meetings are a good way to increase your understanding about environmental management and hear other stakeholders' views. Resource materials available at the DOE Information Center, 475 Oak Ridge Turnpike, Oak Ridge, Tenn., can provide you a more in-depth look at the process. The Oak Ridge Site Specific Advisory Board holds board and committee meetings each month that are open to the public. After you learn about Environmental Management and the companion Public Involvement program, you may want to express your views.

Who is a stakeholder?

You are. Because you are reading this Plan, you have an interest in DOE-ORO Environmental Management activities and perhaps even a stake in its decisions. Stakeholders bring different views, values, and concerns to the Public Involvement program. Your interest may be jobs, a cleaner environment, careful stewardship of your tax dollars, or the future of the Oak Ridge Reservation.

How can you make your voice heard?

It's easy to get involved and have your voice heard. You can write letters, speak at public meetings, join or attend meetings of the Oak Ridge Site Specific Advisory Board or the Local Oversight Committee/Citizens Advisory Panel, or even talk informally with DOE-ORO employees. DOE-ORO announces public involvement opportunities in the stakeholder calendar and in the monthly *Public Involvement News*. You can obtain a free subscription to *Public Involvement News* by calling 1-800-382-6938.

How do you find out about DOE-ORO environmental decisions?

DOE announces its environmental decision proposals through various avenues, including mailings to your home, news releases, and public notices in newspapers. Decision proposals are typically released well ahead to allow for public comment before final remedy selection.

World Wide Web Resources *(access available at DOE Information Center)*

World Wide Web Resources

- **DOE Oak Ridge Operations:** <http://www.oakridge.doe.gov>
- **DOE-ORO Environmental Management:** <http://www.oakridge.doe.gov/>
- **DOE Information Center:** http://www.oakridge.doe.gov/info_cntr
- **Bechtel Jacobs Company LLC:** <http://www.bechteljacobs.com>
- **ORSSAB home page:** <http://www.oakridge.doe.gov/em/ssab>
- **DOE Headquarters Environmental Management:** <http://www.em.doe.gov>
- **DOE Headquarters:** <http://www.energy.gov>
- **U.S. EPA Region 4:** <http://www.epa.gov/region4>
- **TDEC:** <http://www.state.tn.us/environment>
- **OpenNet:** <http://www.osti.gov/opennet>
- **Agency for Toxic Substances Disease Registry:** <http://www.atsdr.cde.gov>
- **EM Fact Sheets:** http://www.bechteljacobs.com/ettp_factsheets.shtml
- **Accelerated Cleanup:** <http://www.bechteljacobs.com/doeclean/>
- **Federal Facility Agreement:** http://www.bechteljacobs.com/ettp_ffa.shtml

To make it easy for you to read this document, we are using only a few acronyms and abbreviations. They are:

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
DOE-ORO	Department of Energy Oak Ridge Operations
EPA	Environmental Protection Agency
NEPA	National Environmental Policy Act
ORNL	Oak Ridge National Laboratory
ORSSAB	Oak Ridge Site Specific Advisory Board
RCRA	Resource Conservation and Recovery Act
Reservation	Oak Ridge Reservation
TDEC	Tennessee Department of Environment and Conservation



Public Involvement History

Chapter 2

Since it began environmental work on the Reservation in the late 1980s, DOE has continuously turned to stakeholders for input. In the early stages of the Environmental Management Program, DOE usually solicited opinions by mail or in public meetings.

Although this approach is still used, it is now augmented with the following more specific efforts:

- DOE sponsors an independent citizens board—called the Oak Ridge Site Specific Advisory Board (ORSSAB)—to provide advice and recommendations on Environmental Management activities.
- The Tennessee Department of Environment and Conservation (TDEC) contracts the Local Oversight Committee to provide independent public oversight of DOE-ORO and Environmental Management activities.
- Workshops are scheduled for many projects to provide a forum for open, frank exchange of information and ideas.
- Citizen working groups are occasionally established for specific projects and issues to provide focused input.
- The DOE Information Center provides resources for in-depth research about CERCLA and NEPA waste management activities.

DOE-ORO Environmental Management continues to study and learn more about its sites and new remediation and waste-handling methods. As a result, the Public Involvement program must keep pace with the changing needs for different types of environmental decision-making. As the program continues to evolve, you will have new ways to add your voice to CERCLA decision-making.

Public Involvement Timeline (1989-2000)

- The ORSSAB formed the Stewardship Working Group to address issues associated with long-term stewardship on the Reservation.
- Stewardship Working Group developed and issued *The Oak Ridge Reservation Stakeholder Report on Stewardship, Vol. 2*.
- Public meetings on Melton Valley and Bear Creek Valley (Y-12) Proposed Plans.
- Initial workshop on *Accelerating Cleanup: Paths to Closure*.
- ORSSAB hosts National Site Specific Advisory Board Meeting on Stewardship. Stakeholders and SSAB members from nine DOE sites participated.

- Public meeting on Proposed Plan for Bethel Valley.
- Public meeting on proposed plan for ETPP Zone 1.
- Public meeting on EE/CA for building decontamination and decommissioning at ETPP.
- Public meeting for Proposed Plan for Upper East Fork Poplar Creek.
- ORSSAB began seating two student members on the Board on a rotating basis.
- ORSSAB Stewardship Committee formed.

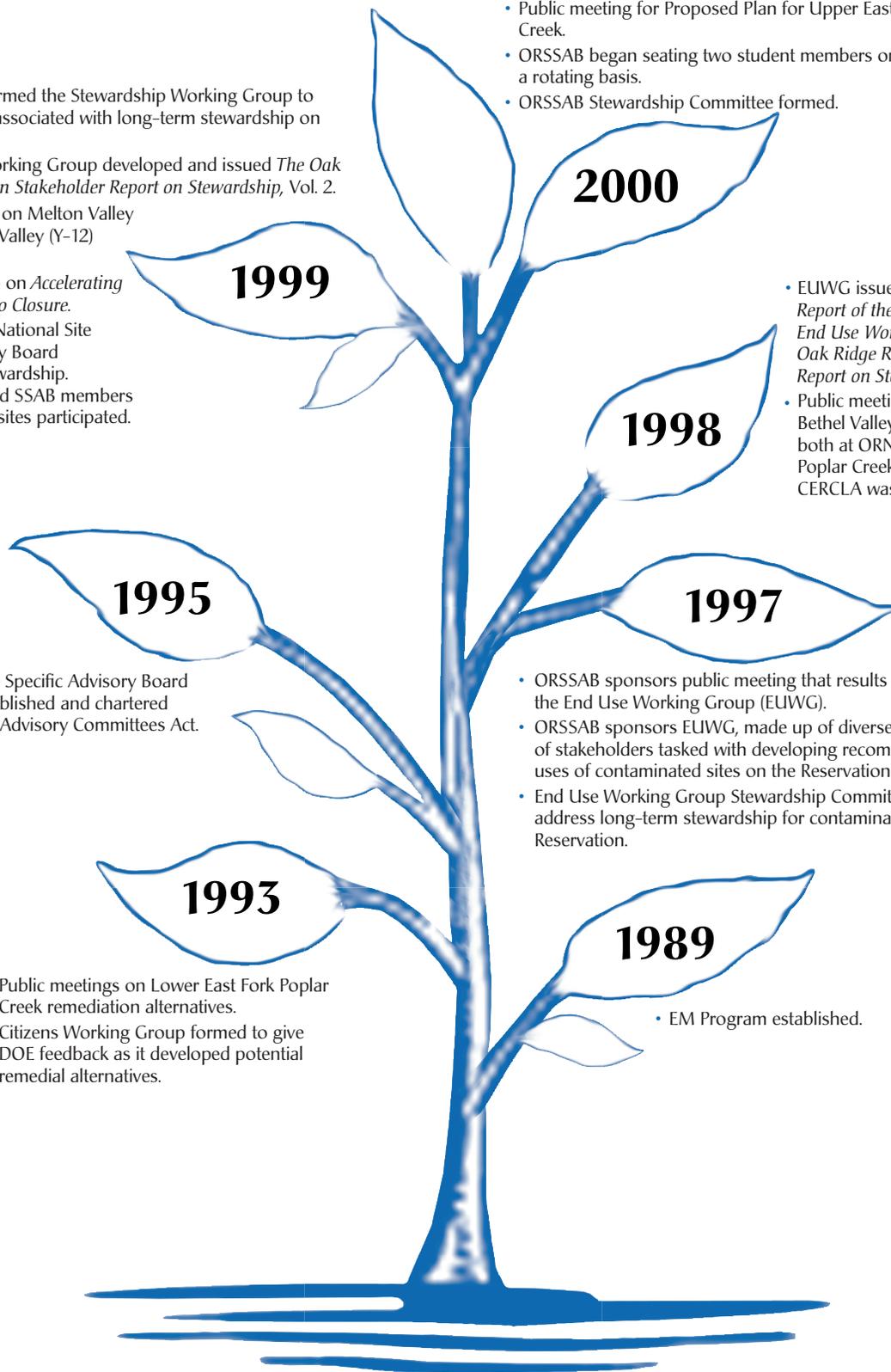
- EUWG issues two reports: *Final Report of the Oak Ridge Reservation End Use Working Group* and *The Oak Ridge Reservation Stakeholder Report on Stewardship*.
- Public meetings and workshops on Bethel Valley and Melton Valley, both at ORNL; Upper East Fork Poplar Creek at Y-12; and proposed CERCLA waste disposal facility.

- Oak Ridge Site Specific Advisory Board (ORSSAB) established and chartered under Federal Advisory Committees Act.

- ORSSAB sponsors public meeting that results in the formation of the End Use Working Group (EUWG).
- ORSSAB sponsors EUWG, made up of diverse group of stakeholders tasked with developing recommendations for end uses of contaminated sites on the Reservation.
- End Use Working Group Stewardship Committee formed to address long-term stewardship for contaminated sites on the Reservation.

- Public meetings on Lower East Fork Poplar Creek remediation alternatives.
- Citizens Working Group formed to give DOE feedback as it developed potential remedial alternatives.

- EM Program established.



Public Involvement During the Years 2001 to 2004

Public Involvement activities in 2001 included the following:

- The public was invited to comment on a Proposed Plan for ETPP Zone 1 remedial actions.
- The public was invited to comment on an Environmental Impact Statement for depleted uranium hexafluoride facilities at Portsmouth, Ohio, and Paducah, Kentucky. Cylinders at ETPP would be transported to Portsmouth under the alternatives being considered. The public was also asked for its input in 2004.

Public involvement activities for 2002 and 2003 largely focused on DOE's new accelerated cleanup plan for the Oak Ridge Reservation. The public was asked to comment on the Performance Management Plan, which details how the accelerated cleanup will be implemented. An Accelerated Cleanup Web page was created (<http://www.bechteljacobs.com/doeclean/>) to provide the public with comprehensive information on DOE's cleanup plans for the Oak Ridge Reservation.

Also during 2002 and 2003, the public was invited to comment on a number of initiatives, including land transfer to the Community Reuse Organization of East Tennessee, DOE's leasing agent; management plan for the Black Oak Ridge area; DOE-ORO's groundwater strategy document; draft Risk-Based End State document; transportation plans for DUF₆ shipments; and various permit modifications.

Public Involvement in Long-Term Stewardship: Citizen Leadership on National Issues

During a two-and-a-half-year period, the ORSSAB sponsored the End Use Working Group Stewardship Committee and the Stewardship Working Group. These groups of Oak Ridge stakeholders included representation from various groups, oversight organizations and agencies, city and county governments, individuals, and others. Two documents were published dealing with the issue of long-term stewardship, and a national stewardship workshop for stakeholders was hosted. Largely through the efforts of these stakeholders, Oak Ridge became the recognized leader on the subject of long-term stewardship. DOE sites around the nation, as well as DOE Headquarters, routinely seek the counsel of the Oak Ridge stakeholders on the subject of stewardship.

The primary concern of the Stewardship Working Group, convened in February 1999, was what happens to the Reservation in 100 years, 200 years, and even 500 years when conceivably there will be no DOE. Who would know what is buried where; what restrictions on land use need to be in place; what areas might remain unsafe for swimming, fishing, or residential dwelling; or where might groundwater be unsafe? Concerns that the records might be destroyed or rendered inaccessible and that people might

forget the legacy of the early nuclear era and unknowingly be exposed to remaining health and environmental hazards.

The Stewardship Working Group built upon the work of the Stewardship Committee of the Oak Ridge Reservation End Use Working Group. The Stewardship Committee published one of the first works on stewardship in July 1998: The Oak Ridge Reservation Stakeholder Report on Stewardship. Members of that Group, many of whom continued on the Stewardship Working Group, realized, as they researched the issue, that cleaning up the Reservation to a pristine state was not a reasonable expectation for both financial and technological reasons, and that some areas of the Reservation will never be completely cleaned up. Hazardous and nuclear waste and contamination will remain in some places throughout the Reservation.

While the first stewardship report provided an overview of stewardship issues, the goals of the Stewardship Working Group were to publish a second stewardship document to address specific Oak Ridge Reservation challenges, to make recommendations regarding how long-term stewardship should be implemented, and to develop a list of stewards (individuals and agencies)

to ensure that essential and appropriate information remained accessible and was passed on to succeeding generations. The primary issues were: Who are the stewards? How will long-term stewardship be financed? How will records be kept and maintained? What is the public's role regarding long-term stewardship?

Today, the ORSSAB Stewardship Committee continues to work on crucial long-term stewardship issues. Major concerns include

integration of long-term stewardship with remediation decisions, application of the Long-Term Stewardship Strategic Plan, and the development of a Long-Term Stewardship Implementation Plan. The committee also serves informally as a Citizens Board for Stewardship and will continue to do so until the ORSSAB completes its mission and is disbanded. At that time, it is anticipated that a formal Citizens Board for Stewardship will be constituted.



Environmental Challenges on the Oak Ridge Reservation

Chapter 3

Oak Ridge, Tennessee, is home to one of the largest and most diverse DOE complexes in the nation. The Oak Ridge Reservation was one of the first facilities established as part of the Manhattan Project to develop and provide special materials for the manufacture of nuclear weapons. Oak Ridge continued to play a major role in national security during the Cold War.

When they were first built, the three major installations on the Reservation—Y-12, K-25, and X-10—each had a distinct mission. The Y-12 Plant, now known as the Y-12 National Security Complex, enriched uranium using an electromagnetic process, which was later abandoned in favor of the more efficient gaseous diffusion process used at K-25,

now known as the East Tennessee Technology Park. The primary mission of the Y-12 Complex became precision machining of special nuclear materials for the manufacture of bombs. X-10, now known as Oak Ridge National Laboratory, undertook weapons research and development, especially purification of plutonium.

Today, Environmental Management, working under an accelerated schedule, seeks to address the extensive environmental contamination resulting from those early missions. The Y-12 National Security Complex and ORNL continue to work on important national security, research, and industrial projects. The K-25 Site is currently being cleaned up and will eventually become a private industrial park.

The Oak Ridge Reservation Today

The Oak Ridge Reservation, which spans more than 33,000 acres, includes three major DOE installations: East Tennessee Technology Park, Oak Ridge National Laboratory, and the Y-12 National Security Complex. These installations occupy about 30 percent of the Reservation. The remainder is designated as a National Environmental Research Park established in 1980 to provide protected land for environmental science research and education and to demonstrate that energy technology development can coexist with a quality environment. All of the Reservation lies within Anderson and Roane counties, and most of the property is within the city limits of Oak Ridge. The Clinch River forms the southern and western boundaries of the Reservation. The Reservation is, for the most part, separated from the Oak Ridge commercial and

residential areas. A few private commercial industries exist within the Reservation; at ETTP, along Bethel Valley Road, and Bear Creek Road.

Since the early 1940s, the Reservation has been the site of nuclear research and vital national security missions. These activities left a legacy of radioactive and toxic chemical wastes requiring management and/or disposal. As much as 10 percent of the Reservation is occupied by old waste sites, most of which lack engineered containment structures. Radioactive and toxic chemical pollutants present in mixed-waste burial grounds, settlement ponds, seepage pits and trenches, inactive tanks, abandoned underground pipelines, and surplus facilities have contaminated soils, groundwater, and surface water.

Radioactive elements include tritium (with a half-life of approximately 12 years) and strontium and cesium (with half-lives of approximately 30 years). Hazards from these three radionuclides will markedly diminish in about 300 years. There are also quantities of radioactive uranium (which will pose a hazard for millions of years). Other radionuclides and nonradioactive chemicals such as PCBs (polychlorinated biphenyls) are also present.

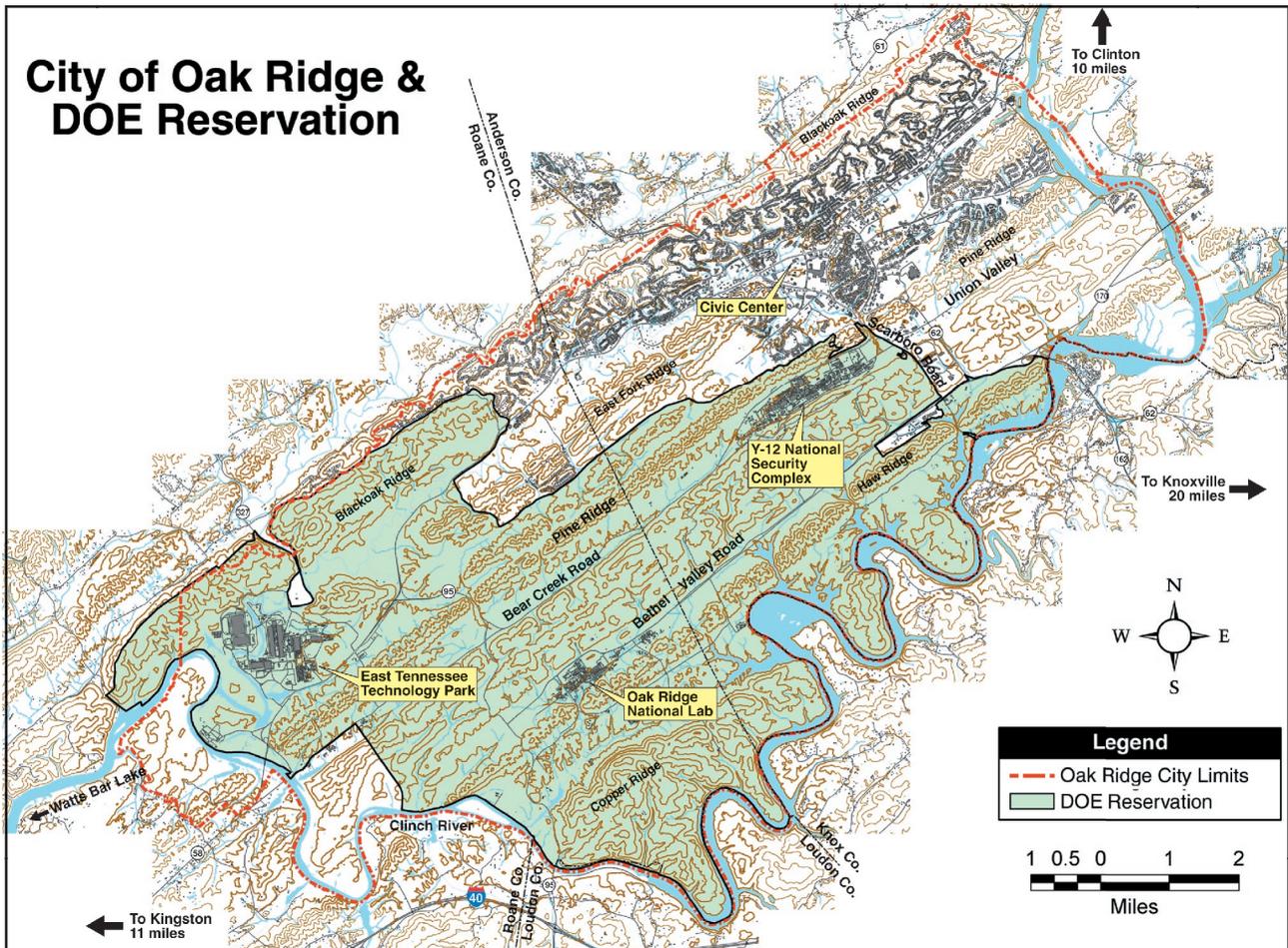
Abundant rainfall (annual average of 55 inches) and high water tables (e.g., 0 to 20 feet below the surface) accelerate leaching of contaminants, resulting in contaminated soil, surface water, sediments, and groundwater. A complex geology also provides for ready movement of groundwater on many parts of the Reservation.

The counties nearest to and most affected by activities at the Reservation are Anderson, Knox, Loudon, Meigs, Rhea, and Roane. Their populations are as follows:*

- Anderson (includes the eastern portion of Oak Ridge and the Reservation)—71,300
- Knox (includes the City of Knoxville)—382,000
- Loudon—39,100
- Meigs—11,000
- Rhea—28,400
- Roane (includes the western portion of Oak Ridge and the Reservation) —51,900

The nearest towns, other than the city of Oak Ridge, are Clinton, Farragut, Harriman, Kingston, Lenoir City, and Oliver Springs. Knoxville, the nearest metropolitan center, is about 20 miles to the southeast.

*Source: 2000 U.S. Census.



The Reservation is situated in the Valley and Ridge Province of East Tennessee. The province is bounded on the southeast by the Great Smoky Mountains and on the northwest by the Cumberland Mountains. Almost all of the Reservation is within the boundary of the City of Oak Ridge.

Cleanup Strategy

To consolidate investigation and remediation of environmental contamination, the contaminated areas of the Reservation have been divided into five large tracts of land roughly equivalent to major hydrologic watersheds. DOE, with the knowledge of the public and concurrence of EPA and TDEC, decided that a comprehensive watershed approach to remediation planning would be most effective. The typical unit-by-unit approach would have taken decades to complete in the water-rich Reservation environment given the potential that actions at one site would have impacts on other nearby sites.

In contrast, the watershed approach allows decisions to be made by looking at contaminated sites linked by a common water pathway. One or several CERCLA Records of Decision for each watershed will replace hundreds of lesser documents, potentially resulting in considerable savings in time and money. The watershed approach also provides the public with a roadmap of proposed remedial actions, facilitates public oversight of DOE's progress, and allows comprehensive stewardship planning for the Reservation.

The watershed areas are ETTP, Melton Valley, Bethel Valley (which includes ORNL), Bear Creek Valley (which includes the Environmental Waste Management Facility near the Y-12 Complex), and Upper East Fork Poplar Creek. An additional area slated for cleanup is Chestnut Ridge, which lies adjacent to Upper East Fork Poplar Creek. Appendix C shows each of these areas and the contamination present.

Cleanup of the Oak Ridge Reservation is being conducted on an accelerated schedule with the higher-risk sites being addressed first. The cleanup is divided into three general programs: ETTP, Melton Valley, and the remainder of the Reservation, known as the "Balance of Reservation."

A majority of the cleanup at ETTP involves the decontamination and demolition of hundreds of unused building and facilities, including the K-25 Building. Some on-site burial grounds will also be remediated. The goal is to convert ETTP into a self-sustaining, private industrial park. ETTP cleanup is expected to be completed in 2008.

Cleanup in Melton Valley include the removal and remediation of various waste areas. Wastes from more than 50 years of operations at Oak Ridge National Laboratory are stored throughout Melton Valley in trenches, tanks, landfills, and impoundments. Melton Valley was also used in the 1950s and 1960s as the Atomic Energy Commission's Southeastern Regional Burial Ground for radioactive wastes from more than 50 facilities. Cleanup activities described in the Melton Valley Interim Record of Decision are expected to be completed in 2006.

Cleanup in the Balance of Reservation project includes remedial actions to be implemented in Bethel Valley, sites associated with the Y-12 National Security Complex, and two off-site locations: Atomic City Auto Parts in Oak Ridge and the Witherspoon Site in South Knoxville.

Appendixes E and J to the Federal Facility Agreement

Two appendixes to the Federal Facility Agreement serve as a resource for stakeholders in looking ahead. Appendix E provides the projected enforceable milestones agreed upon by DOE, EPA, and TDEC for the current and the next two fiscal years. Appendix J provides information on unenforceable, proposed milestones for the fiscal years beyond that. Both appendixes are kept updated on the Web, and both can provide the interested stakeholder with information about upcoming CERCLA activities on the Reservation. Both appendixes are kept updated on the Web at http://www.bechteljacobs.com/ettp_ffa.shtml.

Recently completed, upcoming, and ongoing projects include the following:

East Tennessee Technology Park

Recent Accomplishments

Within the fenced area of ETTP, two significant efforts are under way: the demolition of several buildings to clear the way for dealing with soil/groundwater contamination and the characterization/negotiation efforts to determine the cleanup goals for the site. Outside of the fence, a soils Record of Decision has been signed and remediation is poised to begin. The following recent accomplishments support these two objectives:

- Demolition of the Group 1 Buildings, which includes the K-725 Beryllium Building, K-724 Storage Building, K-1410 Plating facility, K-1131 Feed and Tails Building, and the K-1031 Warehouse.
- Demolition of the Group 2 Buildings (Main Plant Area), which includes the K-1045-A Waste Oil Burning Pit, K-1408 Tire and Battery Shop, K-1300 Stack, K-1301 Fluorine Production Facility, K-1302 Fluorine Storage Building, K-1303 Fluorine Facility, K-1404 Acid Storage, K-1405 High Temperature Laboratory, K-1407 Laboratory and Storage Facility, and K-1413 Engineering Laboratory.
- Remediation of the K-1070-C/D G Pit and Concrete Pad.
- Remediation of the K-1070-A Burial Ground.
- Removal of contaminated materials from the K-1085 Old Firehouse Drum.



Upcoming and Ongoing Projects

- Demolition of a variety of facilities at ETTP, including the K-25 and K-27 buildings as well as approximately 500 other above-ground facilities on-site.
- Decontamination and decommissioning of Buildings K-29, K-31, and K-33.
- Demolition of the Group 2 Buildings (K-1064 facilities), which includes 18 facilities near the K-1064 Peninsula.
- Final remediation of the Zone 1 and 2 areas (Zone 1 includes the areas outside the main plant area, and Zone 2 is the main plant area).
- Decontamination and decommissioning of the remainder of the facilities (~500 buildings).
- Transfer of the first five buildings to the Community Reuse Organization of East Tennessee for reuse.

Melton Valley

Recent Accomplishments

More than 50 years of operations, production, and research activities at ORNL have produced a legacy of contaminated inactive facilities and waste disposal areas. Cleanup of Melton Valley is being performed on an accelerated schedule, to be completed by September 2006. The following accomplishments support this cleanup:

- Decontamination and decommissioning of the Old Hydrofracture Facility.
- Removal of ancillary facilities at the New Hydrofracture Facility.
- Removal of spent nuclear fuel from ORNL.
- Plugging and abandonment of more than 100 wells at ORNL used for deep waste injection.



Upcoming and Ongoing Projects

- Hydrologic isolation of Solid Waste Storage Area 4.
- Removal of transuranic wastes from the 22-Trench Area in Solid Waste Storage Area 5.
- Removal of fuel and flush salts from the Molten Salt Reactor Experiment Facility at ORNL.

Balance of Reservation

Recent Accomplishments

The Closure Project encompassed in the scope of cleanup actions to be completed by 2008 are in Bethel Valley, Upper East Fork Poplar Creek, and two contaminated offsite locations: Atomic City Auto Parts in Oak Ridge and the Witherspoon sites in Knoxville. Another major milestone associated with this project is the complete disposition of legacy low-level and mixed low-level waste on the Oak Ridge Reservation. The remaining cleanup activities post-2008 will be covered by the DOE contractor selected to perform this work.

The following accomplishments support this project:

- Remediation of the Boneyard/Burnyard, a waste disposal site in Bear Creek Valley.
- Remediation of four ORNL surface impoundments which held radiologically contaminated sediment.
- Defueling of the Tower Shielding Reactor, a nuclear reactor built in the 1950s to develop the technology for an atomic-powered aircraft.
- Shipment of more than 200 monolith waste forms containing solidified liquid low-level radioactive waste from the Oak Ridge Reservation.



Upcoming and Ongoing Projects

- Removal of wastes from the T-1, T-2, and High Flux Isotope Reactor tanks in Bethel Valley.
- Remediation of the Core Hole 8 contamination plume at ORNL.
- Disposal of depleted uranium hexafluoride cylinders that are currently located at ETTP.
- Remediation of Upper East Fork Poplar Creek.
- Continued disposal of cleanup-generated wastes from site cleanup at the Environmental Management Waste Management Facility near the Y-12 Complex.
- Disposition of low-level waste from the K-25 facility.



Public Involvement Challenges and Opportunities

Chapter 4

Although many of the formal CERCLA decision documents are now in place, a number of opportunities and challenges remain for public involvement in the Environmental Management Program. A number of remedy decisions remain, as well as work in progress and evaluation of the effectiveness of the remedies.

Participation in Long-Term Stewardship

The public plays a vital role in DOE’s decision-making about the remediation of the land and facilities on the Reservation, and will continue to do so in the future.

There are three major reasons that planning for long-term stewardship for the Reservation is needed.

- Hazards will remain after remediation. These hazards include wastes that have been left in place; residual contamination of soils, facilities, surface water (and sediments), and groundwater; and in some cases, excess nuclear materials stored or disposed of on site. Without long-term stewardship, these hazards will result in unacceptable risks to human health and the environment.
- Regulations mandate monitoring, inspections, and other controls. Because the duration of regulatory requirements may be shorter than the duration of potential risk, future measures of protection may need to be considered.
- Institutional controls (e.g., signs, fencing), although necessary to prevent access and exposure to remaining site hazards, have not yet been proven to be effective over the long-term.

What is Long-Term Stewardship?

As defined by the End Use Working Group Stewardship Committee, stewardship is “Acceptance of the responsibility and the implementation of activities necessary to maintain long-term protection of human health and of the environment from hazards posed by residual radioactive and chemically hazardous materials.”

Stewardship

- DOE recognizes that long-term stewardship is critical for ensuring continued protection of human health and the environment and is taking steps to develop policies, guidance, and procedures for planning and implementing long-term stewardship. The success of long-term stewardship will depend on a strong, open partnership among DOE, state and local government, other federal agencies, and the public.

Key Challenges of Long-Term Stewardship for the Reservation

A better understanding of the challenges DOE faces allows individuals and organizations within and outside of DOE to make more informed decisions that shape future long-term stewardship activities, both nationally and at individual sites. The key challenges include:

- incorporating long-term stewardship considerations into cleanup decisions;
- ensuring the continued effectiveness of long-term stewardship if property ownership changes;
- ensuring public access to information about residual hazards;
- ensuring reliable and sufficient funding;
- maintaining continued partnerships with state and local governments;
- developing mechanisms to promote the sustainability of long-term stewardship; and
- building the concept of “pollution prevention” into the planning processes for new missions and facilities.

DOE-ORO expects that surface remediation will be complete and all groundwater remediation systems will be operational by 2020. At that time, the Reservation will be capable of supporting the following uses: 4% controlled access, 21% restricted industrial, and 75% unrestricted for future DOE mission needs. Contaminated groundwater on site will be placed under use restrictions. Use restrictions are already in place where contaminated groundwater has migrated off-site into Union Valley on the east side of the Y-12 Complex. These restrictions will remain

in place pending the development and implementation of final remedial actions.

Specific stewardship requirements and duration will be determined as remediation is completed and end-state decisions are finalized. Decisions will include consideration of the recommendations of the End Use Working Group Stewardship Committee made in July of 1998 and the Stewardship Working Group in December 1999 on the long-term stewardship strategy for the contaminated portions of the Reservation.

Participation in Regulatory Reviews

Remediation Effectiveness Reports

The *Remediation Effectiveness Report for the Oak Ridge Reservation* contains descriptions of remedial actions and monitoring requirements, summary and analysis of monitoring results, and recommendations on revisions to monitoring. It is available at the DOE Information Center.

The reports are issued for public review and historically have generated substantial public comment. Previous reports have been the subject of special presentations to the ORSSAB, which has formed ad hoc committees to study and draft comments and recommendations to DOE. One such recommendation resulted in a format change to make future versions more reader-friendly.

Every five years, the Remediation Effectiveness Report serves a dual purpose as the *CERCLA 5-Year Review*.

CERCLA Five-Year Review

The CERCLA-required *5-Year Review* is more comprehensive in scale than the Remediation Effectiveness Report and includes all watersheds and off-site locations associated with the Reservation.

The purposes of the review are to determine whether the remedies undertaken are protective of human health and the environment and to evaluate implementation and performance of those remedies. The review may identify actions to correct any problems found.

Opportunities to participate in CERCLA Five-Year Reviews may include:

- public notice of the availability of CERCLA five-year review documents to interested citizens, community groups, and local government;
- a public meeting to provide stakeholders with information about remedial activities subject to the five-year review process, to explain the five-year review process, and to gather community issues related to forthcoming five-year reviews;
- invitations to randomly selected stakeholders to participate in site visits to take samples and/or determine the effectiveness of remediation;
- a public meeting to present findings contained within the approved five-year review reports; and
- evaluation of public recommendations and comments that will, if they have merit, be proposed as changes to decision documents (Record of Decision, Remedial Action Report) for approval by EPA and TDEC. Any approved changes will be reflected in subsequent five-year review documents.

Also at the request of the ORSSAB, DOE has agreed to provide public notification of any agreement among DOE, EPA, and TDEC to destroy any CERCLA documents.

Previous 5-Year Reviews for the Oak Ridge Reservation were conducted in 1996 and 2001. The next review is due in 2006.

In 2000, members of the public were offered opportunities to accompany DOE and contractor staff on visits to specific areas where remediation had been performed. During the visits, interviews were conducted to ensure the effectiveness of the monitoring, surveillance, and stewardship being performed at the site.

Record of Decision Changes

Non-significant changes can be made via the addition of a memo-to-file signed by the lead agency that has been agreed to by the three parties to the Federal Facility Agreement. An example would be to document the removal of a small noncontaminated auxiliary building in the way of a capping remediation. Two mechanisms exist for making significant changes to a Record of Decision after it has been signed by the three parties: an Explanation of Significant Differences and a Record of Decision amendment.

Explanation of Significant Differences

After a Record of Decision is signed, changed circumstances may necessitate changes to a selected remedy. The CERCLA mechanism for authorizing such changes is known as an Explanation of Significant Differences, which is appropriate when the remedial action to be taken differs significantly but does not fundamentally alter the remedy with respect to cost, scope, or performance.

Regulations require that a public notice summarizing the approved Explanation of Significant Differences must be published and that the Explanation of Significant Differences be included in the administrative record. For the work being performed at the Oak Ridge Reservation, DOE has agreed, in order to ensure that the public is informed of the change being considered, to develop an information sheet. This information sheet will be reviewed and concurred to by the Oak Ridge Site Specific Advisory Board prior to being released so that the public will have sufficient information to understand the change. It will be released to the public (available at the DOE Information Center) prior to the signing of the Explanation of Significant Differences.

List of Approved Explanation of Significant Differences (as of April 2004)

- K-1070-C/D SW31 Seep Explanation of Significant Differences (approved July 1993)
- Lower East Fork Poplar Creek Watershed Record of Decision Explanation of Significant Differences (approved November 1996)
- Environmental Management Waste Management Facility Explanation of Significant Differences (approved October 2001)

Record of Decision Amendments

If the remedial action to be taken fundamentally alters the remedy selected in the Record of Decision, DOE will propose an amendment to the signed Record of Decision according to the procedures in the National Contingency Plan.

A Record of Decision amendment requires the development of a proposed plan that fully evaluates the proposed alternative as required under CERCLA. The proposed plan then goes through the CERCLA public review period prior to the signing of the Record of Decision amendment by the three Federal Facility Agreement parties.



CERCLA and The Environmental Management Program

Chapter 5

Environmental Management encompasses numerous projects to remediate contamination remaining from more than 50 years of energy research and weapons production. The program also encompasses aggressive efforts to manage currently generated wastes. Because of site contamination, the Reservation was placed on the EPA National Priorities List in 1989. The National Priorities List is a comprehensive list of sites and facilities that have been found to pose a sufficient threat to human health and/or the environment to warrant cleanup under CERCLA. At National Priorities List facilities, regulatory agencies oversee the decision-making process and the remediation. For the Reservation, regulatory authority and oversight are vested in EPA Region 4 and TDEC. Local government and the public play important yet less formal roles by commenting on CERCLA documents, participating in public meetings, and taking political action, among other things.

The CERCLA Process

The primary steps in CERCLA projects are site investigations, feasibility studies, proposed plans, records of decision, and remedial actions. The remedial investigation and feasibility study process determines the nature and extent of contamination and evaluates remediation alternatives. From these alternatives, one is selected as the preferred alternative, based on the following CERCLA criteria:

- overall protection of human health and environment;
- compliance with regulations;
- long-term effectiveness and permanence;
- reduction of toxicity, mobility, or volume;
- short-term effectiveness;
- implementability;
- cost;
- regulatory acceptance; and
- community acceptance.

The preferred alternative and the rationale for its selection are summarized in a Proposed Plan. The other alternatives are also listed and compared to the preferred alternative. After receiving approval on

the Proposed Plan from EPA and TDEC, the public comment period is initiated. All significant comments, criticisms, and new data submitted in writing or orally will be responded to. The selected alternative will be documented in a Record of Decision. The Record of Decision is a key milestone in the CERCLA process because it documents a legally binding decision that cannot be changed without following specific procedures, including public review; provides the technical basis for the cleanup decision; and summarizes public and regulator comments and the DOE-ORO responses to those comments.

Following the Record of Decision, DOE prepares a Remedial Design Report/Remedial Action Work Plan for implementing remediation activities. When all required remediation work has been completed, DOE issues a Remedial Action Report summarizing the accomplishments and results of field construction and documenting any remaining monitoring activities and/or

institutional controls that must be maintained for the remediation to be protective.

Many documents may be prepared for a single remedial action. Under CERCLA, only the Proposed Plan must be advertised and is subject to public review and comment. However, to enhance public involvement, DOE-ORO Environmental Management regularly provides other pre- and post-decision documents for public review at the DOE Information Center. These pre-decision documents constitute the Administrative Record for each remediation decision on the Reservation. The Administrative Record is closed with the signing of the Record of Decision. DOE Oak Ridge Operations also provides and maintains "Post-Decision Record Files" for each Administrative Record.

The points within the CERCLA process at which the public is invited to provide input are described in the following table and in Appendix D to this Plan.

Public Involvement Activities in the CERCLA Process at the Oak Ridge Reservation

CERCLA Activity	Description	Public Involvement
Remedial Investigation	Data collection to characterize the nature and extent of contamination	DOE notifies the public that the Administrative Record File for the project has been opened and is available for public review.
Feasibility Study	Looks in detail at the range of technologies and alternatives to remediate any contaminated areas found during Remedial Investigation; often combined into one document with the Remedial Investigation	DOE may conduct a meeting or workshop to present the information from the Remedial Investigation/Feasibility Study to the public, but such a meeting is not required by law or regulation.
Proposed Plan	Selects a preferred alternative or combination of alternatives based on information contained in the Remedial Investigation/Feasibility Study	Public comment period required following three-party approval; public meeting is conducted during comment period to explain preferred alternative and to take comments. Public notified through public notices in area newspapers and DOE publications.
Record of Decision	Documents selection of a remedy and authorizes work to proceed	Public notified of availability; contains responsiveness summary of Proposed Plan comments.
Remedial Design	Design and detailed work plan of remedial action to be taken (examples: groundwater treatment systems or caps for burial grounds)	Becomes part of the Administrative Record File, where it may be accessed by the public.
Remedial Action	Actual field work as directed by the Remedial Action Work Plan	Becomes part of the Administrative Record File, where it may be accessed by the public.
Remedial Action Report or Phased Construction Completion Report	Documents the actual work as performed and the maintenance and monitoring requirements to ensure the effectiveness of remediation	Becomes part of the Administrative Record File, where it may be accessed by the public.
Land Use Control Implementation Plan	Details the controls in place to protect people and the environment from exposure to contaminants	Some public involvement activities are likely but not required by law or regulation.
Five-Year Review	Assesses the progress of ongoing projects and the effectiveness of completed remedial actions; identifies actions to correct any problems found (Annual Remediation Effectiveness Reports also assess the effectiveness of completed remedial actions)	DOE-ORO has committed to conducting a range of public involvement activities in conjunction with five-year reviews. These may include public meetings, fact sheets, and other activities.

Removal Actions

Some cleanup activities on the Oak Ridge Reservation are conducted as Removal Actions under CERCLA. These actions provide an important method for moving sites more quickly through the CERCLA process. Removal Actions are common at Superfund sites when the contamination poses an immediate threat to human health and the environment. Removals are classified as either time-critical or non-time-critical depending on the extent and type of contamination.

To determine if a removal action is warranted, a determination must be made, preferably in an action memorandum, that there is a release or threat of release of a hazardous substance or pollutant into the environment.

Generally, when a site presents a relatively time-sensitive, non-complex problem that can and should

be addressed relatively inexpensively, a removal action would be warranted. However, even expensive and complex response actions may be candidates for removal action if they are time-sensitive.

An Engineering Evaluation/Cost Analysis is required for non-time-critical removal actions. The Engineering Evaluation/Cost Analysis explains the basis for the decision to employ a non-time-critical removal action as opposed to initiating a more complex Remedial Investigation/Feasibility Study. It will detail cost, complexity, comprehensiveness, and time sensitivity of the proposed action. The Engineering Evaluation/Cost Analysis and all other documentation associated with the Removal Action are kept in the Administrative Record, which is available to the public.

The Federal Facility Agreement

CERCLA requires a legally binding interagency agreement among agencies (in this case, DOE, EPA, and TDEC) to establish timetables, procedures, and documentation for cleanup of federal facilities on the National Priorities List. The Federal Facility Agreement governs removal actions, interim cleanup actions, and long-term cleanup activities. The Federal Facility Agreement ensures that the environmental impacts associated with past and present activities on the Reservation are thoroughly investigated and that appropriate remedial actions or

corrective measures are taken as necessary to protect human health and the environment.

After two years of negotiations by DOE, EPA, and TDEC, the Federal Facility Agreement for the Oak Ridge Reservation was implemented on January 1, 1992. This agreement established the procedural framework and schedule for developing, implementing, and monitoring response actions on the Reservation in accordance with CERCLA. The Federal Facility Agreement Appendix C lists

all of the inactive sites/areas that will be investigated, and possibly remediated, under CERCLA. Milestones (deadlines) for completion of CERCLA documents are available in Appendix E of the Federal Facility Agreement. Appendix C of the Federal Facility Agreement is updated annually, and Appendix E is formally renegotiated annually once DOE has received its annual funding allocation. Project milestone modifications to Appendix E can be made as necessary when the three parties approve the changes.

The Administrative Record

Section 113 of CERCLA requires DOE to create and maintain an Administrative Record for each response action (remedial or removal) on the Reservation. The Administrative Record is the official body of documents that forms the basis for the selection of a particular response action. It contains documentation such as remedial investigation work plans, remedial investigation reports, feasibility studies, proposed plans, Records of Decision, engineering evaluations/cost analyses, action memoranda, DOE correspondence, EPA and TDEC correspondence, and other material used in the decision-making process.

Two terms that are commonly interchanged actually differ in meaning: Administrative Record and Administrative Record file. The Administrative Record file is an active file to which documentation is added as the response action progresses. Upon signature of the Record of Decision, the Administrative Record file is closed and becomes the Administrative Record. All post-Record of Decision documents are then put in a post-decision file that is associated with the Administrative Record.

CERCLA requires the lead agency to make the Administrative Record file available for public inspection at or near the CERCLA site. Copies of the Reservation Administrative Record files and Administrative Record are available for public review at the DOE Information Center. DOE publishes notices in local newspapers to announce the availability of new Administrative Record files and to invite public review at certain phases of the decision process. Public review opportunities may also include public meetings. Public notices regarding opportunities for public involvement and significant comments from the public on a particular response action are included in the Administrative Record to document public involvement in the CERCLA process.

DOE shall preserve, during the duration of the FFA and for a minimum of 10 years after the termination and satisfaction of the FFA, the complete Administrative Record, post-Record of Decision, primary and secondary documents, and reports required by the FFA. After this 10-year period, DOE shall notify EPA and TDEC at least 90 days prior to the destruction of any such records or documents. DOE will at that time also notify the public of its intent.

Other Environmental Laws and Directives

Although CERCLA is the primary environmental law governing Environmental Management cleanup activities on the Reservation, other federal environmental laws and directives play important roles, including:

- the National Environmental Policy Act (NEPA);
- the Resource Conservation and Recovery Act (RCRA);
- Executive Order 12898, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations";
- Clean Air Act;
- Clean Water Act; and
- Executive Order 12898, "Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations."

In 1994, DOE adopted a policy that combines the public involvement procedures of NEPA and CERCLA for major cleanup decisions. This policy states, "CERCLA documents will incorporate NEPA values, such as analysis of cumulative, off-site, ecological, and socioeconomic impacts, to the extent practicable." In addition, DOE must "...ensure opportunities for early public involvement in the CERCLA process and will make CERCLA documents available to the public as early as possible." DOE's policy (DOE Order 451.1A, "National Environmental Policy Act Compliance Program," June 1997) and announcements on pending NEPA actions are available on its World Wide Web site.

Long-Term Stewardship's Role In Decision-Making

Long-term stewardship ensures that remediation remains effective for an extended, or possibly indefinite, period of time until residual hazards are reduced sufficiently to permit unrestricted use and unlimited access. The implementation of long-term stewardship incrementally starts when each remediation activity is complete. However, the

planning for long-term stewardship starts during remedial decision-making. Recommendations made by key stakeholder groups, such as the End Use Working Group, are factored into remediation decisions. The recommendations documented by these groups are held as part of the Administrative Record Compendium.



Avenues of Communication

Chapter 6

The success of the public's involvement in the DOE CERCLA activities depends upon communication flowing both ways—from the public to DOE as well as from DOE to the public. Beginning with that basic assumption, a discussion of the many avenues through which information flows within the DOE Environmental Management Program follows.

The avenues that DOE uses to inform you about activities and opportunities for public involvement have grown to include telephone hotlines, newspaper advertisements, newsletters, mailings to homes and businesses, e-mail, and World Wide Web sites.

Opportunities for your involvement include citizen working groups, public meetings, workshops, public comment periods for CERCLA documents, and informal comments to DOE-ORO.

Public Involvement News, published monthly by the DOE-ORO Public Affairs Office, is a primary source of timely information for Oak Ridge stakeholders. The newsletter provides information on public meetings, document

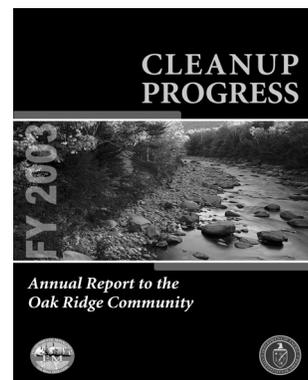
comment periods, the CERCLA Administrative Record, announcements, and additional public involvement opportunities. The monthly meeting calendar lists important meetings, events, and public comment period dates. *Public Involvement News* is mailed to the stakeholder mailing list and is also available at no cost from the DOE Information Center.



Publications of Interest to Stakeholders

DOE continues to rely upon many of the traditional means to provide the public with information—newsletters, annual reports, fact sheets, newspaper notices, and tapes and transcripts of public meetings.

Cleanup Progress is published by DOE-ORO annually to keep stakeholders informed about Environmental Management Program activities on the Reservation. Each issue spotlights current news, news about Reservation projects, and a status report on activities and documentation associated with the Environmental Management activities. Copies of *Cleanup Progress* are mailed to the stakeholder mailing list and are also available at no cost from the DOE Information Center.



Environmental Management Fact Sheets provide a quick and easy way to gain a broad understanding of the numerous Environmental Management projects under way on the Reservation. In addition to fact sheets that address the three major Environmental Management project areas, others cover topics of a more general nature, such as environmental laws and regulations and public involvement information sources. One fact sheet every stakeholder should have on hand is "Key Contacts." That fact sheet lists names, U.S. mail and e-mail addresses, and phone numbers of officials and organizations to contact concerning Environmental Management issues. Environmental Management fact sheets are available at no cost at the DOE Information Center. They are also available on-line.

To be placed on the mailing list for *Public Involvement News*, *Cleanup Progress*, and other Environmental Management publications, please call (865) 576-4006 or 1-800-382-6938.

Other Reports

The following reports are available from the DOE Information Center:

- Annual Site Environmental Reports for each calendar year
- Remediation Effectiveness Reports for DOE-ORO Environmental Management
- CERCLA Five-Year Review Report

EPA and TDEC Publications

A listing and description of more than 50 newsletters published by EPA is available at www.epa.gov/epahome/newslett.htm.

The TDEC DOE Oversight Division publishes the following annual documents (available at <http://www.state.tn.us/environment/doeo/active.php>):

- Environmental Monitoring Report
- Environmental Monitoring Plan
- Status Report to the Public

Stakeholder Group Publications

The Advocate newsletter is published quarterly by the ORSSAB to inform local stakeholders about board activities and maintain an ongoing dialogue with the community. *The Advocate* is available on the web at <http://www.oakridge.doe.gov/em/ssab>, at the Information Resource Center (865-241-4582), and by calling the ORSSAB office (865-576-1590).

Insights. The Local Oversight Committee publishes *Insights* as part of its outreach to the larger community of stakeholders to promote maximum

public awareness; to provide an effective avenue for sharing accurate information; and to inform the public of environmental, waste management, and emergency planning activities.

Oak Ridge Reservation Stakeholder Report on Stewardship. This report describes the basic need for and elements of a stewardship program, its application to the Oak Ridge Reservation, and the roles and responsibilities of stakeholders.

Public Communication Methods

Comment cards

These cards are used to solicit your views and questions. They are available at public meetings and may be handed back to a Public Affairs staff member or mailed to the Public Affairs Office.

Comment periods

The period of time set aside for your review and comment on a specific environmental project or issue—usually 30 days or more. A public meeting may be held during a comment period. Announcements for the comment period include information on where and how you can provide your input.

Informal discussion

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

Mailings

Environmental events or meetings are usually announced through mailings. You can call 1-800-382-6938 to have your name included on the mailing list.

Public meetings and workshops

Held to provide you with information and hear your views on specific issues or topics, these meetings are announced, providing the time, place, and a telephone number you can call for more information. The public meeting and information maps provided below show the various locations of public meetings throughout the Oak Ridge area.

Oak Ridge Site Specific Advisory Board

A citizen's panel advising DOE's Environmental Management Program, the ORSSAB holds Board meetings that are open to you and include an opportunity for you to express your views or ask questions.

Public notices

These notices announce public meetings, comment periods, or document publications. The advertisements appear in area newspapers.

Toll-free telephone number: 1-800-382-6938

DOE has set up a toll-free telephone number you may call to get more information about public meetings and other public involvement activities.

E-mail notification

Stakeholders can receive timely notices and information via e-mail by e-mailing or calling the DOE Public Affairs Office at (865) 576-0885, e-mail: dodsonlm@oro.doe.gov

Public Communication Resources

Administrative Record

The DOE Information Center houses copies of a collection of documents DOE uses to make its final decisions on remediating Reservation sites.

DOE Information Center

A document center located at 475 Oak Ridge Turnpike, Oak Ridge, that houses a copy of the official public Administrative Record and other environmental documents.

News releases and media advisories

DOE provides information to local newspapers, radio stations, and television stations.

Publications

DOE publishes newsletters, fact sheets, and annual reports -- available by mail or at the DOE Information Center.

World Wide Web

DOE maintains several home pages that provide information on environmental management and public involvement activities. A partial list of these home pages is included in the fact sheet "Public Involvement Information Resources," which can be found in the DOE Information Center. DOE also announces the addresses of key home pages in its mailings.

Public Information Centers

DOE Information Center

475 Oak Ridge Turnpike
Oak Ridge, TN 37830
Phone: 865-241-4780
Toll free: 1-800-382-6938

The DOE Information Center is well known to area stakeholders as a storehouse for documents related to CERCLA activities. The Information Center maintains copies of the Administrative Record, Administrative Record files, and the post-decision documents. These documents include remedial investigation/feasibility studies, remedial action or removal action work plans, proposed plans, and more.

Several newsletters are available at the Information Center, including *Public Involvement News* and *Cleanup Progress*. Fact sheets on Environmental Management projects are also available. The Information Center serves as a meeting place for stakeholder groups, such as ORSSAB committees. It is open Monday through Friday, 8 a.m. to 5 p.m.

Center for Environmental Management Information

P.O. Box 23769

Washington, D.C. 20026-3769

Phone: 1-800-7-EM DATA (1-800-736-3282)

Web site: <http://web.em.doe.gov/public/cemi.html>

The Center for Environmental Management

Information, established in 1993, serves as DOE's primary source for information on the Environmental Management Program. It provides a one-stop source of information on the EM Program relating to the radioactive, hazardous, and chemical wastes left over from U.S. production of nuclear weapons.

There are a number of ways to obtain publications. Information and documents may be obtained:

(1) electronically, by using the indicated link on the Web site listed above or by contacting eminfo@cemi.org; or (2) hardcopy via postal service, by completing the electronic order form on the Web site, contacting the Center for Environmental Management Information at (800) 736-3282 between the hours of 9 a.m. and 6 p.m. (EST)-(202) 863-5084 in Washington, DC area), or by written request to the address above.

Government Agencies and Stakeholder Organizations

DOE shares the Oak Ridge environmental public involvement stage with state and local boards and agencies, and several citizen groups and organizations. These publicly funded groups and organizations hold meetings at which citizen input is solicited.

Local government boards concerned with the environmental effects of DOE activities include the City of Oak Ridge Environmental Quality Advisory Board and the Roane County Environmental Review Board. Both boards routinely examine DOE's environmental decisions.

The widespread availability of electronic mail and the Internet have made near-instantaneous dissemination of complex information an everyday event. Many involved groups maintain Web sites and communicate via e-mail and listservers regarding environmental issues on the Reservation.

Government Agencies

Two regulatory agencies participate in environmental management decisions at the Reservation: TDEC and EPA. The working relationships among DOE, TDEC, and EPA are spelled out in the Federal Facility Agreement for the Oak Ridge Reservation (DOE/OR-1014). Appendix E of that document details the deadlines (milestones) for Reservation remediation documents.

U.S. Environmental Protection Agency

61 Forsyth Street, S.W., FFB

Atlanta, GA 30303-3104

EPA Hotline: 1-800-241-1745

EPA Public Affairs Fax: 404-562-8174

Web site: www.epa.gov/region4

EPA Region 4 is based in Atlanta, Georgia. Aside from its official reviews of DOE decision documents, EPA publishes a considerable amount of information on a broad range of topics. Its Web site is an excellent place to start. The Center for Environmental Information and Statistics (www.epa.gov/ceis) serves as "a single, convenient source of information on environmental quality, status, and trends." At that Web site you can find environmental profiles by state, country, and territory using EPA databases. A comprehensive catalogue of current and archival EPA publications is available at www.epa.gov/epahome/publications.htm. Orders can be placed on line or by phone, and most are free of charge.

TDEC DOE Oversight Division

761 Emory Valley Road

Oak Ridge, TN 37830-7072

Phone: (865) 481-0995

Fax: (865) 482-1835

Web site: www.state.tn.us/environment/doeo

The TDEC DOE Oversight Division works to ensure that the environmental effects associated with past and present activities at the Reservation are thoroughly investigated and monitored. The primary objective of the division is to assure the citizens of Tennessee that their health, safety, and environment are being protected during Environmental Management and other ongoing activities at the Reservation, and to assist in making cleanup decisions. The TDEC DOE Oversight Division funds the Local Oversight Committee, created in 1991 to represent those counties and communities affected most directly by DOE's activities at the Reservation.

TDEC publishes three annual reports: the TDEC DOE Oversight Division Status Report to the Public, the DOE Oversight Environmental Monitoring Plan, and the DOE Oversight Environmental Monitoring Report. The annual report and monitoring plan are available as downloadable, self-extracting Microsoft Word documents from the DOE Oversight Web page and all are available at no charge by calling the TDEC office at (865) 481-0995.

Stakeholder Organizations

Two area stakeholder groups—the Oak Ridge Site Specific Advisory Board and the Oak Ridge Reservation Local Oversight Committee—are funded by government agencies.

Oak Ridge Site Specific Advisory Board

P.O. Box 2001, EM-91

Oak Ridge, TN 37831

Phone: (865) 576-1590

24-hour Information Line (865) 576-4750

Fax: (865) 576-5333

Web Site: <http://www.oro.doe.gov/em/ssab>

The Oak Ridge Site Specific Advisory Board is a federally appointed citizen panel that provides advice and recommendations to DOE on its Oak Ridge Environmental Management Program. The group was formed in 1995 and is chartered under the Federal Advisory Committees Act.

The Board is dedicated to providing informed recommendations and advice to the DOE Environmental Management Program regarding environmental restoration and waste management, as well as land use and economic development of contaminated areas. Recommendations regarding environmental justice, health and safety issues, and other subjects may be developed at the Board's discretion. The Board is committed to reflecting the concerns of the communities affected by environmental management of the Reservation and to serving as a communication link between the public and the relevant government agencies, including local governments.

The Board is composed of up to 20 members, chosen to reflect the diversity of gender, race, occupation, views, and interests of persons living near the Reservation. Members are appointed by DOE and serve on a voluntary basis, without compensation. Non-voting members include representatives from the DOE-ORO Office, EPA Region 4, and TDEC. These members advise the Board on their respective agency's policies and views. Non-voting student participants also serve on the Board to represent the viewpoints and concerns of area youth.

The ORSSAB provides a number of avenues through which the public can learn and express views about DOE-ORO Environmental Management work. All Board meetings are open to the public and are announced in newspaper advertisements, in the Federal Register, and through the Board's 24-hour information line. Committee meetings, which are also open to the public, are held at the DOE Information Center. Board meetings are video recorded, and copies of the tapes are available for public review. The meetings are broadcast monthly on Oak Ridge local cable Channel 12. Information is available by calling the Board's support office.

When vacancies occur on the board:

- DOE-ORO conducts an extensive outreach campaign to solicit applications.
- Applications are forwarded to an independent screening panel.
- The panel uses a blind screening process to select nominees.
- Names of nominees are then given back to DOE-ORO with a recommendation that they be appointed.
- DOE-ORO reviews the nominees for potential conflicts of interest.
- DOE-ORO then sends that information to DOE Headquarters with a request that those individuals be appointed to the board.
- DOE Headquarters reviews the information and appoints new members.

The Oak Ridge Reservation Local Oversight Committee, Inc.

Midway Community Center, Wildcat Den

102 Robertsville Road, Suite B

Oak Ridge, TN 37830

Phone: (865) 483-1333

Fax: (865) 482-6572

Web Site: <http://www.local-oversight.org>

The Oak Ridge Reservation Local Oversight Committee, Inc., is a nonprofit, regional organization established in 1991 to provide input from the counties and communities affected most directly by DOE's activities on the Reservation. Funded by a grant from the TDEC DOE Oversight Division, which is in turn funded by DOE under the terms of the Tennessee Oversight Agreement, the Local Oversight Committee's mission is to ensure that human health, the environment, and local economic and social well-being are protected during cleanup and operations.

The Local Oversight Committee added a Citizens' Advisory Panel in 1995 to enable interested citizens to study the issues in depth and make recommendations to the Local Oversight Committee Board. The Citizens' Advisory Panel consists of up to 18 members from Oak Ridge and surrounding areas.

When vacancies occur on the Citizens' Advisory Panel, the panel solicits applications through the media and other public outreach methods. A member selection subcommittee of the panel screens completed applications. The subcommittee recommends new members to the panel, which then makes the appointments.

The East Tennessee Environmental Business Association

P.O. Box 5483
Oak Ridge, TN 37831
Jenny Freeman, Executive Director
Phone: (865) 483-9979
Fax: (865) 481-8928
Web site: <http://www.eteba.org/>

The East Tennessee Environmental Business Association (ETEBA) is a trade organization of companies doing business with the DOE-Oak Ridge Environmental Management Program. Most, but not all, have a local (Oak Ridge or Knoxville) presence, and companies range in size from individual consultants to large engineering firms. ETEBA currently has some 120 member companies.

ETEBA primarily engages in lobbying and marketing on behalf of its members. In addition, ETEBA provides mechanisms by which member companies may obtain cooperative group rates for insurance and risk management.

Fees and dues collected from the membership support the organization's activities. Membership fees and annual dues are based on the number of employees of the member company. ETEBA is governed by a volunteer board with a paid Executive Director and administrative staff.

The Environmental Quality Advisory Board

City of Oak Ridge
PO Box 1
Oak Ridge, TN 37831-0001
Amy Fitzgerald, Government & Public Affairs
Phone: (865) 425-3550
Web site: <http://www.cortn.org/eqab/>

The Environmental Quality Advisory Board is a 12-member, citizen-volunteer, advisory board appointed by the Oak Ridge City Council to advise Council on issues affecting environmental quality and natural resources in Oak Ridge. EQAB is supported by the City staff and meets on the first Thursday of each month at 7:30 p.m.

Community Reuse Organization of East Tennessee

107 Lea Way
PO Box 2110
Oak Ridge, TN 37831-2110
Phone: (865) 482-9890
Web site: <http://www.croet.com>

The Community Reuse Organization of East Tennessee (CROET) oversees and subleases the area's prime industrial and commercial properties. Many of its properties were once used to support the World War II nuclear effort while others are pristine greenfields. All offer tenant access to top-notch facilities, equipment, personnel, and technologies. CROET's facilities, located in the East Tennessee Technology Park, are known for their rich history in the Oak Ridge area.

Appendix A.

Public Participation and Community Relations

DOE P 141.2

05-07-03

ERRATA SHEET

This Errata Sheet corrects DOE P 141.2, *Public Participation and Community Relations*, dated 5-20-02, and must be kept with the Policy.

Cancellation of DOE P 1210.1, Public Participation, dated 07-29-94 was omitted from DOE P 141.2. This errata sheet cancels DOE P 1210.1.

U.S. Department of Energy
Washington, D.C.

POLICY

DOE P 141.2

Approved: 05-02-03

SUBJECT: PUBLIC PARTICIPATION and COMMUNITY RELATIONS

PURPOSE

Public participation is open, ongoing, two-way communication, both formal and informal, between the Department of Energy (DOE) and its stakeholders concerning DOE's missions and activities. Effective public participation is at the core of good community relations, which is essential for DOE facilities to achieve their missions. Regular, interactive communication enables all parties to learn about and better understand the views and positions of each other.

The Department recognizes the many benefits to be derived from public participation and good community relations, for both stakeholders and DOE. Public participation provides a means for DOE to gather a diverse collection of opinions, perspectives, and values from the broadest spectrum of the public, enabling the Department to make more informed decisions. Public participation benefits stakeholders by creating an opportunity to provide input on decisions that affect their communities and our nation.

This Policy is intended to ensure that public participation and community outreach are integral and effective parts of DOE activities and that decisions are made with the benefit of significant public perspectives. This policy provides a mechanism for bringing a broad range of stakeholder viewpoints and community values into DOE's decision-making early in the process. This early involvement enables DOE to make more informed decisions and build mutual understanding and trust between DOE, the public it serves, and the communities which host its facilities.

SCOPE

This policy is designed to function as a framework within which all DOE programs, including programs of the National Nuclear Security Administration, will operate. While the policy applies to all levels of DOE, its intent is the development and implementation of effective public participation programs at each appropriate field site by management officials designated by a site's Lead Program Secretarial Officer. It is also intended that these programs will be tailored to meet specific site and stakeholder needs and that they will include performance goals for community relations. This policy is not intended to affect requirements imposed by law, regulation, or contractual agreement; neither does it expand or limit any rights available to the public under current law.

DISTRIBUTION:
All Departmental Elements

INITIATED BY:
Office of Congressional and
Intergovernmental Affairs

POLICY

Public participation is a fundamental component in program operations, planning activities, and decision-making within DOE. The Department encourages such participation. Effective public participation and good community relations both rest on a foundation of positive personal relationships; DOE managers and staff are encouraged to seek to build and nurture such relationships.

The methods used to encourage public participation will vary widely in nature and scope and may include, but are not limited to, informal conversations, written and electronic communication, scheduled meetings and workshops, legally required hearings, and Federal-State-local-Tribal meetings. Under this Policy, DOE will actively seek, consider, and respond in a timely manner to the views of its stakeholders, thereby providing them an opportunity to influence decisions. Stakeholders are defined as those individuals, groups, host communities, and other entities in the public and private sectors that are interested in or affected by any of DOE's activities and decisions.

GOALS

The goals of the DOE Public Participation and Community Relations Policy are as follows:

1. DOE will actively seek to identify stakeholders, consider public input, and incorporate or otherwise respond to the views of its stakeholders in making its decisions.
2. The public will be informed in a timely manner and empowered to participate at appropriate stages in DOE's decision-making processes. Such processes will be open, understandable, and consistently followed. Managers will define clear access points for public input from the earliest stages of a decision process and will provide adequate time for stakeholders to participate.
3. Credible, effective public participation processes, including active community outreach, will be consistently incorporated into DOE program operations, planning activities, and decision-making processes, at Headquarters and in the field. Employees within the DOE complex will share responsibility for promoting and improving public participation and community relations.
4. DOE will conduct periodic reviews of its public participation and community relations efforts.

CORE VALUES

Though program-specific public participation activities may vary throughout DOE, each program will be characterized by the following core values:

Accessibility Known avenues to DOE managers who are available, approachable, and open to the public.

Accountability Responsibility to the public for its decisions and a willingness to provide the rationale for its decisions.

Accuracy Commitment to the truth.

Communication Open, two-way exchange of information, knowledge, and perspectives between DOE and its stakeholders, including its host communities.

Consistency Stakeholder and community interactions marked by regularity and continuity.

Fairness Objectivity and freedom from undue favor toward any side.

Honesty Commitment to fairness, trustworthiness, and straightforwardness.

Innovation Introduction of new ideas, methods, and approaches.

Openness Ready accessibility and a willingness to listen, consider, and respond to the views of stakeholders.

Respect Consideration of and sensitivity to diversity and cultural concerns of stakeholders.

Responsiveness Timely and thoughtful consideration of and response to the needs and concerns of stakeholders and affected communities.

Scientific
Credibility Commitment to the pursuit of sound, dependable, leading edge science.

Sincerity Openness, frankness, and truthfulness in all stakeholder and community communications.

Time/
Timeliness Adequate amount of time for stakeholders to participate in DOE decision-making processes. Timely responses to stakeholder input and requests. Timely DOE decisions informed but not delayed by public participation.

ACCOUNTABILITY

Senior Departmental program, staff office, and field managers are accountable for ensuring that public participation and community relations activities meet the goals of this Policy, are fully coordinated, and reflect DOE principles and values. Program or staff office and project managers are responsible for ensuring that appropriate public participation and community relations activities are identified and included in their decision-making processes.

Public participation is a performance element for these managers; they will be given incentives for good stakeholder and community relations and held to measurable performance standards.

BY ORDER OF THE SECRETARY OF ENERGY:



KYLE E. MCCLARROW
DEPUTY SECRETARY

Appendix B.

Other Environmental Laws and Directives

National Environmental Policy Act

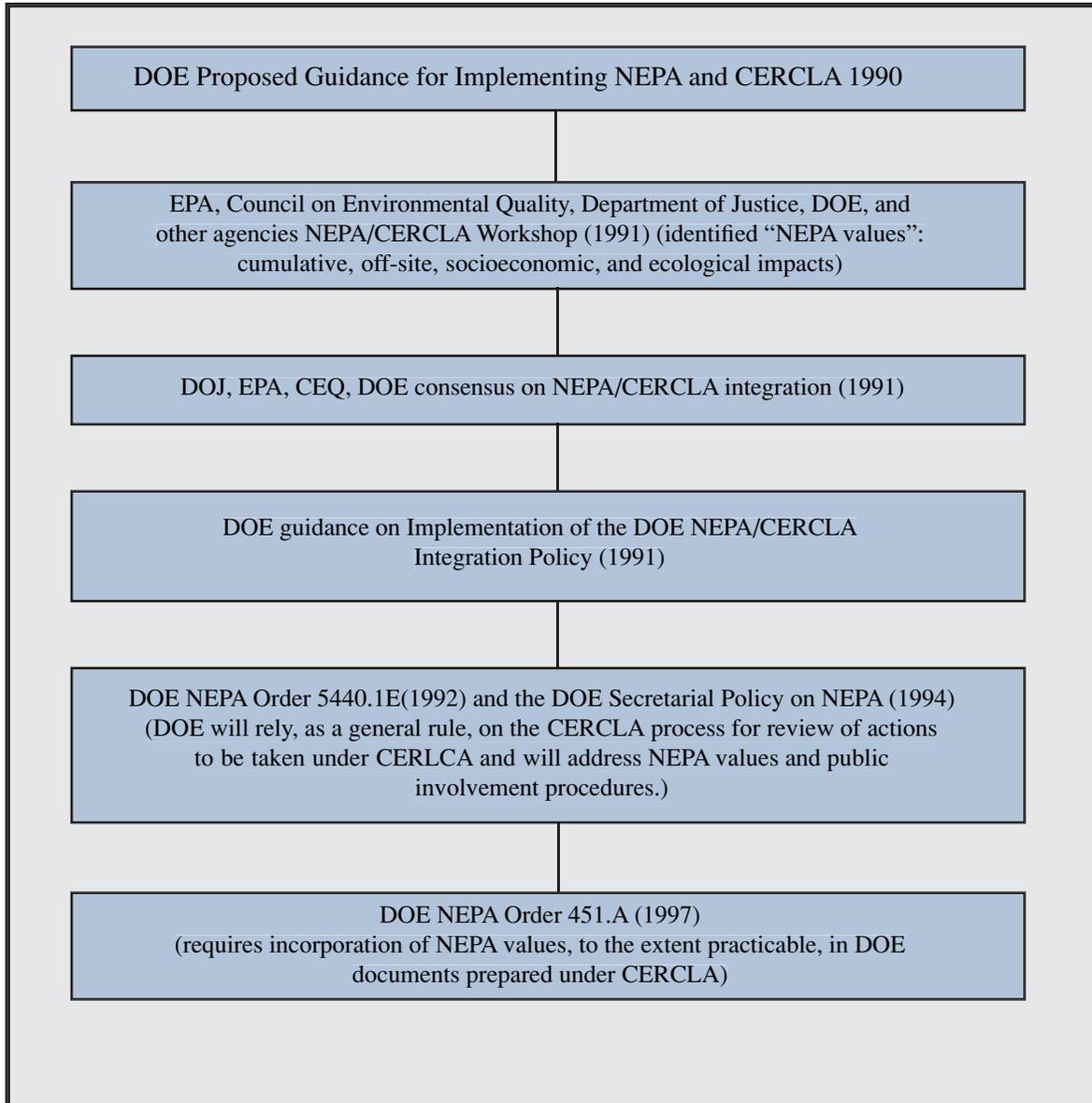
The National Environmental Policy Act (NEPA) requires federal agencies to provide public officials and citizens with environmental and socioeconomic information for proposed major federal actions that could affect environmental quality. Environmental Assessments are prepared to determine whether potential impacts of the proposed action might be significant. If so, an Environmental Impact Statement is prepared to evaluate the impacts of various alternatives to the proposed action. The NEPA process requires public involvement and access to information. Formal public meetings are held in conjunction with the scoping and preparation of Environmental Impact Statements, giving regulators and citizens an opportunity to comment openly on DOE's planned activities.

NEPA requires agencies of the federal government to:

- act as an environmental trustee for future generations;
- ensure healthful, productive, and aesthetically and culturally pleasing surroundings;
- attain the widest possible range of beneficial uses of the environment without degradation or risk to health and safety;
- preserve historic and cultural heritage and individual opportunity for choice;
- achieve a balance between population and resource use; and
- enhance the quality of renewable resources and encourage recycling of depletable resources.



NEPA/CERCLA Integration



Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA) was passed in 1976 to address management of the country's huge volume of solid waste. The law requires that EPA regulate the management of hazardous waste, which includes waste solvents, batteries, and many other substances deemed potentially harmful to human health and the environment. RCRA also regulates

underground tanks used to store petroleum and hazardous substances, recyclable used oil and batteries, mercury thermostats, selected pesticides, and fluorescent/hazardous light bulbs as universal wastes. The RCRA regulations deal primarily with waste from current or ongoing operations, and as such, the waste is designated as newly generated.

The East Tennessee Technology Park, Oak Ridge National Laboratory, and the Y-12 Complex are considered RCRA large-quantity generators. Each facility generates RCRA hazardous waste, some of which contains radionuclides (mixed waste). Currently, there are more than 500 generator accumulation areas at the three Reservation installations.

The CERCLA response action and RCRA corrective action processes are similar and include four steps with similar purposes.

CERCLA and RCRA corrective action processes

CERCLA	RCRA	Purpose
Preliminary Assessment/ Site Investigation	RCRA facility assessment	Identify releases needing further investigations
Remedial Investigation	RCRA facility investigation	Characterize nature, extent, and rate of contaminant releases
Feasibility Study	RCRA facility investigation	Evaluate and select remedy
Remedial Design/ Remedial Action	Corrective measures implementation	Design and implement chosen remedy

Source: Annual Site Environmental Report for 2002, DOE/ORO/2159, U.S. Department of Energy.

EPA, DOE, and TDEC entered into the Oak Ridge Reservation Federal Facility Agreement to ensure that the environmental impacts associated with past and present activities at the Reservation are thoroughly investigated and that appropriate remedial actions or corrective measures are taken as necessary to protect human health and the environment. The Federal Facility Agreement is also intended to coordinate the corrective action processes of RCRA required under the Hazardous and Solid Waste Amendments permit with CERCLA. [http://tis.eh.doe.gov/oepa/law_sum/RCRA.HTML]

RCRA Public Involvement on the Reservation

RCRA addresses those hazardous waste management facilities that are currently in operation or about to commence operations. On the Reservation, there are active waste management facilities with RCRA permits. As with CERCLA, RCRA requires public participation in varying capacities and methodologies.

RCRA requires public notices in several situations. Some of them are:

- When the agency issues a draft permit, grants an appeal, or holds a public hearing
- The permit applicant plans a pre-application meeting
- The facility or the agency proposes permit modifications
- When an information repository is required by the agency
- When the facility conducts a trial burn, which demonstrates that operating conditions are consistent with applicable rules and regulations, or performs closure or post-closure

A typical public notice contains the following:

- Name and address of the facility
- Description of the process conducted at the facility
- Name, address and telephone number of an individual at the permitting agency
- An overview of the public involvement process including procedures and deadlines for public comments
- Contact information for all sources of technical assistance at state and EPA levels
- Location and operating hours of the facility where administrative records are kept
- Website addresses of the facility and permitting agency

Generally, the public notices are distributed by newspaper advertisement including newspaper inserts, radio and television announcements, and signs and bulletin boards.

RCRA also requires that a current mailing list be maintained. In addition to the applicant and the agency with jurisdiction over the facility, the list may include the following:

- Adjoining property owners
- All persons who have requested to be on the mailing list to receive public notices
- Environmental and other groups with an interest in any activity covered by the agency
- Any state whose waters may be affected by the activity

The agency with RCRA-related jurisdiction on the Reservation is:

State of Tennessee
Department of Environment and Conservation
Division of Solid Waste Management
L&C Tower
401 Church St.
Nashville TN 37243-1535

“Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” Executive Order 12898

Environmental justice seeks to ensure the right of all people regardless of race, culture, education, or income level to live in a healthy environment, to breathe clean air, drink clean water, and eat food grown in uncontaminated soil.

In February 1994, former President Clinton established environmental justice as a national priority by issuing Executive Order 12898, “Federal

Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” At that time, he directed all federal agencies with a public health or environmental mission to make environmental justice an integral part of their policies and activities.

DOE realizes that public involvement must be an essential element in reaching its environmental justice goals. Because of its importance, DOE will develop and carry out activities to improve and increase communication among and outreach to minority and low-income communities that may be affected by DOE operations. These efforts include:

- scheduling public meetings to make them accessible and user-friendly;
- providing information in a timely, accessible, and understandable manner;
- seeking and ensuring the active involvement of affected communities early and throughout the decision-making process; and
- developing relationships with affected community organizations.

An environmental justice strategy is in place at DOE-ORO under the direction of the Diversity Programs and Employee Concerns Office. The strategy addresses the need to effectively communicate DOE activities to minority communities. Efforts are under way to ensure that DOE activities are presented to the public in a manner that does not require stakeholders to possess a technical background for them to effectively participate in the decision-making process.

DOE-ORO’s vision for environmental justice is to incorporate the highest concern for the effect on the environment into all its policies, programs, and practices; facilitate and participate in research, development, and technology and information transfer for the benefit of the environment; and contribute to the education of an environmentally literate citizenry.

Clean Air Act

Under the Clean Air Act, the Environmental Protection Agency sets limits on how much of a pollutant can be in the air anywhere in the United States. This ensures that all Americans have the same basic health and environmental protection. The law allows individual states to have stronger pollution controls, but states are not allowed to have weaker pollution controls than those set for the country.

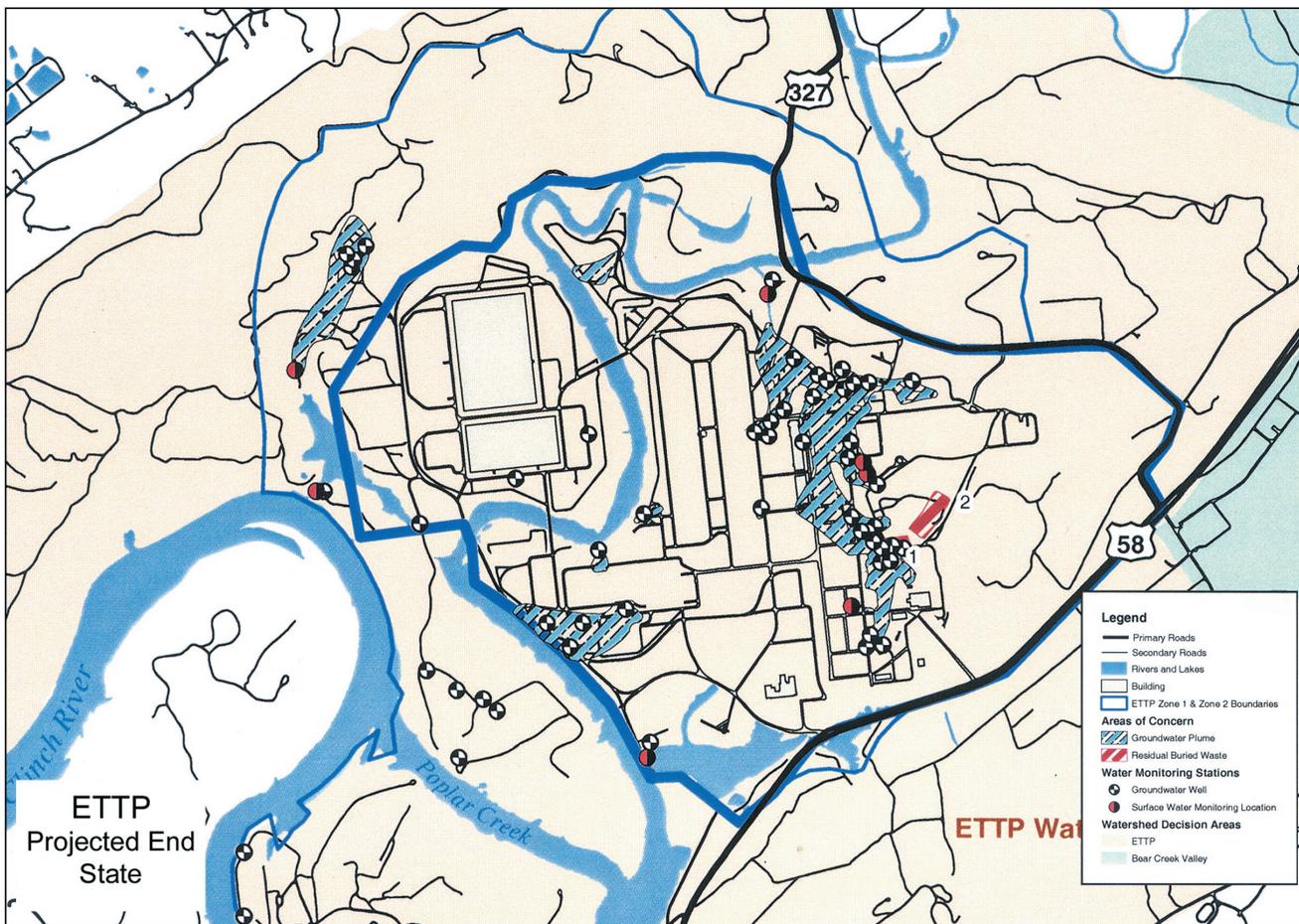
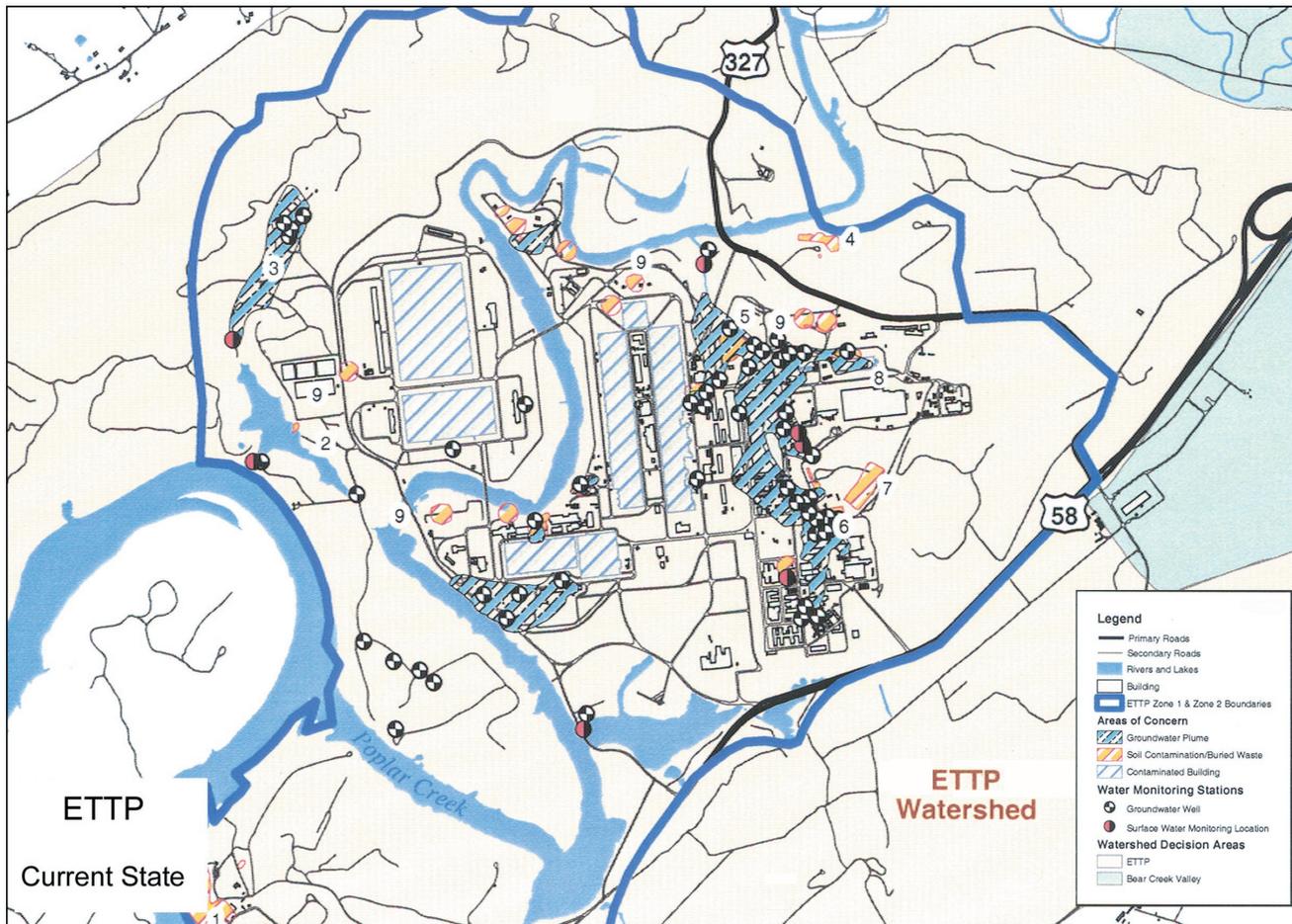
Clean Water Act

The Clean Water Act establishes the basic structure for regulating discharges of pollutants into the waters of the United States. It gives the Environmental Protection Agency the authority to implement pollution control programs, such as setting wastewater standards for industry. It requires water quality standards to be set for all contaminants in surface waters.

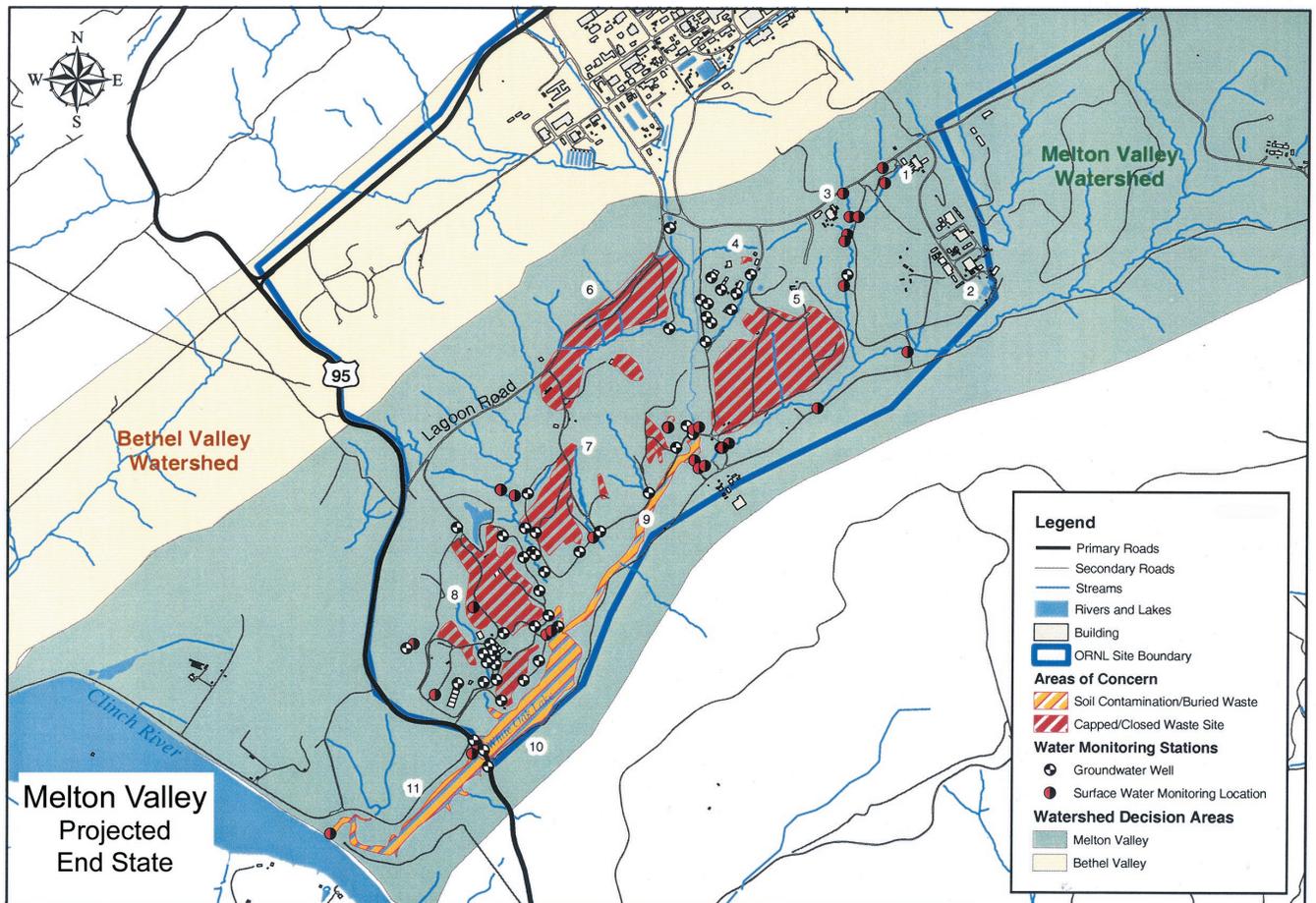
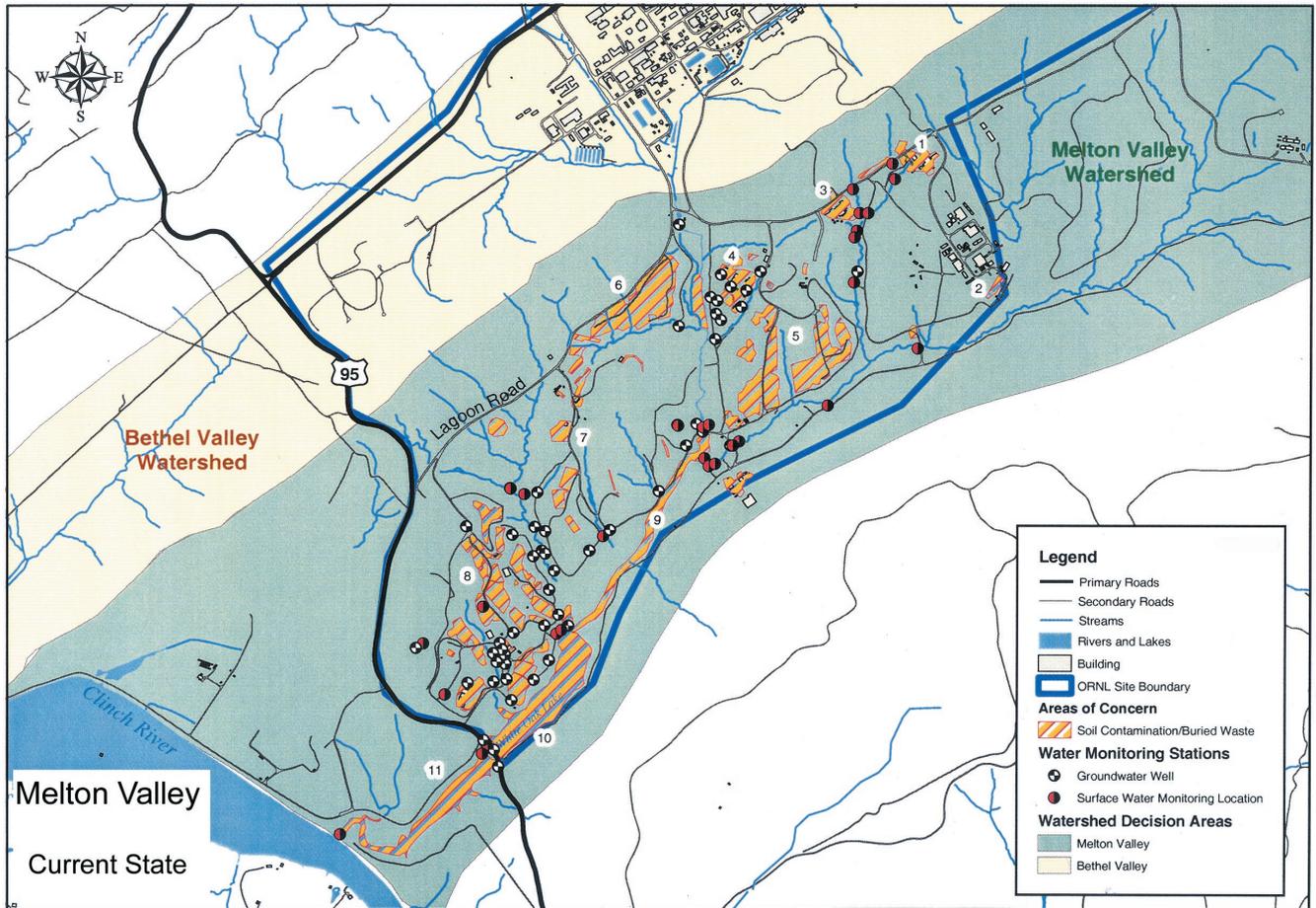
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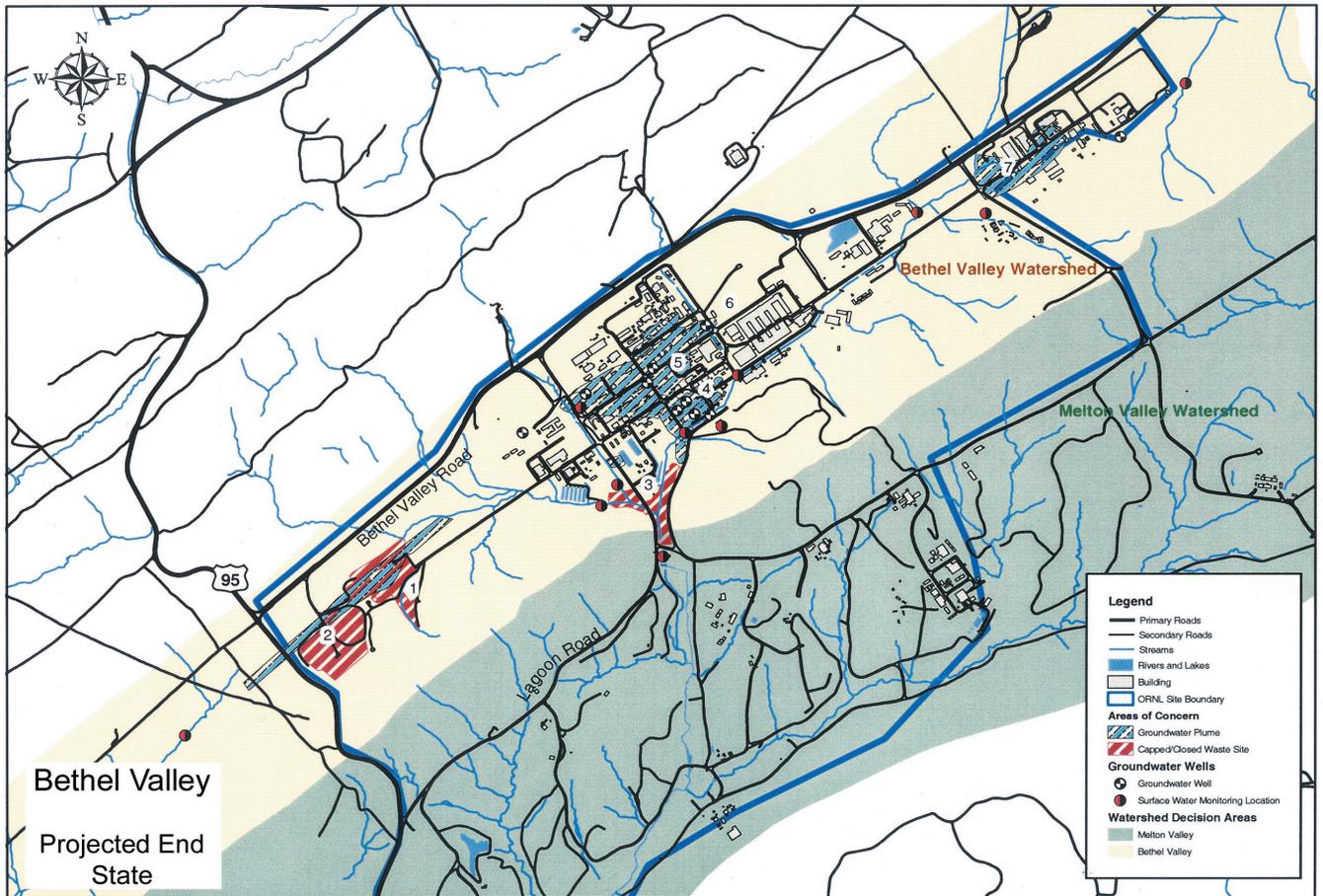
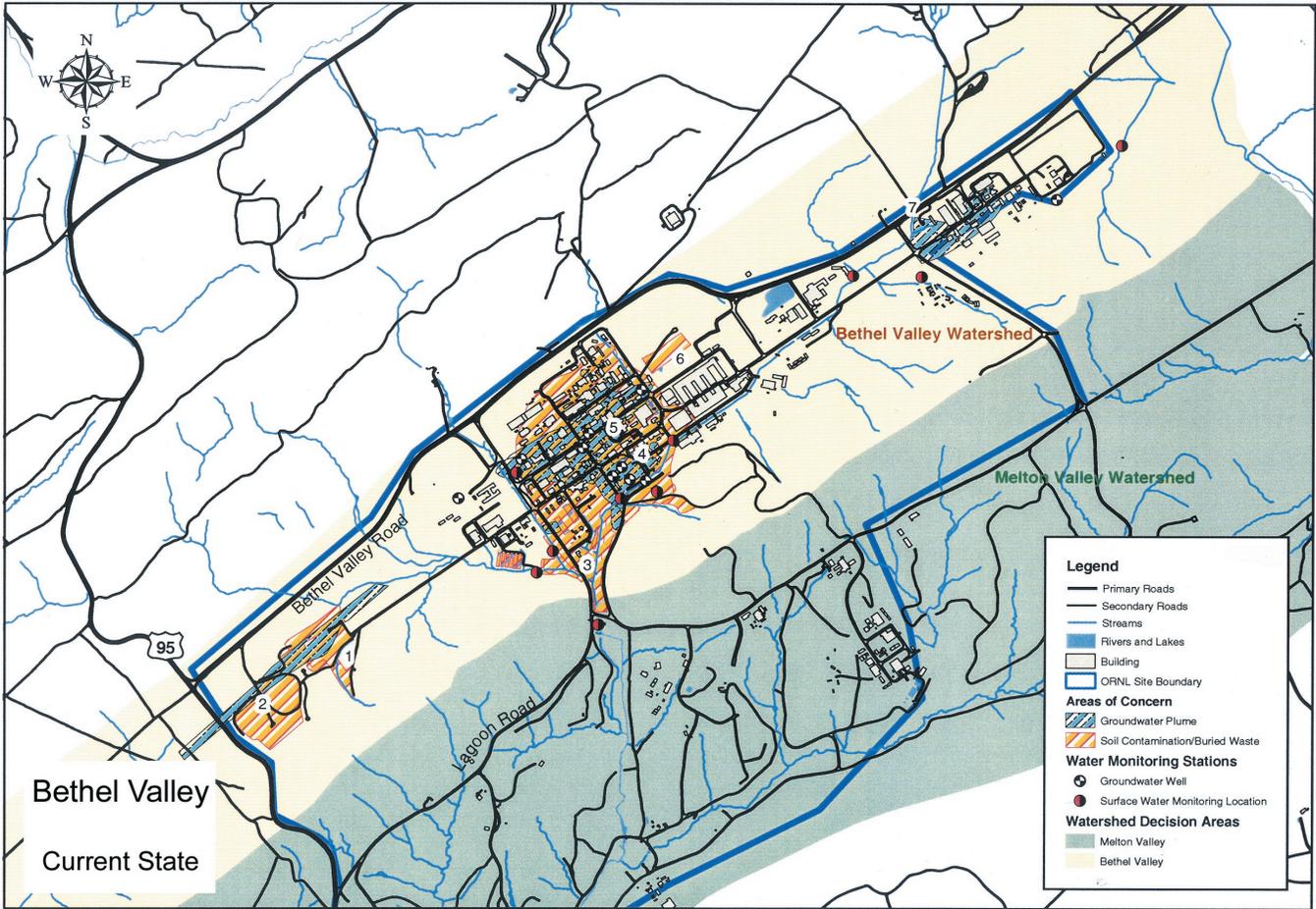
The maps on the following pages show the current state of the five major watershed areas, plus Chestnut Ridge, and the projected end state after remediation of the sites have taken place. Remediation will be accomplished by a variety of methods, including building demolition, soil and waste removal, groundwater remediation, and capping. Under the watershed approach, cleanup decisions are made for the entire watershed area rather than for each contaminated area or building.

East Tennessee Technology Park



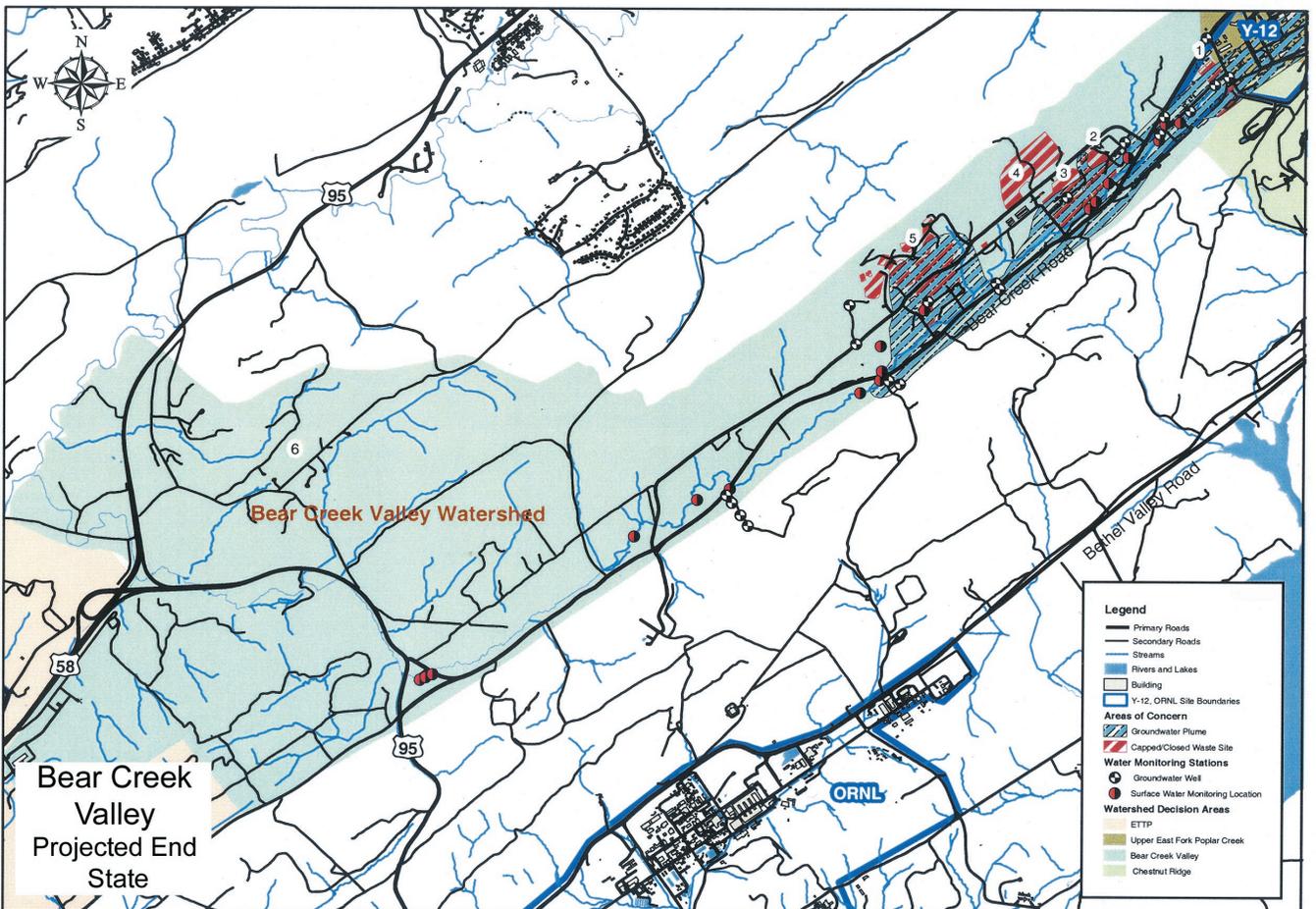
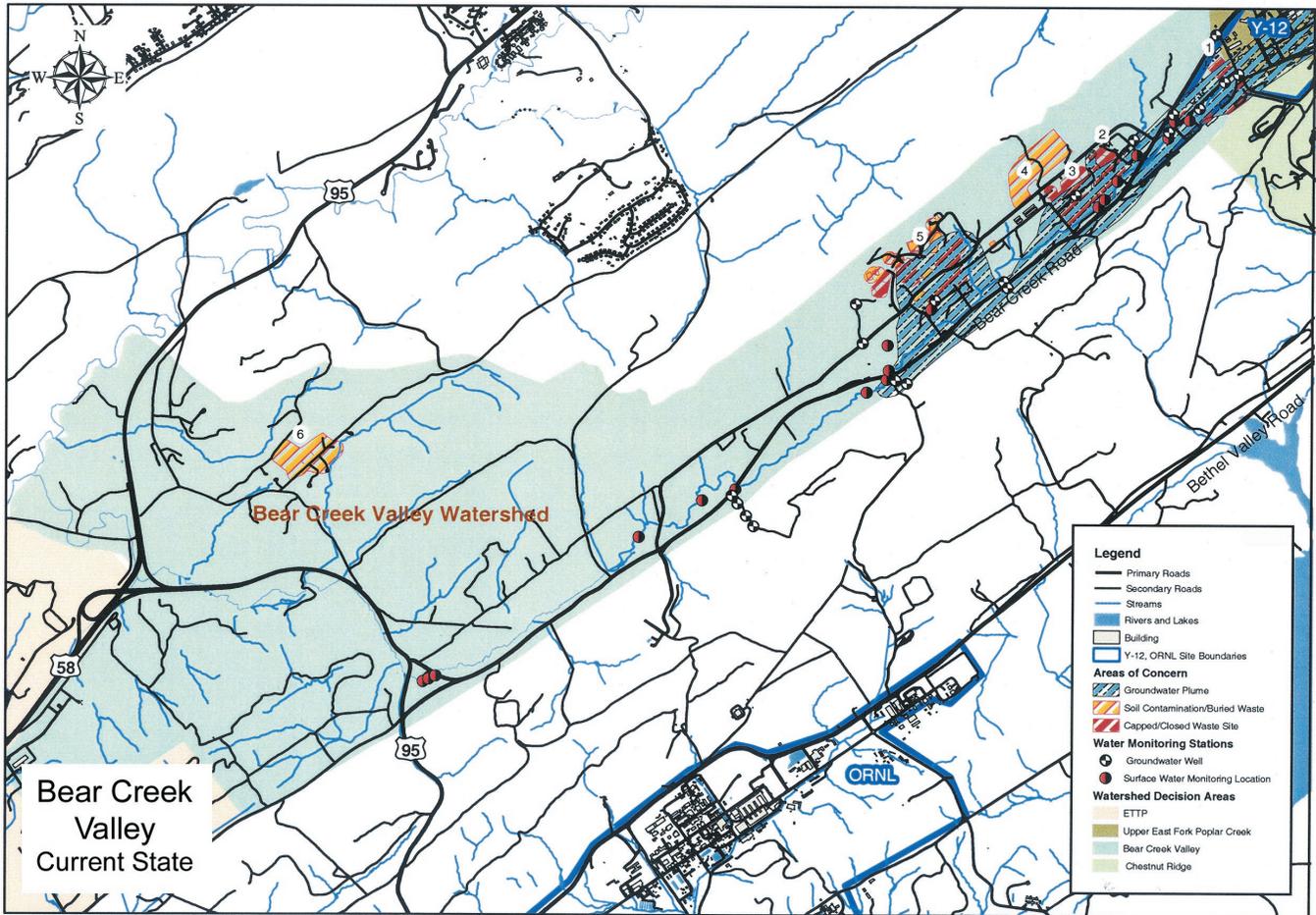
Melton Valley



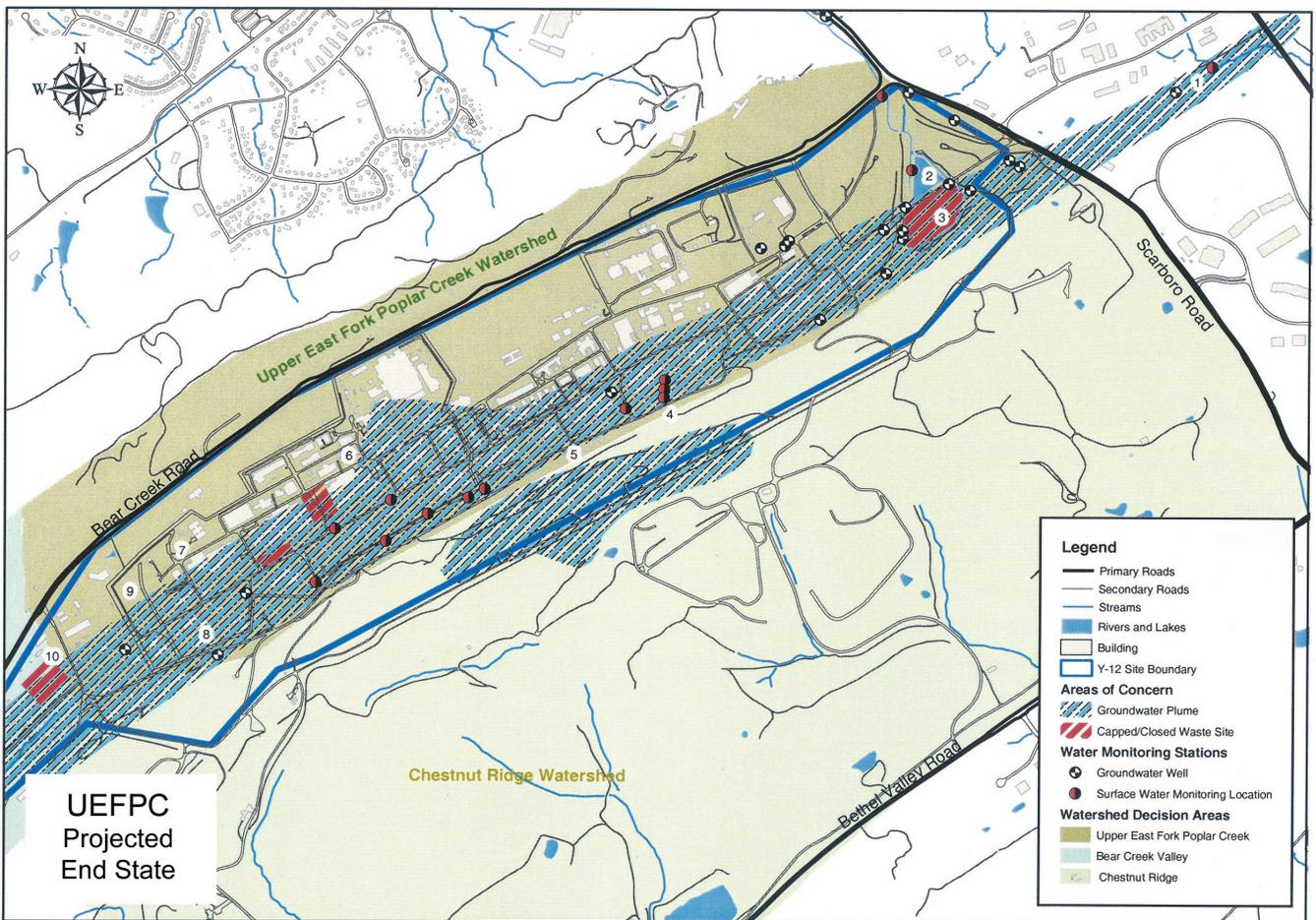
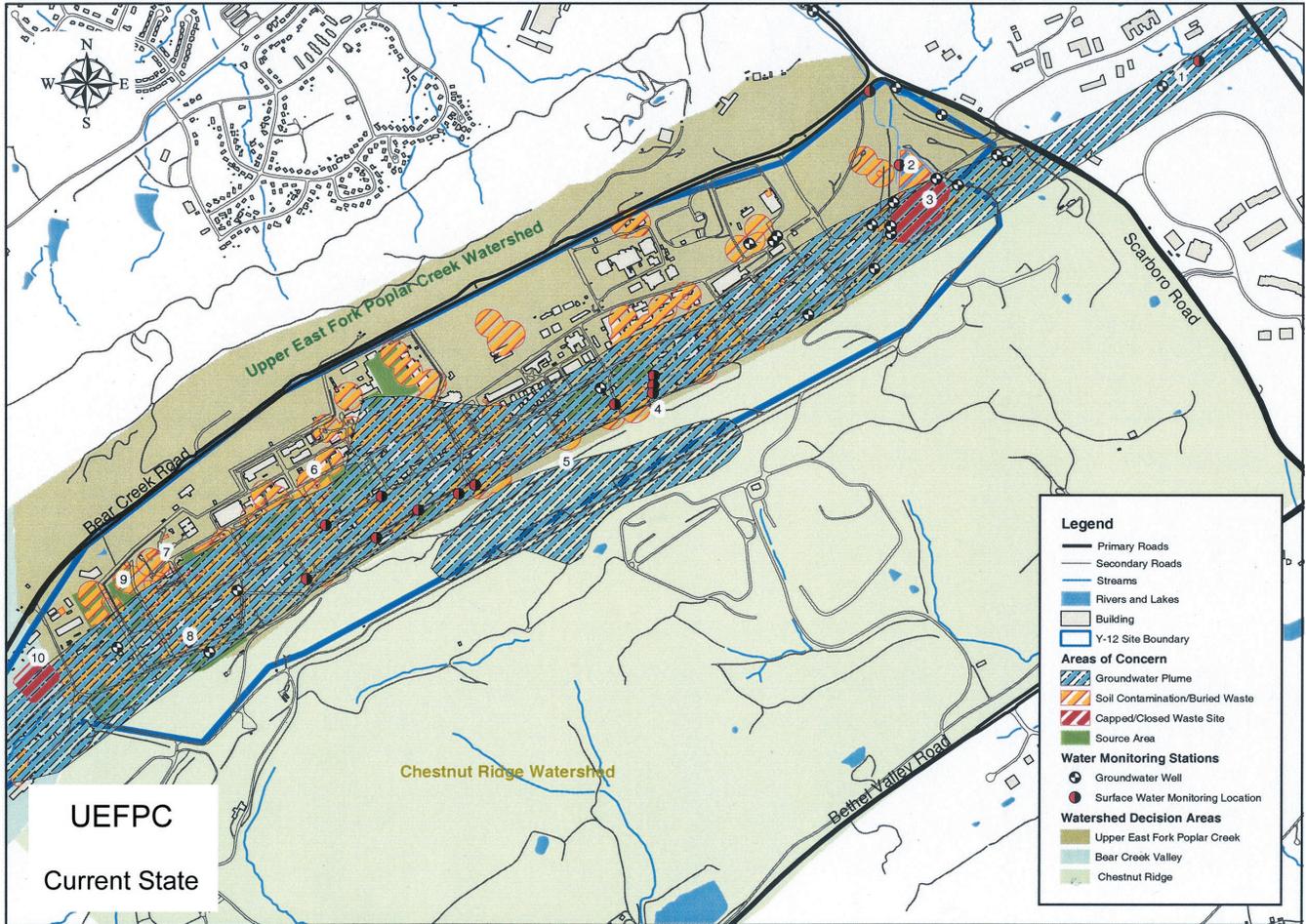


Balance of Reservation

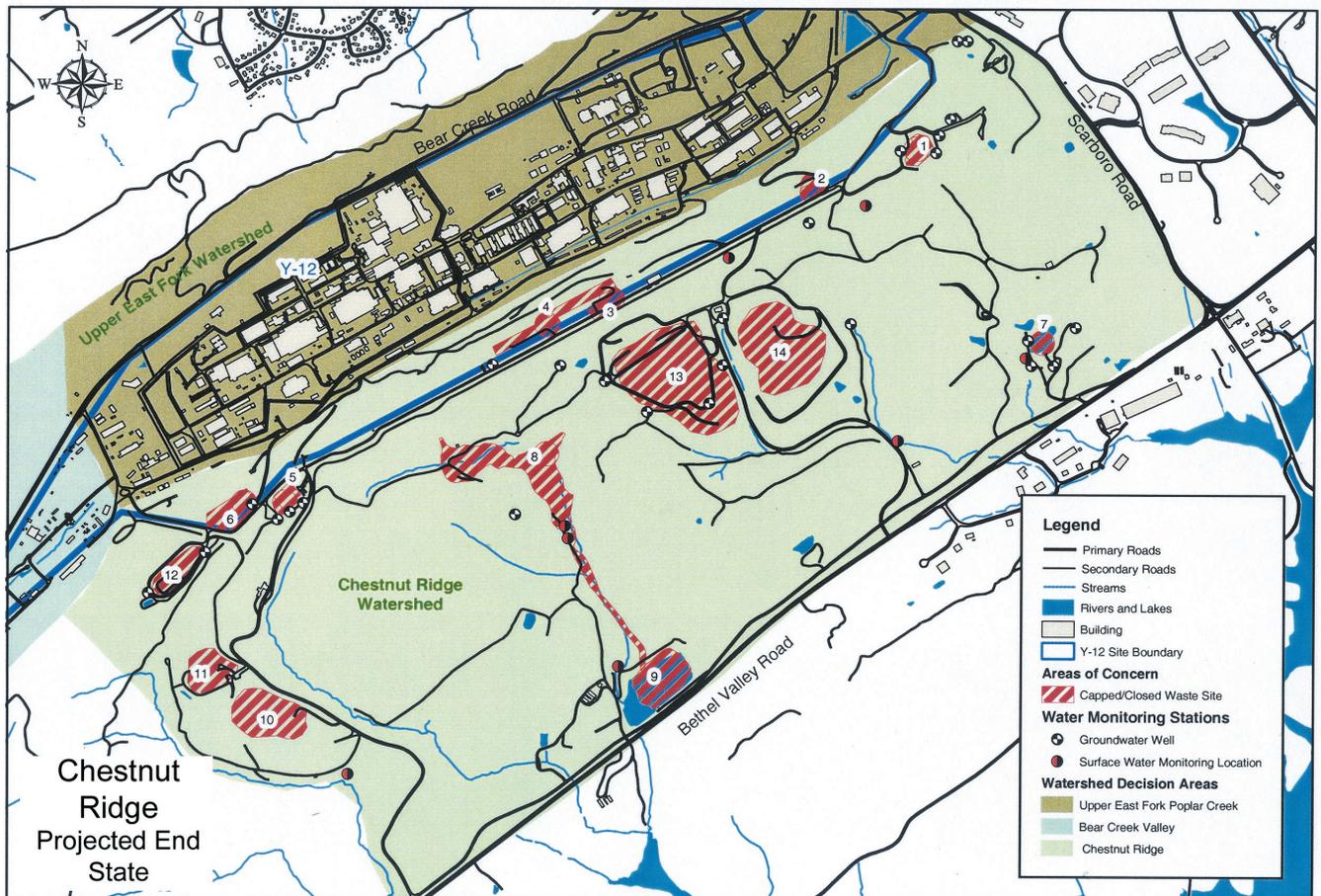
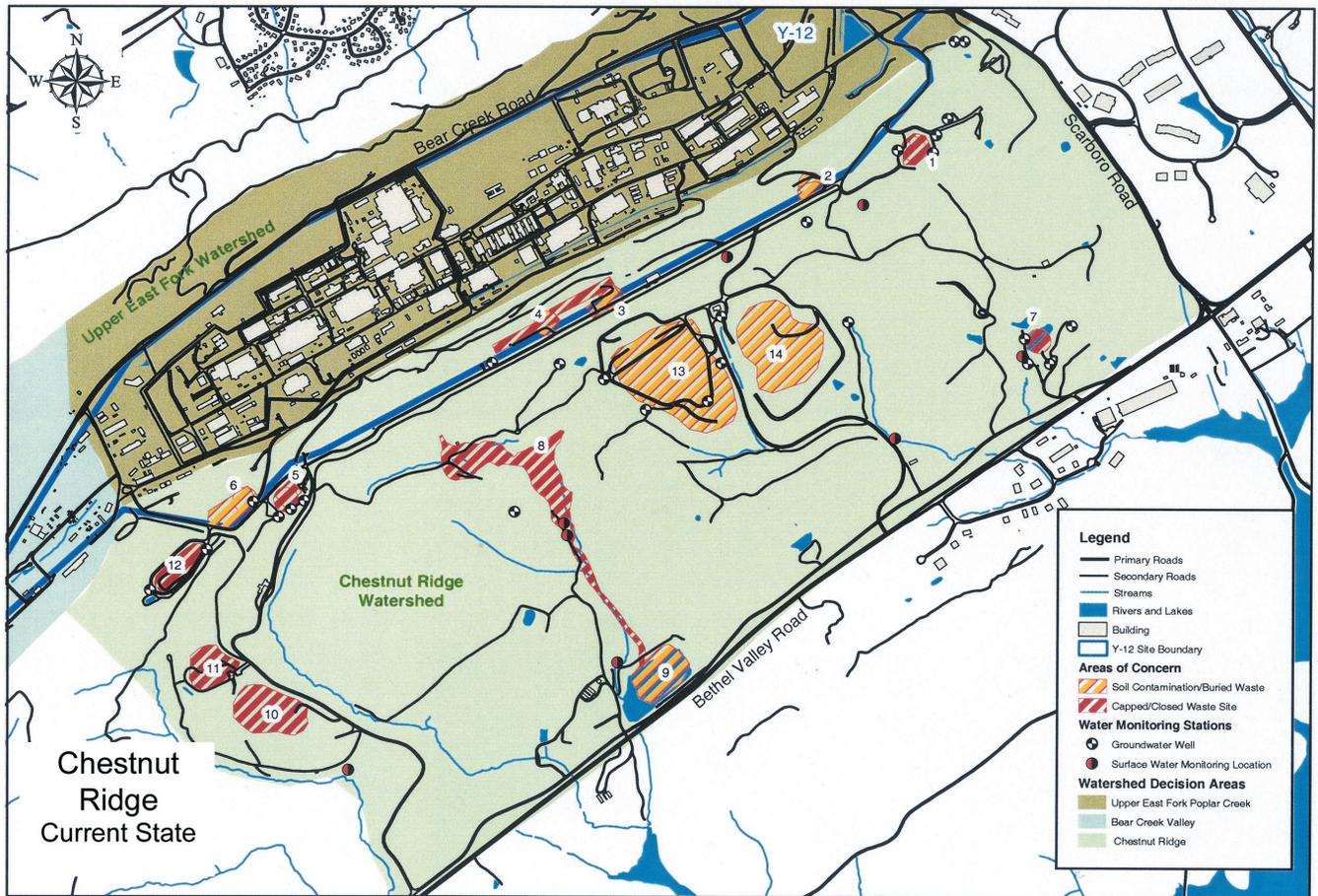
Balance of Reservation



Balance of Reservation



Balance of Reservation



Appendix D.

CERCLA Public Involvement Requirements

Appendix D. CERCLA Public Involvement Requirements

Congress passed the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also known as “Superfund”) in response to a growing national concern about the release of hazardous substances from abandoned waste sites. Under CERCLA, Congress gave the federal government broad authority to regulate hazardous substances, to respond to hazardous substance emergencies, and to develop long-term solutions for the nation’s most serious hazardous waste problems.

The CERCLA response effort is guided by the National Oil and Hazardous Substances Pollution Contingency Plan, commonly referred to as the National Contingency Plan [40 Code of Federal Regulations Part 300]. The National Contingency Plan describes the steps that responsible parties (including federal facilities) must follow in reporting and responding to situations in which hazardous substances are released into the environment. The National Contingency Plan establishes the criteria, methods, and procedures EPA uses to

determine which releases have priority for long-term evaluation and response. The national goal described in the National Contingency Plan is to select remedies that are protective of human health and the environment, that maintain protection over time, and that minimize untreated waste.

Both CERCLA, as amended by the Superfund Amendments and Reauthorization Act, and the National Contingency Plan provide authority for two types of response actions: removal actions and remedial actions.

Removal Actions are short-term actions taken to:

- clean up or remove released hazardous substances, pollutants, or contaminants;
- mitigate a threat of release of hazardous substances;
- monitor and evaluate release conditions;
- dispose of removed material; and/or
- mitigate or prevent damage to public health, welfare, or the environment.

The National Contingency Plan categorizes removal actions in three ways:

1. emergency removal actions,
2. time-critical removal actions, and
3. non-time-critical removal actions.

These categories are based on the type of situation, the urgency of the threat of release, and the subsequent time frame in which the action must be initiated. Emergency removal actions are necessary when there is a release that requires on-site activities to begin within hours or days. Time-critical removal actions are taken in response to releases requiring on-site action within six months. Non-time-critical removal actions are taken when a removal action is determined to be appropriate, but a planning period of at least six months is available before on-site activities must begin.

Section 40 CFR 300.415(e) lists removal actions that address specific situations. In general, removal actions can include, but are not limited to, one or more of the following activities:

- Fences, warning signs, or other security or site control precautions—where humans or animals have access to the release;
- Drainage controls, for example, run-off or run-on diversion—where needed to reduce migration of hazardous substances, pollutants, or contaminants off-site or to prevent precipitation or run-off from other sources (e.g., flooding) from entering the release area;
- Stabilization of berms, dikes, or impoundments or drainage or closing of lagoons—where needed to maintain the integrity of the structures;
- Caps on contaminated soils or sludges—where needed to reduce migration of hazardous substances, pollutants, or contaminants into soil, ground or surface water, or air; Use of chemicals and other materials to retard the spread of the release or to mitigate its effects—where the use of such chemicals will reduce the spread of the release;

- Excavation, consolidation, or removal of highly contaminated soils from drainage or other areas—where such actions will reduce the spread of, or direct contact with, the contamination;
- Removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous substances or pollutants or contaminants—where it will reduce the likelihood of spillage; leakage; exposure to humans, animals, or the food chain; or fire or explosion;
- Containment, treatment, disposal, or incineration of hazardous materials—where needed to reduce the likelihood of human, animal, or food chain exposure; or
- Provision of an alternative water supply—where immediately necessary to reduce exposure to contaminated household water and continuing until such time as local authorities can provide a permanent remedy.

Remedial Actions, the major part of the CERCLA response program, include the discovery, selection, study, design, and construction of longer-term actions aimed at a permanent remedy. The Superfund remedial process includes the following steps:

- **Preliminary assessment:** EPA or DOE performs a preliminary assessment of a site (often a review of data without an actual site visit) to determine if further study is necessary.
- **Site inspection:** A site inspection is an investigation conducted to find out whether there is a release or potential release and to determine the nature of the associated threats.
- **Hazard Ranking System:** Under the hazard ranking system, pertinent data about a site are evaluated and “scored.” The score is based on information such as waste volume, waste toxicity, proximity to population, and distance to underground drinking water. Sites receiving a hazard ranking score of 28.5 or higher are considered for listing on the National Priorities List. As hazard ranking studies are performed, release sites and waste sites may be removed or added to the list.
- **National Priorities List:** The National Priorities List, compiled by EPA, lists those sites, including federally owned facilities, that appear to pose the most serious threats to public health or the environment. EPA determines whether to place a site on the National Priorities List by using the hazard ranking system. The Reservation was placed on the National Priorities List in 1989. According to a final rule published in the Federal Register on May 11, 2000 (65 FR 30481, effective June 12, 2000), the National Priorities List includes 1,227 final sites, of which 159 are in the federal section. The National Priorities List is updated periodically.
- **Remedial Investigation:** A remedial investigation, conducted by the lead agency, determines the nature and extent of the problem presented by the release.
- **Feasibility Study:** The lead agency undertakes a feasibility study to develop and evaluate options for remedial action. The remedial investigation and feasibility study are collectively referred to as the “RI/FS.”
- **Proposed Plan:** Selects the preferred alternative from those options developed in the Feasibility Study. The proposed plan is subject to public review and comment.
- **Record of Decision:** After completing the RI/FS, EPA selects the appropriate cleanup option and publishes it in a public document known as the Record of Decision.
- **Remedial Design:** The remedial design includes the technical analysis and procedures that follow the selection of a remedy for a site.
- **Remedial Action:** The remedial action involves the actual construction or implementation of a cleanup. If a hazardous substance will remain at the site, a review of the remedial action is required five years after implementation of the remedy. This review evaluates the protectiveness of the remedial action and, for long-term remedial actions, the effectiveness of the technology and specific performance levels.

Following is a chart outlining the points within the CERCLA process at which opportunities for public involvement are required. You may wish to refer back to this text for definitions of the specific CERCLA documents discussed in the chart.

CERCLA Public Involvement Requirements

<i>Site Activity</i>	<i>Requirement(s)</i>
For all removal/remedial actions	
Agency Spokesperson	The agency must designate a spokesperson to inform the public about the release and actions taken; to respond to questions; and to notify immediately affected citizens, state and local officials, and, when appropriate, civil defense or emergency management agencies.
Administrative Record	The agency must establish an administrative record and make the administrative record available to the public at a central location at or near the site, if applicable.
For time-critical removal actions	
Notice and Availability of Administrative Record	Within 60 days of the start of an on-site removal activity, the lead agency must make the administrative record available to the public and issue a notice of availability in a major local newspaper of general circulation.
Public Comment Period	The agency must provide a public comment period, if appropriate, of not less than 30 days from the time the administrative record is made available for public inspection.
Response to Significant Comments	The agency must prepare a written response to significant comments.
Community Relations Plan	The agency must prepare a formal report based on community interviews and other relevant information that specifies the community relations activities the agency plans to undertake during the response.
For non-time-critical removal actions	
Information Repository/Administrative Record Establishment and Notification	The agency must follow the same procedures as outlined in the previous section, except that staff must establish the information repository and make the administrative record available no later than the signing of the Engineering Evaluation/Cost Analysis.
Notice of Availability/Description of the Engineering Evaluation/Cost Analysis	The agency must publish a notice of availability and a brief description of the Engineering Evaluation/Cost Analysis in a major local newspaper of general circulation.

CERCLA Public Involvement Requirements (continued)

<i>Site Activity</i>	<i>Requirement(s)</i>
Public Comment Period	Upon completion of the Engineering Evaluation/Cost Analysis, the agency must provide at least 30 days for the submission of written and oral comments. The agency must extend this comment period by at least 15 days upon timely request.
Responsiveness Summary	The agency must prepare a written response to significant comments and make this responsiveness summary available to the public in the information repository.
Remedial response before Remedial Investigation:	
Community Interviews	The agency must hold on-site discussions with local officials and community members to assess their concerns and determine appropriate community relations activities.
Information Repository	The agency must establish an information repository to contain items developed, received, published, or made available pursuant to Sect. 117. The agency must make these items available for public inspection and copying and inform interested citizens of the establishment of the information repository.
Upon commencement of the Remedial Investigation:	
Administrative Record Notification	The agency must publish a notice of availability of the administrative record in a major local newspaper of general circulation.
Upon completion of the Feasibility Study and Proposed Plan:	
Remedial Investigation/Feasibility Study and Proposed Plan Notification and Analysis	The agency must publish a notice of the availability of the Remedial Investigation/ Feasibility Study and the Proposed Plan, including a brief summary of the Proposed Plan, in a major local newspaper of general circulation. The notice also must announce a comment period for the Proposed Plan.
Public Comment Period on the Proposed Plan	The agency must provide at least 30 days for the submission of written and oral comments on the Proposed Plan. This comment period will be extended by a minimum of 30 additional days upon timely request.

CERCLA Public Involvement Requirements (continued)

<i>Site Activity</i>	<i>Requirement(s)</i>
Public Meeting	The agency must provide an opportunity for a public meeting to be held at or near the site during the comment period.
Meeting Transcript	If a meeting is held, the agency must prepare a meeting transcript and make it available to the public.
Pre-Record of Decision significant changes:	
Responsiveness Summary	The agency must prepare a response to significant comments, criticisms, and new data submitted on the Proposed Plan and the Remedial Investigation/Feasibility Study and ensure that this response document accompanies the Record of Decision.
Discussion of Significant Changes	Upon determination that such changes could be reasonably anticipated by the public, the agency must include in the Record of Decision a discussion of significant changes and the reasons for such changes.
Revised Proposed Plan and Public Comment	Upon determination that such changes could not have been reasonably anticipated by the public, the agency must issue a revised Proposed Plan that includes a discussion of the significant changes and the reasons for such changes. The agency must seek additional public comment on the revised Proposed Plan.
After the Record of Decision is signed:	
Record of Decision Availability and Notification	The agency must make the Record of Decision available for public inspection and copying at or near the site before beginning any remedial action. Also, the agency must publish a notice of the Record of Decision's availability in a major local newspaper of general circulation. The notice must state the basis and purpose of the selected action.

CERCLA Public Involvement Requirements (continued)

<i>Site Activity</i>	<i>Requirement(s)</i>
Post-Record of Decision significant changes:	
<i>When the remedial action, enforcement action, settlement, or consent differs significantly from the remedy selected in the ROD with respect to scope, performance, or cost:</i>	
Notice and Availability of Explanation of Significant Differences	The agency must publish a notice that briefly summarizes the explanation of significant difference and the reasons for such differences in a major local newspaper and make the explanation of significant difference and supporting information available to the public in the administrative record and information repository.
<i>When the remedial action, enforcement action, settlement, or consent decree fundamentally alters the basic features of the selected remedy with respect to scope, performance, or cost:</i>	
Notice of Availability/Brief Description of Proposed Record of Decision Amendment	The agency must propose an amendment to the Record of Decision and issue a notice of availability and a brief description of the proposed amendment in a major local newspaper of general circulation.
Public Comment Period, Public Meeting, Meeting Transcript, and Responsiveness Summary	The agency must follow the same procedures as those required for completion of the Feasibility Study and the Proposed Plan.
Notice and Availability of Amended Record of Decision	The agency must publish a notice of availability of the amended Record of Decision in a major local newspaper and make the amended Record of Decision and supporting information available for public inspection and copying in the administrative record and information repository before beginning the remedial action affected by the amendment.
National Priorities List Deletions:	
Public Notice and Public Comment Period	EPA is required to publish a notice of intent to delete in the <i>Federal Register</i> and provide notice of the availability of this notice of intent to delete in a major local newspaper. EPA must also provide a comment period of at least 30 days on the proposed deletion.
Public Access to Information	Copies of information supporting the proposed deletion must be placed in the information repository for public inspection and copying.

CERCLA Public Involvement Requirements (continued)

<i>Site Activity</i>	<i>Requirement(s)</i>
Response to Significant Comments	EPA must respond to each significant comment and any significant new data submitted during the comment period and include these responses in the final deletion package.
Availability of Final Deletion Package	The final deletion package must be placed in the local information repository once the notice of final deletion has been published in the Federal Register.

Appendix E.

Media

Media

Newspapers

Fax

Telephone

<i>Knoxville News Sentinel</i>	342-6400	342-6329
<i>The Oak Ridger</i>	482-7834	220-5515
<i>Roane County News</i>	376-1945	376-3481
<i>Clinton Courier</i>	457-1586	457-2515
<i>Maryville Times</i>	981-1175	981-1124
<i>Chattanooga Times/Free Press</i>	423-757-6383	423-757-6649
Associated Press-Knoxville	523-5904	522-3963

Radio

WIVK, WOKI , WXVO, WSMJ, WNOX	558-4218	588-6511
WBON, WMYU, WWST, WQBB	656-8329	693-1020
WUOT (News)	974-3941	974-5375
WIMZ, WXJB	525-3292	525-6000
WYSH	457-4440	457-1380
WKTS	376-6091	376-4044

Television

WATE – TV (ABC)	523-3561	637-6397 Main number is the news room—day and night
WBIR – TV (NBC)	522-7341	637-1272 Main number is the news room—day and night
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