DOE/EIS-0200

Implementation Plan Executive Summary

*Environmental Restoration and Waste Management
Programmatic Environmental Impact Statement*

MASTER

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

IMPLEMENTATION PLAN

BACKGROUND

In November 1989, the Secretary of Energy established the United States Department of Energy Office of Environmental Restoration and Waste Management. This action consolidated the Department's environmental restoration and waste management activities throughout the nation (figure ES-1). In January 1990, the Secretary of Energy decided that the Department would prepare a Programmatic Environmental Impact Statement on the proposed integrated Environmental Restoration and Waste Management Program.

NEED FOR AN INTEGRATED PROGRAM

The Environmental Restoration and Waste Management Programmatic Environmental Impact Statement will evaluate the proposed action of formulating and implementing an integrated Environmental Restoration and Waste Management Program. Currently, the majority of environmental restoration and waste management activities are conducted on a site-by-site basis. An integrated Program would result in a more consistent national approach that could be implemented more efficiently and effectively.

Figure ES-1. Environmental Restoration and Waste Management Activity Locations.

In addition, an integrated Program would enhance the coordination of waste operations, environmental restoration, technology development, and facility transition with other Departmental programs generating wastes requiring management, such as Defense Programs, Nuclear Energy, and Energy Research.

GOALS

The principal focus of the Programmatic Environmental Impact Statement process will be the evaluation of strategies for conducting remediation of Department sites and facilities to ensure the protection of human health and the environment; and the evaluation of potential configurations for waste management capabilities. In addition to the evaluation of environmental restoration strategies and waste management configurations, the Department also seeks to fulfill several goals through the Programmatic Environmental Impact Statement process that were expressed at the Environmental Restoration and Waste Management Advisory Committee meeting in Springdale, (Cincinnati) Ohio, on September 30, 1992. These goals are to:

- "develop the programmatic basis for integrating environmental cleanup and waste management activities;
- plan for the future so as to achieve the vision of the 30-year environmental cleanup as a sustainable program and to promote a vision of the future uses of the land;
- involve and, indeed, engage the various publics in the planning for this program and to help the public see, through readable comparisons, the costs and benefits and tradeoffs that may be made to promote more informed choices from among sometimes seemingly inconsistent paths, and to portray a systematic analysis of relationships of the various impacts using a multi-disciplinary team-building approach, including all the stakeholders and technical and social disciplines;
- develop a corporate process that will achieve the greatest reduction in real risks over the long term for both workers and the public and then to develop analytical tools for making subsequent site-specific decisions;
- help identify where actions and opportunities exist to achieve equitable regional and national arrangements for waste management systems that can better serve more of the public needs and promote orderly, less contentious processes, and to help reconcile what the Department of Energy has perceived its corporate interests in these issues are with those of the public and try to reach as much consensus as seems possible, and identify perhaps where this may not be practical;
- incorporate waste minimization and pollution prevention in the environmental restoration, waste management and operations programs throughout the Department of Energy to minimize long-term commitment of resources, whether they are materials, the land or human resources, and to minimize the long-term impacts;
- promote the development of technology and appreciation for its limitations; and
- better serve and promote a cohesive overall Federal and state government-wide decision-making in the nationwide cleanup programs, in addition to those under the Department of Energy responsibility."

IMPLEMENTATION PLAN ORGANIZATION

In accordance with the Department of Energy's National Environmental Policy Act implementing procedures in Volume 10 of the Code of Federal Regulations, Section 1021.312, the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement Implementation Plan has two primary purposes: to provide guidance for the preparation of the Programmatic Environmental Impact Statement and to record the issues resulting from the scoping and the extended public participation process. The Implementation Plan identifies and discusses the following:

- Background of Environmental Restoration and Waste Management activities, the purpose of the Programmatic Environmental Impact Statement, and the relationship of the Programmatic Environmental Impact Statement to other Departmental initiatives (chapter 1)
- Need and purposes for action (chapter 2)
- Scoping process and results of the public participation program in defining the scope of the Programmatic Environmental Impact Statement, including a summary of the comments received and their disposition (chapter 3)
- Planned scope and content of the Programmatic Environmental Impact Statement (chapter 4)
- Consultations with other agencies and the role of cooperating agencies (chapter 5)
- Planned schedule of major Programmatic Environmental Impact Statement milestones (chapter 6)

- Responsibilities for preparation of the Programmatic Environmental Impact Statement (chapter 7)

SCOPING PROCESS

The scoping and public participation process that was followed in identifying issues to be considered in the Programmatic Environmental Impact Statement was initiated on October 22, 1990, in a Notice of Intent to prepare the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement. In the Notice of Intent, the Department of Energy invited the public, interested groups, and agencies to provide comments on the scope, issues, and alternatives to be considered in the Programmatic Environmental Impact Statement. After completion of a 120-day scoping period during which 23 public scoping meetings were conducted, the Department of Energy prepared and made publicly available a Draft Environmental Restoration and Waste Management Programmatic Environmental Impact Statement Implementation Plan, dated January 1992. The Department of Energy again invited the public to comment on the Draft Implementation Plan and to participate in one of six regional workshops. Figure ES-2 shows the scoping and meeting locations.

During January 1992, the Department of Energy chartered the Environmental Restoration and Waste Management Advisory Committee to provide independent reviews of the Programmatic Environmental Impact Statement analysis and other Environmental Restoration and Waste Management projects. Environmental Restoration and Waste Management Advisory Committee members, as announced on July 2, 1992, were selected

Figure ES-2. Scoping and Workshop Meeting Locations.

from universities; trade associations; Federal, State, and local government agencies; Native American organizations and groups; unions; environmental groups; and other interested parties. The Advisory Committee charter responsibilities include:

- Advising the Department of Energy on the process, content, public participation, scientific, technical, and other aspects of the analyses for the Programmatic Environmental Impact Statement and other Environmental Restoration and Waste Management projects
- Assessing the progress of the Programmatic Environmental Impact Statement
- Reviewing documents produced for the Programmatic Environmental Impact Statement process and other Environmental Restoration and Waste Management projects, as requested
- Issuing reports and recommendations
- Recommending options to resolve difficult issues faced by the Environmental Restoration and Waste Management Program

After considering comments received on the Draft Implementation Plan, the Department of Energy prepared a Working Final Programmatic Environmental Impact Statement Implementation Plan, which was then provided to the Advisory Committee for review and comment. The Department of Energy then prepared this Implementation Plan after consideration of the comments and discussions with the Advisory Committee.

During the scoping process, most issues were related to the necessity for greater public participation and oversight of the Department of Energy's activities, public and worker

health and safety, adequate resources for cleanup, technologies and alternatives for waste management, and environmental standards. In addition, several comments were received about site-specific activities and the Department of Energy's role in nuclear weapons production. During review of the Draft Implementation Plan, the issues of public participation and the Department of Energy's credibility were most frequently raised. Other issues raised during the Draft Implementation Plan review period included cleanup levels and land use, technology development, and the Programmatic Environmental Impact Statement's role in the site-specific decision-making processes for waste management facilities and environmental cleanup. In its review of the Working Final Implementation Plan, the Advisory Committee made many specific recommendations for improving the Programmatic Environmental Impact Statement coverage of alternatives and those issues of public importance that must be addressed for the success of the Environmental Restoration and Waste Management Program. During subsequent review, considerations were focused on the revision of the programmatic alternatives to be considered for environmental restoration. Figure ES-3 summarizes the number of comments by issue which the Department has considered.

ALTERNATIVES

Based on the input from the Environmental Restoration and Waste Management Advisory Committee, the programmatic alternatives for environmental restoration were structured in terms of the factors that affect the selection of remediation goals. In addition to a No Action baseline risk assessment, four other alternatives will be evaluated in detail. The first of these alternatives reflects the current implementation

of the statutory emphasis in the Comprehensive Environmental Response, Compensation, and Liability Act. This emphasis is to provide for the long-term protection of human health and the environment through compliance with environmental standards determined to be applicable or relevant and appropriate and the utilization of various treatment and resource recovery technologies to the maximum extent possible. In implementing the program under the Comprehensive Environmental Response, Compensation, and Liability Act, concerns have been raised as to whether sufficient consideration is being given to potential worker and transportation risks associated with environmental restoration remedy selection, and whether assumptions of potential future public risks from exposure to residual contamination after remedial action is completed are reasonable. The second alternative to be evaluated emphasizes foreseeable land use to better define likely exposure scenarios and appropriate waste management strategies. The third alternative equally balances remedial worker and transportation risks with the risks to a site's surrounding population. Under this third alternative, the environmental restoration program would strive to minimize situations whereby a proposed remedy would result in greater risk due to its implementation than posed by the current state of the contaminants, even if applicable or relevant and appropriate requirements must be waived to do so. The final alternative emphasizes foreseeable land use to establish the initial remediation objectives and also emphasizes the consideration of worker and transportation risks. If the worker and transportation risks associated with implementing a remedy to achieve a desired land use are considered unacceptable, alternative strategies and limitations would be systematically considered to reach an acceptable solution.

Figure ES-3. Issues and Number of Comments.

Under any of these alternatives, the Department of Energy would implement the program with the concurrence of regulating agencies and input from the local public and stakeholders in compliance with applicable environmental statutes.

The waste management alternatives to be considered in the Programmatic Environmental Impact Statement include a continuation of the current program and various configuration alternatives representing decentralized, regionalized, and centralized approaches appropriate for each of six waste types. The six waste types are high-level waste, transuranic waste, low-level waste, low-level mixed waste, hazardous waste, and Greater-Than-Class-C low-level waste. The Programmatic Environmental Impact Statement evaluation of the waste management configurations alternatives is intended to provide input for decisions about locating new or expanded waste management facilities at the Department of Energy sites; potential improvement in overall management of waste treatment, storage, and disposal by consolidating some wastes at selected sites; and Environmental Restoration wastes. Subsequent, project-level National Environmental Policy Act documents will be tiered to the Programmatic Environmental Impact Statement and will further evaluate implementation of the selected alternatives.

The Department of Energy acknowledges that uncertainties may exist that could preclude the selection of a DOE site for a particular waste management facility. In such a case, the Record of Decision issued on the basis of the Programmatic Environmental Impact Statement for waste management facilities may be at only a broad level (for example, identification of potential candidate Department of Energy sites in a region in which one or more waste facilities could be located based on additional information and

analyses). In addition, the Record of Decision may only make tentative determinations for waste management facilities requiring State permits, pending completion of permit review processes.

For both environmental restoration and waste management, the Programmatic Environmental Impact Statement will evaluate a No Action alternative, as required by the National Environmental Policy Act. The Environmental Restoration and Waste Management Advisory Committee recommended identifying the impacts under No Action of undertaking no further Environmental Restoration actions and operating only existing or approved Waste Management facilities. Approved Waste Management facilities are those for which National Environmental Policy Act review has been completed and appropriate permits received. Although taking no action is unreasonable because it does not comply with the Department of Energy policy and environmental requirements, the evaluation of no action will provide a basis upon which the impacts of further actions can be assessed.

The analysis of impacts presented in the Programmatic Environmental Impact Statement will address public and worker health and safety, environmental and ecological resources, and socioeconomics. As recommended by the Advisory Committee, the Statement will emphasize assessing issues associated with protecting public and worker health and safety.

NUCLEAR WEAPONS COMPLEX

Since the start of the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement and the Programmatic Environmental Impact Statement for

reconfiguration of the Nuclear Weapons Complex, the Department has begun a major downsizing of the weapons complex. The amounts of waste to be generated as a result of operating a reconfigured Nuclear Weapons Complex will be discussed in the Programmatic Environmental Impact Statement for reconfiguring the Nuclear Weapons Complex, and the future waste to be generated by the complex will be considered in preparing the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement. The current downsizing of the weapons complex is anticipated to result in impacts in the areas of workforce utilization and reuse of facilities by non-departmental entities including the public, which are no longer required to support the Department's mission. The Environmental Restoration and Waste Management Programmatic Environmental Impact Statement will address the potential changes in employment at DOE sites as a result of conducting future environmental restoration and waste management activities. Additionally, the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement, through the analysis of alternative environmental restoration strategies, will consider potential future land use as an element of an integrated Environmental Restoration and Waste Management Program.

As part of the scoping process on the revised scope of the programmatic environmental impact statement for reconfiguration of the Nuclear Weapons Complex, the Department of Energy invited comments on whether the reconfiguration programmatic environmental impact statement should be combined with the Environmental Restoration and Waste Management Programmatic Environmental Impact Statement. The Department is considering the comments it has received, and the Department's decision on combining the

programmatic statements will be issued in the revised Implementation Plan for the Reconfiguration Programmatic Environmental Impact Statement.

SPENT NUCLEAR FUEL

Although the Department of Energy had proposed to consider in the scope of the Programmatic Environmental Impact Statement the storage of spent nuclear fuel, the U.S. District Court for the District of Idaho on June 28, 1993, ordered the Department to prepare a comprehensive, sitewide environmental impact statement on the environmental effects of all major Federal actions involving spent nuclear fuel at the Idaho National Engineering Laboratory. The scope of the environmental impact statement, as ordered by the Court, includes evaluating the alternative of transporting, receiving, processing, and storing spent nuclear fuel at sites other than the Idaho National Engineering Laboratory. In view of the breadth of the Court's Order, the Department proposed on September 3, 1993, to expand the scope of the Idaho National Engineering Laboratory Environmental Restoration and Waste Management Environmental Impact Statement to include the analysis of spent nuclear fuel that was being prepared for the Programmatic Environmental Impact Statement. Although the Programmatic Environmental Impact Statement will no longer consider alternatives for spent nuclear fuel, the preparation of the Programmatic Environmental Impact Statement will be closely coordinated with the preparation of the Idaho National Engineering Laboratory Environmental Impact Statement. The Programmatic Environmental Impact Statement will summarize and take into consideration, as part of its analysis of cumulative environmental consequences, the impacts of the programmatic spent nuclear fuel alternatives considered in the Idaho National

Engineering Laboratory Environmental Impact Statement.

TECHNOLOGY DEVELOPMENT

The Programmatic Environmental Impact Statement will describe the process the Department of Energy uses to select Environmental Restoration and Waste Management technologies for development, demonstration, and application. Also, the Statement will evaluate cases in which emerging technologies are believed to offer significant advantages over existing technologies. Moreover, the impact of the emerging technology on the Statement's analysis of Environmental Restoration and Waste Management alternatives will be discussed.

ADDITIONAL ISSUES

As committed to at the Draft Implementation Plan Workshops and recommended by the Advisory Committee, the Programmatic Environmental Impact Statement will discuss a number of significant programmatic issues facing the Environmental Restoration and Waste Management Program. Issues to be addressed include budgeting and prioritization, job retraining programs, stakeholder roles, waste minimization, and public involvement. These issues are important to achieving waste management and cleanup goals and the future implementation of the Program. Many of the issues that will be addressed were expressed during the public scoping process and the reviews of the Draft and Working Final Implementation Plan. These discussions would help the public understand the decisions to be reached as a result of the Programmatic Environmental Impact Statement process. Also, these discussions would present an

opportunity for the public and interested groups and agencies to directly provide their input on ways to improve the conduct of the Environmental Restoration and Waste Management Program in the future.

DRAFT PROGRAMMATIC STATEMENT

The Draft Environmental Restoration and Waste Management Programmatic Environmental Impact Statement is expected to be publicly available between June and September, 1994. After release of the Draft Programmatic Environmental Impact Statement, the Department of Energy will invite comments from the public, interested agencies, and groups on the Draft Statement. During this comment period, the Department of Energy will conduct public hearings at numerous locations near Department of Energy sites, similar to the public scoping meetings. The Department of Energy intends to provide additional time for interaction between the Department and the public. This will facilitate greater public involvement and discussion of analyses in the Programmatic Environmental Impact Statement while providing opportunities to further explore public concerns in conjunction with the public hearings. The details of the public hearings on the Draft Statement will be announced in conjunction with the availability of the Draft Programmatic Environmental Impact Statement. To provide for further involvement of the public, interested agencies, and groups, the Department of Energy also plans to conduct public workshops. Although the format and number of these workshops has not yet been determined, their goal would be to obtain the participants' informal views about the implications of the Programmatic Environmental Impact Statement analyses and about what they considered to be specific issues of importance to the Environmental Restoration and Waste Management Program.

FURTHER INFORMATION

Impact Statement Implementation Plan," appendix L.

The Implementation Plan includes a number of appendices that provide additional supportive and clarifying information on the scope of the Programmatic Environmental Impact Statement, Environmental Restoration and Waste Management's activities, and the roles and responsibilities of participating organizations. The following are appendices that readers may find of particular interest:

- The Environmental Restoration and Waste Management Programmatic Environmental Impact Statement annotated outline, appendix C
- The Environmental Restoration and Waste Management organization and functions, appendix E
- The Environmental Restoration and Waste Management Advisory Committee charter and membership, appendix H
- The Department of Energy and Environmental Protection Agency letter of agreement on Environmental Protection Agency's cooperating agency role in the Programmatic Environmental Impact Statement, appendix I
- The "Memorandum of Agreement Between the Offices of Defense Programs and Environmental Restoration and Waste Management," appendix J
- The "Public Participation Policy for Environmental Restoration and Waste Management," appendix K
- The "Environmental Restoration and Waste Management Advisory Committee Comments and the Department of Energy Responses on the Working Final Environmental Restoration and Waste Management Programmatic Environmental

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