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Implementation Plan

Nuclear Weapons Complex Reconfiguration Programmatic Environmental Impact Statement

Department of Energy
1000 Independence Avenue
Washington, D.C. 20585

9563

February 1992

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Attention: Implementation Plan

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GROUND WATER BUREAU

Department of Energy
Washington, DC 20585

Availability of the Implementation Plan for the Nuclear Weapons Complex Reconfiguration Programmatic Environmental Impact Statement

The Department of Energy's (DOE's) Nuclear Weapons Complex is a set of interrelated facilities that design, manufacture, test and maintain nuclear weapons of this Country's arsenal and dismantle the weapons retired from that stockpile. DOE performs these functions consistent with the Nation's nuclear deterrent objectives as set by the President and funded by Congress. The Department has proposed to reconfigure its nuclear weapons complex to be smaller, less diverse, and less expensive to operate than that of today.

The Complex currently consists of 12 sites located in 11 states. The proposed reconfigured complex, called Complex 21, would be fully operational early in the 21st century and would sustain the Nation's nuclear deterrent through the middle of that century. Before deciding on whether or not to reconfigure the Complex, or on the specific strategy to achieve the proposed reconfiguration, a Programmatic Environmental Impact Statement (PEIS) is being prepared pursuant to the National Environmental Policy Act to assist DOE in its decisionmaking process. DOE has prepared an Implementation Plan to provide guidance for preparing the PEIS and record issues identified through the public involvement process known as scoping.

An analysis of the need for nuclear weapons, their deployment, their number, and the potential impacts of their use will not be part of this PEIS. DOE does not have the authority to make such decisions and the President has recently emphasized, in proposing major new arms control initiatives, that the United States must maintain a nuclear deterrent capability. As the outcome of the nuclear weapons complex reconfiguration process could have some impact on an area of your immediate concern, a copy of the Implementation Plan is enclosed for your information. The Implementation Plan is a "living document" and may be revised from time to time to reflect changes in scope, methodology, or work plan.

If you would like further information on this project, please contact Diana Webb of this office at (202)586-2288.

Sincerely,

James R. Nicks

James R. Nicks
Acting Deputy Assistant Secretary
for Weapons Complex Reconfiguration

Enclosure

DOE/EIS-0161IP
February 1992

Implementation Plan

for the

Nuclear Weapons Complex Reconfiguration Programmatic Environmental Impact Statement

Prepared by
The United States Department of Energy
Office of Defense Programs
Deputy Assistant Secretary for Weapons Complex Reconfiguration

APPROVED BY:

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Mission of the Department of Energy

The Department of Energy (DOE) coordinates and administers the energy functions of the Federal Government. The Department is responsible for long-term, high risk research and development of energy technology; the marketing of Federal power; energy conservation; the nuclear weapons program; energy regulatory programs; and a central energy data collection and analysis program.

The origin of the Department dates from the formation of the U.S. Army's Manhattan Engineer District in August 1942. More widely known as the Manhattan Project, this organization developed the original laboratories and early production facilities that created the two nuclear weapons used in World War II. *The Atomic Energy Act* of 1946 created the Atomic Energy Commission (AEC) to assume the responsibilities of the Manhattan Engineer District, thereby placing all nuclear weapons design, development, manufacturing, maintenance, modification, and dismantlement under the authority of a five-member civilian commission. The AEC took possession of the existing facilities and directed the expansion of the Nuclear Weapons Complex (Complex) to enable mass production of nuclear materials and weapons that had previously been produced in only small quantities. The structure of the Complex as it exists today was formed during the early years of the AEC. However, several of the facilities that were part of the Complex during the rapid build-up of the nuclear weapons stockpile in the 1950's and 1960's have since been closed.

In 1974, the *Energy Reorganization Act* abolished the AEC and transferred part of its functions to the newly created Energy Research and Development Administration. Three years later, the *Department of Energy Organization Act*, effective October 1, 1977, consolidated the major Federal energy functions into one cabinet-level department, transferring to DOE all the responsibilities of the Energy Research and Development Administration; the Federal Energy Administration; the Federal Power Commission; and the Alaska, Bonneville, Southeastern, and Southwestern Power Administrations (formerly components of the Department of the Interior), as well as the power-marketing functions of the Department of the Interior's Bureau of Reclamation. Also transferred to DOE were certain functions of the Interstate Commerce Commission and the Departments of Commerce, Housing and Urban Development, and the Navy.

The Department's organization also includes the Economic Regulatory Administration, the Energy Information Administration, and the Federal Energy Regulatory Commission, an independent regulatory organization.

In addition to headquarters' components located in and around Washington, D.C., the Department has an extensive field structure that plays an integral part in the implementation and management of departmental projects and programs.

The Assistant Secretary for Defense Programs (ASDP) is responsible for overall policy, planning, and management of defense related components and programs, including programmatic direction, coordination, and evaluation of multiple Complex functions and activities. The ASDP is responsible for conducting experiments and performing research and development work in the military application of atomic energy, and for production and surveillance of nuclear weapons, and for production of nuclear materials. In addition, ASDP is responsible for other functions connected with security and the national defense, including responsibility for liaison with the Department of Defense, the National Security Council, and other Federal agencies.

PREFACE

In September 1989, the Secretary of Energy (Secretary) initiated a study to examine the Department's long-range plan for modernization of the Nuclear Weapons Complex (Complex). On January 12, 1990, early in the development of that study, the Secretary announced that a Programmatic Environmental Impact Statement (PEIS) would be prepared as part of the decision process.

In February 1991, the Secretary released the *Nuclear Weapons Complex Reconfiguration Study.* That report presented a vision of a reconfigured Complex, to be in place early in the 21st century, called Complex 21. Complex 21 would be smaller, less diverse, and less expensive to operate than the Complex of today. It would be able to safely and reliably support nuclear deterrent stockpile objectives set by the President and funded by Congress. It would also be consistent with the realities of the emerging international security environment, and flexible enough to accommodate the likely range of deterrent contingencies. In addition, it would be designed, constructed, and operated to comply with all applicable Federal, state, and local laws, regulations, and orders.

On February 11, 1991, the Department published in the *Federal Register* (56 FR 5590) a "Notice of Intent (NOI) to Prepare a Programmatic Environmental Impact Statement for Reconfiguration of the Nuclear Weapons Complex." The PEIS NOI described the Department's proposed action, preliminary alternatives, and candidate DOE sites for the potential relocation of nuclear materials recycling and manufacturing facilities. It invited public comment on the alternatives and issues to be addressed in the PEIS, announced the intention to hold public scoping meetings, and identified locations of public reading rooms to provide relevant information for public review. In that same publication (56 FR 5595), DOE invited proposals to offer land for the Nuclear Weapons Complex reconfiguration site. No proposals were received from that invitation.

On November 29, 1991, the Department published in the *Federal Register* (56 FR 60985) an announcement of its intention to incorporate in the *Reconfiguration PEIS* the Environmental Impact Statement (EIS) analysis for the New Production Reactor (NPR) capacity. The Secretary determined that the President's September 27, 1991, announcement created both the opportunity and necessity to integrate the examination of the tritium production capacity issues with the reconfiguration program. This redirection of the PEIS effort will ensure that DOE's long-range planning and decisionmaking are fully consistent with the President's goals. On December 16, 1991, the Secretary announced his plan to complete, by late calendar year 1992, an Environmental Assessment of the impact of consolidating the nonnuclear facilities of the Complex.

This Implementation Plan (IP) has been prepared to record the results of the scoping process, report the disposition of issues identified in that process, and describe the work plan for preparation of the PEIS. The IP is a "living document" in that it is being published at this time to provide insight to the Department's approach to the PEIS and document the results of the public scoping meetings. The IP may be revised from time to time throughout the preparation of the PEIS to provide updated information regarding major changes in scope, methodology, or work plan. In particular, DOE is now assessing how recent Presidential initiatives to reduce the nation's stockpile may affect Complex 21. When completed, DOE will make the results of these assessments available to the public.

The Proposed Action

The Department of Energy proposes to reconfigure the Nuclear Weapons Complex to be smaller, less diverse, and less expensive to operate than that of today. The goal is to safely and reliably support the nuclear deterrent stockpile objectives set by the President and funded by Congress. The reconfigured Complex would have fewer individual sites, generally lower capacity facilities, and would fully comply with applicable environmental, safety, and health laws, regulations, and orders.

The PEIS will evaluate alternatives for consolidating two or more nuclear activities at a single site and for constructing a new tritium production capability. The PEIS will also evaluate alternatives for consolidating research, development, and testing activities through the creation of Centers of Excellence.

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LIST OF ACRONYMS AND ABBREVIATIONS

LIST OF ACRONYMS AND ABBREVIATIONS

A&E	Architecture and Engineering
AEC	Atomic Energy Commission
APT	Accelerator Production of Tritium
ASDP	Assistant Secretary for Defense Programs
BLM	Bureau of Land Management
CAMP	Capital Asset Management Process
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (also known as Superfund)
CFR	Code of Federal Regulations
CNR	Composite Noise Rating
Complex	Nuclear Weapons Complex
Continued Operation EIS	Final EIS on the Continued Operation of K-, L-, and P- Reactors at SRS
CRC	(Nuclear Weapons) Complex Reconfiguration Committee
D&D	Decontamination and Decommissioning
Department	Department of Energy
DOE	Department of Energy
DOD	Department of Defense
DOT	Department of Transportation
DP	Defense Programs
DP-40	DOE Office of the Deputy Assistant Secretary for Weapons Complex Reconfiguration
DPEIS	Draft Programmatic Environmental Impact Statement
EA	Environmental Assessment
EH	Assistant Secretary for Environment, Safety and Health
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EM	Office of Environmental Restoration & Waste Management
EMR	Electromagnetic Radiation
EPA	United States Environmental Protection Agency
ES&H	Environment, Safety, and Health
FAA	Federal Aviation Administration
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FR	Federal Register
FPEIS	Final Programmatic Environmental Impact Statement
FWS	United States Fish and Wildlife Service
HEU	Highly Enriched Uranium
HNF	Hanford
HWR	Heavy Water Reactor
INEL	Idaho National Engineering Laboratory
KCP	Kansas City Plant
LANL	Los Alamos National Laboratory
LLNL	Lawrence Livermore National Laboratory
LMR	Liquid Metal Cooled Reactor
LWR	Light Water Reactor
MCL	Maximum Contaminant Levels

MHTGR	Modular High Temperature Gas-Cooled Reactor
Modernization Report	Nuclear Weapon Complex Modernization Report
NAAQS	National Ambient Air Quality Standards
NCHRP	National Cooperative Highway Research Program
NCP	Nonnuclear Consolidation Plan
NEPA	National Environmental Policy Act of 1969, As Amended
NMFS	National Marine Fisheries Service
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NPR	New Production Reactor
NPS	National Park Service
NRC	Nuclear Regulatory Commission
NRHP	National Register of Historic Places
NTS	Nevada Test Site
NWC	Nuclear Weapons Council
NWPA	Nuclear Waste Policy Act of 1982
ORR	Oak Ridge Reservation
PCBs	Polychlorinated biphenyls
PEIS	Programmatic Environmental Impact Statement
PPP	Privatization Planning Panel
PRMP	Plutonium Recovery Modification Project
PSD	Prevention of Significant Deterioration
Pu	Plutonium
PX	Pantex
RCRA	Resource Conservation and Recovery Act
RCG	Research, Development and Testing Consolidation Work Group
RD&T	Research, Development, and Testing
Reconfiguration Office	Office of the Deputy Assistant Secretary for Weapons Complex Reconfiguration
REP	Residue Elimination Project
RFP	Rocky Flats Plant
ROD	Record of Decision
SCS	Soil Conservation Service
Secretary	Secretary of Energy
SEIS	Supplemental Environmental Impact Statement
SEN	Secretary of Energy Notice
SEP	Site Evaluation Panel
SNL	Sandia National Laboratories
SNM	Special Nuclear Materials
SRS	Savannah River Site
START	Strategic Arms Reduction Treaty
TADP	Technology Assessment Development Plan
TASP	Technology Assessment and Selection Panel
TRU	Transuranic Waste
USDA	United States Department of Agriculture
USGS	United States Geological Survey
UST	Underground Storage Tanks
WDSP	Weapons Design Standardization Panel
WG	Weapons Grade
WIPP	Waste Isolation Pilot Plant
Y-12	Oak Ridge Y-12 Plant

EXECUTIVE SUMMARY

NUCLEAR WEAPONS COMPLEX RECONFIGURATION PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT IMPLEMENTATION PLAN

EXECUTIVE SUMMARY

INTRODUCTION

The Nuclear Weapons Complex (Complex) is a set of interrelated facilities that design, manufacture, test, and maintain nuclear weapons in this country's arsenal and dismantle the weapons retired from that stockpile. The Complex currently consists of 12 sites located in 11 states, as shown in Figure ES.1. Much of the current Complex was constructed more than three decades ago and is now in need of major repairs or modernization. The deteriorated state of the Complex has made it increasingly difficult to meet expected standards for the protection of the environment and the safety and health of workers and the public. Due to recent downsizing of the nuclear weapons stockpile, there is now more capacity than required for the anticipated workload.

In response to these problems, the Department of Energy (DOE) has developed a proposal to reconfigure the Complex, known as Complex 21. Complex 21 would be fully operational early in the 21st Century and would sustain the Nation's nuclear deterrent until the middle of that century. This

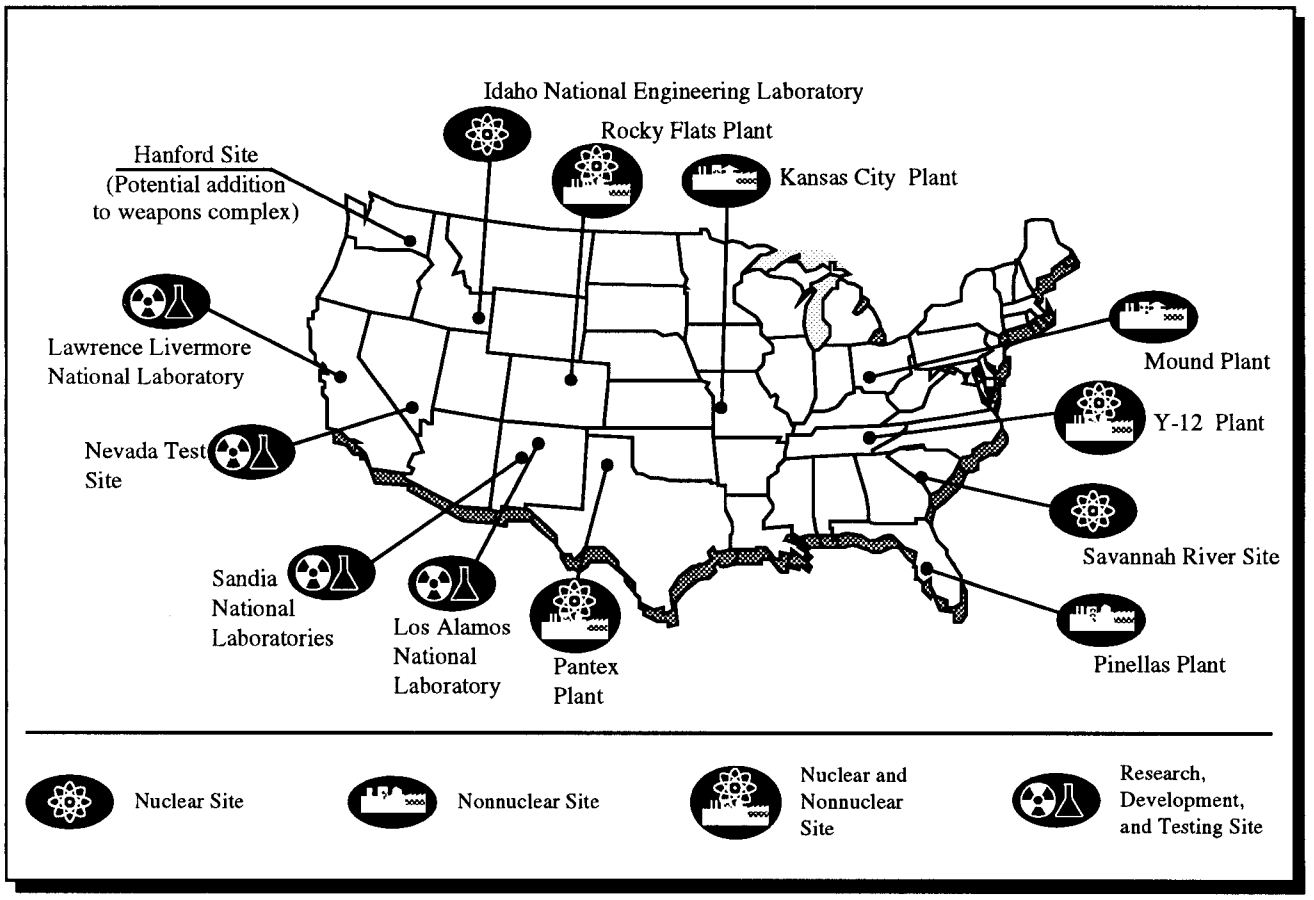


FIGURE ES.1.—*Current Nuclear Weapons Complex.*

Programmatic Environmental Impact Statement (PEIS) is being prepared pursuant to the *National Environmental Policy Act* (NEPA) of 1969, as amended, to assist in the DOE decisionmaking process regarding long-range planning for the Complex. A Record of Decision (ROD) prepared after completion of the PEIS will document DOE's programmatic decisions on configuration of the Complex. DOE will prepare a Reconfiguration Plan, based on the ROD, that will provide specific direction on implementing those decisions.

In accordance with DOE's procedures for implementing NEPA, this *PEIS Implementation Plan* has been developed to provide guidance for preparation of the PEIS and to record the issues identified as a result of the scoping process. Key elements of the Implementation Plan are (1) descriptions of the purpose of and need for reconfiguration, (2) planned scope and content of the PEIS, including the reconfiguration proposal and alternatives, (3) the scoping process and major issues identified through public scoping, (4) the PEIS work plan, and (5) consultation with other agencies and organizations. The Implementation Plan also includes a preliminary annotated outline of the draft PEIS.

PURPOSE OF AND NEED FOR RECONFIGURATION

The major purpose of reconfiguration would be to achieve a Complex that is smaller, less diverse, and less expensive to operate than is the case today. The Complex must continue to be capable of safely and reliably fulfilling future national defense requirements and be compliant with Environment, Safety, and Health (ES&H) standards. The Complex must be operated in a manner that will protect the health of Complex workers and the general public, protect the environment, and properly secure nuclear materials and weapons components. Reconfiguration would be implemented through a comprehensive strategy that incorporates state-of-the-art techniques and processes, and complies with accepted practices regarding industrial and weapons safety.

Reconfiguration is needed because the Nation's nuclear weapons requirements are not as great as in the past, and maintaining the existing large infrastructure is not an effective use of national resources. The majority of existing Complex facilities were constructed 30 to 40 years ago following a vastly different set of criteria and may not satisfy the environmental and production requirements of the next century. Some facilities have been unable to keep pace with technological advancements, are accountable to an ever-encroaching population at formerly remote sites, and need the ability to respond to changeable threats to safeguards and security. Complex 21 would be designed to support nuclear deterrence needs of the 21st Century in a safer, more environmentally protective manner. These needs are expected to be smaller than in the past.

PLANNED SCOPE AND CONTENT

In accordance with Council on Environmental Quality (CEQ) regulations, the PEIS will identify and analyze the direct, indirect, and cumulative effects of a range of reasonable programmatic alternatives for reconfiguration of the Complex. The *Reconfiguration PEIS* will consider the environmental consequences of constructing and operating support facilities, transporting Complex materials, and both normal and accidental radiological and nonradiological releases. Impacts to be considered include those to public and worker health and safety, air quality, water resources, biological resources, cultural and paleontological resources, transportation, and socioeconomic conditions. The PEIS will also include other relevant issues identified by DOE or the public through the scoping process.

Reconfiguration would occur within the three functional elements of the Complex: nuclear materials recycling and manufacturing; nonnuclear manufacturing; and research, development, and testing (RD&T). The DOE proposal to consolidate certain aspects of the nonnuclear functions will be analyzed in a separate environmental assessment (EA) prepared prior to the draft PEIS. Notice of the

plan to prepare an EA for nonnuclear consolidation within the nuclear weapons Complex was published in the *Federal Register* on January 27, 1992 (57 FR 3046). A copy of this notice is in Appendix D.

Complex 21 would consider modular construction for flexibility in making capacity adjustments. The number and size of waste streams would be kept to a minimum, and Complex 21 facilities would be constructed and operated to comply with all applicable Federal, state, and local laws, regulations, and orders.

Development of the PEIS will be closely coordinated with concurrent efforts addressing Complex 21 reconfiguration, involving the following expert work groups: Site Evaluation Panel (SEP); Privatization Planning Panel (PPP) and Nonnuclear Consolidation Plan (NCP) Work Group; Technology Assessment and Selection Panel (TASP); Weapons Design Standardization Panel (WDSP); Research, Development, and Testing Consolidation Work Group (RCG); Office of New Production Reactors; and the Architecture and Engineering (A&E) contractor.

Some of the information relating to specific Complex capabilities, capacity requirements, and technological processes is classified defense information. In preparing the PEIS, DOE will review this classified information in reaching a decision on the reconfiguration of the Complex. It is anticipated that the completed PEIS and its associated ROD may include classified information which will not be made available for general public review. However, an unclassified version of the PEIS and ROD will be issued for public review. Specific elements associated with Complex capability and capacity requirements and technological data may be included in the PEIS.

The PEIS will be based on a single production capability which will be the same for all alternatives analyzed (including No Action). The production capabilities of Complex 21 facilities will be based upon the midpoint of the range of stockpile sizes anticipated in the next century, as developed by DOE and the Nuclear Weapons Council (NWC). Appropriate sensitivity analyses will be conducted to assure that reasonable alternatives are not dismissed from consideration. The projection and related analyses, which will be classified, will take into account recent Presidential initiatives to reduce the nuclear weapons stockpile.

RECONFIGURATION PROPOSAL AND ALTERNATIVES

As stated in the *Nuclear Weapons Complex Reconfiguration Study*, dated January 1991, and in the NOI for the Reconfiguration PEIS (56 FR 5590), the PEIS will analyze alternative configurations for the Complex and compare them to the effects of not reconfiguring the Complex (the "No Action" alternative).

The *Reconfiguration Study* outlined two reconfiguration options, designated A and B. Under Reconfiguration Option A, the plutonium recycling and manufacturing functions now performed at Rocky Flats Plant (RFP) near Denver, Colorado, would be relocated; the nonnuclear manufacturing functions now performed at RFP would be either transferred or privatized; and the remaining configuration of the Complex would be unchanged, but facilities would be upgraded in place to the extent improvements are necessary to achieve compliance with ES&H requirements. Under Reconfiguration Option B, either the nuclear materials functions now performed at the Pantex Plant near Amarillo, Texas, or the uranium processing functions now performed at the Oak Ridge Y-12 Plant (Y-12) near Oak Ridge, Tennessee, or both, would be collocated with the plutonium functions from RFP. Candidate sites being considered for relocation of these functions under either Option A or B are the Hanford Site near Richland, Washington; the Idaho National Engineering Laboratory (INEL) near Idaho Falls, Idaho; the Oak Ridge Reservation (ORR) near Oak Ridge, Tennessee; the Pantex Plant near Amarillo, Texas; and the Savannah River Site (SRS) near Aiken, South Carolina. The possibility of relocating

other mission elements would also be examined in the interests of further consolidating the Complex.

Program Changes

A number of significant program changes have occurred since publication of the Reconfiguration Study and the NOI to prepare the *Reconfiguration PEIS*. These changes include the following:

- *Mid-term Configuration*—The NOI announced that the PEIS would include an analysis of sufficient detail to support construction decisions regarding a mid-term configuration for the plutonium fabrication functions currently located at RFP. However, design information will not be available in sufficient detail to support a construction-level analysis in the PEIS. Closure of RFP and relocation of plutonium functions will be included, among the programmatic alternatives analyzed in the PEIS. However, should the ROD involve closure of RFP and relocation of plutonium functions, a subsequent site-specific EIS would be prepared to support construction of new facilities associated with this action.

- *New Production Reactor*—The *Draft Environmental Impact Statement for the Siting, Construction, and Operation of New Production Reactor Capacity* (*NPR Draft EIS*) was issued in April 1991. Public hearings were held and numerous comments received. Subsequently, on November 1, 1991, the Secretary announced his decision to merge the analysis of the NPR capacity into the *Reconfiguration PEIS*. This decision to merge the two analyses was made in light of the President's September 27, 1991, announcement of intent to reduce the Nation's stockpile of nuclear weapons. The President's initiative allows DOE the opportunity to conduct an integrated examination of the Reconfiguration and NPR programs. This approach will result in integrating the programmatic analysis regarding tritium supply with the programmatic analysis of the other functional elements of the Complex.

- *Nonnuclear EA*—On December 16, 1991, the Secretary announced his decision to prepare an EA for consolidation of nonnuclear functions. The EA will be completed by late 1992, and if it is determined that there is no significant environmental impact, then DOE will proceed with consolidation at Kansas City Plant (KCP); construction of new facilities as needed; and the phaseout of nonnuclear functions at Mound, Pinellas, and Rocky Flats plants. This process would be completed by late 1995. If a FONSI cannot be issued, then these actions would be included in the PEIS.

As a result of these changes, the activities formerly considered under Reconfiguration Options A and B have been reorganized into a set of actions that could occur within each of the three elements of the Complex:

- Nonnuclear
- Nuclear
- RD&T

The possible actions within each of these categories are discussed in the following sections, and illustrated in Figure ES.2.

Nonnuclear Element

The Nonnuclear Element provides products and services needed to manufacture nuclear weapons and

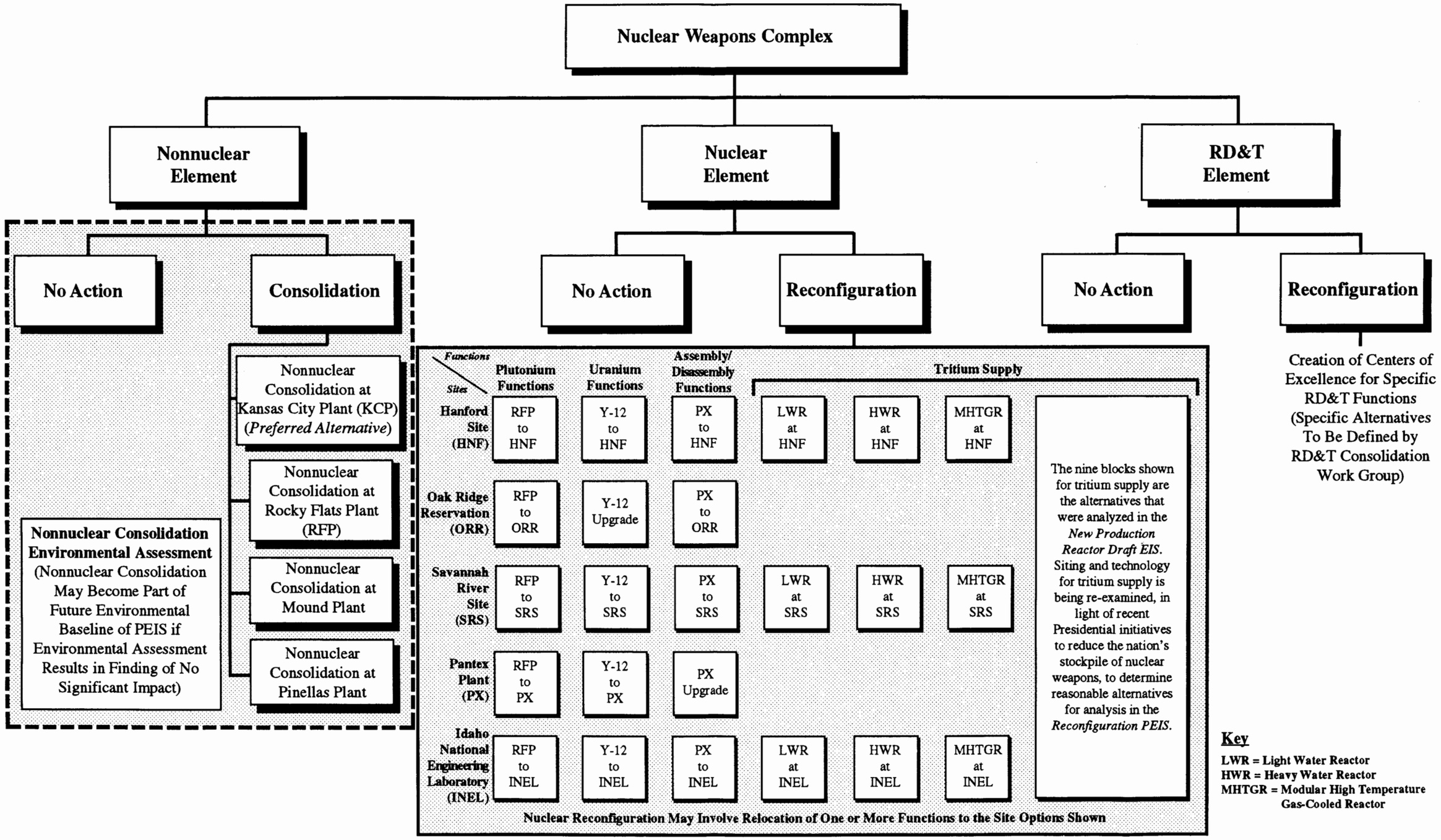


Figure ES.2.— ***Nuclear Weapons Complex Reconfiguration Alternatives by Functional Element.***

test individual components. Although some of these facilities handle small amount of radioactive materials, they are considered to be nonnuclear sites because they do not produce nuclear components. As previously mentioned, the Secretary has decided to conduct an EA of the proposed consolidation of nonnuclear functions at KCP. The EA will also analyze consolidation alternatives at Mound Plant, Pinellas Plant, or RFP. The preferred alternative is to consolidate most nonnuclear activities at KCP, locate other nonnuclear manufacturing activities with similar activities taking place at SRS, Pantex and Y-12, and collocate certain activities with SNL in Albuquerque, NM. The EA will be performed concurrently with work on the PEIS and completed in 1992. The EA is expected to support construction decisions as well as siting decisions. Under the No Action Alternative, nonnuclear consolidation would not take place; however, ES&H compliance-oriented upgrades could occur at selected facilities.

Nuclear Element

The nuclear element includes plutonium functions, uranium functions, assembly/disassembly functions, and tritium supply functions.

The PEIS must consider the environmental effects of relocating the plutonium functions from RFP to one of five candidate sites: Hanford, INEL, ORR, Pantex, and SRS. The PEIS will also examine the impacts of collocating the uranium functions currently performed at the Y-12 Plant and/or the assembly/disassembly functions currently performed at the Pantex Plant with the relocated plutonium functions. The various combinations of plutonium, uranium, and assembly/disassembly functions that could be placed at a particular site under reconfiguration of the nuclear element are illustrated in Figure ES.2.

DOE proposes to site, construct, and operate new tritium supply capacity. The Department had previously intended to analyze the impacts of a replacement tritium capacity in the *NPR EIS*. DOE now intends to integrate the programmatic analysis of tritium supply capacity into the *Reconfiguration PEIS*. The *NPR Draft EIS* examined three siting alternatives: Hanford, INEL, and SRS. Siting, sizing, scheduling, and technology for tritium supply capacity will be reexamined in light of the President's initiative to reduce nuclear weapons requirements. Current tritium supply options are indicated in Figure ES.2.

Under the No Action Alternative, DOE would not reconfigure the nuclear element and tritium would continue to be produced at the K- or L-Reactors at the SRS. However, the nuclear element No Action Alternative will include initiatives developed by the WDSP. The adoption of WDSP recommendations will ultimately result in fewer material alloys and manufacturing processes used in the fabrication of nuclear weapons components. Greater commonality of components and materials would enable economies of scale in production and manufacturing and a corresponding reduction in the number of specialized equipment sets, process lines, or facilities necessary to produce and maintain the stockpile of nuclear weapons.

RD&T Element

Reconfiguration of the RD&T element of the Complex is based upon creation of Centers of Excellence for specific RD&T functions at one or more sites, including Lawrence Livermore, Los Alamos, and Sandia National Laboratories, and the Nevada Test Site. The specific alternatives are currently being defined by the RCG. This work group will examine existing duplication of facilities and resources within the laboratory system and recommend how to implement the Secretary's proposal for the creation of particular Centers of Excellence to share resources with multiple users. This effort may reduce RD&T operating costs and should eliminate the need for future construction of duplicative facilities. It is not anticipated, however, that DOE would consider

closing any of the national laboratories under any reconfiguration alternative. Under No Action, Centers of Excellence would not be created.

Alternatives Considered but Eliminated from Detailed Study

Some scoping comments suggested that additional alternatives be considered to represent the reconfiguration spectrum—from eliminating the Complex altogether to consolidation of all Complex activities at a single site. By law, DOE is required to support a continuing National nuclear stockpile capability. Hence, a nuclear weapons production, surveillance, and maintenance capability is required, although the capacity is envisioned to be smaller due to a reduced number of weapons in the stockpile. The elimination of the Complex is thus not a reasonable alternative to reconfiguring the Complex.

The consolidation of all Complex facilities at a single site is neither affordable nor desirable. Although many facilities within the Complex need major repair or renovation, there are also other facilities which contain state-of-the-art technology with respect to operational efficiency and environmental compliance. The replacement or relocation of certain state-of-the-art facilities for the sake of consolidation would not be prudent or cost-effective. Therefore, a single site for the entire Complex is not a reasonable alternative.

The Preferred Alternative

DOE has not yet identified a preferred alternative. The preferred alternative will be identified in the Final PEIS. At this point, the Secretary has indicated a desire to relocate the nuclear weapons functions now assigned to RFP and to close the facilities at that plant.

Relationship to Other Actions

On January 12, 1990, the Secretary decided that DOE would prepare two PEIS's: one on Reconfiguration and one on DOE's Environmental Restoration and Waste Management (EM) Program. The *EM PEIS* will analyze alternative strategies and policies for conducting DOE's EM program which not only includes the environmentally responsible management and restoration of nuclear facilities, but also the protection of worker and public health and safety through the safe disposal of radioactive, hazardous, and mixed wastes. The *EM PEIS* will support DOE decisions on how to manage processes or facilities for treatment, storage, or disposal of radioactive, hazardous, and mixed (i.e., radioactive and hazardous) waste; approaches to be used to remediate contaminated sites; treatment technology application or development; land use; and technology and policy considerations for Decontamination and Decommissioning (D&D) of DOE facilities at the end of their useful lives. An NOI to prepare the *EM PEIS* was published in the *Federal Register* on October 22, 1990 (55 FR 42633), and scoping meetings have been held. A draft Implementation Plan for the EM PEIS was issued on February 4, 1992 (57 FR 4193).

The DOE decision to prepare two separate PEIS's was based on the separate sets of decisions that each PEIS must address. Among other things, the *Reconfiguration PEIS* will help determine those sites that will carry out the nuclear weapons mission over the long term. The *EM PEIS*, on the other hand, is directed at alternative strategies and policies for conducting a DOE-wide EM program. The volume of waste attributable to future operation of the Complex is a relatively small portion of the waste to be considered in the *EM PEIS*.

For a short time after generation, defense wastes are managed by the generating facility. Longer term management of wastes is under the auspices of the Office of Environmental Restoration and Waste Management. Consequently, both the *Reconfiguration PEIS* and the *EM PEIS* will address similar

issues related to interim waste management at Complex sites. The Defense Programs (DP) mission provides for the management of wastes, including finding means to minimize waste generation, until DOE either disposes of the wastes or places them into long-term storage. Consequently, this *Reconfiguration PEIS* will consider the impacts of managing wastes generated by proposed and alternative facilities for plutonium functions, tritium supply capacity, uranium functions, and assembly/disassembly of nuclear weapons. The *Reconfiguration PEIS* will also provide a bounding analysis of potential long term environmental consequences of various waste management technologies in order to support technology selection decisions for the weapons complex. Any such waste management activities undertaken at Complex sites would be in accordance with the policies and procedures developed in conjunction with the *EM PEIS*. The *Reconfiguration PEIS* will not, however, cover in site-specific detail the environmental restoration or D&D activities at existing Complex sites, long-term storage of wastes, or disposal of existing wastes or residues—these issues will be addressed in the *EM PEIS* or subsequent site-specific NEPA documents.

DOE will continually review the proposed scope of the two PEIS's as the draft documents are developed. Changes in relationships as described herein may occur as DOE responds to evolving policy or technological considerations.

THE SCOPING PROCESS

Scoping for the PEIS consisted of both internal DOE scoping and public scoping. Internal DOE scoping began with expert working groups that produced the studies that led to the *Nuclear Weapons Complex Modernization Report* and continued through the *Nuclear Weapons Complex Reconfiguration Study*. Upon publication of the completed *Reconfiguration Study*, DOE published an NOI in the *Federal Register* on February 11, 1991, to prepare the PEIS. This NOI (56 FR 5590) marked the beginning of the public scoping phase, which ran through September 30, 1991.

Public meetings were conducted at 15 locations around the country (Figure ES.3) to allow interested parties to present spoken comments and other information. All spoken and written comments

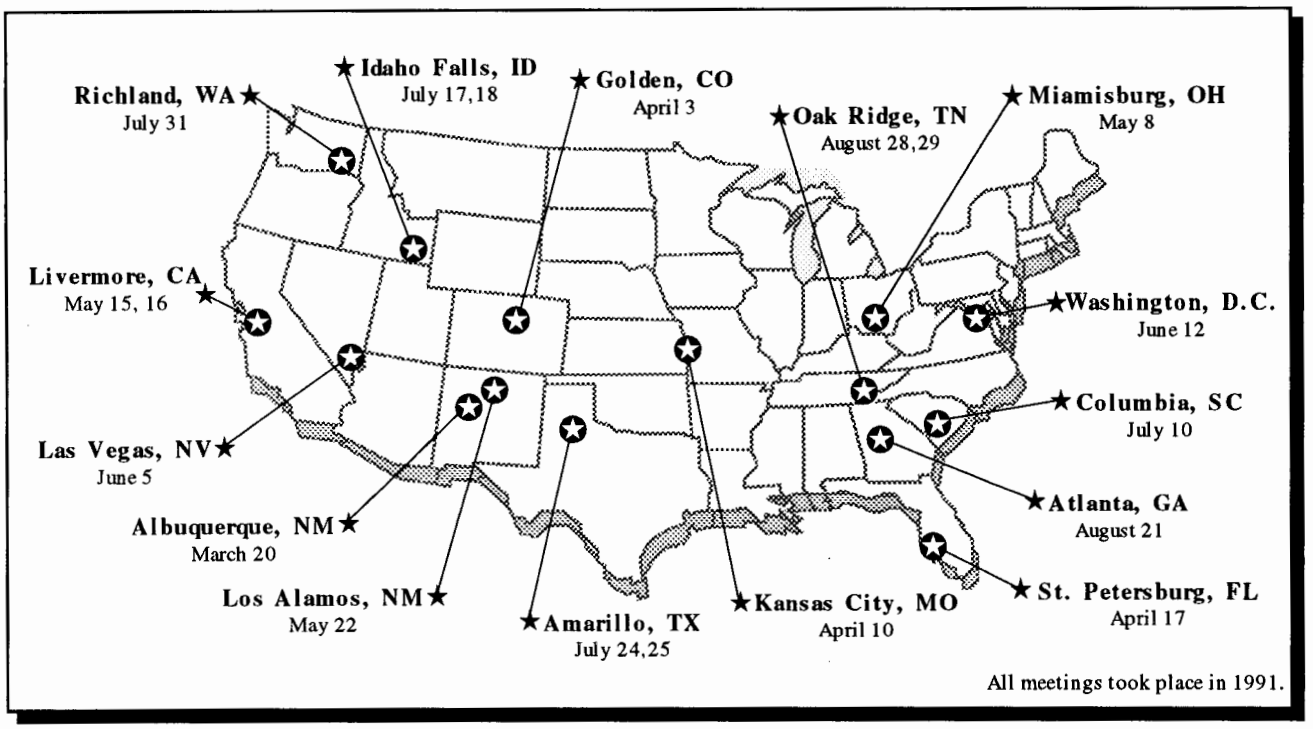


FIGURE ES.3.—*Scoping Meeting Locations and Dates.*

received throughout public scoping were systematically organized and reviewed for consideration during the preparation of this *Implementation Plan.* (A comment is defined as a single statement or point of discussion concerning a specific topic raised by an individual.)

During the PEIS scoping process, DOE received a total of 36,984 comments from 16,542 members of the public; from representatives of interested groups; and from Federal, state, and local officials (see Figure ES.4). Of these, 4,869 were spoken and recorded at public scoping meetings and 32,115 were written and submitted at scoping meetings or received by mail. The total number of comments includes 28,838 comments received via 19 preprinted postcards, form letters, or petition campaigns involving a total of 13,401 participants.

A *Federal Register* announcement (56 FR 60985) was published on November 29, 1991 inviting public comment on the decision to integrate the NPR and Reconfiguration NEPA reviews. The comment period ended January 6, 1992. DOE received 26 letters and 168 postcards containing a total of 931 comments from 196 citizens, representatives of interested groups, and Federal and state officials. Comments covered a range of environmental and policy related issues including the need for additional tritium production, concern for waste management and existing environmental problems, and NPR siting alternatives. Included in the total number of comments are 168 identical postcards, each containing five comments, accounting for 840 of the 931 comment total. These comments will be considered during preparation of the PEIS, as will comments received on the *NPR Draft EIS*, which was published in April 1991.

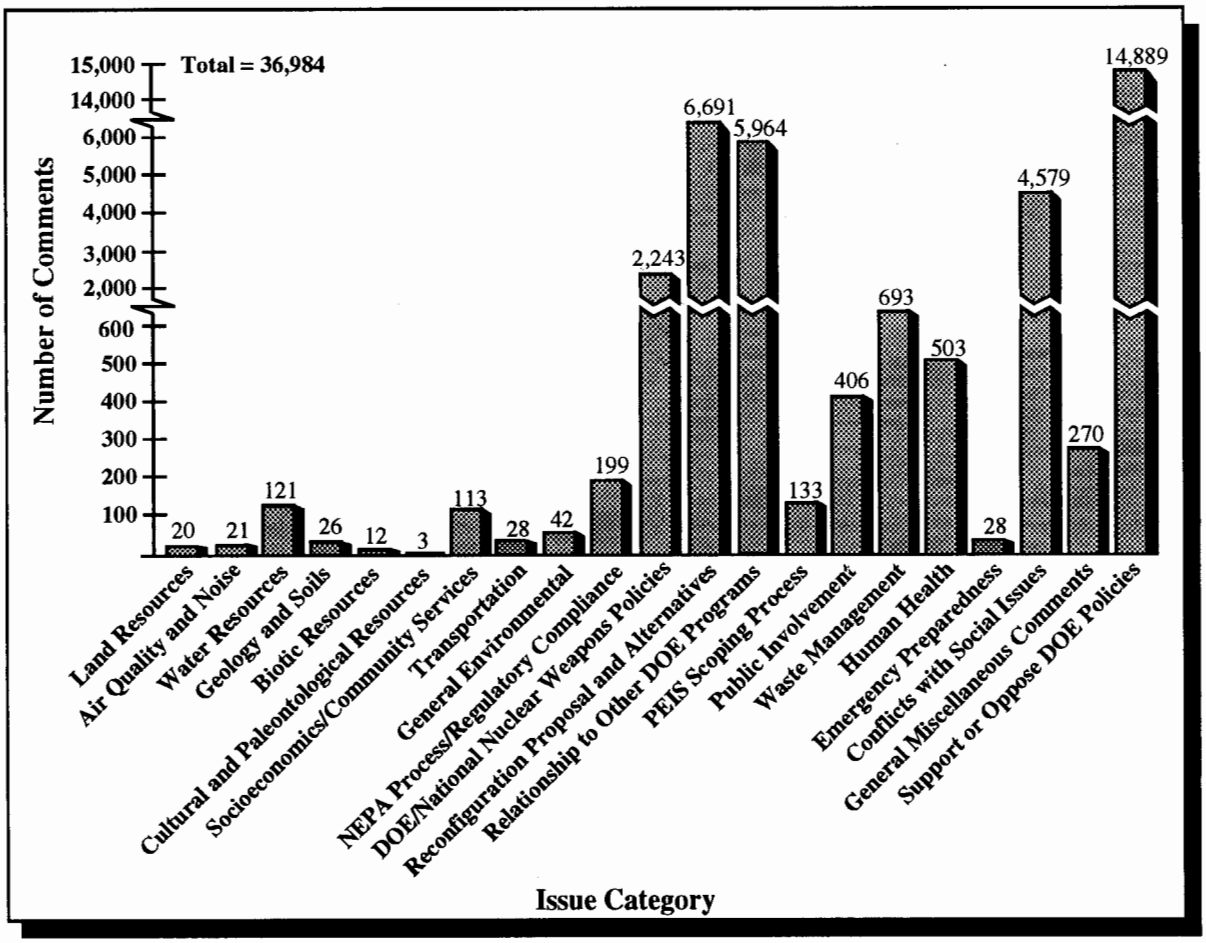


FIGURE ES.4.—*Number of Comments By Scoping Issue Category.*

A review of the comments received was conducted to identify: (1) significant issues to be analyzed in the PEIS; and (2) issues that either are not significant or are outside the scope of the PEIS. Most of the comments were provided by individual citizens or individuals affiliated with or representing more than 50 interested groups and organizations. The remaining comments were submitted by Federal and state elected officials, mayors, local elected officials, and representatives of Federal and state agencies. Comments were provided on a wide range of environmental and policy-related issues. This *Implementation Plan* provides a summary of comments received through the public scoping process, and the comments received on NPR integration.

Major issues identified through both internal DOE scoping and public scoping will be addressed by analyses at each DOE site in the following areas:

- Land resources, including land use, visual resources, and recreation
- Air quality and noise
- Water resources, including ground water, surface water, and floodplains
- Geology and soils
- Biological resources, including aquatic biota, wetlands and other sensitive habitats, upland (terrestrial) biota, and threatened and endangered species
- Cultural and paleontological resources, including Native American resources
- Socioeconomics and community services, including employment, population, regional and local economies, housing, and community infrastructure and services
- Transportation
- Human health

The PEIS will also address factors related to facility operation including plant safety, site suitability, management of wastes and hazardous materials, safeguards and security, emergency preparedness, and risk analyses for postulated accident scenarios. In addition to analyses conducted at each site, the PEIS will address national and international considerations. National-level considerations will involve intersite transportation of nuclear materials and other hazardous substances, energy use and its conservation, and land and ecological resources. International considerations include levels of stratospheric ozone and greenhouse gases.

PEIS Work Plan

The *Reconfiguration PEIS* will serve as a planning and decision-support tool, providing DOE and the public with information on the environmental consequences of a broad range of possible reconfiguration alternatives before potential options have been foreclosed or irrevocable project-level commitments of resources have been made. DOE will also use the PEIS process to develop a comprehensive plan (Reconfiguration Plan) for long-term management of the Complex. The Reconfiguration Plan will be prepared after the Reconfiguration ROD, and will describe in detail how DOE will implement the decisions in the ROD. If the ROD states that DOE will not reconfigure the Complex, the plan will not address reconfiguration.

In the future, project-specific DOE actions may be required to implement the programmatic decisions stemming from the PEIS. Future project-specific NEPA documents will be tiered from the PEIS, and the PEIS may be referenced in future site-wide EIS's, thus simplifying the NEPA analysis needed for future projects. In addition, DOE may choose to supplement the PEIS and Reconfiguration Plan later if there is a proposed change in the implementation of Complex 21.

As shown in Figure ES.5, the PEIS process began in February 1991 with the publication of the NOI and an announcement of the public scoping

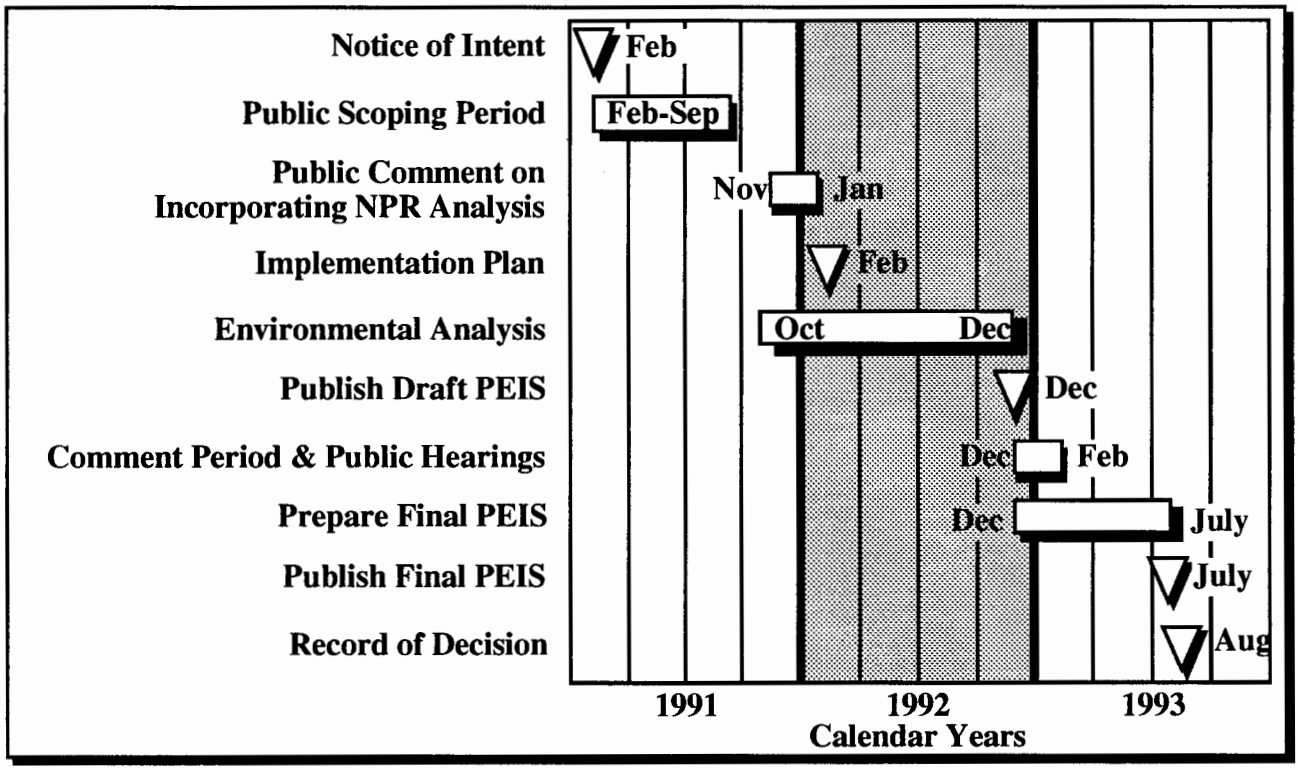


FIGURE ES.5.—*Schedule for Reconfiguration PEIS.*

meetings. The Draft PEIS is currently expected to be completed by December 1992, followed by a public comment period and public hearings. Publication of the Final PEIS is planned in July 1993, with the ROD in August 1993.

The PEIS will be prepared using an approach that builds upon environmental analyses conducted for each of the affected DOE sites. For each site, the environmental consequences of feasible reconfiguration actions will be evaluated. At some sites these actions could range from closure of the existing facilities to construction of new facilities. The environmental consequences of any given programmatic alternative would be the sum of the consequences of the associated potential mission change(s) at each site.

The environmental conditions will be described for each of the affected sites and their associated regions-of-influence. However, the characterization of the affected environment will not be limited to existing conditions. Rather, in order to provide a comparison to the consequences of operating Complex 21, the environmental baseline will include reasonably foreseeable changes to environmental resources over the same period as the expected operating lifetime of Complex 21 (approximately the middle of the next century).

At all sites, the level of analytical detail will be sufficient to support programmatic decisions. Analyses required to project environmental baseline conditions will be documented in an appendix and summarized in applicable subsections of the PEIS. The basis for static or changing environmental conditions during the baseline period will be described.

Potential environmental consequences of Complex 21 will be evaluated by first analyzing future baseline conditions without the project and then applying environmental effects associated with the project. For example, current air emissions data will be adjusted to incorporate planned modifications to existing facilities and the construction and operation of new facilities. Proposed project emissions will be added to this future baseline, as appropriate.

DOE has invited several other agencies to participate in the preparation of the PEIS as cooperating agencies. The Departments of Agriculture, Commerce, Defense, Health and Human Services, Interior, Labor, and Transportation and the Nuclear Regulatory Commission have expressed interest in the program, but have declined to participate as cooperating agencies. One agency, the Environmental Protection Agency (EPA), has expressed an interest in participating as a cooperating agency.

ENVIRONMENTAL CONSULTATION

Federal agencies are required to prepare EIS's concurrently and integrated with related surveys and studies required by such statutes as the *Fish and Wildlife Coordination Act*, the *National Historic Preservation Act*, the *Endangered Species Act*, and other environmental review laws and Executive orders. Federal agencies must also list in EIS's all Federal permits, licenses, and other entitlements that must be obtained in implementing the proposal. During preparation of the *Reconfiguration PEIS*, DOE will coordinate and request consultations with Federal, state, and local agencies having responsibility for geographic areas, natural resources, or environmental requirements that would be affected by reconfiguration. Consultations will also be initiated with affected Indian Tribes as prescribed in the *American Indian Religious Freedom Act* and the *Native American Graves Protection and Repatriation Act*. Consultations will be conducted that are consistent with the scope of the program-level decisions to be made in the PEIS.

CHAPTER 1

INTRODUCTION

Hanford Site

- 360,000 acres near Richland, Washington.
- Formerly used for reactor production of plutonium and chemical processing of DOE spent fuel and irradiated targets to recover enriched uranium and plutonium. Will be considered as a potential addition to the Complex.

Idaho National Engineering Laboratory (INEL)

- 570,000 acres near Idaho Falls, Idaho (established 1949).
- Performs chemical processing of naval reactor spent fuel and DOE-owned research reactor fuels to recover enriched uranium for use as naval and production reactor fuel.

Rocky Flats Plant (RFP)

- 6,550 acres between Denver and Boulder, Colorado (established 1952).
- Fabricates finished plutonium parts for nuclear weapons and performs plutonium recycle and recovery.
- Fabricates nonnuclear components from beryllium, stainless steel, and depleted uranium.

Kansas City Plant

- 136 acres in Kansas City, Missouri (established 1949).
- Produces electromechanical, electronic, rubber, plastic, and metallurgical components for arming, fusing, and firing systems; nuclear safety components; and use control components. Performs surveillance and evaluation of components; and designs and produces customized electronic test equipment.

Mound Plant

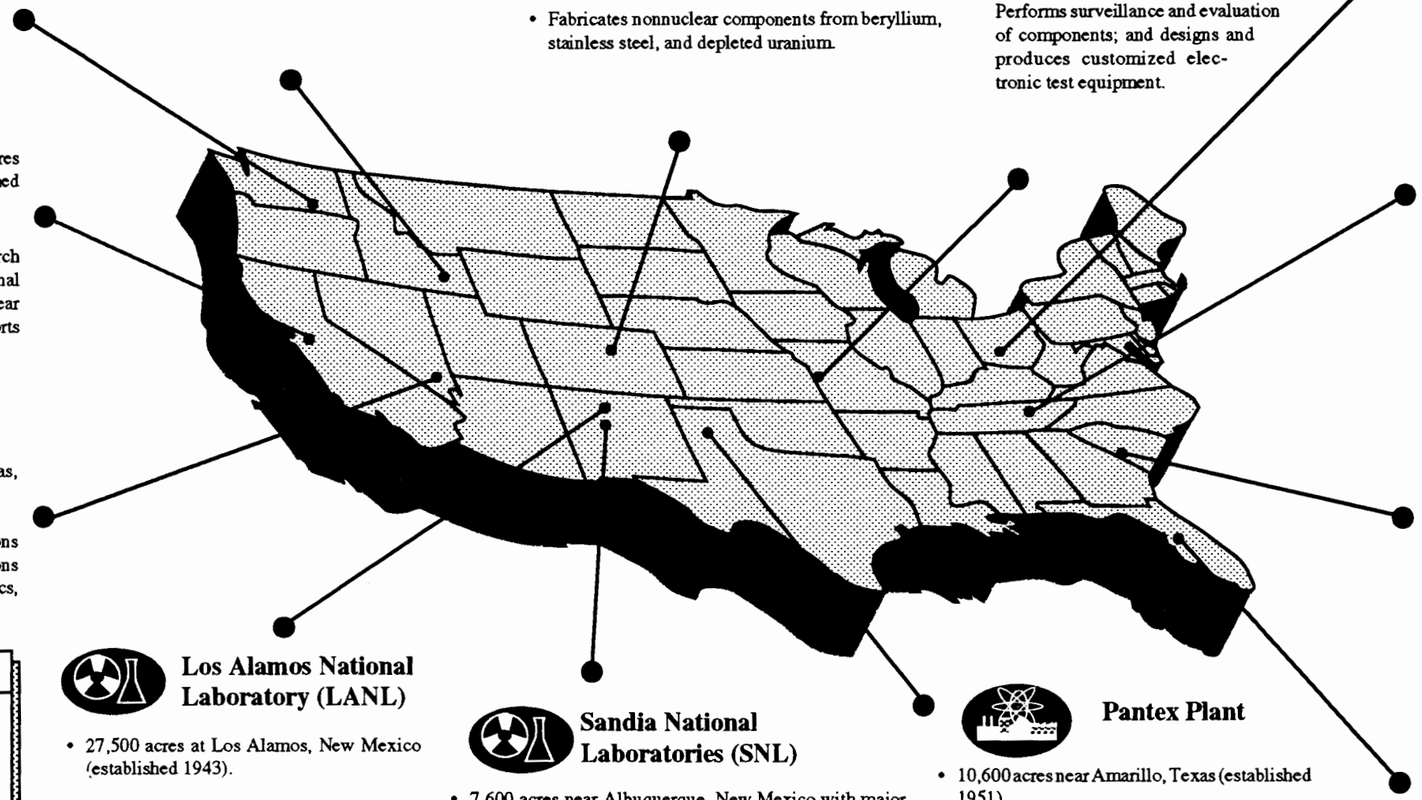
- 306 acres in Miamisburg, Ohio (established 1948).
- Isotope separation and sales. Tritium process development.
- Produces detonators, pyrotechnic devices, explosively actuated timers and firesets, radioisotopic heat source piece parts, mechanical assemblies, flat cable products, and gas transfer systems; conducts stockpile surveillance testing on explosive components and gas transfer systems; and recovers tritium from some retired weapons.

Lawrence Livermore National Laboratory (LLNL)

- 821 acres in Livermore, California plus 7,000 acres in Alameda and San Joaquin Counties (established 1952).
- Performs nuclear weapons RD&T; basic research in experimental, theoretical, and computational physics; earth and life sciences; chemistry; nuclear engineering; and seismic research that supports verification of nuclear testing treaties.

Nevada Test Site (NTS)

- 864,000 acres, 65 miles northwest of Las Vegas, Nevada (established 1951).
- Conducts underground testing of nuclear weapons and evaluation of the effects of nuclear weapons on military communications systems, electronics, satellites, sensors, and other materials.



Los Alamos National Laboratory (LANL)

- 27,500 acres at Los Alamos, New Mexico (established 1943).
- Performs nuclear weapons RD&T; basic research in experimental, theoretical, and computational physics; earth and life sciences; chemistry; nuclear engineering; and research for arms control verification.

Sandia National Laboratories (SNL)

- 7,600 acres near Albuquerque, New Mexico with major facilities at Livermore, California (413 acres) and Tonopah Test Range, Nevada (established 1948).
- Performs design and engineering of nonnuclear components for nuclear weapons systems, ordnance engineering, research for arms control verification, and field and laboratory testing.

Pantex Plant

- 10,600 acres near Amarillo, Texas (established 1951).
- Assembles and disassembles nuclear weapons components; performs weapons repair, modification, and disposal; and conducts stockpile evaluation and testing.
- Fabricates high explosive components and assembles high explosives and nonnuclear components.

Oak Ridge Y-12 Plant (Y-12)

- Located on the 35,252 acre Oak Ridge Reservation near Oak Ridge, Tennessee (established 1942).
- Processes depleted uranium and highly enriched uranium, and fabricates uranium components.
- Produces lithium compounds and parts, precision machining, and specialty subassembly of structural components.

Savannah River Site (SRS)

- 192,000 acres near Aiken, South Carolina (established 1953).
- Produces plutonium, tritium, and other nuclear materials; chemically processes DOE spent fuel and irradiated targets to recover enriched uranium, plutonium, and tritium; and performs purification and loading of tritium reservoirs.

Pinellas Plant

- 90 acres in Largo, Florida (established 1957).
- Produces neutron generators, thermal batteries, specialty capacitors, lightning arrestor connectors, frequency devices, magnetic components, and neutron detectors.

LEGEND

- Nuclear Elements
- Nonnuclear Elements
- RD&T Functions
- Nuclear and Nonnuclear Site

FIGURE 1.1.— ***Nuclear Weapons Complex Sites.***

CHAPTER 1: INTRODUCTION

Chapter One states the purpose of the Implementation Plan, presents an overview of the Department of Energy's Defense Programs mission, and describes functions of the sites that fulfill that mission. It also introduces the concept of Complex 21, discusses the NEPA strategy to be followed in achieving Complex 21, and discusses the status of reconfiguration activities that will be coordinated with Programmatic Environmental Impact Statement preparation.

1.1 BACKGROUND

The Nuclear Weapons Complex (Complex) is a set of interrelated facilities that design, manufacture, test and maintain nuclear weapons of this country's arsenal and dismantle the weapons retired from that stockpile. The Complex currently consists of 12 sites located in 11 states, as shown in Figure 1.1.

The Department of Energy (DOE) has developed a proposal, known as Complex 21, to reconfigure the Complex. Complex 21 would be fully operational early in the 21st Century and would sustain the Nation's nuclear deterrent through the middle of that century. Before deciding whether or not to reconfigure the Complex, or on the specific strategy to achieve the proposed reconfiguration, a Programmatic Environmental Impact Statement (PEIS) is being prepared pursuant to the *National Environmental Policy Act* (NEPA) of 1969, as amended, to assist in the DOE decisionmaking process regarding long range planning for the Complex. A Record of Decision (ROD), prepared after completion of the PEIS, will document DOE's programmatic decisions on the configuration of the Complex. DOE will prepare a Reconfiguration Plan based on the ROD that will provide specific direction for implementing those decisions.

1.2 PURPOSE OF THE IMPLEMENTATION PLAN

The *PEIS Implementation Plan* has two primary purposes:

- To provide guidance for the preparation of the PEIS; and
- To record the issues identified as a result of the scoping process.

In order to serve these purposes, this Implementation Plan has been prepared in accordance with DOE NEPA Guidelines (52 FR 47662) and follows the intent of the *DOE National Environmental Policy Act Implementing Procedures; Proposed Rule*, (10 CFR 1021) (55 FR 46444). Chapter 2 describes the purpose of and need for the Reconfiguration Proposal. Chapter 3 presents a discussion of the planned scope and content of the PEIS, including a description of the reconfiguration proposal and alternatives. Chapter 4 describes the scoping process, includes a discussion of the major issues identified through public scoping, and states how these issues will be addressed in the PEIS. Chapter 5 presents a description of the PEIS work plan, including study methodology, data collection plans, schedule, planned work assignments, and target page length. Consultation with other agencies and organizations is discussed in Chapter 6.

Finally, four appendices present the annotated outline for the PEIS, a summary of scoping comments, contractor NEPA disclosure statements, and *Federal Register Notices* regarding reconfiguration.

1.3 DEFENSE PROGRAMS MISSION

Congress, in the *Atomic Energy Act* of 1954, declared, as a matter of national policy, that the development, use, and control of atomic energy shall be directed so as to:

- make the maximum contribution to the general welfare, subject at all times to the paramount objective of making the maximum contribution to the common defense and security
- promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition in private enterprise

In that law, Congress assigned the nuclear weapons manufacturing and stockpile sustainment role to the Atomic Energy Commission. Today, that role resides with the Department of Energy. The Department's Nuclear Weapons Complex designs, builds, tests, maintains, and dismantles the weapons which constitute the Nation's stockpile, as directed by the President and approved by Congress. The Complex also conducts surveillance and maintenance activities to ensure the reliability and safety of the stockpiled weapons throughout their operational life. The size of the nuclear weapons stockpile is determined on a year-to-year basis through a joint recommendation by the Secretaries of Defense and Energy for approval by the President.

1.4 DESCRIPTION OF EXISTING COMPLEX

The size, location, and functions of sites in the current Complex are illustrated in Figure 1.1. The environmental effects of reconfiguration activities at each of these sites will be considered in the PEIS. In addition, the PEIS will consider a renewed Defense Programs mission for the Hanford Site, which became an inactive part of the Complex in 1990.

Much of the current Complex was constructed more than three decades ago and is now in need of major repairs and modernization. The deteriorated state of the Complex has made it increasingly difficult to meet modern standards for the protection of the environment and the safety and health of workers and the public. Additionally, many of the facilities were sized to meet workloads substantially larger and more diverse than those expected in the future. The facilities are administered by DOE through its Rocky Flats, Albuquerque, Idaho, Oak Ridge, San Francisco, Savannah River, and Nevada Field Offices.

The Complex is organized into three integrated functional elements with extensive interrelationships: nuclear sites; nonnuclear plants; and laboratories and test sites used for research, development, and testing (RD&T). There is functional overlap in that the Rocky Flats, Pantex, and Oak Ridge Y-12 plants have both nuclear and nonnuclear responsibilities. Figure 1.2 shows a simplified schematic of the materials flow between sites. The functional elements and major sites involved in these functional elements are described in the next three sections.

1.4.1 Nuclear Sites

Five sites, the Idaho National Engineering Laboratory (INEL), Pantex Plant, Rocky Flats Plant (RFP), Savannah River Site (SRS), and the Y-12 Plant (Y-12) at the Oak Ridge Reservation currently constitute the nuclear element of the Complex. This portion of the Complex is essential to fabricate and assemble nuclear weapons parts.

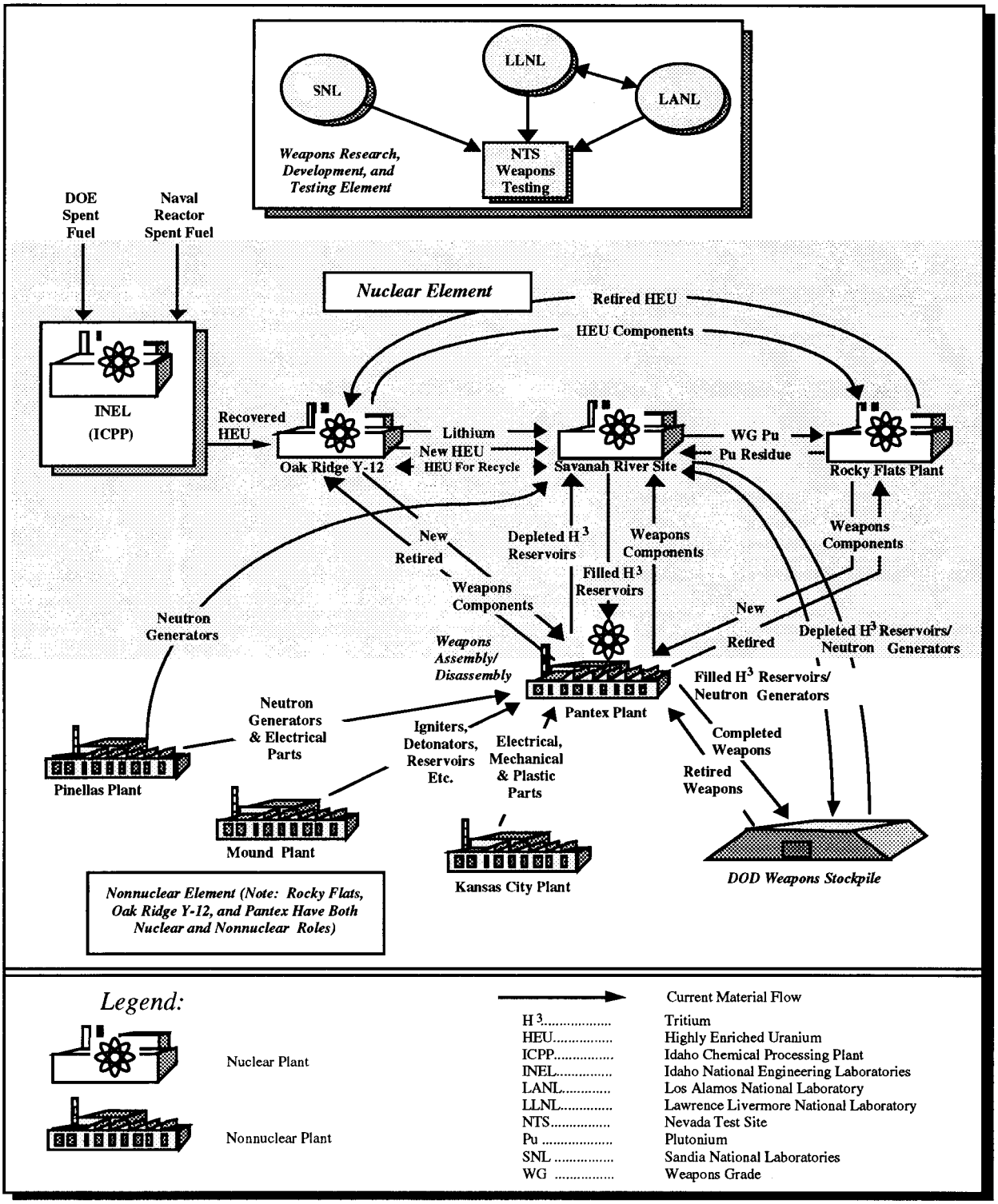


FIGURE 1.2.— ***Simplified Materials Flow in the Current Nuclear Weapons Complex.***

Nuclear materials include weapons-grade plutonium, highly enriched uranium, and tritium. Weapons-grade plutonium and highly enriched uranium are supplied by the recovery and recycling of materials that have been in the stockpile. In the past, DOE produced weapons grade plutonium in nuclear reactors and highly enriched uranium in enrichment facilities. The need for these materials is now met through recycling materials from retired weapons. Tritium gas, a critical element of nuclear weapons, is produced to fulfill requirements for both new weapons and to replace tritium that has undergone radioactive decay in existing weapons. Because of the relatively short half-life of tritium (12.3 years), assurance of an uninterrupted tritium supply has high priority in planning for Complex 21.

New tritium production capability was to have been met by the New Production Reactors (NPR) Program. However, the changing international situation has greatly reduced the urgency of and capacity requirements for construction of the NPR, providing an opportunity and a necessity to conduct an integrated review of the related but previously separated Reconfiguration and NPR programs. Construction of a new tritium production capability will now be examined as part of the overall Complex Reconfiguration program and its analysis included in the *Reconfiguration PEIS.*

1.4.2 Nonnuclear Sites

DOE currently performs nonnuclear functions at the Kansas City, Mound, Pantex, Pinellas, RFP, and Y-12 Plants. Pantex, RFP, and Y-12 are primarily nuclear sites, but perform some nonnuclear activities. Although facilities at Mound and Pinellas handle small amounts of radioactive materials, they are considered to be nonnuclear sites because they do not produce nuclear components or nuclear materials. In contrast to high volume factories, the nonnuclear plants generally produce relatively small quantities of technologically sophisticated products which require a long shelf life. This results in a large infrastructure with relatively high fixed costs, irrespective of the production rate.

An accelerated action to consolidate most remaining nonnuclear functions at a single site by the end of 1995, and possibly to increase the private sector portion of nonnuclear manufacturing, is being considered. The implementation of this action depends on the results of a *Nonnuclear Consolidation Environmental Assessment* (EA) currently in progress. Notice of the plan to prepare an EA for nonnuclear consolidation within the Complex was published in the *Federal Register* on January 27, 1992 (57 FR 3046). A copy of this notice is in Appendix D. If the EA supports a Finding of No Significant Impact (FONSI), the Secretary will decide whether to proceed with this proposed consolidation. Should both these events occur and the Secretary elects to proceed with Nonnuclear Consolidation as proposed, the future baseline conditions defined in the PEIS will be affected in that the Mound and Pinellas plants would have their missions transferred and would be closed, and all nonnuclear functions would be removed from the Rocky Flats Plant. Kansas City Plant would become the consolidated nonnuclear site.

1.4.3 Research, Development, and Testing Sites

The weapons RD&T program is concentrated in three national laboratories — Los Alamos (LANL), Lawrence Livermore (LLNL), and Sandia (SNL) — and the Nevada Test Site (NTS). The RD&T element of the Complex provides the technological underpinning for our nuclear deterrence. The laboratories provide the capability to sustain the reliability and safety of the current stockpile, design and test new or modified nuclear weapons, conduct exploratory research to avoid technological surprise by a potential adversary, provide future weapons design options, and support national arms control objectives. The RD&T program is the only source of nuclear weapons technological innovations available for the national nuclear deterrent to respond

to evolving threats. Therefore, the RD&T program must maintain the flexibility to quickly respond to changing national requirements. Two sites, LLNL and LANL, have a similar mission in order to stimulate intellectual competition in highly classified physics research and nuclear device design. SNL designs, develops, tests, and integrates technologies for system applications and military functions not duplicated by any other facility. Unique facilities at NTS are used to test both developmental and stockpiled nuclear weapons systems.

1.5 COMPLEX 21: VISION OF THE FUTURE

In view of the emerging international security environment and the President's initiative to reduce the number of nuclear weapons, the requirements for the number and types of nuclear weapons are expected to decrease from current stockpile levels. Additional changes that cannot be predicted are likely in the future. The Complex must provide the flexibility to respond to emerging and future changes. To meet these challenges, the Secretary of Energy (Secretary) has proposed to reconfigure the present Complex into Complex 21.

Complex 21 would be smaller, less diverse, and less expensive to operate than the Complex of today. The goal is to safely and reliably support whatever nuclear deterrent stockpile objectives are set by the President and funded by Congress with fewer individual production sites and generally lower capacity facilities at those sites. Consideration will be given to locating two or more nuclear activities at a single site. Nonnuclear activities will be transferred to the private sector (privatized) to the maximum extent consistent with minimizing the costs associated with weapons production and maintaining the weapons stockpile. The thrusts to downsize, consolidate, and privatize, however, must be balanced with selected key capabilities which, if lost, would cause significant and rapid degradation of overall Complex effectiveness.

Complex 21 would employ state-of-the-art technology and modular construction for flexibility in making capacity adjustments (either up or down). The number and size of waste streams would be kept to a minimum and would fully comply with environmental laws and regulations. Facilities would be constructed to comply with all applicable Federal, state, and local laws, regulations, and orders.

Implementation of the Complex 21 reconfiguration for the nuclear and RD&T sites would begin after the ROD, developed within the PEIS process, is issued in calendar year [1] 1993. Implementation of the nonnuclear portion of reconfiguration would begin in early 1993 if the *Nonnuclear Consolidation EA* supports a FONSI. If the *Nonnuclear Consolidation EA* does not support a FONSI, then the nonnuclear portion will be reincorporated into the PEIS.

Elements of Complex 21 would be brought online as rapidly as project-level NEPA requirements and technical, regulatory, and budgetary issues allow. Complex 21 would be fully operational early in the 21st Century and would sustain the Nation's nuclear deterrent until the middle of that century. If the Secretary elects to proceed with Complex 21, a Reconfiguration Plan would be prepared to assist with implementing the ROD. Facilities or sites that would no longer be needed to support the nuclear weapons mission would be turned over to DOE's Office of Environmental Restoration & Waste Management for environmental restoration.

1.6 NEPA STRATEGY FOR RECONFIGURATION

Implementation of Complex 21 will require the establishment of an overall program plan involving numerous individual projects and activities. NEPA requires DOE to consider the environmental consequences of an overall program and subsequent projects and activities before they are implemented. In complying with NEPA, DOE must follow

[1] All dates in this Implementation Plan are expressed in calendar years.

Council on Environmental Quality (CEQ) regulations (40 CFR 1500-1508) as well as DOE's own guidelines and regulations for implementing NEPA.

DOE has adopted and published departmental guidelines for implementing the procedural provisions of NEPA (52 FR 47662, as amended by 52 FR 12474 and 55 FR 37174). On November 2, 1990, DOE proposed a rule (10 CFR 1021), entitled *Compliance with the National Environmental Policy Act Implementing Procedures*, to revise DOE's NEPA guidelines (55 FR 46444). The proposed new rule incorporated changes directed by the Secretary in Secretary of Energy Notice (SEN) 15-90, February 1990, to facilitate participation of the public and affected states in the NEPA process for proposed DOE actions. Although the proposed rule has not been finalized, SEN 15-90 directs the Department to adhere to both the current guidelines and the spirit of the new requirements of the proposed rule.

DOE's NEPA compliance strategy for reconfiguration has two phases: near-term compliance in developing a Reconfiguration Plan; and long-term compliance while the Plan is being implemented. The first phase will include preparation of the EA for consolidation of the nonnuclear element and the PEIS for reconfiguration of the nuclear and RD&T portions of the Complex.

The *Nonnuclear Consolidation EA* could serve as the basis for issuing a FONSI which would allow consolidation of the nonnuclear functions to be effected immediately. Early consolidation of nonnuclear functions would result in a considerable cost savings to the Government. If, as a result of the EA analysis, it is determined that the EA cannot support a FONSI, then the analysis of the nonnuclear consolidation would be incorporated into the Draft PEIS. In either case, nonnuclear consolidation cannot begin until appropriate NEPA documentation is in place.

The *Reconfiguration PEIS* will serve as a planning and decision support tool by providing DOE and the public with information on the environmental consequences of a broad range of possible reconfiguration alternatives to assist DOE in planning future actions and making decisions. Specifically, the PEIS will be used to support DOE decisions on whether or not the existing Complex should be reconfigured, and, if so, what form a future configuration (Complex 21) should take. These decisions will also include the steps that should be taken to implement Complex 21 should reconfiguration be the selected alternative. If the *Nonnuclear Consolidation EA* supports a FONSI, the conclusions of the EA would be incorporated by reference in the PEIS. The decision on whether to reconfigure the nuclear and RD&T functions of the Complex would then involve determining the underlying requirements of the future Complex and whether those needs are better realized by maintaining the existing configuration through continued modification and upgrades (i.e., No Action) or through the selection of an alternative configuration.

Should a decision be made to reconfigure the existing Complex, the next program-level decision would be how to reconfigure the Complex to best meet the underlying requirements. The selection of a specific configuration involves consideration of environmental consequences and minimizing costs while maximizing attainment of regulatory and institutional requirements, efficiency, flexibility, and reliability.

The decision on a configuration (even with the No Action alternative) must be followed by consideration of the steps that should be taken to implement the decision. Major issues associated with these include the timing of specific actions, the need to maintain Complex capabilities during transition, and the mitigation of environmental impacts.

After considering the analysis in the PEIS as well as other factors such as technical considerations and cost, DOE will document its decisions in an ROD, which will be published in the *Federal Register* no

earlier than 30 days after the Notice of Availability for the Final PEIS is published. Following the ROD, DOE will incorporate its decisions into a Reconfiguration Plan. The plan will cover such things as sites identified to carry out (or relinquish) specific functions and schedules for transferring responsibilities from one location to another or bringing new facilities online. The plan will also outline any mitigation actions the Department intends to implement to alleviate adverse environmental impacts associated with the proposed action, thereby fulfilling the requirement for a Mitigation Action Plan as contained in DOE's NEPA procedures.

The second phase, long-term compliance, will result in future, project-specific DOE actions to implement the programmatic decisions stemming from the PEIS. This will include tiering future project-specific NEPA documents from the PEIS, thus simplifying the analysis needed for future projects. Additionally, PEIS analyses could be incorporated by reference in future NEPA documents. DOE may supplement the PEIS and Reconfiguration Plan later if there is a proposed change in the implementation of Complex 21.

1.7 Coordination with Other Reconfiguration Entities

The development of the PEIS will be closely coordinated with concurrent efforts dealing with Complex 21 reconfiguration. These related efforts include those of the Site Evaluation Panel (SEP); Privatization Planning Panel (PPP) and the Nonnuclear Consolidation Plan Work Group; Technology Assessment and Selection Panel (TASP); Weapons Design Standardization Panel (WDSP); Research, Development, and Testing Consolidation Work Group (RCG); the Architecture and Engineering (A&E) contractor and the DOE Office of New Production Reactors.

1.7.1 Site Evaluation Panel

The SEP was chartered to evaluate and recommend an unranked list of best qualified sites for the potential relocation of weapons complex facilities now located at the Rocky Flats, Y-12, and Pantex Plants. Based on the qualification criteria described in the "Invitation for Site Proposals for the Nuclear Weapons Complex Reconfiguration Site" published in February 1991 (56 FR 5595), five DOE sites (Hanford, INEL, ORR, Pantex, and SRS) were identified for evaluation by the SEP. No non-DOE site proposals were submitted in response to the invitation. The SEP subsequently evaluated the five DOE sites to determine their individual strengths and weaknesses and to recommend a best qualified list of sites as potential hosts for the relocated facilities. The SEP has recommended that all five sites remain under consideration as potential relocation sites for Complex 21 activities.

1.7.2 Privatization Planning Panel and Nonnuclear Consolidation Plan Work Group

The PPP completed the Phase I activities assigned in its working charter in January 1991. During Phase I, the PPP evaluated all nonnuclear products and manufacturing processes for privatization potential. Following acceptance of its Phase I report by DOE management, the PPP was discontinued. Phase II activities of the PPP working charter, the development of the Nonnuclear Consolidation Plan (NCP), were assigned to the NCP Work Group. On December 16, 1991, the Secretary announced that a *Nonnuclear Consolidation EA* would be prepared.

1.7.3 Technology Assessment and Selection Panel

The TASP is the only Reconfiguration Panel that would have a continuing mission throughout the

transition to Complex 21. The TASP was chartered to assess and recommend appropriate technologies for incorporation into Complex 21 designs. The TASP, in cooperation with the A&E contractor (Fluor Daniel, Inc.), will recommend proven technologies for incorporation into the conceptual designs for the various Complex 21 reconfiguration alternatives. Promising technologies requiring further development will be included in a Technology Assessment Development Plan (TADP) which will be updated annually.

1.7.4 Weapons Design Standardization Panel

The WDSP completed its work of recommending ways to standardize weapons design and manufacturing processes in February 1991. Recommendations have been assigned to various DOE Headquarters elements for implementation prior to and during the transition to Complex 21. Some WDSP recommendations were also referred to the TASP for action. Those actions referred to the TASP will be incorporated into the TADP.

1.7.5 Research, Development, and Testing Consolidation Work Group

The RCG was chartered in May 1991, to examine options to reduce the operational costs of RD&T facilities and institutions in Complex 21. It will assess alternatives for consolidation of selected duplicate facilities or functions into "Centers of Excellence." Such consolidation should not jeopardize the peer review and competition necessary to ensure reliable and safe nuclear weapons design and stockpile surveillance. In the No Action Alternative, the PEIS will analyze the RD&T facilities and sites as they are today, with allowances for facility compliance-oriented upgrades and modifications required by environmental laws, regulations and DOE orders. RD&T consolidation measures recommended by the RCG and approved by DOE management will be incorporated as appropriate into the reconfiguration alternatives.

1.7.6 Architecture and Engineering Studies

Fluor Daniel, Inc., of Irvine, CA, is under contract to DOE to develop conceptual designs and cost estimates for alternative Complex 21 configurations. Initial efforts will focus on preconceptual designs needed to assess the impacts of the programmatic alternatives within the *Reconfiguration PEIS*, including the No Action Alternative. During preparation of the PEIS, the A&E will also focus on conceptual designs and cost estimates to support the PEIS ROD. Finally, the A&E will conduct design studies to support follow-on project-level analyses for the construction and operation of Complex 21 facilities.

1.7.7 Office of New Production Reactors

On November 1, 1991, the Secretary directed that the *Reconfiguration PEIS* incorporate the analysis of tritium supply capacity formerly proposed for the NPR. The Office of New Production Reactors will provide engineering and design information to be used in the *Reconfiguration PEIS* analysis of alternative new reactor sources for production of tritium.

CHAPTER 2

PURPOSE OF AND NEED FOR RECONFIGURATION

CHAPTER 2: PURPOSE OF AND NEED FOR RECONFIGURATION

Chapter Two presents the background and purpose of, and need for, reconfiguration of the Complex, including the major problems of the current Complex.

2.1 BACKGROUND

Much of the current Complex is, as stated in Section 1.3, more than three decades old and in need of major repair and modernization. Some critical production facilities have had unplanned shutdowns. Recognizing that a comprehensive rather than piecemeal approach was needed to address these problems, Congress directed in the *National Defense Authorization Act for Fiscal Years 1988/1989* (P.L. 100-180) that a study be conducted and a plan prepared for the modernization of the Complex taking into account the overall size, productive capacity, technology base, and investment strategy necessary to support long-term security objectives. The product of that study, entitled the *Nuclear Weapons Complex Modernization Report (Modernization Report)*, was submitted to Congress on January 12, 1989. It called for extensive modernization of facilities over a 15- to 20- year period. The report also called for a major program of environmental restoration and waste management.

In February 1989, DOE began parallel development of two 5-year plans to implement the findings of the *Modernization Report*. One plan covered environmental restoration and waste management while the other focused on modernization of facilities. As the *Modernization 5-Year Plan* was being developed, however, fundamental changes in DOE policy direction and in the structure of international political and military forces raised questions about the continued validity of assumptions underlying the *Modernization Report* and the adequacy of proposed solutions for the more serious problems of the Complex.

Consequently, in September 1989, the Secretary ordered the establishment of a Modernization Review Committee to reexamine the modernization issue. The Committee was directed to review the assumptions and recommendations of the original *Modernization Report*; assess the capacity and capability requirements of the Complex; and review the processes by which the immediate and future requirements for maintaining, updating, and cleaning up the Complex are developed.

In August 1990, the Secretary reviewed the progress of the study and issued additional guidance to focus the analysis more sharply on the realities of the emerging international security environment. This ensured flexibility to accommodate the likely range of deterrent contingencies and emphasized the objective of achieving a Complex that is smaller, less diverse, and less expensive to operate than today's. Subsequently, the Modernization Review Committee was redesignated the Complex Reconfiguration Committee. The Committee's product was the *Nuclear Weapons Complex Reconfiguration Study* dated January 1991, which replaces the January 1989 *Modernization Report*.

The *Nuclear Weapons Complex Reconfiguration Study* presents an overview of the current problems of the Complex; outlines a vision of the future

Complex, including potential configurations of a future Complex and transitional activities; and describes a process for a future Secretarial decision on whether and how to reconfigure the Complex. The *Reconfiguration PEIS* will be used to support this future Secretarial decision. Specifically, the PEIS will provide environmental input to this decision by evaluating the environmental consequences of a proposed action to reconfigure the existing Complex, the reasonable alternatives for future configuration of the Complex, and No Action (i.e., continuation of the existing configuration).

On September 27, 1991, the President announced his intention to further reduce the Nation's nuclear weapons stockpile. Subsequently, the Secretary announced his decision to merge the NPR Capacity Analysis into the Department's *Reconfiguration PEIS*, allowing DOE the opportunity to conduct an integrated review of the Reconfiguration and NPR programs. On December 16, 1991, the Secretary announced his decision to conduct an EA for the consolidation of the nonnuclear element of the Complex. The *Nonnuclear Consolidation EA* will be completed in 1992.

2.2 PURPOSE OF RECONFIGURATION

The major purpose of reconfiguration would be to achieve a Complex that is smaller, less diverse, and less expensive to operate than is the case today. The Complex must continue to be capable of safely and reliably fulfilling future national defense requirements and be compliant with ES&H standards. Specifically included within this purpose are safeguarding the health of Complex workers and the general public, protecting the environment, and properly securing nuclear materials and weapons components. Reconfiguration, implemented through a comprehensive strategy, would take advantage of state-of-the-art technology and processes and comply with accepted practices regarding industrial and weapons safety.

Related objectives include reducing the capital investment necessary to replace outmoded and technologically inefficient processes and minimizing future costs of operating and maintaining the unique national resource represented by the Complex's facilities and capabilities.

To fulfill this purpose, the Secretary issued SEN-12B-91 to establish guiding principles in the development of a future Complex. These principles are:

- Emphasize compliance with laws, regulations, and accepted practices regarding protection of the environment, health, and safety of the public and the Complex workers, and security

- Safely and reliably maintain the weapons stockpile directed by the President and funded by the Congress

- Minimize the number of weapons production sites and the size of individual sites

- To the extent economically justified, maximize transfer of nonnuclear materials production activities to the private sector

- Maintain redundancy in key capabilities that, if lost, could significantly and rapidly degrade the effectiveness of the Complex

- Emphasize the use of modular construction to promote minimum ES&H impacts and maximum flexibility to increase Complex capacity should a requirement arise

- Identify sites that may be transferred to the Office of Environmental Restoration and Waste Management for eventual decommissioning, or converted to

inactive standby status, while ensuring flexibility to respond to potential arms control breakouts

- Maintain the capability to decommission the large number of weapons expected to be retired during stockpile downsizing or replacement.

2.3 NEED FOR RECONFIGURATION

Reconfiguration is needed because the Nation's nuclear weapons requirements are not as great as in the past, and maintaining the existing large infrastructure is not an effective use of national resources. The majority of existing facilities at Complex sites were designed and built between the mid-1940's and late 1950's. These facilities reflect the strong emphasis placed on nuclear deterrence during the post-World War II, Cold War era. A significant reduction in projected military requirements during the mid-1960's resulted in excess production capacity. This excess capacity has been gradually reduced as a consequence of limited funding, the aging of the Complex, and the evolution of more stringent environmental and safety requirements.

Although some needed facilities are now being upgraded, their basic design and construction reflect outdated standards. For several facilities, selective upgrades and renovations have extended their useful life. This approach worked reasonably well at such places as the Kansas City and Pinellas Plants where modular designs and the nonnuclear nature of their operations were well suited to modernization by replacement of production lines within the building's structural shell. However, in other facilities where the cost of major upgrades and renovation is high (especially those with nuclear materials production operations), past efforts have only provided temporary relief. Even as improvements were being made, increased safety oversight has raised further technical questions concerning the safety of current production operations. This has resulted in reduced operations and extended outages for further upgrading and backfitting.

In addition to the facilities themselves, production machinery and processes have not kept pace with modern technology. This is particularly true with regard to the installation of automated operations to replace manual processes. Some manufacturing processes are further handicapped by reliance on obsolete technologies that limit productivity.

Many current problems of the Complex can be traced to the fact that the majority of its facilities were designed and built long before the enactment of environmental, safety, and health legislation. Since the 1970's there have been major advances in the understanding of not only the health and safety aspects of weapons production, but also of the basic materials and engineering sciences that affect the technical performance of the Complex. Current trends indicate that future health and safety regulations will likely be more restrictive, both in radiation exposure and radioactive materials release guidelines and in the handling, treatment, and disposal of other hazardous and toxic materials.

Recent shutdowns of critical facilities, documented in the *Complex Reconfiguration Study*, highlight the main problems facing the Complex. They are as follows:

- Age, long-term deterioration, and technological obsolescence of some facilities and equipment

- Difficulty in meeting and maintaining standards for protecting the environment, safety, and health

- An excessive and growing maintenance backlog, stemming both from the age and deterioration of facilities and equipment, and the past practice of deferring maintenance to meet

production and other programmatic requirements within the funding levels authorized

- Population encroachment on formerly remote sites

- Changing threats to safeguards and security and the difficulty of meeting new standards and requirements in the existing facilities.

Chapter 3

Planned Scope and Content

CHAPTER 3: PLANNED SCOPE AND CONTENT

Chapter Three describes the Reconfiguration Proposal and alternative strategies. It further describes management actions common to all alternatives, other DOE program-level, site-wide and project-level NEPA reviews currently being conducted, and the relationship of these NEPA reviews to the PEIS.

3.1 RECONFIGURATION PROPOSAL AND ALTERNATIVES

DOE proposes to reconfigure the Complex to be smaller, less diverse, and less expensive to operate than that of today. The goal is to safely and reliably support the nuclear deterrent stockpile objectives set by the President and funded by Congress with fewer individual sites and generally lower capacity facilities at those sites that would fully comply with applicable environmental, safety, and health laws, regulations, and orders.

The PEIS will evaluate alternatives for consolidating two or more nuclear activities at a single site and for constructing and operating a new tritium production capability. The PEIS will also evaluate alternatives for consolidating RD&T activities through the creation of Centers of Excellence to share resources with multiple users.

As stated in the *Nuclear Weapons Complex Reconfiguration Study*, dated January 1991, and in the *Notice of Intent* (NOI) for the *Reconfiguration PEIS* (56 FR 5590); the PEIS will analyze alternative configurations for the Complex and compare them to the effects of not configuring the complex (the "No Action" Alternative).

The *Reconfiguration Study* outlined two reconfiguration options, designated A and B. Under Reconfiguration Option A, the plutonium recycling and manufacturing functions now performed at RFP near Denver, Colorado, would be relocated and the nonnuclear manufacturing functions now performed at RFP would be either transferred or privatized. The remaining configuration of the Complex would be unchanged, except that facilities would be upgraded in place to the extent improvements are necessary to achieve compliance with ES&H requirements. Under Reconfiguration Option B, either the nuclear materials functions now performed at the Pantex Plant near Amarillo, Texas, or the uranium processing functions now performed at the Oak Ridge Y-12 Plant near Oak Ridge, Tennessee, or both, would be collocated with the plutonium functions currently being conducted at Rocky Flats. Candidate sites being considered for relocation of these functions under either Option A or B are the Hanford Site near Richland, Washington; INEL near Idaho Falls, Idaho; ORR near Oak Ridge, Tennessee; the Pantex Plant near Amarillo, Texas; and SRS near Aiken, South Carolina. The possibility of relocating other mission elements would also be examined in the interests of further consolidating the Complex.

3.1.1 Program Changes

A number of significant program changes have occurred since publication of the Reconfiguration Study and the NOI to prepare the *Reconfiguration PEIS*. These changes include the following:

- *Mid-term Configuration*—The NOI announced that the PEIS would include an analysis of sufficient detail to support

construction decisions regarding a mid-term configuration for the plutonium fabrication functions currently located at RFP. However, design information will not be available in sufficient detail to support a construction-level analysis in the PEIS. Closure of RFP and relocation of plutonium functions will be included, among the programmatic alternatives analyzed in the PEIS. However, should the ROD involve closure of RFP and relocation of plutonium functions, a subsequent site-specific EIS would be prepared to support construction of new facilities associated with this action.

- *New Production Reactor—The Draft Environmental Impact Statement for the Siting, Construction and Operation of New Production Reactor Capacity (NPR Draft EIS)* was issued in April 1991. Public hearings were held and numerous comments received. Subsequently, on November 1, 1991, the Secretary announced his decision to merge the analysis of the NPR capacity into the *Reconfiguration PEIS.* This decision to merge the two analyses was made in light of the President's September 27, 1991, announcement of intent to reduce the Nation's stockpile of nuclear weapons. The President's initiative allows DOE the opportunity to conduct an integrated examination of the Reconfiguration and NPR programs. This approach will result in integrating the programmatic analysis regarding tritium supply with the programmatic analysis of the other functional elements of the Complex.

- *Nonnuclear EA*—On December 16, 1991, the Secretary announced his decision to prepare an EA for consolidation of nonnuclear functions. The EA will be completed by late 1992, and if it is determined that there is no significant environmental impact, then DOE will proceed with consolidation at Kansas City Plant (KCP); construction of new facilities as needed; and the phaseout of nonnuclear functions at Mound, Pinellas, and Rocky Flats plants. This process would be completed by the end of 1995. If a FONSI cannot be issued, then these actions would be included in the PEIS.

As a result of these changes, the activities formerly considered under Reconfiguration Options A and B have been reorganized into a set of actions that could occur within each of the three elements:

- Nonnuclear
- Nuclear
- RD&T

The possible actions within each of these categories are discussed in the following sections, and illustrated in Figure ES.2 of the Executive Summary.

3.1.2 Nonnuclear Element

DOE proposes to consolidate certain nonnuclear elements of the Complex at one location, to relocate other nonnuclear aspects, and to phase out the nuclear weapons mission at certain locations. Specifically, DOE proposes to do the following:

- Collocate tritium activities now done at the Mound and Pinellas plants with the tritium activities now done at SRS; all of these tritium activities would be done at the existing Replacement Tritium Facility at SRS

- Collocate high explosives work now done at the Mound Plant with the high

explosives work now done at the Pantex Plant, which would result in a very small addition to the amount of high explosives already used at Pantex

- Collocate the beryllium work now done at RFP with similar machining work now done at the Y-12 Plant

- Relocate the manufacture of neutron generators from the Pinellas Plant to SNL at Albuquerque, where they are now designed

- Retain the pit support functions now done at RFP with the pit fabrication work now done at RFP, wherever this fabrication work will be located as a result of the Reconfiguration ROD

- Consolidate at KCP the nonnuclear electrical and mechanical functions now performed at the Mound, Pinellas, and RFP plants

- Phaseout the nuclear weapons mission at the Mound and Pinellas Plants, together with certain nonnuclear work at RFP, and turn over the government-owned, contractor-operated nuclear weapons facilities at these locations to the DOE Office of Environmental Restoration and Waste Management (EM) for cleanup, restoration, or decontamination and decommissioning (D&D), as appropriate

In addition, DOE is evaluating whether or not certain developmental work now done at the nonnuclear manufacturing sites should be reassigned to one or more of the DOE national laboratories. If DOE decides to pursue this option, it may become part of the proposed action for the *Nonnuclear Consolidation EA*.

The products and services produced by this element of the Complex are needed to manufacture nuclear weapons and test individual components. Although some of these components involve small amounts of tritium, these activities are collectively referred to as the nonnuclear functional element of the Complex because they do not involve the production of nuclear materials, nor the manufacture of principal weapons components from uranium, plutonium, or tritium.

Many nonnuclear weapons components are manufactured and supplied by the private sector. The nonnuclear consolidation proposal does not include components currently manufactured by the private sector. Where practical and cost effective, DOE may transfer the manufacture of some additional selected products to the private sector under existing procurement procedures.

RFP currently performs some nonnuclear manufacturing work with depleted uranium. This work is not part of this proposal because it is scheduled to be phased out prior to consolidation.

DOE will analyze four alternatives to the proposed action in the EA: "No Action", consolidation at Mound, consolidation at Pinellas, and consolidation at RFP. For each of the consolidation alternatives, the functions now performed at the alternative consolidation site would not be relocated. If transferred, the tritium, high explosives, and beryllium work, and the manufacture of neutron generators would be collocated as in the preferred alternative. Some beryllium work is now done at the Y-12 Plant. Under an RFP consolidation alternative the Y-12 beryllium work would not be collocated with the RFP beryllium work because it is considered to be integral to other Y-12 operations which are not a part of this proposal. The remainder of the nonnuclear activities, including those now performed at KCP, would be relocated to the alternative consolidation site.

Under No Action, the consolidation of nonnuclear functions would not occur. Planned upgrades,

renovations, repairs, and maintenance activities necessary to improve Complex compliance with all ES&H and environmental restoration standards would continue irrespective of future Complex configuration.

Should there be a FONSI, effects of the selected consolidation option will be included in the PEIS as part of the future environmental baseline of affected sites. On the other hand, should the EA indicate any significant environmental impacts of the proposed action, the nonnuclear consolidation alternative(s) would be evaluated in the *Reconfiguration PEIS*.

3.1.3 Nuclear Element

The nuclear element includes plutonium functions, uranium and lithium (salt) functions, assembly/disassembly functions, tritium supply, and storage of special nuclear materials and weapons components. PEIS consideration of the effects of these functions is described in the following sections.

3.1.3.1 *Plutonium Functions*

The PEIS must consider the environmental effects of relocating the plutonium recycle, recovery, and component manufacturing functions from RFP to one of the five candidate sites: Hanford, INEL, ORR, Pantex and SRS. All DOE sites were initially considered as candidate sites for the relocation of RFP plutonium functions. Hanford, INEL, ORR, Pantex, and SRS met the initial screening criteria delineated in the NOI. These criteria were:

- 5,000 contiguous acres of Federally-owned, unobstructed land (based on a minimum operational area of 400 acres—currently Rocky Flats occupies 385 acres—with a one-mile buffer zone in all directions)
- Adequate resources to meet electrical power and potable water requirements (75 million volt amps and 555,000 gallons per day, respectively, based upon actual usage history at RFP)
- No inherent mission incompatibility

In addition, DOE issued an invitation through a *Federal Register* notice on February 11, 1991, allowing non-DOE entities to submit other sites for consideration. No proposals from non-DOE entities were received.

The PEIS will also analyze alternatives for the storage of plutonium material and components.

3.1.3.2 *Uranium and Lithium (Salt) and Assembly/Disassembly Functions*

The PEIS will also consider the impacts of collocating the uranium and lithium (salt) functions currently performed at the Y-12 Plant and/or the assembly/disassembly functions currently performed at the Pantex Plant with the relocated plutonium functions. The various combinations of plutonium, uranium, and assembly/disassembly functions that could be placed at a particular site under reconfiguration of the nuclear element are illustrated in Figure ES.2.

All five sites that are candidates for relocation of plutonium functions also satisfied the criteria for collocation of uranium and assembly/disassembly functions. The relevant criteria are:

- 10,000 contiguous acres of Federally-owned, unobstructed land (based on a minimum operational area of 2,200 acres for the combined facilities—plutonium plus uranium plus assembly/disassembly—with a one-mile buffer zone in all directions)

- Electrical power and potable water requirements of 199 million volt amps and 5.2 million gallons per day, respectively

- No inherent mission incompatibility

The PEIS will also analyze alternatives for the storage of uranium and lithium materials and components.

3.1.3.3 *Tritium Supply*

DOE proposes to site, construct, and operate a new tritium supply capacity. The Department had previously intended to analyze the impacts of a replacement tritium supply capacity in the *NPR EIS*, but now intends to integrate the programmatic analysis of tritium supply capacity into the *Reconfiguration PEIS*.

Siting studies for NPR were first conducted in 1988. DOE initially considered 13 possible locations for the NPR but narrowed the alternative sites to Hanford, INEL, and SRS before preparing the *NPR Draft EIS*. The *NPR EIS* scoping process did not identify any additional sites for consideration. The three alternative locations are all DOE-owned, contractor-operated sites. They were selected because they are large and relatively isolated, already contain some of the reactor support facilities that would be required, and have staffs trained and experienced in reactor construction and operation.

The *NPR Draft EIS* analyzed the potential environmental impacts of three reactor technologies at three DOE sites. The technologies analyzed were a heavy water reactor, a light water reactor, and a modular high-temperature gas-cooled reactor. The three potential NPR sites are also being considered for relocation of other nuclear functions now carried out at the Rocky Flats, Pantex, and Y-12 plants, as described above. Accordingly, the effects of collocating tritium supply with other nuclear functions will be assessed in the PEIS.

It is likely that the projected tritium supply capacity of the future weapons complex will be substantially lower than that analyzed in the *NPR Draft EIS* due to the President's initiatives (i.e., the President's September 27, 1991 announcement and the January 28, 1992 State of the Union message) to reduce the nuclear weapons stockpile. The tritium supply capacity will be consistent with the smaller stockpile and yet provide sufficient capability to maintain an arsenal. Therefore, the sizing requirements, siting criteria, production technologies, and schedules for tritium supply capacity used in the *NPR Draft EIS* are being reexamined. DOE is reassessing whether other sites and technologies, including production of tritium from accelerators, would be reasonable alternatives for tritium supply to be considered in the *Reconfiguration PEIS*. When completed, DOE will make the results of these reassessments available to the public. Current tritium supply options are indicated in Figure ES.2 of the Executive Summary.

3.1.3.4 *No Action*

Under the No Action Alternative, DOE would not reconfigure the Complex. Plutonium functions would remain at RFP, uranium and lithium at Y-12, assembly/disassembly at Pantex, and tritium would continue to be produced in the K- or L-Reactors at SRS. However, the PEIS No Action Alternative will include initiatives developed by the WDSP and the Capital Asset Management Process (CAMP).

The adoption of WDSP recommendations will ultimately result in fewer material alloys and manufacturing processes used in the fabrication of nuclear weapons components. Greater commonality of components and materials would enable economies of scale in production and manufacturing and a corresponding reduction in the number of specialized equipment sets, process lines, or facilities necessary to produce and maintain the stockpile of nuclear weapons.

Projected capital improvements, including preventive maintenance activities, will be managed

through CAMP as described in DOE's *Complex Reconfiguration Study.* CAMP will be used in the No Action Alternative to project requirements for overhaul or replacement of capital assets to achieve ES&H compliance and environmental restoration, fulfill mission production requirements, and reduce costs of operation.

3.1.4 RD&T Element

Reconfiguration of the RD&T element of the Complex is based upon creation of Centers of Excellence for specific RD&T functions at one or more sites, including Lawrence Livermore, Los Alamos, and Sandia National Laboratories; and the Nevada Test Site. The specific alternatives are currently being defined by the RD&T Consolidation Work Group. This work group will examine existing duplication of facilities and resources within the laboratory system and recommend how to implement the Secretary's proposal for the creation of particular Centers of Excellence to share resources with multiple users. This effort may reduce RD&T operating costs and should eliminate the need for future construction of duplicative facilities. It is not anticipated, however, that DOE would consider closing any of the national laboratories under any reconfiguration alternative. Under No Action, Centers of Excellence would not be created.

3.1.5 Alternatives Considered but Eliminated from Detailed Study

Some scoping comments suggested that additional alternatives be considered to represent the reconfiguration spectrum—from eliminating the Complex altogether to consolidation of all Complex activities at a single site. By law, DOE is required to support a continuing national nuclear stockpile capability. Hence, a nuclear weapons production, surveillance, and maintenance capacity is required, although the capacity is envisioned to be smaller due to a reduced number of weapons in the stockpile. The elimination of the Complex is thus not a reasonable alternative to reconfiguring the Complex.

The consolidation of all Complex facilities at a single site is neither affordable nor desirable. Although many facilities within the Complex need major repair or renovation, there are also many facilities which contain state-of-the-art technology with respect to operational efficiency and environmental compliance. The replacement or relocation of these facilities for the sake of consolidation would not be prudent. Therefore, a single site for the entire Complex is not a reasonable alternative.

The *Reconfiguration Study* looked at four hypothetical stockpile cases for the purposes of sizing the capacity of Complex 21. The PEIS will be based on a single production capability which will be the same for all alternatives analyzed (including No Action). The production capabilities of Complex 21 facilities will be based upon the midpoint of the range of stockpile sizes anticipated in the next century, as developed by DOE and the Nuclear Weapons Council (NWC). Appropriate sensitivity analyses will be conducted to assure that reasonable alternatives are not dismissed from consideration. The projection and related analyses, which will be classified, will take into account recent Presidential initiatives to reduce the nuclear weapons stockpile. Although the capacity of the Complex is projected to be smaller in the future, the Complex will be sized to provide the capability agreed upon by the NWC and the PEIS analysis will be based on full utilization of that capacity. DOE recognizes, that because of the President's initiative to reduce the stockpile the actual production rates may be less than design capacity.

3.1.6 The Preferred Alternative

DOE has not yet identified a preferred alternative. The preferred alternative will be identified in the Final PEIS. At this point, the Secretary has indicated a desire to relocate the nuclear weapons functions

now assigned to RFP and turn over the RFP facilities to EM for environmental restoration.

3.2 CONCURRENT ACTIONS

The PEIS will interface with other ongoing and future NEPA reviews. Currently, DOE is preparing the *EM PEIS* and two site-wide EIS's (for LLNL and RFP) and will continue to prepare project-specific EIS's in accordance with the requirements of NEPA, CEQ, and DOE. The DOE Office of the Deputy Assistant Secretary for Weapons Complex Reconfiguration (DP–40) will coordinate the preparation of the *Reconfiguration PEIS* with related NEPA documents prepared by other DOE offices. NEPA actions in progress or recently completed are discussed in the following sections.

3.2.1 Interim Actions

Should DOE wish to act on a proposal covered by the scope of the *Reconfiguration PEIS* analysis before the *Reconfiguration PEIS* ROD is issued, DOE must first determine, on a case-by-case basis, whether the action may proceed. As specified in 40 CFR 1506.1(c):

> "While work on a required program environmental impact statement is in progress and the action is not covered by an existing program statement, agencies shall not undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action:
>
> "(1) is justified independently of the program;
>
> "(2) is itself accompanied by an adequate environmental impact statement; and
>
> "(3) will not prejudice the ultimate decision on the program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives."

DOE will review any proposals for interim actions to ensure that these conditions are met. Currently, the Department has determined that some actions for which EIS's are being prepared are interim actions within the meaning of 40 CFR 1506.1(c). Accordingly, DOE does not intend to revisit the decisions associated with these actions as part of the *Reconfiguration PEIS*; however, if an ROD is issued on an interim action prior to completing the *Reconfiguration PEIS*, the PEIS will consider these actions as common to any alternative and will include the environmental consequences of the decisions on these actions as part of its environmental baseline. The following sections briefly discuss each of these interim actions.

3.2.1.1 *Special Nuclear Materials Research and Development Laboratory*

On January 12, 1990, DOE published an NOI to prepare an EIS on the proposed construction and operation of a Special Nuclear Materials (SNM) Research and Development Laboratory at LANL (55 FR 1252). The proposed SNM Laboratory would provide space to consolidate certain aqueous processing and analytical chemistry functions currently being performed in the Chemistry and Metallurgy Research building. This building was constructed in 1952 and requires either a major upgrade or the construction and operation of the SNM Laboratory to continue weapons program support work without undue risk of interruption. Although at a low level, work on the SNM Laboratory EIS is continuing. No date has been set for issuing a Draft EIS.

Ongoing plutonium research and development activities either in an upgraded building or in the

proposed SNM Laboratory are necessary to support ongoing weapons program support work and technical development, and to allow curtailment of plutonium operations at RFP. Construction of the SNM Laboratory would address immediate safety and reliability needs regardless of decisions related to Complex 21. Because (1) the proposed SNM Laboratory and reconfiguration actions are independently justified, (2) an EIS would be prepared for the SNM Laboratory, and (3) reconfiguration decisions would not be prejudiced by proceeding, the SNM Laboratory action is considered to meet the test of 40 CFR 1506.1(c) for an interim action. However, project funding has not allowed DOE to proceed with the *SNM EIS*, and it is unlikely that an EIS or ROD for this project would be completed prior to completion of the *Reconfiguration PEIS* and ROD. Accordingly, the *Reconfiguration PEIS* will continue to consider the existing facilities as part of the No Action Alternative.

3.2.1.2 *Residue Elimination Project*

On May 30, 1990, DOE published an NOI (55 FR 21919) to prepare an EIS on the Plutonium Recovery Modification Project (PRMP) at RFP. The project, as identified in the NOI, would replace the current RFP capability to recover plutonium metal from scrap and site returns and provide the capability to process residues to reduce the backlog of stored material. Since the issuance of the NOI, DOE has determined that the PRMP is not needed to support the specification metal production of plutonium because no new metal is needed in the foreseeable future. However, a residue elimination facility may be needed to separate plutonium from waste, so that waste can be disposed, or to process the residue into a form suitable for shipping to another site for storage or disposal. Accordingly, it is anticipated that a *Residue Elimination Project (REP) EIS* would analyze a project that would be capable of reprocessing plutonium residues as part of RFP cleanup, but would not be capable of producing new plutonium metal. The schedule for issuing a Draft EIS on the REP is indefinite, dependent on project funding.

The requirement to dispose of the plutonium residue at RFP is independent of the need to reconfigure the Complex. The plutonium residue elimination action is considered to meet the test of 40 CFR 1506.1(c) for an interim action because (1) the plutonium residue elimination and reconfiguration actions are independently justified, (2) an EIS will be prepared for the residue elimination, and (3) reconfiguration decisions will not be prejudiced by proceeding with the project. However, project funding has not allowed DOE to proceed with the *REP EIS* and it is unlikely that an EIS and ROD for this project would be completed prior to completion of the *Reconfiguration PEIS* and ROD.

3.2.2 Other Related DOE NEPA Reviews

In addition to those actions that are covered by the scope of the *Reconfiguration PEIS* and the *Nonnuclear Consolidation EA*, and that require a case-by-case determination of whether they may proceed as interim actions, DOE continues to evaluate other programs and projects in accordance with the requirements of NEPA. Some of these NEPA reviews, while not covered by the scope of the *Reconfiguration PEIS*, are related to the PEIS in that they provide additional information on Complex sites and activities. The following sections briefly discuss the related NEPA reviews that are underway or have been recently completed.

3.2.2.1 *Environmental Restoration and Waste Management PEIS*

On January 12, 1990, the Secretary decided that DOE would prepare two PEIS's: one on Reconfiguration and one on DOE's Environmental Restoration and Waste Management (EM) Program. The *EM PEIS* will analyze alternative strategies and policies for conducting DOE's EM program which

not only includes the environmentally responsible management and restoration of nuclear facilities, but also the protection of worker and public health and safety through the safe disposal of radioactive, hazardous, and mixed (i.e., radioactive and hazardous) wastes. The environmental analysis will support DOE decisions on how to manage processes or facilities for treatment, storage, or disposal of radioactive hazardous, or mixed wastes; approaches to be used to remediate contaminated sites; treatment technology application or development; land use; and technology and policy considerations for D&D of DOE facilities at the end of their useful lives. An NOI to prepare the *EM PEIS* was published in the *Federal Register* on October 22, 1990 (55 FR 42633), and scoping meetings have been held. A draft *Implementation Plan for the EM PEIS* was issued on February 4, 1992 (57 FR 4193).

The DOE decision to prepare two separate PEIS's was based on the separate sets of decisions that each PEIS must address. Among other things, the *Reconfiguration PEIS* will help determine those sites that will carry out the nuclear weapons mission over the long term. The *EM PEIS*, on the other hand, is directed at alternative strategies and policies for conducting a DOE-wide EM program. The volume of wastes to be considered by future operation of the Complex is a relatively small portion of the waste to be considered in the *EM PEIS*.

For a short time after generation, defense wastes are managed by the generating facility. Longer term management of wastes is under the auspices of the Office of Environmental Restoration and Waste Management. Consequently, both the *Reconfiguration PEIS* and the *EM PEIS* will address similar issues related to interim waste management at Complex sites. The Defense Programs (DP) mission provides for the management of wastes, including finding means to minimize waste generation, until DOE either disposes of the wastes or places them into long-term storage. Consequently, this *Reconfiguration PEIS* will consider the impacts of managing wastes generated by proposed and alternative facilities for plutonium functions, tritium supply capacity, uranium functions, and assembly/disassembly of nuclear weapons. The *Reconfiguration PEIS* will also provide a bounding analysis of potential long term environmental consequences of various waste management technologies in order to support technology selection decisions for the weapons complex. Any such waste management activities undertaken at Complex sites would be in accordance with the policies and procedures developed in conjunction with the *EM PEIS*. The *Reconfiguration PEIS* will not, however, cover in site-specific detail the environmental restoration or D&D activities at existing Complex sites, long-term storage of wastes, or disposal of existing wastes or residues—these issues will be addressed in the *EM PEIS* or subsequent site-specific NEPA documents.

DOE will review the proposed scope of the two PEIS's as the draft documents are developed. Changes in relationships, as described herein, may occur as DOE responds to evolving policy or technological considerations, and will be reflected in the Department's NEPA analyses.

3.2.2.2 *Continued Operation of K- and L-Reactors*

In December 1990, DOE published the *Final EIS on the Continued Operation of K-, L-, and P-Reactors at SRS (Continued Operation EIS)*. The EIS analyzes the effects of continued operation of one, two, or three existing production reactors at SRS at least until new tritium production capability is demonstrated. In the subsequent February 1991 ROD (56 FR 5584), DOE decided that it would continue to operate the K- and L-Reactors and terminate operation of the P-Reactor in the immediate future, maintaining it in cold standby. Since that time, DOE has made plans to maintain the L-Reactor on stand-by.

Continued operation of the SRS reactors is needed to meet currently defined requirements for tritium supply. If new tritium production capability is

constructed, K- and L-Reactors could be maintained in appropriate standby conditions. The *Continued Operation EIS* and the ROD will serve as part of the environmental baseline for the No Action Alternative in the *Reconfiguration PEIS*.

3.2.2.3 *Site-Wide NEPA Documentation*

In February 1990, the Secretary directed that DOE's NEPA Guidelines be revised to include a new agency policy for developing and updating site-wide NEPA documents (SEN-15-90). To further the purposes of NEPA and to assist with site planning activities, DOE may elect to initiate some site-wide EIS's or EA's (or to supplement existing documents) while the *Reconfiguration PEIS* is underway. Such site-wide NEPA documents will be coordinated to ensure that reconfiguration and EM options are not prejudiced. Site-wide NEPA documents completed or updated after the *Reconfiguration PEIS* will incorporate appropriate aspects of the Reconfiguration ROD. The following sections briefly discuss the site-wide documents currently underway.

Lawrence Livermore and Sandia National Laboratories, Livermore, California

An NOI for the preparation of a site-wide EIS/ Environmental Impact Report (EIR) for LLNL and related SNL facilities at Livermore, California, was published in the *Federal Register* on October 5, 1990 (55 FR 41048). The site-wide EIS/EIR, which is being prepared in accordance with the requirements of NEPA and the *California Environmental Quality Act,* will analyze the impacts of the proposed action of continuing operations with near-term projects (i.e., within 5 to 10 years) at the adjacent sites of LLNL and SNL Livermore in Alameda County, and at LLNL Site 300 in Alameda and San Joaquin Counties. Alternatives to the proposed action that will be considered include No Action, shutdown and decommissioning, and modifications of operations (such as scaling down operations or using alternative technologies and management strategies to reduce or limit impacts of operations).

Possible relocations of some nuclear weapons functions now performed at LLNL and SNL Livermore will not be addressed in the EIS/EIR, but will be considered as part of the *Reconfiguration PEIS*. The draft EIS/EIR is expected to be available early in 1992, and a Final EIS/EIR is expected to be available in late 1992.

Rocky Flats Plant, Golden, Colorado

An NOI for the preparation of a site-wide EIS for RFP was published in the *Federal Register* on March 13, 1991 (56 FR 105480). The site-wide EIS will analyze the proposed action of continuing current operations and implementing near-term (i.e., within 5 to 10 years) projects and environmental restoration activities. The site-wide EIS will also evaluate No Action (i.e., continuing current operations and environmental restoration activities with only those modifications necessary for safe and environmentally sound operation). Alternatives that would affect the long-term operation of RFP are to be considered in the *Reconfiguration* and *EM PEIS's*. The EIS Implementation Plan is expected to be available in 1992.

3.2.3 Waste Management Actions

DOE is currently proceeding with several waste management actions that would provide for the disposal of commercial nuclear reactor fuel, defense high-level radioactive waste, and transuranic waste (TRU) as well as environmental restoration of inactive facilities and sites. The following sections briefly discuss these actions and their relationship to the *Reconfiguration PEIS*.

3.2.3.1 *Waste Isolation Pilot Plant*

Under Section 213(a) of the *Department of Energy National Security and Military Applications of Nuclear Energy Authorization Act of 1980*, as amended, DOE was authorized to provide a research and development facility to demonstrate the safe disposal of radioactive waste produced by national defense activities. DOE issued a Final EIS on the proposed development of the Waste Isolation Pilot Plant (WIPP) in October 1980 (DOE/EIS-0026) and an ROD in January 1981 (48 FR 9162). The ROD called for the phased development of WIPP for the disposal of post-1970 defense-generated TRU waste.

Since the issuance of the Final EIS in 1980, data collected at the WIPP site near Carlsbad, New Mexico, has led to a better understanding of the hydrogeologic characteristics of the areas and their implications for long-term performance. In addition, revisions to the action considered in the 1980 Final EIS included changes in the composition of the TRU waste inventory, consideration of the hazardous chemical constituents in TRU waste, modification and refinement of the system for transporting the waste, and modification of the test phase. Accordingly, DOE initiated the preparation of a Supplemental EIS (SEIS) in February 1989 and issued a Final SEIS (DOE/EIS-0026-S) in February 1990. Based on the Final SEIS, DOE decided, in an ROD of June 1990 (55 FR 25689), to proceed with the continued development of WIPP by proceeding with the Test Phase. The Test Phase (approximately 5 years) will involve placing, in a fully retrievable manner, a limited quantity of TRU waste underground at WIPP to conduct tests. The data collected will reduce uncertainties associated with modeling to determine compliance with Environmental Protection Agency (EPA) disposal standards. If the Test Phase indicates that WIPP would not satisfy EPA disposal standards, a number of options would be considered to facilitate compliance with standards. If such options would still not result in WIPP attaining compliance with disposal standards, WIPP would be decommissioned.

The need for additional NEPA documentation will be evaluated during the Test Phase. Prior to a decision on whether to proceed to the disposal phase, DOE will issue a second SEIS. This second SEIS will analyze the long-term performance of WIPP in light of information generated during the Test Phase. A system-wide assessment of the impacts of transportation and treatment will also be addressed in the second SEIS. Currently, DOE has in storage approximately 57,000 cubic meters of TRU waste, of which the largest portion is stored at INEL. Additional TRU waste will be generated in the cleanup and D&D of DOE nuclear facilities, regardless of whether they operate in the future.

Neither the *Reconfiguration PEIS* nor the *EM PEIS* will revisit DOE's decision to proceed with the Test Phase of WIPP. The *EM PEIS* will evaluate the long-term storage of TRU waste in the event that WIPP is either found unsuitable for disposal or its disposal phase is delayed. The *Reconfiguration PEIS* will address the short-term management of TRU waste generated by the construction or operation of Complex facilities.

3.2.3.2 *Yucca Mountain*

In the *Nuclear Waste Policy Act of 1982* (NWPA), Congress declared that a national problem had been created by the accumulation of spent nuclear fuel from commercial reactors and high-level radioactive waste. The NWPA assigned to DOE the responsibility for managing the disposal of this spent fuel and waste, specified the siting process, and authorized the construction of one geologic repository. Under the *NWPA Amendments Act of 1987*, the process for selecting this repository was streamlined, and the Yucca Mountain site in Nevada was selected for detailed study as the candidate site for the first geologic repository in the United States.

Under the amended NWPA, the Yucca Mountain site was not selected for a repository; rather, Congress designated the site as the only candidate site to be assessed for suitability as a repository. If,

during site characterization, the Yucca Mountain site is determined to be unsuitable for development as a geologic repository, DOE will, among other actions, (1) terminate all site characterization activities, (2) notify Congress and the State of Nevada of such termination, and (3) restore the site to mitigate any significant adverse environmental impacts caused by site characterization studies. If the Yucca Mountain site is found to be suitable for repository development, a recommendation for approval of the site, accompanied by an EIS, will be sent to the President. If the President considers the site qualified, the President will then recommend the site to Congress, which must act on the recommendation only if the State of Nevada disapproves the recommendation within 60 days. If no notice of disapproval is submitted or if a notice of disapproval is overturned by a joint congressional resolution, then, under current law, the site recommended by the President becomes the designated site. When the site designation becomes effective, DOE is to submit a license application to the Nuclear Regulatory Commission (NRC) for authorization to construct a repository at the site. The NRC will review the application and decide whether to authorize the construction of the repository. Filling the repository to capacity is expected to take about 25 years from the start of waste emplacement. The NWPA, as amended, requires the Secretary of Energy to report to the President and the Congress between January 1, 2007, and January 1, 2010, on the need for a second repository.

Pursuant to the amended NWPA, DOE is proceeding with site characterization activities at the Yucca Mountain site. The national geologic repository would be used for DOE defense high-level radioactive wastes. The quantity of DOE defense high-level radioactive wastes requiring deep geologic disposal is relatively small compared to the amount of spent fuel from commercial nuclear reactors, existing commercial high-level radioactive waste, and other radioactive wastes that would be placed in the repository.

DOE is proceeding with the solidification of defense high-level wastes and has completed NEPA reviews to evaluate the environmental consequences of solidification (*Defense Waste Processing Facility EIS* (DOE/EIS-0082), *Waste Form Selection for Savannah River Plant High-Level Waste EA* (DOE/EA-0179), and *Disposal of Hanford Defense High-Level, Transuranic, and Tank Wastes EIS* (DOE/EIS-0113). The decisions reached as a result of these NEPA reviews will not be revisited in the *Reconfiguration PEIS* as the need to proceed with the solidification of defense high-level liquid radioactive wastes is independent of the need to reconfigure the Complex. The *EM PEIS* is expected to evaluate long-term storage of solidified high-level waste until a national repository is available. The *Reconfiguration PEIS* will not evaluate DOE's statutory requirement to proceed with the characterization of the Yucca Mountain site.

3.2.3.3 *Other Environmental Restoration and Waste Management Actions*

DOE is currently proceeding with a number of environmental restoration actions that involve the assessment and cleanup of inactive facilities and sites that are contaminated with various quantities of TRU and low-level radioactive, hazardous, or mixed waste materials. The principal regulatory requirements for remedial actions are derived from the amended *Resource Conservation and Recovery Act* (RCRA) and the amended *Comprehensive Environmental Response, Compensation, and Liability Act* (CERCLA). Additional remedial actions may result from commitments made in NEPA documents and decisions. In conducting remedial actions, DOE's policy is to integrate, wherever practical, the NEPA process into CERCLA requirements.

During the period of preparing the *Reconfiguration PEIS,* several integrated (i.e., NEPA-CERCLA or NEPA-RCRA) assessments may be prepared to address remediation actions at specific facilities and waste sites. The regulatory framework established under CERCLA and RCRA requires that

site-specific cleanup requirements and remedies be selected. The *Reconfiguration PEIS* will include, as part of the environmental baseline, the DOE decisions on integrated, site-specific assessments of remedial actions.

3.3 Time Period Considered in Analysis

If the Secretary decides to proceed with reconfiguration, implementing that decision would proceed in three major phases. The first phase includes preparing the *Reconfiguration PEIS* and ROD to determine whether to proceed with Complex 21 and, if so, its configuration. The second phase would develop detailed designs and meet project-specific NEPA requirements for facilities needed to implement the selected configuration. The third phase would detail the constructing, testing, and certifying of the projects comprising the reconfigured Complex, leading to full operation. Present planning, depending on funding levels, is to complete Complex 21 by the year 2005.

Following the PEIS, DOE will develop an implementation schedule as part of a Reconfiguration Plan. The implementation schedule will be subject to change, including revisitations required by congressional authorizations and appropriations. Although the individual implementation schedule of any Complex 21 activities or projects may overlap (e.g., construction of one project could occur simultaneously with the construction of another, or one project could begin operation well before another), the current uncertainty associated with the schedule of any given activity or project requires that assumptions be made regarding the time periods used in the PEIS analyses.

Given the uncertainties associated with Phase II and Phase III scheduling, the PEIS will assume an environmental baseline period for construction between 1995 and 2005, and an operational period of between 30 and 40 years (to account for variations in probable design life of individual facilities). The undertaking and completing of all Complex 21 construction by 2005 is assumed as it will compress the time period over which construction impacts would occur and bound potential impacts (e.g., emissions from site preparation activities for a given facility would be greater on an annual basis if site preparation activities are assumed to occur all in one year rather than in two years). Although the design-life of Complex 21 facilities has not yet been determined by engineering studies, the assumption of a Complex 21 operational periods of between 30 and 40 years is consistent with the operating periods used in prior DOE NEPA documents for new facilities. Phase II project-level NEPA documents will identify in detail the specific construction and operational periods for each project.

3.4 Content of PEIS

Based on the PEIS scoping process and NEPA requirements, Appendix A of this Implementation Plan presents an annotated outline of the *Draft Reconfiguration PEIS* that briefly describes planned PEIS section contents. The outline is tentative and subject to refinement and revision as preparation of the PEIS progresses. Some of the information relating to specific Complex capabilities, capacity requirements, and technological processes is sensitive defense information which is classified. In preparing the PEIS, DOE will review classified information to analyze environmental impacts and reach a decision on the reconfiguration of the Complex. It is anticipated that the completed PEIS and its associated ROD may include classified information that will not be made available for general public review. The unclassified portion of the *PEIS* and *ROD* will be made available for public review in accordance with 40 CFR 1506 and 10 CFR 1021.

CHAPTER 4

THE SCOPING PROCESS

CHAPTER 4: THE SCOPING PROCESS

Chapter 4 outlines the requirements for conducting scoping as a preliminary step in PEIS development. It then describes the two-phased scoping process, which includes the internal DOE studies on modernizing the Complex and information provided by the public at scoping meetings. Internal DOE scoping took into account the input of about 200 DOE and support contractor personnel working under the direction of the Complex Reconfiguration Committee. After publication of the Complex Reconfiguration Study, an NOI to conduct a PEIS was published, thereby marking the beginning of the public scoping phase. The results of public scoping activities are summarized in this chapter and detailed in Appendix B. Disposition of scoping issues and analytical methodologies are also discussed in this chapter.

4.1 DESCRIPTION OF THE SCOPING PROCESS

The CEQ regulations (40 CFR 1501.7) require "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." This process is termed scoping and usually has two phases. During the first phase, the lead agency conducts internal studies to define the proposed action, identify preliminary alternatives, and develop preliminary issue areas to be addressed in the EIS. The second phase involves participation by the public and other agencies. The objectives of public scoping are to notify interested persons, agencies, and other groups of the proposed action and alternatives; solicit their comments regarding environmental issues, alternatives to the proposed action, and other items of interest; and consider those comments in the preparation of the EIS.

CEQ regulations (40 CFR 1501.7(a)) require the lead agency to:

- Invite the participation of affected Federal, state and local agencies; any affected Indian tribe; and other interested persons
- Determine the scope and significant issues to be analyzed in depth in the EIS
- Identify and eliminate from detailed study the issues which are not significant or have been covered by previous environmental reviews, narrowing the discussion of these issues in the statement to a brief presentation of why they will not have a significant effect on the human environment, or providing a reference for their coverage elsewhere
- Allocate assignments for preparation of the EIS among the lead and cooperating agencies, with the lead agency retaining responsibility for the statement
- Indicate any public environmental assessments and other EIS's which are being or will be prepared that are related to but not part of the scope of the EIS under consideration

- Identify other environmental review and consultation requirements so that other studies may be conducted concurrently and integrated with the EIS

- Indicate the relationship between the timing of environmental analyses and the planning and decision-making schedule

Scoping for the PEIS consisted of both internal DOE scoping and public scoping. This process was used to identify issues to be considered during preparation of the PEIS.

4.1.1 Internal DOE Scoping

Internal DOE scoping began with the Modernization Review Committee, which was later redesignated the Complex Reconfiguration Committee (CRC). The CRC focused on six major areas: stockpile sizing criteria; ES&H; Complex configuration; management structure; capital asset management; and the PEIS. Separate study teams, formed for each major area, produced analyses and recommendations. The PEIS Study Team developed a NEPA strategy for reconfiguration, including investigation of the scope and proposed content of a *Reconfiguration PEIS* and subordinate site- and project-specific EIS's. This effort was coordinated with other DOE projects and activities that involve EIS preparations pertinent to modernization to avoid potential duplications and future conflicts.

Internal DOE scoping efforts have continued through the activities of several planning groups and through the establishment of an A&E contract. The DOE planning efforts include the activities of the NCP and the RCG. The functions of each group are discussed in Section 1.6 of this Implementation Plan. The A&E contract was issued on September 6, 1991, to Fluor Daniel, Inc. for the purpose of developing conceptual designs for various reconfiguration options.

4.1.2 Public Scoping

Upon publication of the completed *Complex Reconfiguration Study*, the product of the CRC, DOE published an NOI to conduct a PEIS. This NOI, announced in the *Federal Register* (56FR 5590) on February 11, 1991, marked the beginning of public scoping.

The public scoping process provides DOE the opportunity to solicit comments from the general public, governmental agencies, and other interested parties to identify significant issues to be addressed in the PEIS. The NOI initiated the public scoping comment period which ended on September 30, 1991. Public scoping meetings were conducted at 15 locations (Figure 4.1) around the country to allow interested parties to present spoken comments and other information. A meeting was held near each of the Complex sites, as well as in Washington, D.C. and Atlanta, GA. All spoken and written comments received throughout the public scoping process were systematically organized and reviewed for consideration during the preparation of the PEIS. The results of the public scoping meetings are discussed in the sections that follow.

4.1.3 Public Comment on Incorporating NPR into the PEIS

On November 1, 1991, the Secretary announced a decision to integrate the NPR EIS into the Department's Programmatic EIS for reconfiguring the nuclear weapons complex. This approach would result in integrating the programmatic analysis regarding tritium supply with the programmatic analysis of the other functional elements of the weapons complex. A *Federal Register* announcement (56FR 60985) was published on November 29, 1991, inviting public comment on the decision's ramifications. The comment period ended January 6, 1992.

DOE received 26 letters and 168 postcards containing a total of 931 comments from 196

citizens, representatives of interested groups, and Federal and state officials during the comment period on incorporation of NPR into the PEIS. Comments covered a range of environmental and policy related issues including the need for additional tritium production, concern for waste management and existing environmental problems, and NPR siting alternatives. Included in the total number of comments are 168 identical postcards, each containing five comments, accounting for 840 of the 931 comment total. Table B.4 of Appendix B provides a detailed summary of comments received through the public comment period.

The Secretary's decision on incorporation of the NPR analysis with the NEPA process for reconfiguration came after the April 1991 publication of the *NPR Draft EIS*. The *NPR Draft EIS* included consideration of comments received during the NPR public scoping process which were documented in the *NPR Implementation Plan*. Following publication of the *NPR Draft EIS*, public hearings were conducted and numerous written and spoken comments were received. Public comments received by DOE are being considered during the preparation of the *Reconfiguration PEIS*.

Issues raised during the November 29, 1991–January 6, 1992 comment period will be considered in a similar manner to issues raised during the scoping period. Most comments addressed issues that were already raised as part of the scoping process. Disposition of such issues is discussed in Section 4.3 of this Implementation Plan. Several comments supported the integration of the NPR and reconfiguration environmental analyses. DOE has considered all comments received during this period in the process of defining the scope of the PEIS.

4.2 Results of the Scoping Process

DOE received a total of 36,984 comments from 16,542 citizens; representatives of interested groups; and Federal, state, and local officials during the PEIS scoping process. Of these, 4,869 comments were received in spoken testimony at public scoping meetings and 32,115 were received in written

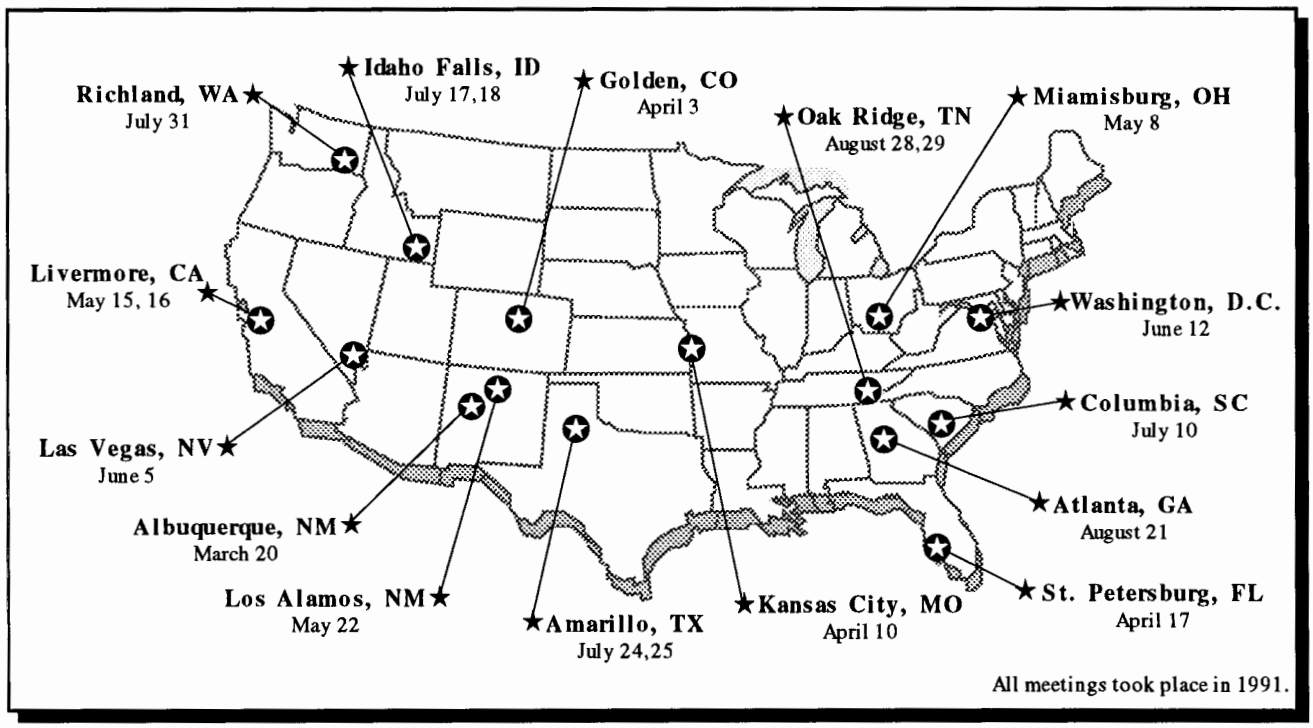


FIGURE 4.1.—*Public Scoping Meeting Locations and Dates.*

comments submitted at the scoping meetings or received by mail. A comment is defined as a single statement or point of discussion addressing a specific topic made by an individual. One letter, for example, could contain several separate comments. Much of the spoken testimony of individuals, written statements, and letters contained multiple comments.

The total number of comments includes 28,838 comments received from 19 postcard, form letter, or petition campaigns which involved a total of 13,401 participants. In tallying the number of comments, the totals have included the product of multiplying the number of comments on a form letter/postcard by the number of submittors of the document. For example, if 100 identical postcards containing 5 comments were received, the comment total would be 500.

Five figures are provided to summarize the results of the public scoping process. Figure 4.2 illustrates the number of speakers that provided information at each scoping meeting and individuals submitting only written information. Figure 4.3 shows the number of comments received at each meeting and through the mail. Figure 4.4 identifies the number of comments received within 21 general issue categories. Finally, Figures 4.5 and 4.6 illustrate the number of comments and commenters, respectively, grouped by category of respondent.

As shown in Figure 4.5, of the 36,984 comments received, more than 94 percent were provided by individual citizens and 4 percent were received from individuals affiliated with or representing more than 50 interested groups and organizations. The remaining comments (2 percent) were submitted by state governors, mayors, local elected officials, and other representatives of state and Federal agencies.

DOE has considered comments from all sources in defining the scope of the PEIS. The comment review was conducted to identify: (1) significant issues to be analyzed in detail in the PEIS; and (2) issues that either are not significant or were determined to be inappropriate for the scope of the PEIS.

Comments were provided on a wide range of environmental and policy related issues. Appendix B provides a detailed summary of comments received through the public scoping process and the subsequent public comment period discussed in Section 4.1.3. Comment summaries in Appendix B are grouped by the same issue categories, and in the same order as presented in Figure 4.4.

4.3 Disposition of Major Issues

DOE invited written comments throughout the public scoping period. In addition, DOE has prepared transcripts of all spoken presentations at the public scoping meetings. All comments received through the scoping process, whether written or spoken, were considered to identify issues of concern and define the scope of the PEIS. Copies of all transcripts, letters, and other materials submitted by individuals and interested organizations are kept on file at DOE Headquarters and in public reading rooms established for this project, as listed in Table 4.1.

Issues initially identified through the internal DOE scoping process were listed in the NOI. Further discussions of the issues initially identified by DOE, as well as those identified through the public scoping process, are presented in the following sections.

4.3.1 Land Resources

DOE received 20 comments discussing the issue of land resources surrounding DOE sites and these comments were further grouped into 10 subcategories. A summary of these comments can be found under Issue Category 1 in Appendix B. In general, the issues under the category of Land Resources concerned land use at existing and proposed DOE facilities and effects on local communities, residents, agriculture and visual resources. Reuse of land and facilities at RFP if DOE relocated its functions was also an issue of concern.

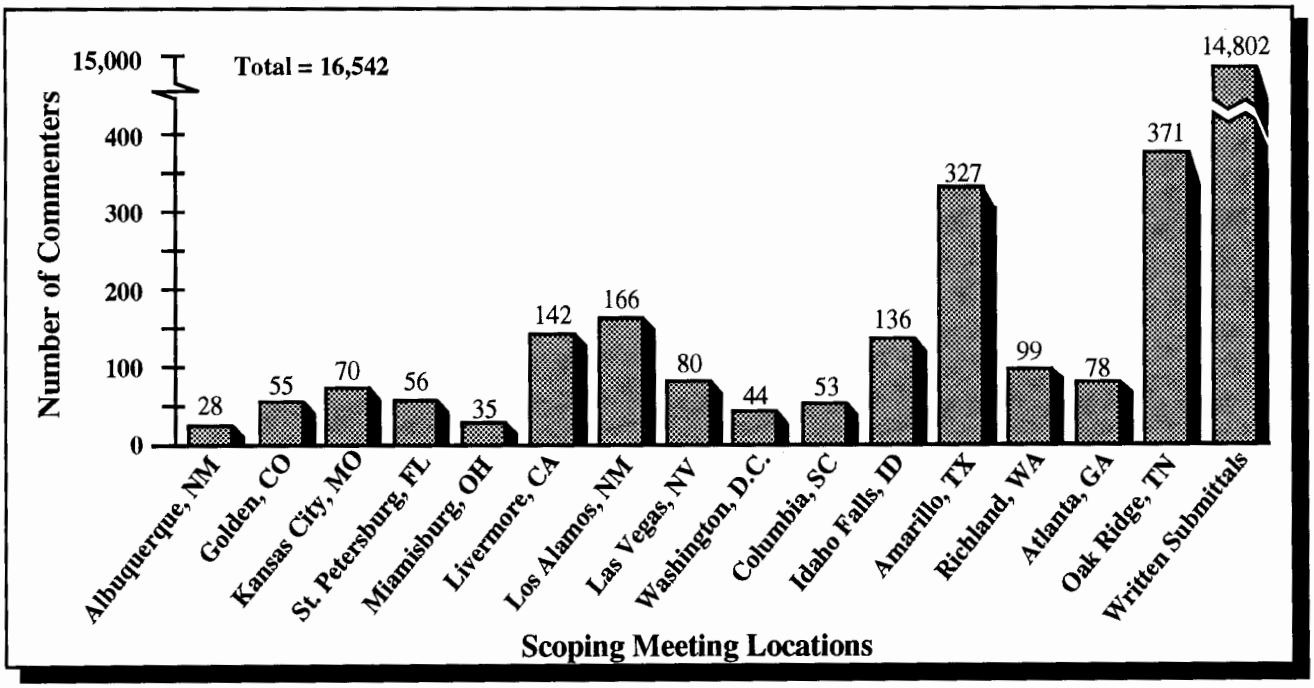


FIGURE 4.2.— ***Number of Speakers at Each Scoping Meeting and Individuals Submitting Only Written Information.***

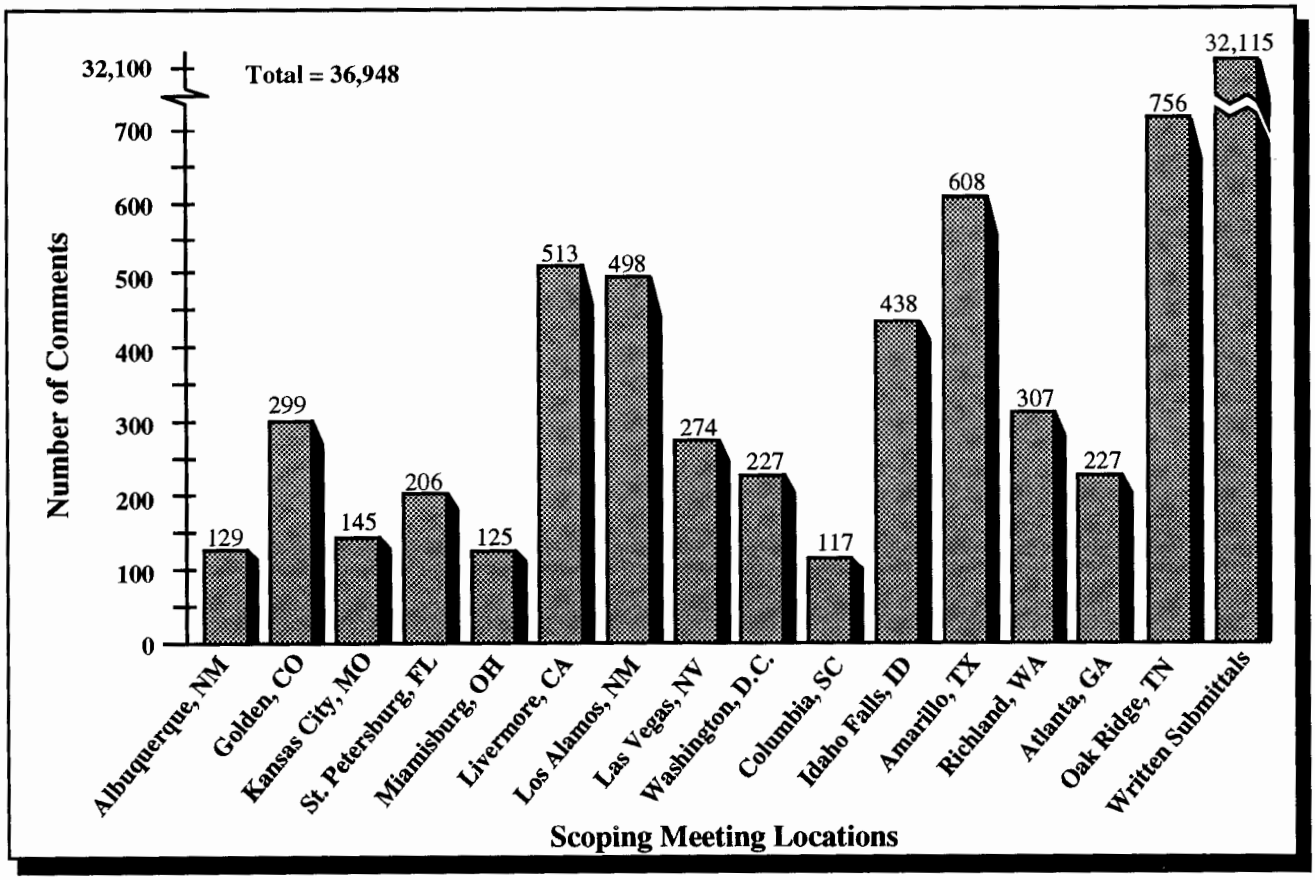


FIGURE 4.3.— ***Number of Comments Received at Each Scoping Meeting and Through Written Submittals.***

The PEIS will consider land use plans and policies, zoning regulations, specially protected lands, and existing land use and recreational patterns as appropriate for all sites. In addition, the visual character of each site will be described. The potential impacts associated with changes to land use, visual resources, and regional recreation as a result of Complex reconfiguration will be discussed.

4.3.1.1 *Land Use*

The analysis of land use impacts will consider direct impacts that could result from the modification of existing facilities or construction of new facilities on or adjacent to each Complex site, and indirect impacts resulting from population growth in the support communities for each site. Land use changes associated with Complex reconfiguration will affect both developed and undeveloped land and could occur in both rural and urban land use settings because of the varying locations of the Complex sites. Changes in land use resulting from modification of existing facilities or construction of new facilities at most, if not all, Complex sites are expected to occur within the existing boundaries of each site. However the use of lands adjacent to or in the vicinity of the Complex sites (i.e., non-DOE land) could be affected by land use changes at each site, including new or expanded safety zones surrounding specific facilities.

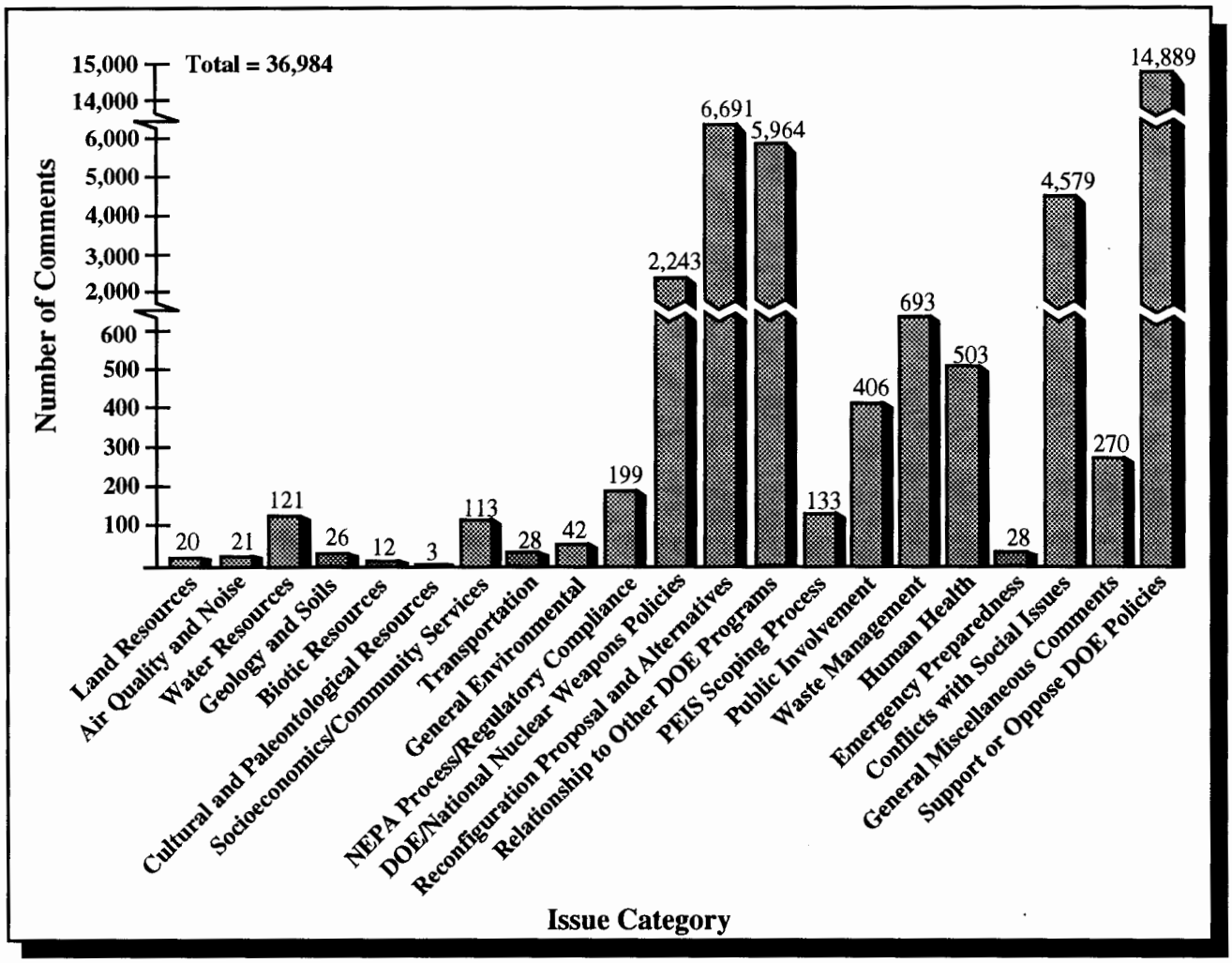


FIGURE 4.4.— ***Number of Comments by Issue Category Defined in the NOI or Through Public Scoping.***

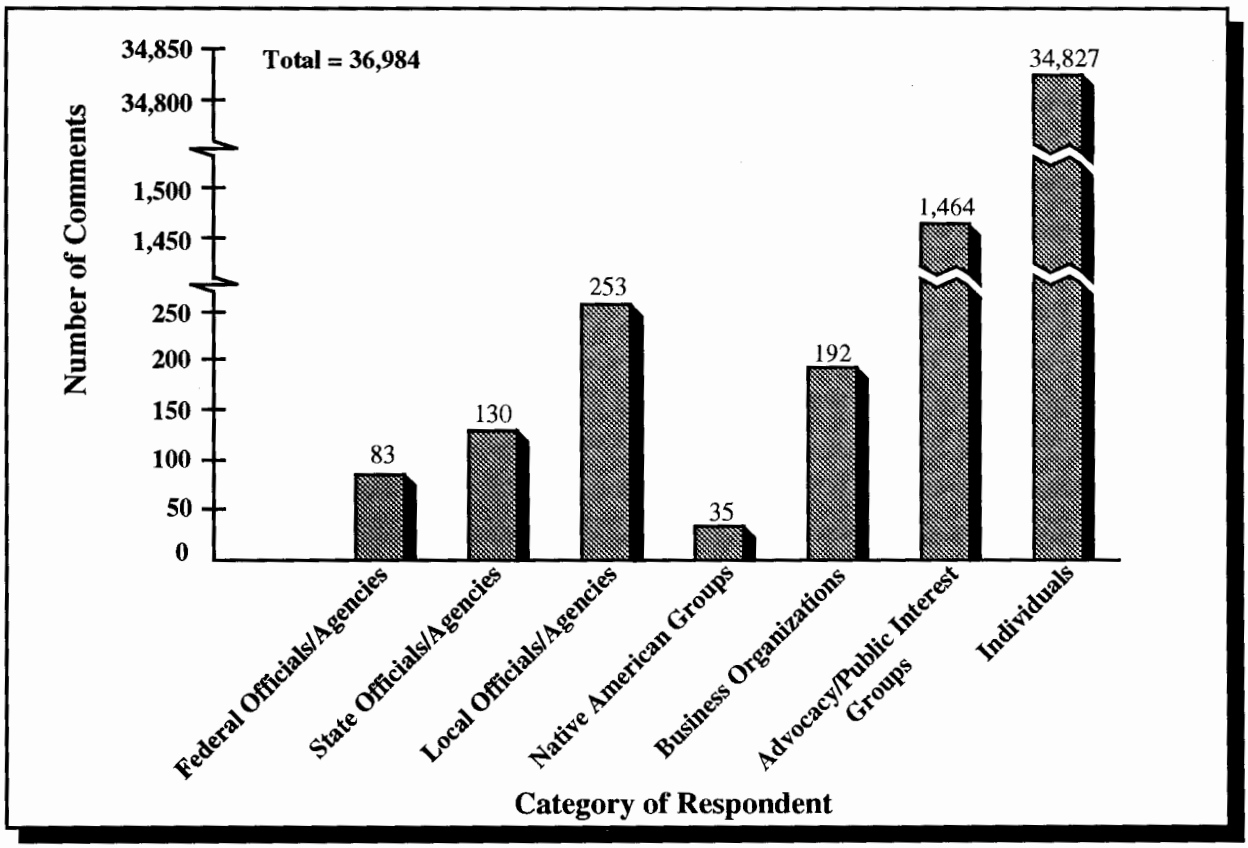


FIGURE 4.5.— ***Number of Comments by Category of Respondent.***

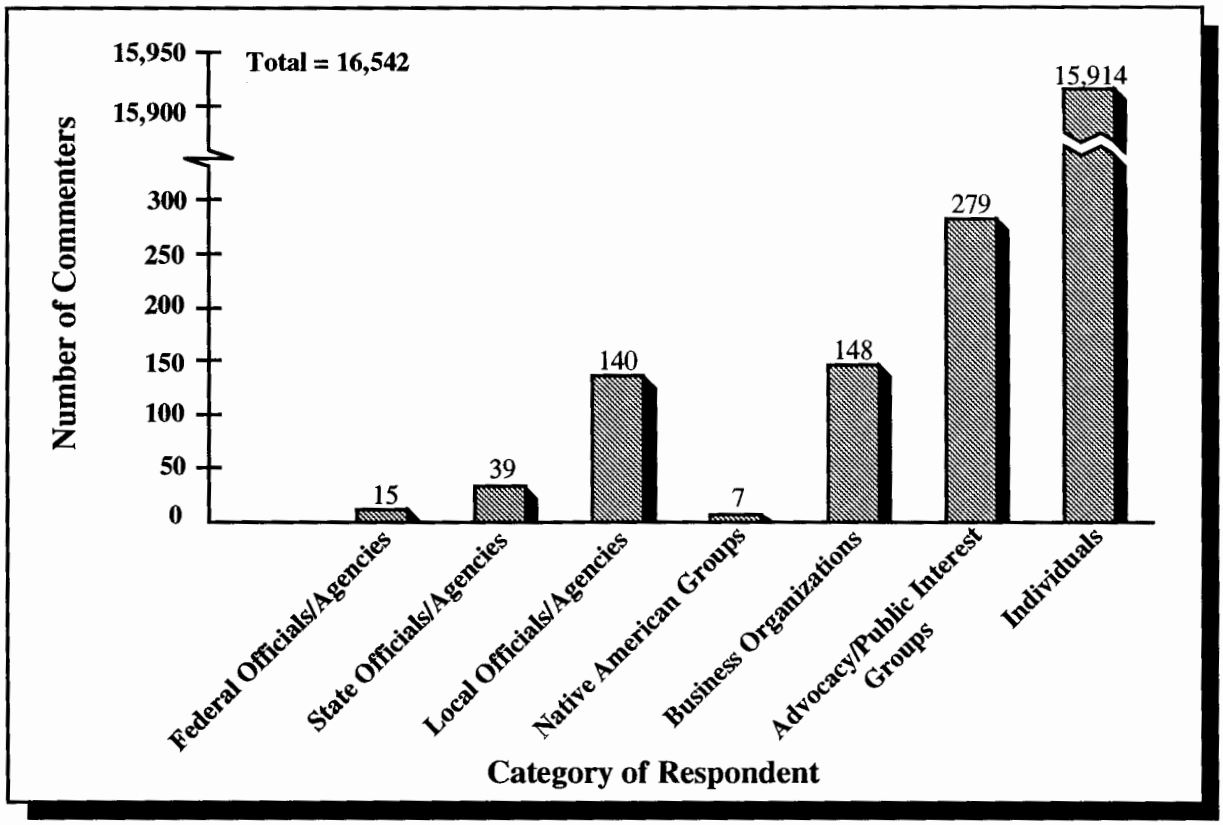


FIGURE 4.6.— ***Number of Commenters by Category of Respondent.***

TABLE 4.1.— *DOE Public Reading Rooms for the Complex Reconfiguration PEIS*

California
U.S. Department of Energy
San Francisco Field Office
1333 Broadway
Oakland, California 94612
(510) 273-4428

Colorado
U.S. Department of Energy
Rocky Flats Public Reading Room
Front Range Community College Library
3645 West 112th Avenue
Westminster, Colorado 80030
(303) 469-4435

Florida
U.S. Department of Energy
Public Reading Room
Largo Public Library
351 East Bay Drive
Largo, Florida 34640
(813) 587-6715

Idaho
U.S. Department of Energy
Idaho Field Office
Public Reading Room
1776 Science Center Drive
P.O. Box 1625
Idaho Falls, Idaho 83402
(208) 526-9162

Illinois
U.S. Department of Energy
Chicago Field Office
9800 South Cass Avenue
Argonne, Illinois 60439
(708) 972-2010

Missouri
U.S. Department of Energy
Public Reading Room
Red Bridge Branch, Mid-Continent
Public Library
11140 Locust Street
Kansas City, Missouri 64137
(816) 942-1780

New Mexico
U.S. Department of Energy
Albuquerque Field Office
Pennsylvania and H Streets
P.O. Box 5400
Kirtland Air Force Base, New Mexico 87115
(505) 845-5163

Nevada
U.S. Department of Energy
Nevada Field Office
2753 South Highland Drive
Las Vegas, Nevada 89193
(702) 295-1274

Ohio
U.S. Department of Energy
Miamisburg Library
DOE Public Reading Room
35 South Fifth Street
Miamisburg, Ohio 45342
(513) 866-1071

South Carolina
U.S. Department of Energy Reading Room
University of South Carolina
Aiken Campus
171 University Parkway
Aiken, South Carolina 29801
(803) 641-3320

Tennessee
U.S. Department of Energy
Oak Ridge Field Office
Freedom of Information Officer
200 Administration Road, Room G-209
P.O. Box 2001
Oak Ridge, Tennessee 37831
(615) 576-5765

Texas
U.S. Department of Energy
Lynn Library/Learning Center
Amarillo College
2201 South Washington Street
Amarillo, Texas 79109
(806) 371-5400

Washington
U.S. Department of Energy
Richland Field Office
825 Jadwin Avenue, Room 157
P.O. Box 1970, Mail Stop A1-65
Richland, Washington 99352
(509) 376-8583

District of Columbia
U.S. Department of Energy
Freedom of Information Reading Room
Forrestal Building, Room 1E-90
1000 Independence Avenue, SW
Washington, DC 20585
(202) 586-6020

The degree to which reconfiguration alternatives affect future use or development of land at each site will be considered. Significance of land use impacts will be based on the extent and type of land that will be affected by reconfiguration-related actions. The land use impact analysis will also consider potential direct and indirect impacts resulting from the conversion of, or the incompatibility of land use changes, with special status lands, such as prime and unique farmlands, and other protected lands, such as federally- and state-controlled lands (e.g., public land administered by the Bureau of Land Management (BLM) or other government agencies).

4.3.1.2 *Visual Resources*

Visual resources are defined as natural and human created features that give a particular landscape its visually aesthetic qualities. Visual resource assessments will be conducted to identify and evaluate the impacts on the aesthetics of the landscape due to the construction and operation of Complex 21 facilities. Visual impacts will be assessed based on whether changes in existing facilities or construction of new facilities would appear uncharacteristic in each site's visual setting and, if so, how noticeable the changes will be.

The visual resource analysis, based on the Bureau of Land Management's *Visual Contrast Rating System,* will be conducted to (1) identify key viewing positions, such as public travel routes, nearby residential/commercial areas, and public uses such as parks, recreation areas, and scenic areas; (2) assess the degree of visibility of new or modified facilities from these key viewing positions; and (3) assess the compatibility of such facilities with the existing physical setting. The objective of this assessment will be to establish whether new or modified Complex facilities will be compatible with the existing physical setting and to identify landscape features that determine how noticeable such facilities will be. The analysis will provide a comparison of the characteristics of the existing landscape with those of proposed facilities and a determination of the resulting level of contrast. Complex facility characteristics that will be examined may include buildings, stacks, access roads, parking areas, facility and perimeter lighting, and steam and emission plumes. Significant impacts will be determined based on the sensitivity of the affected environment to changes in its visual character. Sensitivity will be assessed based on the potential for public concern regarding adverse effects on specific views within the affected environment.

4.3.1.3 *Regional Recreation*

The regional recreation analysis will address the ability of regional recreation areas to absorb increased use resulting from changes in population associated with the reconfiguration alternatives at each of the Complex sites. Existing and projected baseline conditions will be described based on an evaluation of available recreation opportunities in each region, current visitor-use levels at key recreation areas, the potential increase of participation in outdoor recreation activities resulting from baseline population growth, and the ability of identified recreation areas to absorb this increased use. Recreation areas will be identified using various literature sources, maps, and agency contacts. Information pertaining to available recreation opportunities and facilities and visitor-use data will be obtained for each recreation area from appropriate Federal, state, and regional recreation agencies.

The determination of significant impacts will be based on the likelihood that increased use at specific recreation areas would result in a frequent, noticeable decline in the perceived quality of the recreational experience. Examples of impacts include overcrowding, activity conflicts, traffic congestion, loss of serenity, law enforcement problems, and public health and safety problems.

4.3.2 Air Quality and Noise

Twenty-one commenters raised air quality and noise issues which have been further grouped into 11 subcategories. These comments are summarized in Appendix B under Issue Category 2. Generally, the issues raised under the category of Air Quality and Noise concerned the need to monitor and control radiological and non-radiological airborne emissions from existing and proposed DOE facilities, and to consider the effects of these emissions on air quality. Questions were also raised about Complex site suitability, taking into consideration meteorological conditions at certain sites.

Potential effects on the environment associated with air pollutant emissions and noise from normal operations will be evaluated. The assessment of air quality and noise impacts will include identification of applicable criteria for assessing impacts; development of source inventories; estimation of air pollutant concentrations and noise levels; and assessment of impacts based on the estimated concentrations and noise levels, data on existing environment, and assessment criteria. Human health effects will be discussed in a separate section of the PEIS. This analysis will include consideration of airborne releases of radioactive particles.

4.3.2.1 *Air Quality*

Analyses will be performed to assess the effects of the alternatives on air pollutant concentrations and the subsequent impact of air quality on human health and welfare. The air pollutant concentrations resulting from existing facilities at each site will be assumed to be represented by available ambient air quality monitoring data. The baseline concentrations of air pollutants will be estimated by combining emissions from existing facilities with planned and anticipated changes in facility emissions during the baseline period.

Air emission inventories will be used to assess the impacts of the alternatives. Employment requirements for each alternative will be used as the basis for estimating traffic emissions.

If necessary, concentrations of air pollutants for the baseline period and for the various alternatives will be estimated using EPA-approved dispersion models. These estimates will be made for selected alternatives chosen to bound the potential impact of the alternatives for each site. The analyses will incorporate appropriate meteorological, climatological, and topographical data for the site.

Assessment criteria for pollutants will be identified. EPA has developed primary and secondary ambient air quality standards. In addition, many states have their own standards. The more stringent of the EPA or state standards will serve as assessment criteria for these pollutants. In regard to toxic air pollutants for which other standards or guidelines have been developed or are proposed, the applicable standard or guideline will serve as the assessment criteria.

Predicted pollutant concentrations will be compared to the assessment criteria identified. The air quality impacts will be considered significant if the ambient standard or guideline is exceeded. Impacts will also be considered significant if the estimated contribution to air pollutant concentrations exceeds the Prevention of Significant Deterioration (PSD) increments.

4.3.2.2 *Noise*

Noise is defined as unwanted sound, generated from a wide range of sources, that interferes or interacts with the human or natural environment. Unwanted sound is defined as that which disrupts normal activities or diminishes the quality of the environment. The PEIS will address two primary sources of noise: stationary sources associated with specific land uses or sites (such as machinery), and transient sources (e.g., automobiles and trucks).

The potential for health and welfare effects on workers and the general public from noise exposure,

and the mitigation of these effects, will be discussed. Noise-producing sources will be identified for each alternative. Sound-power levels for these sources will be developed based on data and formulas of the Edison Electric Institute's Environmental Noise Guide, equipment manufacturer's testing data and engineering information, including the type, number, and design capacity. Traffic volumes for each site and each new functional component will be compiled along with information on roadway conditions and speeds for major site access routes. The Federal Highway Administration's (FHWA) noise model will be used in determining noise levels associated with these traffic levels. EPA has identified noise levels requisite to protect public health and welfare with an adequate margin of safety. These levels will be used to evaluate the significance of increased/decreased noise levels due to Complex activities. The Composite Noise Rating model will be used to assess the potential for annoyance due to Complex noise. In addition, if there are any local community noise level regulations or guidelines applicable to the area near a site, these will also be used as assessment criteria. The noise impact will be considered significant if the EPA guideline or a local noise level regulation is exceeded as a result of the contribution from Complex activities.

4.3.3 Water Resources

DOE received 121 comments concerning water resources, which were further grouped into 24 subcategories. A complete listing of all water resources issues is provided under Issue Category 3 in Appendix B. In general, commenters were concerned about the possibility and extent of ground and surface water contamination, and sediment contamination of swamps in and around various DOE facilities. Impacts from withdrawal of surface waters for future production activities was also a concern. Several commenters raised issues about the disposal of radioactive wastes near lakes, rivers, and aquifers where DOE facilities exist. Drinking water contamination was a topic of concern, as were effects of increased water consumption due to construction and operation of Complex 21. DOE was also urged to employ better technology in understanding the hydrogeology and extent of contamination around DOE sites.

Potential impacts to both surface water and ground water will be assessed. The PEIS will describe the quality and quantity of surface water and ground water resources from available data. Current uses of these resources will be described, including capacity of local water supplies. Potential effects on surface water and ground water quality as well as on water capacity and storage will be evaluated.

4.3.3.1 *Surface Water*

The PEIS will assess impacts to surface water quality, floodplains, and surface water usage by considering the effects of withdrawals from and discharges to surface waters. The impact assessment will describe the project-related change in flow of rivers and streams using standard water budget calculations, including the effect on the annual average flow and the 7-day, 10-year low flow. Water budget calculations and comparisons with natural water level fluctuations will also be used to assess impacts that changes in discharges and withdrawals may have on existing uses of surface waters. Impacts on the hydrologic characteristics of affected watercourses from the construction of any surface water intake and discharge structures will also be addressed. Consumptive water uses and the resulting impact on the surface water features will be quantified by comparing project requirements to existing river flows or reservoir capacities. The United States Geological Survey (USGS) WATSTORE and EPA STORET data bases will be important sources of surface water flow and water quality information.

The water quality impacts associated with pollutant discharges to surface waters from the alternative actions, coupled with the impacts of any existing discharges, will be estimated. Potential water quality impacts resulting from soil erosion during the

construction phase will also be assessed. Federal and state permit requirements for surface water discharges will be examined. Water quality will be compared against Federal and state surface water quality standards, effluent limitations, thermal limits, and safe drinking water standards to assess the significance of project impacts.

4.3.3.2 *Ground Water*

The analysis of ground water resources will consider effects on aquifers, ground water usage, and ground water quality within the regions-of-influence for ground water resources. Ground water resources are defined as the aquifers underlying the site and their extensions down the hydraulic gradients to, and including, discharge points and/or the first major users. As part of the baseline discussion, a description of the potentially affected ground water basins will be presented. The local aquifers will be described in terms of the extent, thicknesses, character of rock formations, and quality of the ground water. Recharge areas will be noted. Total baseline water use within the regions-of-influence will be compiled using the best available data, which may include such sources as county-level statistical reports available from the USGS.

Current facility ground water usage, as well as usage by others in the area, will be described and projections of future usage will be made based on changing patterns of usage and anticipated growth patterns. Local water use per capita will be estimated in coordination with socioeconomic analyses. Cases in which projected ground water use might exceed locally developed sources of ground water supply will be identified. Existing water rights for the major water users, as well as contractual agreements for water supply to the sites from support communities, will be summarized.

Estimates of drawdowns in the affected aquifers, both onsite and offsite, as well as a prediction of impacts on existing ground water users, will be made. Short- and long-term impacts associated with construction withdrawals and dewatering will be estimated if available data indicate that serious drawdown problems may occur. The USGS MODFLOW or a similar computer model may be used to assess ground water impacts. Both Complex and non-Complex facilities will be considered in determining cumulative impacts on specific aquifers of concern and on the hydrogeologic system in general.

Ground water quality impacts associated with pollutant discharges to ground water, including radionuclides, will be described. The results of the ground water quality projections will be compared to Federal and state ground water quality standards, effluent limitations, and safe drinking water standards in order to assess the acceptability of each alternative. Additionally, the PEIS will identify Federal and state permitting requirements for ground water withdrawal and discharge. Impacts of ground water withdrawals on existing contaminant plumes due to construction and facility operation will be assessed to determine the potential for changes in their rates of migration and the effects of any changes in the plumes on ground water users. Significance of impacts will be assessed by the degree to which ground water quality, drawdown of ground water levels, and ground water availability to other users may be affected by the project.

4.3.4 Geology and Soils

DOE received 26 comments concerning geology and soils, which were grouped into 8 subcategories. A complete listing of all the geology and soils comments may be found under Issue Category 4 in Appendix B. Comments under this category predominantly focused on the proximity of DOE facilities to geologic faults and areas known for volcanic activity. Concern was also raised regarding the geologic suitability of various DOE facilities due to sink holes, geologic substructures, high water tables, salt beds, and terrain. The PEIS will assess impacts to both geology and soils, and will describe geologic factors that could affect the project.

4.3.4.1 *Geology*

Geology and the construction and operation of Complex facilities are related in two ways. First, there may be impacts upon the local geology of the site areas due to construction and operation activities. Second, there may be an impact upon a site as a result of geological conditions or events. Impacts to the geological environment may include destruction of or damage to unique geological features, subsidence caused by ground water withdrawal, landslides or shifting caused by loading or removal of supporting rock or soil and removal of or covering of mineral resources such as lime or aggregate. The descriptions of the individual settings will emphasize, as appropriate, the aspects of the local geology that could affect project alternatives including geomorphology, stratigraphy, structural attitude of rocks, faults and seismicity, general foundation and boring conditions, and rock and mineral resources.

Areas of potentially unstable slopes and impacts to the stability of slopes by removal or addition of large volumes of earth in construction will be characterized. Shrinking or swelling of ground as a result of landscaping, irrigation or construction dewatering will be addressed. Mineral resources that may be affected, including sand and gravel, will be identified, along with an estimate of their volumes, accessibility, and value. The degree to which any of the above factors will be affected by the project will be an indication of the significance of geologic impacts.

4.3.4.2 *Soils*

Two categories of potential impacts to soils can be identified: (1) those caused by contamination of soils by various program-related activities and (2) those resulting from erosion of soils either during the construction phase or operational phase.

The impact of intentional or unintentional release of radioactive or nonradioactive contaminants to soils will be assessed. Soil contamination impacts will be evaluated by investigating practices as well as allowable concentrations of regulated releases set by DOE. Federal and state maximum contamination limits for soils will be used to assess the significance of impacts.

In addition to concerns regarding soil contamination, soil erosion rates associated with construction will be calculated using two empirical formulas that assess wind (Wind Erosion Equation) and sheet and rill erosion (Universal Soil Loss Equation). The significance of soil erosion impacts will be determined by comparing the sum of the erosion calculations for conditions during construction to the maximum tolerable soil loss of a soil with a similar texture. The maximum tolerable soil loss is a local value that will be obtained from the Soil Conservation Service.

4.3.5 Biotic Resources

DOE received 12 comments in this issue category, which have been grouped into 6 subcategories. All the biotic resources issues are summarized under Issue Category 5 in Appendix B. In general, commenters were concerned with the impacts of existing and proposed DOE facilities and operations on local and regional wildlife species.

The PEIS will address potential impacts to biotic resources within the following categories: terrestrial resources, wetlands, aquatic resources, and threatened and endangered species. In general, the significance of potential impacts will be based on the degree to which various habitats or species could be affected by the project. Where appropriate, impacts will be evaluated with respect to Federal and state protection regulations and standards.

4.3.5.1 *Terrestrial Resources*

Potential impacts to terrestrial resources include loss and disturbance of wildlife and wildlife habitats as

well as exposure of flora and fauna to air and water emissions, including radioactive materials. Two important considerations in assessing the impact of habitat loss will be the presence and regional importance of affected habitats, and size of habitat area to be temporarily disturbed by construction activities and permanently disturbed during the operational phase. The loss of important or sensitive habitats is more important than the loss of a regionally abundant type. The PEIS will also evaluate disturbance, displacement, or loss of wildlife in accordance with wildlife protection laws including the *Fish and Wildlife Coordination Act, Migratory Bird Treaty Act, Bald and Golden Eagle Protection Act,* and appropriate state and local laws.

Exposure to air emissions can be detrimental to flora and fauna. Emissions of concern could include sulfur dioxide, particulates and radioactive materials. Expected deposition or dose levels will be compared to threshold levels for sensitive plants and animals.

4.3.5.2 *Wetlands*

Most impacts on wetlands are related to displacement of wetlands by filling, draining, or clearing activities. Other impacts could potentially occur from construction activities conducted outside of wetland areas. Operational impacts to wetlands may occur from liquid emissions, from surface or ground water withdrawals, or the creation of new wetlands.

Wetlands on each site will be identified using published information such as Federal and state wetland reports, National Wetland Inventory maps, aerial photographs, and topographic maps. Vegetation, soils, and hydrologic data will be collected as available. Where possible, wetlands will be classified according to the Cowardin system. Information concerning state wetland regulations and policies will be obtained. Permit application requirements and policies will also be obtained from appropriate state agencies. Changes in the size, location, character, and value of wetlands and secondary effects from air emissions and surface and ground water withdrawals will be evaluated.

4.3.5.3 *Aquatic Resources*

Impacts on aquatic resources during construction and operation will be evaluated to determine compliance with Federal and state regulatory requirements such as those imposed by National Pollutant Discharge Elimination System (NPDES) permits and the *Fish and Wildlife Coordination Act.* In addition, it is possible that reconfiguration might lead to the creation of aquatic habitats if either cooling or evaporation ponds are used.

Reconfiguration may require the alteration of or emplacement of new water intake structures. Such structures may result in potential losses of aquatic organisms through impingement or entrainment. Impact analysis will include a comparison of the water body involved, water requirements, aquatic species present, and intake design to estimate the degree to which impingement and entrainment could affect the viability of important aquatic species.

While contaminant releases will be limited by various Federal and state regulations, there may still be impacts on aquatic plants and animals. Potential impacts will depend on the nature of the water body and the aquatic life present. Impact analysis will involve determining the level of exposure of important organisms to the contaminants of concern, and whether that level meets limits such as EPA Aquatic Life Criteria or, in the case of radioactive substances, those established in DOE orders or state regulations.

4.3.5.4 *Threatened and Endangered Species*

Impacts to threatened and endangered species of wildlife and plants, including critical habitat, state-listed species, and species proposed for listing, will be determined. The U.S. Fish and Wildlife Service

(FWS), National Marine Fisheries Service (NMFS), and appropriate state agencies will be consulted to obtain a list of species, areas of occurrence, and critical habitats that could be impacted. This list, along with site environmental and engineering data, will be used to evaluate whether programmatic alternatives could impact any plant or animal (or its habitat). If needed, DOE will prepare and submit a biological assessment to the FWS, the NMFS, and/ or the appropriate state agency to assess the impact of an alternative.

4.3.6 Cultural and Paleontological Resources

Three public comments have been received in 2 subcategories concerning cultural and paleontological resources. Commenters were concerned with the impacts associated with the construction of DOE facilities on cultural and paleontological resources at various sites. A summary of these comments can be found in Appendix B under Issue Category 6.

The PEIS will include an evaluation of the impacts of Complex reconfiguration on prehistoric, historic, Native American, and paleontological resources. The effects considered will include those resulting directly from land disturbance during construction, visual intrusion to the settings or environmental context of historic structures, visual and audio intrusions on Native American sacred sites, reduced access to Native American traditional use areas, and unauthorized artifact collecting and vandalism.

4.3.6.1 *Prehistoric Resources*

Prehistoric resources are physical properties resulting from human activities that predate written records. They are generally identified as either isolated artifacts or sites. Sites may contain concentrations of artifacts (e.g., stone tools and ceramic shards), features (e.g., campfires and houses), and plant and animal remains. Depending on their age, complexity, integrity, and relationship to one another, sites may be important for and capable of yielding information about past populations and adaptive strategies. The baseline section for prehistoric resources will include a brief overview; the number and types of prehistoric sites in the project areas, if known; and their status on both the National Register of Historic Places (NRHP) and appropriate state registers. The overview will consist of a summary of existing information about prehistoric resources in the region and a discussion of types of sites that likely occur.

Impact assessments for prehistoric resources will focus mainly on those properties likely to be eligible for the NRHP. In addition to identifying the numbers and kinds of resources to be affected, the following issues will also be considered: the relative importance of a resource type in the regional context, the depositional integrity of a given resource, and the relative degree of protection afforded similar resources in the region. Impacts will be considered significant if the proposed project could substantially add to existing disturbance of resources in the project areas or if the project could adversely affect NRHP-eligible resources or cause loss or destruction of important prehistoric resources.

4.3.6.2 *Historic Resources*

Historic resources consist of physical properties that postdate the existence of written records. Historic resources include architectural structures (e.g., buildings, dams, and bridges) and archaeological features such as foundations, trails, and trash dumps. Ordinarily, sites less than 50 years old are not considered historic for analytical purposes, but exceptions can be made for younger properties if they are of exceptional importance (36 CFR 60.4). The baseline section for historic resources will include a brief overview, the number and types of historic sites in the project areas, if known, and their status on both the NRHP and appropriate state registers. The overview will consist of a summary of existing information about historic resources in

the region and a discussion of the types of sites that likely exist.

Impact assessments for historic resources will focus mainly on those properties likely to be eligible for the NRHP. In addition to identifying the numbers and kinds of resources to be affected, the following issues will also be considered: evaluation of the relative importance of a resource type in the regional context, the depositional or architectural integrity of a given resource, and the relative degree of protection afforded similar resources in areas in the region. Impacts will be considered significant if the proposed project could substantially add to existing disturbance of resources in the project areas or if the project could adversely affect NRHP-eligible resources or cause loss or destruction of important historic resources.

4.3.6.3 *Native American Resources*

Native American resources are sites, areas, and materials important to Native Americans for religious or heritage reasons. Of primary concern in the PEIS are concepts of sacred space that create the potential for land use conflicts. Native American concerns will be identified through direct consultation with tribal representatives and field visits with tribal religious specialists. Contacts will be identified by reference to the ethnographic literature, by state and national pantribal organizations, and by agency and academic professionals in anthropology.

The individual resource type, the proximity of impact areas to the resources, and the likely duration of impacts will be considered in the analysis of Native American resources. Specific concerns include the relative importance of the resource in the Native American physical universe and/or belief system, the distance at which activities in the vicinity of a sacred area constitute a disturbance, the extent to which affected resources may be restored, and the extent to which alternative sources for raw materials are available and/or suitable. Impacts to Native American resources will be considered significant if the project has the potential to affect sites important for their position in the Native American physical universe or belief system, or the possibility of reduced access to traditional use areas or sacred sites.

4.3.6.4 *Paleontological Resources*

Paleontological resources are the physical remains, impressions, or traces of plants or animals from a former geological age. They include casts, molds, and trace fossils such as burrows or tracks. Fossil localities typically include surface outcrops, areas where subsurface deposits are exposed by ground disturbance, and special environments favoring preservation, such as caves, peat bogs, and tar pits. Paleontological resources are important mainly for their potential to provide scientific information on paleoenvironments and the evolutionary history of plants and animals. The baseline section for paleontological resources will include a discussion of known paleontological localities and/or geological formations in the project areas that may be fossil bearing.

Impact assessments for paleontological resources will be based on the numbers and kinds of resources that could be affected as well as the quality of fossil preservation in a given deposit and the proportion of the total resource to be affected. Impacts will be considered significant if they affect deposits with high research potential. Such deposits would include poorly known fossil forms; well-preserved terrestrial vertebrates; unusual depositional contexts; assemblages containing a variety of fossil forms, particularly associations of vertebrates, invertebrates, and plants; or those recovered from poorly studied regions or in unusual concentrations.

4.3.7 Socioeconomics and Community Services

There were 113 comments on socioeconomic issues, which were further grouped into 31 subcategories.

Summaries of all comments received in this issue area can be found in Appendix B, under Issue Category 7. Most of the socioeconomic comments concerned the loss of direct payroll and secondary vendor contracts that would result from facility closure. However, issues were also raised about the effects on areas receiving increased workloads and related growth-surges. These issues included the availability of properly trained technicians for plant operations and toxic cleanup, employee retraining, and relocation opportunities. Commenters stated that an analysis of local community infrastructure costs and community services availability should be made for sites receiving new functions.

Concern was also expressed for facilities having other activities not associated with the Complex. Several commenters suggested that the PEIS should consider what functions or activities would continue if nuclear weapons-related activities ceased, and the resulting changes in employment and potential for job conversion at these facilities. Disclosure of the economic impacts of nuclear weapons production and alternatives to production was requested. Commenters raised questions about the economic gains from expansion of Complex facilities at various sites in terms of gains in employment versus losses in real estate development, tourism, and reduction of other business opportunities. A few commenters expressed the need for Federal tax assistance to defer local government costs. Several individuals were concerned about the economic impact caused by the possible environmental contamination of agricultural areas around DOE facilities. In addition, concern was expressed about the economic consequences to the host communities when Complex 21 draws to a close or if Congress were to cut off funding during the construction phase.

The PEIS will describe and assess impacts on local and regional socioeconomic conditions and factors including population, employment, economy, housing, and community infrastructure and services. Since missions currently being conducted at one DOE site may be relocated to another DOE site, the PEIS will assess the socioeconomic impacts of both the gains and losses of missions at each site. Geographically, the potential for socioeconomic effects will be greatest in those local jurisdictions immediately adjacent to each site and those that are the residential locations of the majority of Complex site employees. A region-of-influence, comprising those local jurisdictions likely to experience the greatest socioeconomic impacts, will be defined for each of the Complex sites. The significance of impacts will be based on the degree to which changes in employment and population affect the local economy, housing market, and community infrastructure and services. The following sections discuss each of the socioeconomic conditions and factors to be considered in the PEIS.

4.3.7.1 *Employment*

Reconfiguration of the Complex could affect employment at Complex sites. Changes in site employment would, in turn, directly affect local and regional populations, economies, housing, and community services and infrastructures. Current employment at each of the Complex sites will be described as well as projected employment associated with other planned DOE initiatives. Employment trends and the relationship of site employment to these trends will be examined for the socioeconomic region-of-influence. Emphasis will be placed on evaluating total direct and indirect employment changes and impacts associated with potential mission relocations.

4.3.7.2 *Population*

The PEIS will describe and assess the demographic changes in the regions surrounding each Complex site. Demographic characteristics to be considered include total population, population density, and other important attributes of each local jurisdiction such as age groups and migration rates. Demographic characteristics will be presented on an area-wide basis (i.e., within a 50-mile radius) to support the assessment of effluent and emission

effects and on a local basis (i.e., socioeconomic region-of-influence) to support the assessment of socioeconomic impacts. Trends will be identified and used to project demographic changes over the environmental baseline period. Cumulative population impacts will include the population impacts of other DOE actions under consideration, including planned environmental restoration activities.

4.3.7.3 *Economy*

The PEIS will characterize the regional and local economies surrounding each of the Complex sites. Emphasis will be placed on describing the relative contribution and importance of each site's employment payroll and purchases to the economy of the socioeconomic region-of-influence. Trends within each socioeconomic region-of-influence will also be identified to predict major changes in economic sectors. Changes to local economic conditions will be evaluated based on each site's relative contribution and changes to employment. Emphasis will be placed on the economic effects of mission changes associated with reconfiguration alternatives.

4.3.7.4 *Housing*

Changes in employment at each of the Complex sites would affect the demand and supply of housing units, including the need for temporary housing (e.g., rental units) to support in-migrating construction workers. The PEIS will characterize and evaluate trends in the housing stock within each site's socioeconomic region-of-influence. In-migrating and out-migrating site employees associated with each of the PEIS alternatives will then be used to evaluate housing impacts.

4.3.7.5 *Community Infrastructure and Services*

Community infrastructure includes utilities, water, and sewage facilities. Community services include education, health care, and police and fire protection. Community infrastructure and services are provided in part by local property taxes, sales taxes, income taxes, and service levies. Each Complex site is located on land owned by the Federal Government, exempting these lands from state and local taxation. All employee income, property, and purchases, however, are subject to applicable state and local taxation requirements.

Changes in employment at Complex sites could affect the need and ability to provide community infrastructures and services. The PEIS will identify trends in community infrastructures and services in the socioeconomic regions-of-influence around Complex sites. Impacts to community infrastructures and services will be evaluated based on changes in Complex site employment.

4.3.8 Transportation

Twenty-eight transportation comments in 15 subcategories were received. All of these comments are summarized under Issue Category 8 in Appendix B. Typical concerns included the effects that expansion of certain facilities would have on local and regional airports, roads, highways, and other transportation systems, and the possibility of increased accidents related to nuclear weapons transport.

The PEIS will assess the impacts of the alternatives on the local and regional public transportation systems, including regional roads and highways, and, if applicable, airports, railways, and waterways. The following sections discuss the transportation conditions and factors to be considered in the PEIS.

4.3.8.1 *Local Transportation*

The PEIS will characterize the transportation system in the region surrounding each Complex site, including roads and highways, rail systems, and airports. Major planned improvements to regional transportation systems will be identified as part of the environmental baseline characterization. Changes in site employment associated with reconfiguration alternatives will be used to identify potential impacts to the level of service provided by local and regional transportation systems.

4.3.8.2 *Transportation of Weapons Complex Materials*

A risk analysis for both incident-free transportation and accident scenarios will be performed to assess potentially significant impacts. Currently, special nuclear materials, nonnuclear materials and components, and other products, by-products, and materials are transported between Complex sites. Reconfiguration of the Complex could alter the amount of materials transported between sites as well as the origins and destinations of the materials. Changes in the type and amounts of materials transported and the origin and destination of materials could, in turn, affect the risks to individuals and populations either involved in the transport of these materials or in proximity to transport routes.

The PEIS will identify and discuss the transportation of Complex materials. Annual quantities of materials transported will be identified, as will changes in the types and quantities of materials transported for each reconfiguration option with respect to the No Action Alternative. The PEIS will also identify and discuss the origins, destinations, and modes (e.g., road and rail) used in transporting materials between Complex sites, and the packages and containers used in transporting the materials.

The PEIS will evaluate the risks associated with incident-free transport of Complex materials and accidents using the RADTRAN computer code. The incident-free transport risks to be calculated will include those to transport vehicle operators and the population near the transport routes. The accident risks to be evaluated will include those from the transport of radioactive and hazardous materials. Accident severity categories will be used to define conditional probabilities and release fractions. The PEIS will present incident-free and accident risks for each reconfiguration alternative, identify all assumptions, and address the uncertainties associated with risk calculation methodologies.

4.3.9 General/Miscellaneous Environmental Comments

There were 42 comments, expressing general concern about environmental impacts, that do not fit into any other category. These comments have been grouped into 25 subcategories, and are summarized under Issue Category 9 in Appendix B. Comments in this category address topics such as the need to consider impacts on neighboring communities, health, air, soil, surface water, ground water, and/or wildlife. These comments generally express broad environmental concerns that will be examined within more than one of the environmental resource areas already discussed. One comment addressed the potential environmental consequences of the accidental detonation of a nuclear weapon in the production process. Nuclear weapons design is such that DOE does not consider accidental detonation to be a reasonable possibility and, therefore, is not an appropriate subject for analysis in the PEIS.

4.3.10 NEPA Process and Regulatory Compliance

DOE has received 199 comments related to the NEPA process or compliance with NEPA and other environmental laws and regulations. These comments were further grouped into 46

subcategories. Summaries of comments received in this area can be found under Issue Category 10 in Appendix B.

The PEIS will identify and discuss major Federal and state environmental statutes and regulations, and DOE Orders applicable to implementation of the reconfiguration alternatives. The PEIS discussion of environmental requirements will be directed at identifying those environmental and compliance considerations that would affect the siting and design of future Complex facilities. Subsequent project-specific NEPA reviews tiered to the PEIS will list and discuss the status of all required permits and approvals required for project implementation.

Major upgrades or modifications to existing Complex facilities required to attain ES&H compliance will be described as part of the No Action Alternative, and major elements of compliance agreements directly affecting the continued operation of existing Complex facilities will also be identified and discussed (see Section 4.3.16). Because today's requirements and standards will likely be outdated by the time Complex improvements are completed, planning for improvements to the Complex must anticipate future ES&H requirements and standards. The PEIS will therefore, also identify and discuss reasonably foreseeable future ES&H planning considerations applicable to new or modified Complex facilities.

The PEIS will identify any DOE intentions to take future NEPA actions associated with reconfiguration. The document also will describe the role of the PEIS in the process by which the reconfiguration decision will be made. Details on how actions outlined in the ROD are funded by Congress will not be provided. Issues concerning penalties such as fines or incarceration associated with violation of environmental laws are beyond the scope of NEPA and the CEQ implementing regulations.

4.3.11 National Nuclear Weapons Policies

There were 2,243 comments on national nuclear weapons policies, including DOE policies related to the nuclear weapons complex. This comment category was further divided into 138 subcategories. The majority of these comments dealt with national nuclear weapons policies that are beyond the scope of this PEIS. Essentially, these are issues that do not bear on the program-level decision of whether and how to reconfigure the Complex. Many comments questioned the justification for nuclear weapons, an issue that will not be analyzed in this PEIS. A summary of all the comments in this issue area can be found under Issue Category 11 in Appendix B.

Typical of the comments received in this category are the following:

- The need for and proliferation of nuclear weapons
- The need for a long-term energy policy
- The need for a nuclear test ban treaty and arms control agreements
- The credibility and accountability of DOE
- The use of independent monitoring agencies to check DOE compliance with laws and regulations
- The allocation of funds for cleanup and/or worker or public compensation for injuries associated with nuclear weapons production instead of further weapons production or any other DOE projects
- The need for safe nuclear waste storage facilities

- The need for DOE to honor existing health and safety contracts at sites that are to be closed or converted
- The need for DOE to make more information available to the public on reconfiguration, health and safety, waste disposal, and other environmental compliance issues
- The relationship between conventional weapons and nuclear weapons
- Concern about DOE contractors and/or opposition to DOE facility management, quality assurance, and safety policies
- The need to resolve existing problems, including cleanup, before proceeding with the Complex
- The need for DOE to disclose various operational and production costs of nuclear weapons and the reconfiguration program
- The need to evaluate how future production will affect the progress of cleanup projects
- The need to release the nuclear stockpile memorandum for public discussion and debate
- The need to consider environmental effects in the private sector resulting from shifting nonnuclear component manufacturing from DOE plants to private industry
- The need for DOE to keep its cleanup promises
- The need to determine the level of responsibility that DOE will accept for health problems developed as a result of exposure to the products and by-products of nuclear weapons production
- The need to focus the Complex towards warhead dismantlement, treaty verification activities, and environmental cleanup
- Concern about policy regarding transportation of nuclear wastes
- The need for DOE to improve policy related to tribal treaty rights and include state, tribal, and public interest representation on its committees and panels
- The need for DOE to provide economic assistance to communities hosting DOE facilities
- Concerns about Complex security

These comments on DOE policy have been referred to senior DOE management, as well as decision-makers in the executive and legislative branches.

DOE's Complex provides special nuclear materials and weapons consistent with the Nation's nuclear deterrent policy as determined by the President and Congress. The proposed action is the reconfiguration of the Complex, not whether or not to operate the Complex. DOE cannot authorize a change in the Nation's nuclear deterrent policy. Further, the President has made it clear that the U.S. must and will retain a nuclear deterrent capability. Accordingly, an analysis of the need for nuclear weapons, their deployment, their number, and the potential impacts of their use is unreasonable in the PEIS.

Ethical and moral concerns such as justification and morality of the Nation's nuclear deterrence policy are outside the scope of the *Reconfiguration PEIS.* The Supreme Court has also held that an assessment of possible impacts to psychological health from the

perception of risk is also outside the scope of an EIS unless an effect can be closely linked to impacts on the physical environment (*Metropolitan Edison v. People Against Nuclear Energy*, 103 S. Ct. 1556, 1983). DOE believes that there is no close causal relationship between such concerns and the proposed action of the *Reconfiguration PEIS.*

4.3.12 Reconfiguration Proposal and Alternatives

There were 6,691 comments regarding the reconfiguration proposal and alternatives. These comments were grouped into 134 subcategories as shown under Issue Category 12 in Appendix B. Collectively, these comments urge DOE to consider a very large number of alternatives in the PEIS.

In *The Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations* (46 FR 18026), the CEQ addresses what is meant by a "range of alternatives" as referred to in 40 CFR 1505.1(e). As stated in this reference, "When there are potentially a very large number of alternatives, only a reasonable number of examples, covering the full spectrum of alternatives must be analyzed and compared in the EIS." The PEIS will analyze a reasonable number of examples that cover the full spectrum of reconfiguration options. Additional environmental studies may be required to support project-specific decisions that will be tiered from the programmatic decision on reconfiguration strategy. More detailed project-specific alternatives will be developed for examination in the project-specific EIS's, as required. The tiering process is defined in 40 CFR 1508.28.

4.3.13 Relationship to Other DOE Programs and Activities

The relationship of reconfiguration to other DOE program activities was the subject of 5,964 comments grouped into 16 subcategories. All comments raised under this issue area are summarized in Appendix B, Issue Category 13.

In general, commenters stated that other DOE activities should be considered in the *Reconfiguration PEIS*, including those associated with the following DOE programs:

- EM
- NPR
- SNM R&D Laboratory at Los Alamos
- WIPP
- Continued Operations of SRS K-, and L- Reactors
- Continued Operation of RFP
- PRMP and Residue Elimination Project

As discussed in Section 3.1.1 of this Implementation Plan, the NPR analysis has been integrated into the Reconfiguration PEIS. Section 3.2 discusses the relationship of the remainder of these projects and programs to the *Reconfiguration PEIS*. As identified in this section, both the *Reconfiguration PEIS* and *EM PEIS* will address short-term waste management. Long-term storage and disposition of waste is expected to be addressed in the *EM PEIS* as part of its evaluation of a long-term waste management strategy. In addition, continued operations at SRS and RFP will be considered as part of the No Action Alternative in the *Reconfiguration PEIS.*

4.3.14 PEIS Scoping Process

DOE received 133 comments grouped into 32 subcategories regarding DOE policies and procedures for conducting the PEIS scoping process.

These comments are summarized under Issue Category 14 in Appendix B. As described in Section 4.1.2, DOE conducted a 7 1/2 month public comment period during which 15 scoping meetings were held at locations throughout the country, in full compliance with CEQ regulations. In addition to public participation at the scoping meetings, written comments were invited. All written and oral comments received through the scoping process have been documented and are available for public review in the *Reconfiguration PEIS* Reading Rooms (Table 4.1). Comments received early in the scoping process were considered in the conduct of subsequent meetings. In addition, comments related to scoping will be considered when DOE schedules public hearings on the *Reconfiguration Draft PEIS* as well as in scheduling future scoping meetings for other DOE programs.

4.3.15 Public Involvement and Community Relations

There were 406 comments concerning public involvement and community relations. These comments were grouped into 24 subcategories. The majority of commenters expressed a desire for increased community participation in monitoring site activities. Individuals stressed the need for local community participation in the planning process for the economic conversion of facilities and suggested the establishment of a dispute resolution process. In addition, requests were made for accurate and easily obtainable information about reconfiguration and input into the reconfiguration decisionmaking process.

Issue Category 15, in Appendix B, provides a detailed categorization of comments received in this issue area. DOE has reviewed each comment and will consider implementing procedures to enhance community relations and public involvement. It is, however, beyond the scope of this PEIS to analyze the impacts of such plans.

4.3.16 Waste Management

There were 693 comments grouped into 92 subcategories relating to waste management. These comments are summarized under Issue Category 16 in Appendix B. The comments addressed both general and specific waste management issues that ranged from comments on the management of wastes generated by the Complex to the cleanup of wastes from past practices. Several concerned the WIPP. These comments included:

- The need to determine the disposition of wastes if WIPP does not open
- The need to address disposition of future Complex 21 wastes when WIPP capacity is reached
- The technical adequacy of the WIPP project

As discussed in Section 3.2.3.1, a Supplemental EIS for WIPP was issued in February 1990. After publication of this SEIS, DOE decided in June of 1990 to proceed with the continued development of WIPP by proceeding with WIPP Test Phase. Prior to a decision on whether to proceed with the WIPP Disposal Phase, DOE plans to issue a second SEIS. Neither the *Reconfiguration PEIS* nor the *EM PEIS* will revisit DOE's decision to proceed with the WIPP Test Phase. The *EM PEIS*, however, is expected to evaluate the long-term storage of TRU waste in the event that WIPP is either found unsuitable for disposal or the WIPP Disposal Phase is delayed. Both the *Reconfiguration PEIS* and the *EM PEIS* will address the short-term management of TRU waste generated by the operation of Complex facilities.

In addition to specific comments received on WIPP, other comments expressed concern for improving waste management practices and minimizing waste. Comments of this type included:

- The "new" Complex should not repeat waste management problems of the past
- The need for research and development of closed-loop waste management systems that result in zero emissions and zero discharge
- The need to consider waste management at new or expanded facilities
- Disposition of accumulated hazardous waste, mixed waste, and radioactive material (high- and low-level)
- Long-term above-ground retrievable storage at plants producing the waste concerned
- Concern over transportation associated with the long-term disposition of waste

A major thrust of Complex reconfiguration efforts has been, and will continue to be, the minimization of wastes. Alternative processes and technologies used in the production of nuclear weapons materials and components are being reviewed to determine where proven technologies can accomplish significant reductions in the generation of waste. An assessment has also been undertaken to minimize waste generation through greater standardization of nuclear weapon designs. This would minimize the need for specialty processes that create unique waste treatment and disposition problems. The *Reconfiguration PEIS* will discuss minimization efforts and the short-term management of Complex-generated wastes, including the need for short-term storage of wastes at Complex facilities that will generate the wastes. Long-term disposition of wastes and other types of waste minimization are expected to be addressed in the *EM PEIS* as part of an overall waste management strategy. In addition, the *EM PEIS* will evaluate the environmental consequences of transporting wastes.

Other comments on waste management were either site-specific or facility-specific in nature. These types of comments included:

- Evaluation of the airborne release of plutonium particles from the incineration of wastes at Pantex and RFP
- Need for increased priority for cleanup of Hanford
- Opposition to import of wastes from other sites to RFP
- Handling of nuclear materials and waste management practices at each of the sites
- The need for improved disclosure of waste management practices at each of the sites
- The use of creativity in determining alternative waste remediation techniques
- The need for non-Superfund sites to receive equal priority for cleanup
- Response to offsite accidental contamination

While DOE recognizes the concerns expressed by these comments and has initiated several efforts to address related concerns, including the establishment of the Office of Environmental Restoration and Waste Management and the annual publication of an *EM Five-Year Plan*, these and similar comments are not considered to be within the scope of the *Reconfiguration PEIS*. Both the *Reconfiguration* and the *EM PEIS*'s are intended to provide environmental input into development of long-term strategies that, when decided upon, will provide a basis for assessing and implementing site-specific and facility-specific actions.

The construction and operation of Complex 21 facilities would generate several types of wastes. Generation points would be different dependent upon future siting of various facilities. Construction wastes would be similar to those generated by any construction project of comparable scale. Wastes generated during the operation of Complex 21 facilities would consist of six primary types of waste: TRU waste; low-level radioactive waste; high-level radioactive waste; hazardous waste; mixed waste; and nonhazardous, nonradioactive waste. The type and amount of waste would vary according to the technology selected for Complex 21 facilities.

The nuclear weapons mission provides for the short-term management and onsite storage of wastes, including the means to minimize waste generation, until DOE either disposes of the wastes or places them in long-term storage. To provide a framework for addressing the impacts of short-term waste management and storage for each reconfiguration alternative, descriptive information will be presented on waste management activities anticipated for each site and facility combination. The volumes of each waste type generated will be estimated by facility and site for each reconfiguration alternative and may vary according to technologies analyzed for Complex 21 facilities. These estimates will include consideration of concepts for waste minimization. The waste volume estimates will be compared to historical site waste volumes and the capacity required for short-term onsite storage.

The volumes of wastes to be generated by alternative Complex configurations will be provided for inclusion, consideration, and evaluation of alternative waste management configurations in the *EM PEIS*. Based on the alternative waste management configurations to be developed as part of the *EM PEIS*, the need for short-term waste management facilities will be identified and evaluated. The evaluation of short-term waste management for Complex-generated waste will be presented in both the *Reconfiguration* and *EM PEIS*'s.

4.3.17 Human Health

DOE received 503 comments about human health. The human health area includes such topics as health effects for in-plant workers and health impacts for the public. Comments were far ranging and have been further grouped into 101 subcategories. These are summarized in Appendix B, under Issue Category 17. In general, comments on human health involved the following topics:

- Health risks to workers and health effects on workers at existing or proposed DOE facilities associated with radioactive and hazardous materials, and the need to analyze and mitigate these risks

- Public health risks and effects associated with existing or proposed DOE facility operations and the transportation of radioactive and hazardous materials and wastes, and the need to analyze and mitigate these risks

- Health risks, health effects, and damage to the environment associated with the contamination of the air, water, and food chain by radioactive and hazardous materials resulting from either routine or accidental discharges from DOE facilities, and the need to analyze and mitigate these risks

- The need for more detailed analyses regarding health risks and health effects associated with previous, current, and future DOE activities to be more completely analyzed and evaluated, and the need for the results of all analyses to be made available to the public

- The need to clarify, modify, or make more stringent the methods used by DOE in assessing the health risks associated with DOE activities, and the

need to make this information available to the public

- The need for DOE to place a greater priority on the safety of DOE operations
- The need for DOE to place a greater priority on the monitoring, reduction, or cessation of radioactive and hazardous emissions from DOE operations
- The need to have all DOE operations and policies involving health issues determined, monitored, and/or funded by the public or an independent agency

The PEIS will assess the impacts on human health for employees and the public for each of the reconfiguration alternatives and for the risks associated with postulated accident scenarios. Health effects from exposure to radiation or to any other toxic or hazardous material associated with facility operation will be calculated for both the in-plant employees and for the public. Models will also be used in projecting the impacts on both employees and the public due to normal operations and accidents. As discussed below, the PEIS will address radiological and biological effects of materials used, and health impacts on plant workers and the general public.

4.3.17.1 *Radiological and Biological Effects of Materials Used*

The Complex uses a broad variety of processes involving both radioactive and toxic materials that can be hazardous to people who may be exposed to them. The degree of hazard is directly related to the quantity or dose of the particular radioactive or toxic material to which the person may be exposed. The health effects from radiation and from toxic and hazardous material are determined by identifying the type and quantity of material to which one is exposed, estimating doses, and then calculating the resultant health effect. This will be done for each of the reconfiguration alternatives.

4.3.17.2 *Health Impacts on Plant Workers*

The health impacts from normal operations will be determined by identifying the type and amount of radioactive and toxic or hazardous material involved. Experience from past and current operations, combined with modeling, will be used to estimate the dose and calculate the health impacts to the in-plant workers.

4.3.17.3 *General Health Impacts on the Public*

Public health problems may result from exposure to radioactive or nonradioactive toxic materials released during normal operations or accidents. In the case of normal operations, the effect will most likely be cumulative, resulting from either breathing air contaminated from plant releases or from eating food or drinking water contaminated from normal or accidental plant releases. The PEIS will assess health effects for both normal operations and possible accidents. Modeling will be used to estimate the type of material, quantity of dose, and health impacts on the public. Additional estimates will be made of the risk to the public, especially from a spectrum of accidents.

4.3.18 Emergency Preparedness

Twenty-eight comments on emergency preparedness were grouped into 18 subcategories. Commenters were primarily concerned with the lack of predetermined response measures to cope with various transportation accident scenarios, the need for risk assessment and contingency planning for plausible worst-case scenarios, and the lack of preparation of physicians and hospitals for accidents that may occur during transport of waste materials. Other concerns included the need for cleanup and control plans for accidental release of transported

material, and the lack of emergency response teams in highly populated towns. A detailed summary of all of the comments received in this issue area can be found in Appendix B, Issue Category 18.

The PEIS will examine several aspects of facility operation including plant safety design criteria, site suitability, management of waste and hazardous materials, emergency preparedness, and risk analysis for postulated accident scenarios. The PEIS will also address the need for response measures and plans when assessing the reconfigured Complex. These are described in more detail in succeeding paragraphs.

4.3.18.1 *Plant Safety Design Criteria*

DOE Orders 5480.5, *Safety of Nuclear Facilities,* and 6430.1A, *General Design Criteria*, specify facility design requirements. These include safety features for mitigating the consequences from credible accidents. The PEIS will describe these overall requirements along with any unique applications inherent to specific alternatives. All future Complex facilities will be designed, constructed, and operated in accordance with these criteria.

4.3.18.2 *Site Suitability*

The same DOE Orders mentioned in the preceding section also specify criteria for, and considerations in, siting nuclear and nonnuclear facilities. These include consideration of the risks and consequences of accidents on employees, the general population, and the environment. The PEIS will evaluate site suitability for the alternative configurations based on the criteria and considerations specified in the DOE Orders.

4.3.18.3 *Emergency Preparedness Programs*

DOE sites must have extensive emergency preparedness programs, including plans and resources to deal with any emergency that may occur at the facility. The requirements are specified in DOE Orders 5500.1A—*Emergency Management System*; 5500.2A—*Emergency Notification, Reporting, and Response Levels*; 5500.3—*Reactor and Nonreactor Nuclear Facility Emergency Planning, Preparedness, and Response Program for DOE Operations*; and 5500.4—*Public Affairs Policy and Planning Requirements for Emergencies.* These plans must be compatible with all other local, state, and national plans and be thoroughly coordinated with all interested groups. Resources must be adequate to protect the workers, the public, and the environment from hazards that might occur at the facility. The PEIS will describe the general requirements for and the features of emergency preparedness programs and analyze the impacts of various alternative configurations on these programs.

4.3.18.4 *Risk Analysis for Postulated Accident Scenarios*

The PEIS will consider the relative risk of postulated accidents in the evaluation of each alternative. In evaluating the magnitude and relative risk of each alternative, a suitable risk assessment will be performed to produce results for decisionmaking purposes. Although the concepts used will be analogous to a formal Probabilistic Risk Assessment, which would be appropriate for a project-level analysis, the programmatic analysis will involve considerably less detail and be more generic.

For the purpose of the PEIS, risk is defined as the expectation of consequences associated with each alternative. As such, risk represents the summation of the probability-weighted consequences over all contributing scenarios. The risk-contributing scenarios to be considered include both design-basis and severe accidents. Design-basis accidents are deterministic, and generally have probabilities

greater than 1 x 10^{-6} per year. Severe accidents are those involving multiple failures with probabilities less than 1 x 10^{-6} per year. The specific accidents considered will depend on the types of facilities. Examples of accidents to be considered include those resulting from operator errors, unplanned criticality, fire, severe weather, earthquakes, and transportation. Once the relative risk of each alternative is determined, the risk assessment will evaluate the significance of such risks in the context of the cost/benefit of DOE's overall concept for Complex modernization. The decision maker must determine an acceptable level of risk and take into account the risk reduction associated with new, improved facilities. The risks of the various alternatives in the PEIS will be evaluated in terms of the incremental increase in risk and the cumulative effect of that risk with respect to normal day-to-day risks to which the general population is exposed. The PEIS will also discuss events such as terrorism.

4.3.19 Conflicts with Social Issues

DOE received 4,579 comments concerning conflicts with social issues. These comments were grouped into 8 subcategories and are summarized under Issue Category 19 in Appendix B. In general, these comments address the desirability of redirecting Federal funds to other programs. The allocation of Federal resources, such as the social or political desirability of increasing funding for one agency or program at the expense of another, is not within the scope of this PEIS. The purpose of an EIS is to assess the potential environmental consequences of the proposed action and reasonable alternatives in order to provide environmental input on whether or not to proceed. Once a decision on the proposed action is made, it is the responsibility of the President and Congress to determine the allocation of Federal resources for the action relative to other national needs.

4.3.20 General/Miscellaneous Comments

There were 270 comments that do not fit in any of the previously discussed issue categories. These comments have been grouped into 91 subcategories as shown under Issue Category 20 in Appendix B. Although all comments in this category have been reviewed and considered by DOE, they do not bear upon the scope of environmental analyses to be included in the PEIS.

4.3.21 Support of or Opposition to DOE Policy

Comments in this category include 14,889 statements in opposition to or in favor of DOE or DOE programs. These comments have been grouped into 29 subcategories as shown under Issue Category 21 in Appendix B. These statements have been brought to the attention of appropriate DOE offices. However, they do not address issues that bear upon the scope of environmental analyses to be included in the PEIS.

4.4 Summary of Issues and Methodologies

Major issues identified through both internal DOE scoping and public scoping will be addressed by analyses at each DOE site in the following resource areas:

- Land resources, including land use, visual resources, and recreation
- Air quality and noise
- Water resources, including surface water and ground water
- Geology and soils

- Biotic resources, including terrestrial resources, wetlands, aquatic resources, and threatened and endangered species

- Cultural and paleontological resources, including paleontological and Native American resources

- Socioeconomics and community services, including employment, population, the economy, housing, and community infrastructure

- Transportation

- Human health

The PEIS will also address factors related to facility operation including plant safety, site suitability, on-site management of wastes and hazardous materials, emergency preparedness, and risk analyses for postulated accident scenarios.

Table 4.2 provides a summary of the analysis methods and models that may be used to evaluate potential environmental impacts. Table 4.2 also presents a summary of the indicators that may be used to evaluate the context and intensity of impacts. In accordance with CEQ regulations, these factors may, in turn, be used to assess the significance of impacts.

In addition to analyses conducted at each site, the PEIS will address several other national and international considerations. National-level considerations will involve inter-site transportation of DOE materials, energy use and conservation, and land and ecological resources. International considerations will involve levels of stratospheric ozone and greenhouse gases.

TABLE 4.2.— *Environmental Impact Assessment Methodologies and Models -Continued*

Methods	Models	Indicators of Significance: Intensity Criteria	Indicators of Significance: Context Criteria
Transportation Capacity/demand analyses (Level of Service, daily and peak hour); accident potential calculations	• Computer database records • MICROTRIP and other related trip generation software • RADTRAN computer code	• Increased accident potential levels service • Degree of interference to transportation patterns • Air quality impacts associated with level of service degradation	• Area: transportation corridors, local transportation network • Jurisdiction: state and local • Degree of change in level of transportation agencies, FHWA, and Federal Aviation Administration (FAA)
Human Health Evaluation of radiation doses, hazardous chemical exposure levels, and health effects to workers and the offsite public due to normal facility operations. Addresses both radioactive and nonradioactive releases	• GENII for airborne and liquid radioactive releases • Atmospheric dispersion modeling results provided as input	• Radiation doses • Hazardous chemical exposure levels • Health effects • EPA standards and DOE orders • Guidelines on acceptable levels of health risk • OSHA requirements and NIOSH guidelines	• Area: 50-mile radius • Jurisdiction: EPA and DOE
Accidents Evaluation of facility accident probabilities, consequences and risks due to natural phenomena, process accidents and externally initiated accidents involving both radioactive and nonradioactive releases	• GENII for airborne and liquid radioactive releases • CHEM-PLUS for fire and explosion impacts • SLAB for hazard chemical releases • Atmospheric dispersion modeling results provided as input	• Accident probabilities • Accident consequences (health effects) • Accident risks (expectation of health effects) • DOE Order 6430.1A • Guidelines on acceptable levels of risk	• Area: 50-mile radius • Jurisdiction: DOE, EPA, Federal Emergency Management Administration (FEMA)

TABLE 4.2.— *Environmental Impact Assessment Methodologies and Models -Continued*

Methods	Models	Indicators of Significance: Intensity Criteria	Indicators of Significance: Context Criteria
Cultural and Paleontological Resources			
Field studies and/or predictive methods in proposed impact areas; identification of historic themes; affected resource significance analysis (National Register eligibility criteria); disturbance area calculations; Native American consultation	• No modeling required • Significant literature search with some field studies	• Importance of site research potential to regional research priorities • Relative rarity of specific site types • Preservation potential for NRHP eligible structures and sites • Degree of protection afforded similar resources in regional area • Degree of disturbance to Native American religious sites	• Area: regional resource database, comparable sites • Jurisdiction: Advisory Council on Historic Preservation and State Historic Preservation Offices
Socioeconomics and Community Services			
Regional economic models using local expenditures and project data to calculate total employment (or employment reductions from facility closures) and population impacts; demands on infrastructure, housing, community facilities, and services; tax revenue calculations.	• County business pattern database from U.S. Census Bureau • Computer spreadsheet records and statistical analysis • Census data	• Degree of change in employment and population • Ratio of site-generated economic activity to local economy • Ratio of site-generated housing demand to housing stock • Ratio of Federal source revenues to total revenues	• Area: 50-mile radius for labor force • Jurisdiction: host community and county
Capacity/Demand calculations	• Computer spreadsheet records and analysis • NCHRP traffic flow models	• Degree of change in utility supply and system integrity • Application of state and federal standards and permits • Degradation of public service levels	• Area: utility service areas • Jurisdiction: Federal, state, and local providers and management agencies

TABLE 4.2.— *Environmental Impact Assessment Methodologies and Models -Continued*

Methods	Models	Indicators of Significance: Intensity Criteria	Indicators of Significance: Context Criteria
Water Resources (Continued)		• Ability to provide adequate water for consumptive, commercial and recreational use • Degree of exceedance of existing water rights	
Geology and Soil Resources Geotechnical/engineering safety evaluations; identification and evaluation of natural resources; regional and local seismicity; and volcanic hazard evaluations	• USGS Seismicity Databases	• Degree of restrictions on geologic resource use • Degree of soil degradation • Degree of interference with agricultural production • Potential for soil erosion • Limitations on land use suitability due to seismic and/or other geologic hazards • Loss of prime or unique farmland	• Area: project area • Jurisdiction: U.S. Soil Conservation Service • Bureau of Mines or state mining agencies • USGS
Biotic Resources Relative habitat loss analyses, resource sensitivity analyses; indirect impacts to surrounding habitats; threatened and endangered species analysis; National Wetland Inventory maps review	• No modeling; predominantly literature search • Aerial photo interpretation of USGS 1:24,000 scale topos • FWS database for Threatened and Endangered Species	• Relative degree of loss to species of ecological, scientific, recreation, or economic value • Relative rarity of habitat or species • Disturbance of wetlands • Disturbance of threatened or endangered species • Degree of deposition from air emissions	• Area: site and site vicinity • Jurisdiction: FWS and other state and Federal natural resource agencies; U.S. Army Corps of Engineers and EPA; NMFS

TABLE 4.2.— *Environmental Impact Assessment Methodologies and Models -Continued*

Methods	Models	Indicators of Significance: Intensity Criteria	Indicators of Significance: Context Criteria
Air Quality and Noise (Continued) with protected new source term facilities; conduct fugitive emissions calculations based on degree of land disturbance	– DEGADIS for dense gas releases		
EEI Electric Power Plant Environmental Noise Guide	• The following noise models may be used: - Computer analytical models such as the FHWA STAMINA traffic noise model and Composite Noise Rating (CNR) Model - NOISECALC model for stationary sources	• Degree of change in weighted sound levels (Ldn) or CNR • Exceedance of local standards or EPA guideline	• Area: site boundary and sensitive receptors for surface sources (stationary and mobile) • Jurisdiction: Federal, state and local noise control regulation areas
Water Resources Mass-balance of mixing cell formulas for estimating contamination effects; hydrologic and hydraulic calculations; sediment yield analysis; standard runoff calculations; spill pollutant discharge trajectory/plume calculations; water budget calculations; aquifer recharge and discharge zones; floodplain evaluations	• Limited modeling; extensive use of available data • ENVSIM and other surfacce water quality models, if required • MODFLOW (USGS) groundwater model, if required • USGS WATSTORE and EPA STORET databases, if required	• Degree of change in water availability • Potential changes in water quality parameters with respect to water quality standards • Potential for flood damage • Degree of change in average annual flow • Potential for sedimentation and erosion • Degree of change in hydrologic characteristics from project related construction	• Area: surface and ground water patterns • Jurisdiction: EPA, state and regional water quality management agencies

TABLE 4.2.— *Environmental Impact Assessment Methodologies and Models*

Methods	Models	Indicators of Significance: Intensity Criteria	Indicators of Significance: Context Criteria
Land Resources Acreage calculations as appropriate; policy/consistency analyses; aerial photograph interpretation; safety zone analysis; historical land use assessment; analysis of indirect land use impacts from project-related population growth; analysis of project related construction and its effect on the visual character of the surrounding land; analysis of the ability of local recreational facilities to handle project-induced recreation use; analysis of facility usage based on historical usage rates	• Computer database spreadsheet records and analysis. • Mapping and calculations of land use areas affected • BLM Visual Contrast Rating System	• Degree of change to existing land use patterns • Degree of conflict with regional and local plans • Degree of change to current recreation use patterns • Compatibility of new Complex facilities with existing visual character	• Area: area outside of, but within 1 mile of site boundaries • Jurisdiction: local and regional planning offices • Region: Regional recreation areas (approximately 50 miles from major support communities)
Air Quality and Noise Emissions inventories by pollutant dispersion analysis; receptor sensitivity analyses; air toxicity assessments Utilize existing environmental monitoring data; examine existing compliance status; calculate future concentrations based on analysis of existing source terms coupled	• The following air model computer codes may be used: – ISCST and ISCLT for short term and long term modeling of stack releases in flat terrain – COMPLEX I for point source releases in complex terrain – SCREEN, PTPLU and PTFUM for initial assessments in simple terrain	• Degree of change in pollutant concentration with respect to state or National Ambient Air Quality standards • Exceedance of PSD increments for particulate matter, sulfur dioxide, or nitrogen oxide	• Area: pollutant generation areas, national air basins • Jurisdiction: EPA, state, and regional air quality management agencies.

CHAPTER 5

THE PEIS WORK PLAN

CHAPTER 5: THE PEIS WORK PLAN

Chapter 5 presents the conceptual framework for preparing the Reconfiguration PEIS, beginning with the study methodology and the approach to data collection. A discussion of the PEIS schedule and planned work assignments for the PEIS contractor support team is also included. The chapter concludes with a statement regarding the planned page length of the PEIS.

5.1 PEIS STUDY METHODOLOGY

The PEIS will build upon environmental analyses conducted for each of the potentially affected DOE sites. For each site, the environmental consequences of the full range of reasonable reconfiguration actions will be evaluated. At some sites these actions could range from closure of existing facilities to construction of new facilities to house a large combination of nuclear weapons production functions. At other sites, these actions may only consist of maintaining current missions (No Action) and streamlining mission requirements. The environmental consequences of any given programmatic alternative would be the sum of the consequences of the associated mission changes at each site.

At each DOE site, the affected environment will be described for each environmental aspect that may be significantly affected by the project. The geographic area to be evaluated, called the region-of-influence, will vary with each resource. The area will be large enough to include possible direct and indirect impacts of reconfiguration activities. For each environmental attribute, the region-of-influence will depend on the nature of the attribute and the manner in which it may be affected by the project. For example, the region-of-influence for ground water resources will be defined by the limits of the ground water basins that could be affected by the project.

The existing environmental conditions will be described for each of the affected sites and their associated regions-of-influence. However, the characterization of the affected environment will not be limited to existing conditions. Rather, the environmental baseline will include all reasonably foreseeable changes throughout the expected construction and operation phases of Complex 21. Analyses required to project future environmental baseline conditions will be documented in an appendix and summarized in applicable sections of the PEIS. The basis for static or changing environmental conditions during the baseline period will be described.

At all sites, the level of analytical detail will be sufficient to support programmatic decisions. The descriptions will be no longer than are necessary to understand the effects of the alternatives on the environment (40 CFR 1502.15). The PEIS will avoid needless bulk and characterization and will be limited to those resources anticipated to be affected. To avoid repetition, those effects that are the same under the multiple alternatives will be discussed once and subsequently referenced.

Potential environmental consequences of Complex 21 will be evaluated by first analyzing future baseline conditions without reconfiguration and then applying environmental effects associated with the project.

Environmental consequences could be driven by key aspects of the project such as the following:

- Land area disturbed by construction or operation activities
- Resource requirements for construction and operations, such as water and construction materials
- Project employment
- Air emissions and wastewater effluent
- Process technologies that could have environmental effects

At each site, parameters associated with these impact drivers will be analyzed to represent the full range of functions that could be located there. For example, any reconfiguration option will have a unique set of employment levels at each site. The environmental consequences of these possible employment levels will be analyzed using a building block approach for each site. The number of weapons program employees at a site could decrease or increase, depending on whether functions are relocated from the site or other functions are consolidated there. Socioeconomic consequences will then be evaluated for the range of possible employment levels at the site, considering total site employment. Socioeconomic consequences associated with a programmatic alternative will be summed from individual site analyses. Similar analyses will be performed for other impact drivers so that effects on all environmental resources can be evaluated.

Potentially affected environmental resource areas, as identified through both internal DOE scoping and public scoping, will be addressed by analyses at each DOE site. At certain DOE sites, the analyses will focus on candidate locations within the larger site where facilities could be located. In addition to analyses conducted at each site, the PEIS will address inter-site transportation of DOE materials and several national and international considerations (see Appendix A).

5.2 Data Collection

Data acquisition for the PEIS will involve the identification, collection, and analysis of large quantities of information from a variety of sources.

Federal, state, regional, and local government (e.g., county, city, and tribal) agencies will be contacted by PEIS preparers for information not available within DOE. Field visits to government or private agencies and the affected sites will be conducted to fill information gaps, assess site conditions, and validate data as necessary. In some cases, supplemental inventories and surveys may be conducted to ensure complete and accurate data representation. These efforts will be coordinated with the DOE sites and local agencies as necessary to minimize disruptive effects and maximize efficiency.

5.3 Proposed PEIS Schedule

Figure 5.1 illustrates the schedule for development and approval of the PEIS. Each iteration of the document from the preliminary draft through the final camera-ready copy will require review and coordination. Figure 5.1 shows the current plan for these coordination and concurrence cycles. The EPA has indicated an interest in participating as a cooperating agency in the PEIS preparation. That participation will be reflected in the schedule following a determination of the specific nature and degree of EPA participation.

5.4 Planned Work Assignments

The DOE Office of the Assistant Secretary for Defense Programs, with support from the Office of the Deputy Assistant Secretary for Weapons Complex Reconfiguration (Reconfiguration Office),

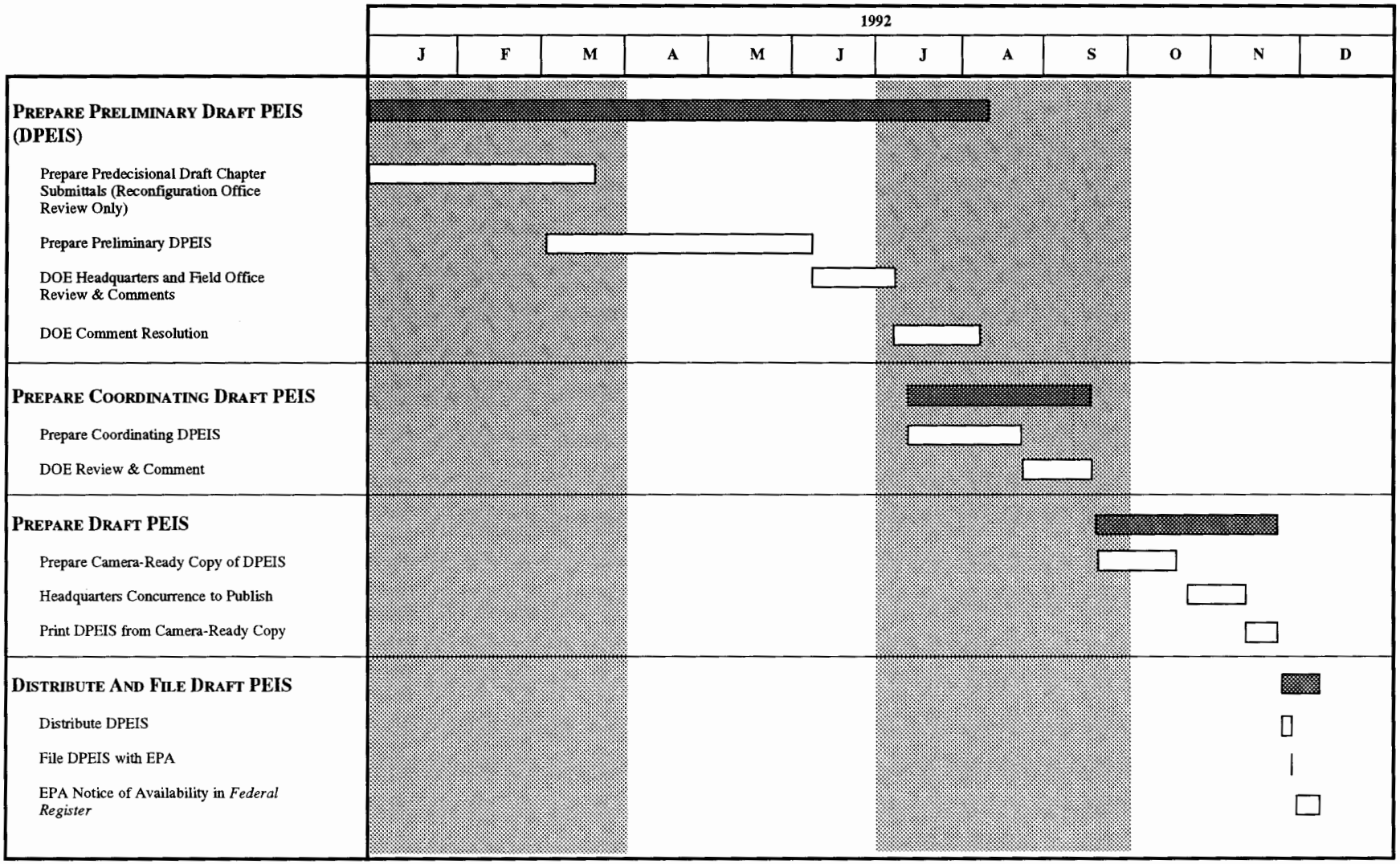


Figure 5.1.—*Schedule for Development and Approval of the Reconfiguration PEIS.*

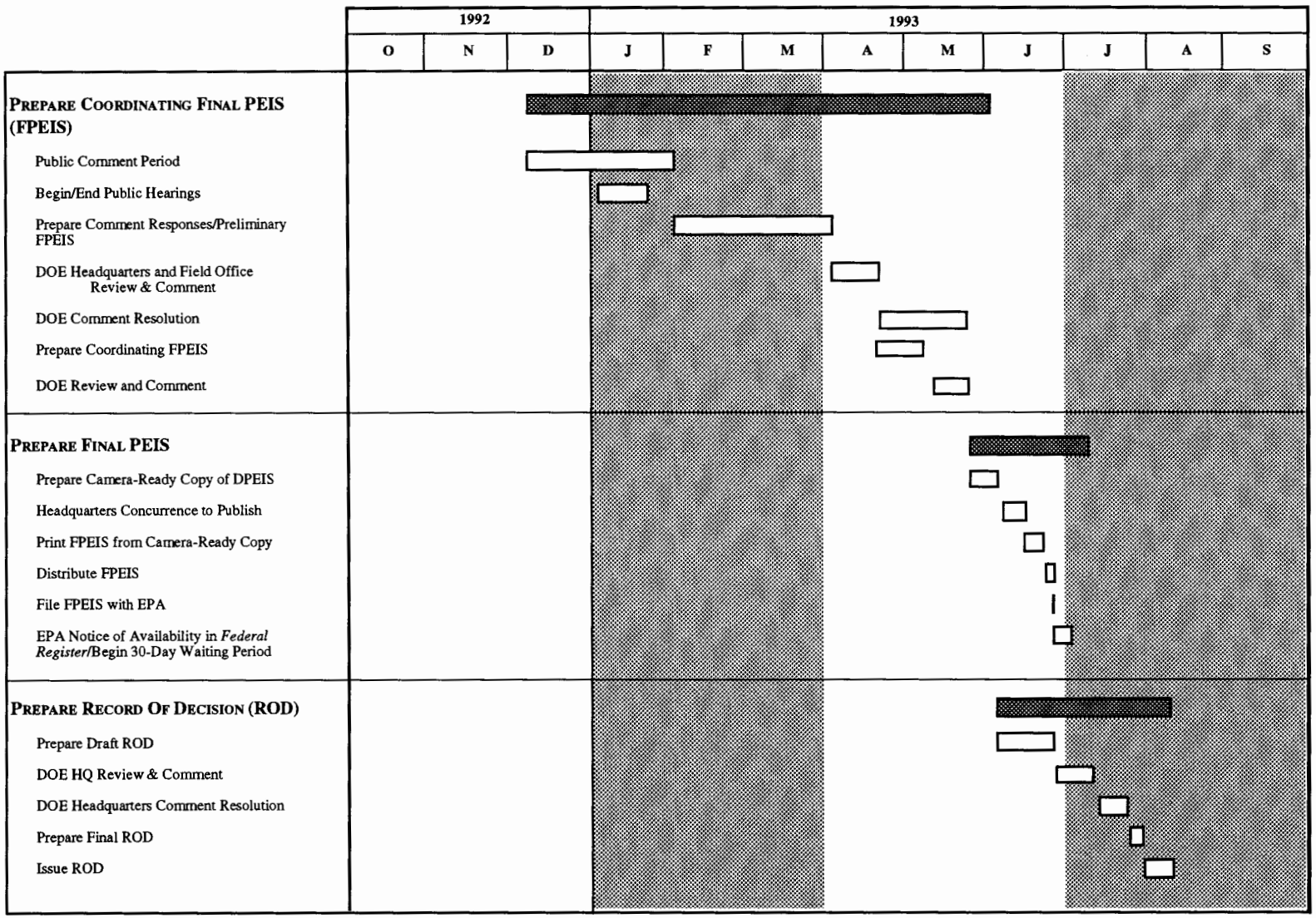


Figure 5.1.—*Schedule for Development and Approval of the Reconfiguration PEIS—Continued.*

has overall responsibility for the PEIS. A contractor team led by Tetra Tech, Inc., will provide support services in preparation of the PEIS and all underlying requirements. Other members of the PEIS Project team are HALLIBURTON NUS Environmental Corporation; SRA Technologies, Inc.; S-Cubed Division of Maxwell Laboratories, Inc.; and Lamb Associates, Inc. All firms on the PEIS Project Team have provided NEPA disclosure statements (Appendix C) pursuant to 40 CFR 1506.5(c).

Administrative and logistical support for the public scoping process was provided by the Oak Ridge Associated Universities. This support included facility arrangements, audio visual and other logistical support at meetings, provision of moderators, preparation of meeting transcripts, and organization of written documents.

In supporting DOE, the Tetra Tech team is responsible for management, organization, and analysis of scoping comments and for providing technical support in the development of the Implementation Plan, the Draft PEIS, Final PEIS, Reconfiguration Plan, and Draft ROD. Throughout the preparation of the PEIS, the Tetra Tech Team will provide support in the following areas: study integration; data collection; coordination with other DOE entities including panels and the A&E contractor; nuclear weapons requirements; health physics; environmental sciences; socioeconomics; security for classified information; document production; library services; and quality assurance.

DOE is responsible for the scope and content of the PEIS and all supporting documents. The Reconfiguration Office will provide direction to the Tetra Tech Team.

The DOE Office of the Assistant Secretary for Environment, Safety and Health, supported by the Office of NEPA Oversight, has primary responsibility for technical review of the document and for ensuring compliance with NEPA and CEQ regulations. Other DOE reviews will be provided by the Office of the General Counsel, the Office of Environmental Restoration and Waste Management, and the Office of New Production Reactors. In addition, each affected field office will review the document to provide feedback on the validity of site data. Coordination of these reviews will be accomplished by the Defense Programs Office of Self Assessment. Figure 5.2 illustrates the central role of the Reconfiguration Office in directing study activities and coordinating with the public and the affected DOE offices and sites.

Upon completing all reviews, the Assistant Secretary for Defense Programs will send the PEIS to the Assistant Secretary for Environment, Safety and Health (EH) for approval. After resolution of any outstanding issues, EH will request authority for approval from the Secretary. Following approval, EH will authorize issuance of the document by Defense Programs. After completion and filing of the Final PEIS with EPA, an ROD and a Reconfiguration Plan will be forwarded to the Secretary for action. The Reconfiguration Plan will be published to document planned actions associated with reconfiguration decisions.

DOE has invited several other agencies to participate in the preparation of the PEIS as cooperating agencies. The following agencies have expressed interest in the program, but have declined to participate as cooperating agencies: the Department of Agriculture, Department of Commerce, Department of Defense, Department of Health and Human Services, Department of the Interior, Department of Labor, Department of Transportation and the Nuclear Regulatory Commission. One agency, EPA, has expressed an interest in participating as a cooperating agency.

5.5 Target Page Length for the PEIS

The PEIS must address programmatic actions at 13 sites in 12 states (including the Hanford Site which currently has no active Defense Programs mission). To ensure adequate coverage of the environmental analyses required by NEPA, CEQ Regulations, and DOE Orders, the target page length for the PEIS is

500 pages, plus an executive summary and appendixes.

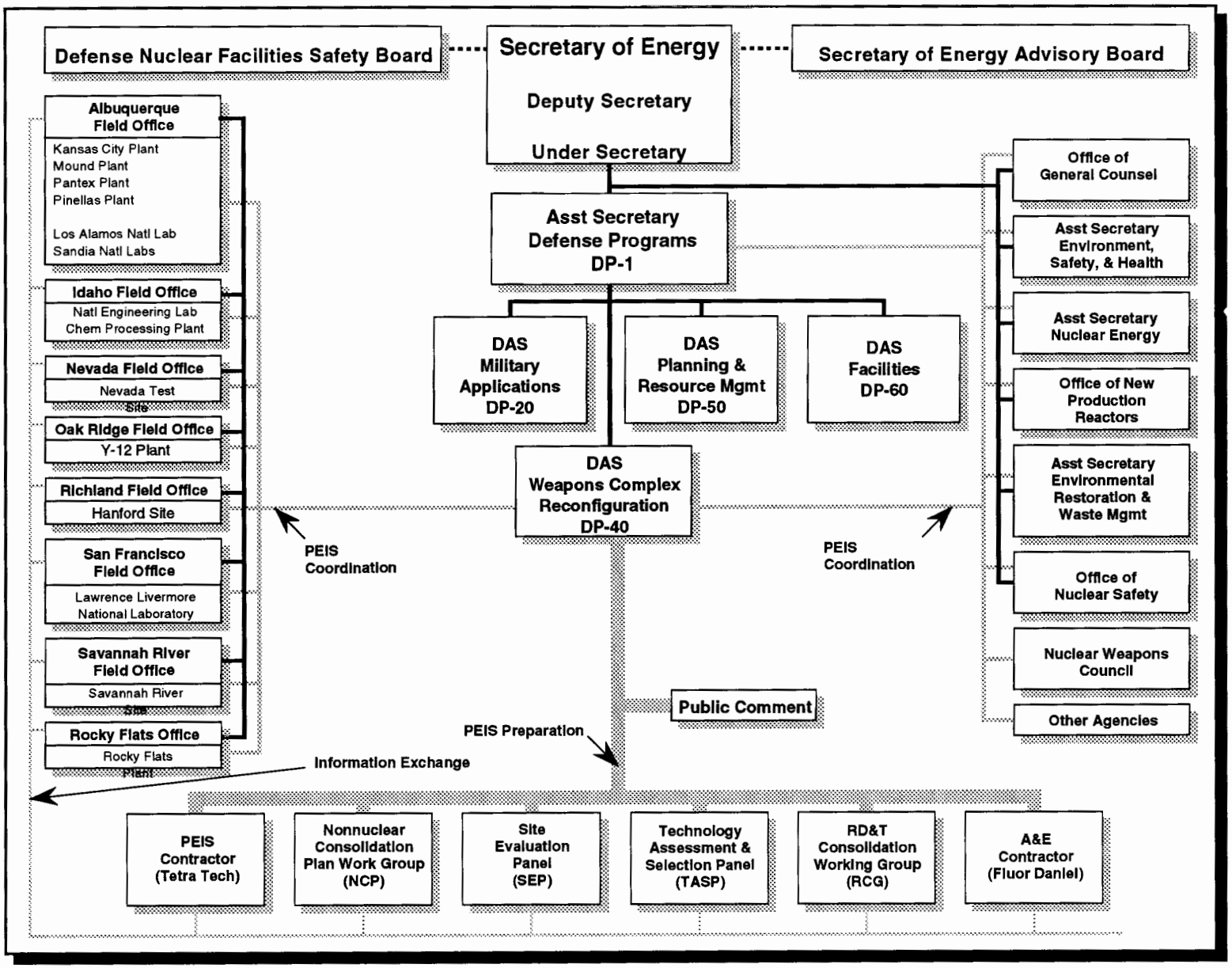


FIGURE 5.2.—*Reconfiguration PEIS Interfaces.*

CHAPTER 6

ENVIRONMENTAL CONSULTATIONS

CHAPTER 6: ENVIRONMENTAL CONSULTATIONS

This chapter discusses consultation requirements and planned coordination of the PEIS with other government agencies and with affected Indian Tribes.

6.1 ENVIRONMENTAL CONSULTATION REQUIREMENTS

In accordance with 40 CFR 1500.4(k), Federal agencies are required to integrate the NEPA process and coordinate NEPA compliance with other environmental review requirements to the fullest extent possible. In addition, 40 CFR 1502.25 requires Federal agencies to prepare EIS's concurrently and integrated with related environmental surveys and studies required by other agencies, environmental review laws, and executive orders and to list in EIS's all Federal permits, licenses, and other entitlements that must be obtained in implementing the proposal.

6.2 PLANNED ENVIRONMENTAL CONSULTATION FOR THE PEIS

As discussed in Section 1.5, DOE's NEPA compliance strategy for reconfiguration has two phases: near-term compliance in developing a Reconfiguration Plan, including the preparation of the *Reconfiguration PEIS*; and long-term compliance while the Plan is being implemented, including the preparation of project-specific NEPA reviews tiered to the *Reconfiguration PEIS*. Integration and coordination of NEPA compliance with other environmental review requirements will be conducted in accordance with this two-phased approach.

During preparation of the *Reconfiguration PEIS*, DOE will coordinate and request consultations, as appropriate, with the agencies identified in Table 6.1. The consultations undertaken during preparation of the PEIS will be directed at identifying those environmental and compliance considerations that would affect the siting and design of future Complex facilities. Surveys and studies required by such statutes as the *Fish and Wildlife Coordination Act*, the *National Historic Preservation Act*, and the *Endangered Species Act* will be initiated as part of the PEIS consultation process. Consultations will also be initiated with affected Indian Tribes under the *American Indian Religious Freedom Act*, and the *Native American Graves Protection and Repatriation Act*. The PEIS will list and discuss the required permits and approvals required for implementation of the reconfiguration alternatives and will discuss the status and results of all consultations. DOE will provide the Draft PEIS to all the agencies identified in Table 6.1.

During preparation of project-specific NEPA reviews tiered to the *Reconfiguration PEIS*, DOE will continue to coordinate and request additional consultations. Consultations undertaken during project-specific NEPA reviews will be directed at attaining all required permits and approvals for construction and operation of new or modified Complex facilities. Project-specific NEPA reviews will list and discuss the status of all required permits and approvals required for project implementation.

TABLE 6.1.— *Agency Coordination and Consultation*

Subject Area	*Legislation*	*Agency*
Endangered species	*Endangered Species Act of 1973*, as amended; state laws	U.S. Fish and Wildlife Service, National Marine Fisheries Service, state agencies
Migratory birds	*Migratory Bird Treaty Act*	U.S. Fish and Wildlife Service
Bald and Golden Eagles	*Bald and Golden Eagle Protection Act*	U.S. Fish and Wildlife Service, state agencies
Historic preservation and Native American concerns	*National Historic Preservation Act of 1966*; as amended; *Archaeological and Historic Preservation Act of 1974*; *Archaeological Resources Protection Act of 1979*, and their implementing regulations (36 CFR 800); *American Indian Religious Freedom Act of 1978; Native American Graves Protection and Repatriation Act of 1990*	State Historic Preservation Offices, President's Advisory Council on Historic Preservations, Native American Groups
Discharge of pollutants to surface water	*Clean Water Act; Safe Drinking Water Act*	U.S. Environmental Protection Agency, state agencies
Work in navigable waters of the United States	Section 404 of *Clean Water Act*; *Rivers and Harbors Act*	U.S. Army Corps of Engineers
Prime and unique farmlands	*Farmland Protection Policy Act of 1981*	U.S. Department of Agriculture Soil Conservation Service
Floodplains	*Executive Order 11988*; *Fish and Wildlife Coordination Act*	U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, state agencies
Wetlands	*Executive Order 11990*; *Fish and Wildlife Coordination Act;* Section 404 of *Clean Water Act*	U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, state agencies
Water body alteration	*Fish and Wildlife Coordination Act*	U.S. Fish and Wildlife Service, state agencies
River status	*Wild and Scenic Rivers Act*; *Anadromous Fish Conservation Act*; *Hanford Reach Study Act*	U.S. Fish and Wildlife Service, U.S. Forest Service, Bureau of Land Management, National Park Service, local land management agencies
Air quality	*Clean Air Act*	U.S. Environmental Protection Agency, state and local agencies
Water use and availability	*Water Resources Planning Act of 1956*; *Safe Drinking Water Act*; others	U.S. Environmental Protection Agency, Office of Water Policy, state and local agencies
Noise	*Noise Pollution and Abatement Act of 1970; Noise Control Act of 1972*	U.S. Environmental Protection Agency, state and local agencies
Siting and planning	State siting acts; local zoning regulations and land use policies	State and local agencies
Waste management and transportation	*Solid Waste Disposal Act*, as amended by the *Resource Conservation and Recovery Act* and the *Hazardous and Solid Waste Amendments of 1984*; *Comprehensive Environmental Response, Compensation, and Liability Act; Emergency Planning and Community Right to Know Act*	U.S. Environmental Protection Agency, U.S Department of Transportation, state and local agencies

APPENDIXES

APPENDIX A:

ANNOTATED OUTLINE
FOR THE
NUCLEAR WEAPONS COMPLEX RECONFIGURATION PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

This appendix presents an outline for the *Draft Reconfiguration PEIS* annotated with a brief description of the contents of the various sections of the PEIS. The outline is subject to change as the preparation of the PEIS progresses.

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
Inside Cover	All PEIS volumes, including the Executive Summary, will contain a brief statement of DOE's mission.
Letter from the Secretary of Energy	A letter will be included that will emphasize the importance of this project and DOE's commitment to protect public and worker safety and health and the environment.
Cover Sheet	This will contain the title of the PEIS; the responsible agency; an abstract of the PEIS; the name of a DOE contact for written comments; the name, address, and phone number of a DOE contact for questions regarding the PEIS and questions regarding the DOE NEPA process; a summary of the public comment process; and a statement inviting comments. A cover sheet will be included in the Executive Summary and in the first volume of the PEIS.
Executive Summary	This will be a separately bound, stand-alone section of the PEIS. It will briefly discuss background, history, proposed actions, alternatives, purpose and need, comparison of impacts, and mitigation measures.
Table of Contents	All volumes of the PEIS will have a Table of Contents.
List of Figures	All volumes of the PEIS will have a List of Figures.
List of Tables	All volumes of the PEIS will have a List of Tables.
List of Acronyms and Abbreviations	This section will contain a list of all acronyms and abbreviations that are used in the PEIS. This includes acronyms and abbreviations from common usage of the English language, discipline-specific acronyms and abbreviations, and DOE-unique acronyms and abbreviations.
1. Introduction	This section contains a brief overview of the Introduction chapter.
1.1 Defense Programs Missions	This section will include a description of DOE's mission to produce nuclear materials and nonnuclear components to meet the requirements for national defense; a (Continued)

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
	description of DOE's missions that involve weapons assembly, dismantlement, and research, development, and testing and a brief description of defense programs missions that are not part of the *Reconfiguration PEIS*.
1.2 Description of the Complex	This section will briefly describe the configuration of the Complex as it exists today, including identification of the sites, their missions, and their interrelationships. This section will also provide a brief history of the Complex, particularly the evolution of programs and facilities, and the changes in land use at the various project sites. This will include the Manhattan Project era, the Cold War, and recent history.
1.3 Complex 21: Vision of the Future	This section will describe the plans and interrelationships between plans for nuclear, nonnuclear, and RD&T sites and facilities.
1.4 The Reconfiguration Planning Process	This section will include descriptions of completed actions such as the *Modernization Report, Implementation Plan for the NPR Capacity EIS, Draft EIS for the Siting, Construction, and Operation of NPR Capacity, Complex Reconfiguration Study* and the reconfiguration panels; ongoing actions such as the *Reconfiguration PEIS* and the conceptual designs; and future actions such as the ROD, preparation of the Reconfiguration Plan, and Title I and Title II designs. This section will also include a description of the monitoring and self-assessment processes that will ensure implementation.
1.5 NEPA Requirements and Strategy for Reconfiguration	This section will briefly describe NEPA, CEQ regulations, and DOE orders and regulations that require the preparation of this PEIS. This section will explain that the reconfiguration proposal is a major Federal action involving significant environmental impacts, and that NEPA requires that a PEIS be prepared for such an action. This section will explain how NEPA will be applied throughout the reconfiguration process, and how future NEPA documentation for Complex activities will be tiered from this PEIS.

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
1.6 The Scoping Process 1.6.1 Internal DOE Scoping 1.6.2 Public Scoping 1.6.3 Public Comment on Incorporation of the NPR EIS	This section will include a description of the internal DOE and public scoping processes, a listing of the dates, locations, and results of the public scoping process, including a summary of the numbers and types of public comments received and significant issues identified. This section will include a summary of the comments received on DOE's decision to incorporate the *NPR Draft EIS* into the PEIS.
1.7 Content and Organization of the PEIS	Depending on the complexity of the PEIS, this section may contain a cross reference table to make it easier for the reader to locate pieces of information that are related, but separated, within the PEIS.
2. Purpose of and Need for the Reconfiguration Proposal	This section contains a brief overview of the Purpose and Need chapter.
2.1 Purpose of the Reconfiguration Proposal	This section will explain the purpose of the proposed action.
2.2 Need for Reconfiguration	This section will describe the underlying need for the proposed action (i.e., reconfiguring the Complex). The description of need will include consideration of need as it relates to nuclear, nonnuclear, and RD&T activities. This section will include a description of how DOE, DOD, Congress and the President interact to direct DOE to perform its nuclear weapons functions. This section will also describe the function of the Nuclear Weapons Stockpile Memorandum and its relationship to this action.
2.3 Related Actions 2.3.1 Interim Actions 2.3.2 Other related DOE NEPA Reviews 2.3.3 Waste Management Actions	This section will discuss the relationship of actions related to this PEIS. Interim actions to be discussed may include the Special Nuclear Materials Laboratory EIS and Plutonium Residue Elimination Project. Other related DOE NEPA actions will also be discussed, including the *Environmental Restoration and Waste Management PEIS, Continued Operation of K-, L- and* (Continued)

PEIS ANNOTATED OUTLINE

Chapter/Section	Annotation
	P-Reactors EIS, and related site-wide EIS's and project-specific EIS's. Related waste management actions to be discussed include the Waste Isolation Pilot Plant, and a high-level radioactive waste repository.
3. Reconfiguration Proposal and Alternatives	This section contains a brief overview of the Reconfiguration Proposal and Alternatives chapter.
3.1 Planning Assumptions	This section will include assumptions related to the need for the various nuclear, nonnuclear, and RD&T functions; the degree of capability needed and the timeframe for supplying the capability; the rates and types of changes in environmental regulations; and site conditions and process technologies.
3.2 Description of the Reconfiguration Proposal 3.2.1 Complex 21 Reconfiguration 3.2.2 Other Alternatives (if any) 3.3.3 Management Actions Common to All Alternatives	This section will describe the proposed action as stated by the Secretary of Energy and as described in the Reconfiguration and NPR NOI's and the Notice of Opportunity for Public Comment on the incorporation of the tritium production capacity into the PEIS. This section will also state DOE's preferred alternative, if any, and will describe the rationale for selecting the preferred alternative.
3.3 No Action Alternative 3.3.1 Current Conditions 3.3.2 Compliance Oriented Upgrades and Renovations 3.3.3 Management Actions Common to All Alternatives	This section will describe the No Action Alternative. The No Action Alternative involves continuation of current practices, with the addition of facility changes necessary to achieve and maintain compliance with ES&H standards. The No Action Alternative does not involve any major relocation of Complex facilities, functions, or activities.
3.4 Reconfiguration Alternatives	This section will present an overview of reconfiguration alternatives including the development of new tritium production capacity.

PEIS ANNOTATED OUTLINE

Chapter/Section	Annotation
3.5 DOE Sites 3.5.1 Hanford Site 3.5.2 Idaho National Engineering Laboratory 3.5.3 Pantex Plant 3.5.4 Rocky Flats Plant 3.5.5 Savannah River Site 3.5.6 Y-12 Plant (Oak Ridge Reservation) 3.5.7 Lawrence Livermore National Laboratory 3.5.8 Los Alamos National Laboratory 3.5.9 Sandia National Laboratory 3.5.10 Nevada Test Site	This section will describe the process, including environmental and technical evaluations, used for the selection of DOE sites and candidate areas. If the description of the selection process is lengthy, it will be referenced or included in an appendix. This section will also provide information on the settings of the Complex sites. It may include maps showing the DOE sites, and candidate areas within the sites, for the relocation of portions of the reconfigured Complex and for the siting of new tritium production capacity. (Alternatively, these maps may be presented in Chapter 4).
3.6 Nuclear Weapons Complex Functions 3.6.1 Nuclear Functions 3.6.1.1 Assembly/ Disassembly 3.6.1.2 Plutonium Component Manufacturing 3.6.1.3 Uranium Assembly Manufacturing 3.6.1.4 Tritium Supply 3.6.2 RD&T Activities	This section will contain descriptions of Complex functions being considered for development, relocation, or closure. The descriptions will include information on: (a) shutdown systems; (b) engineered safety features; (c) support systems; (d) process and effluent monitoring; (e) safeguards and security; and (f) operating practices. The material requirements of each function will be described, including requirements for construction and operations, onsite and offsite transportation, utilities and infrastructure, and site size. Source terms, including effluents and wastes, will be described. This section will include process flow diagrams. If the descriptions of the functions are lengthy, the bulk of the information will be included in an appendix.

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
3.7 Alternatives Considered but not Evaluated in Detail	This section will describe other options for meeting the underlying needs that were considered but not evaluated in detail, such as the purchase of materials from foreign countries, the privatization of the entire Complex, and the conversion of materials from commercial reactors. Site, functional building block and technology alternatives that were considered but not evaluated in detail will be described. The methodology used to eliminate these alternatives from detailed consideration will be included.
3.8 Summary and Comparison of Environmental Consequences of Alternatives	This section will rely on figures and graphics to succinctly compare the environmental impacts of the alternatives. This will also include a brief description of the impacts of the alternatives and a measure of the differences between the impacts.
4. Affected Environment and Environmental Consequences	Chapter 4 will describe the specific reconfiguration alternatives for each site, the current and future baseline conditions, and the environmental consequences of the various alternatives. The description of alternatives will include a brief discussion of the functions comprising each alternative. This chapter will describe the environment of the areas that may be affected by the alternatives under consideration. The environment to be described includes: (1) each of the Complex sites and each site's associated regional area; and (2) candidate areas for the construction and operation of new Complex facilities. The environment at the time the proposed action is to be implemented (i.e., environmental baseline) will also be described. For the *Reconfiguration PEIS* this covers the period until about the middle of the next century. This chapter will also provide a discussion of the possible environmental impacts associated with the various reconfiguration alternatives at each site. Impacts produced by construction and operations as well as cumulative impacts will be considered. When impacts are identified, possible measures to mitigate the impacts will also be identified. (Continued)

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Chapter/Section	Annotation
	Impacts of the No Action Alternative are equivalent to the projections of the baseline conditions. Therefore, the sections describing the impacts of No Action will reference the appropriate affected environment sections. The data and analyses to be presented in the chapter will be commensurate with the significance of the impact, with less important material summarized, consolidated, or referenced. The introduction to Chapter 4 will discuss the purposes of the Affected Environment and Environmental Consequences chapters, together with a description of the chapters' organization.
4.1 Hanford Site	This section will provide a brief introduction to the affected environment and environmental consequences for the Hanford Site. A concise description of the site setting will be included. This section will briefly describe the site size and its location relative to regional landmarks (e.g., major population centers, national/state parks, Indian Reservations, major military installations). The location of the candidate area(s) relative to other site facilities, especially existing and planned facilities and environmental restoration and waste management activities, will be described. The location of the candidate area(s) relative to major onsite populations will be presented. In addition, this section will also discuss the ownership of the candidate area(s) and any conditions associated with the use of the candidate area(s) for new Complex facilities.
4.1.1 Description of Alternatives	This section will describe the specific alternatives for this site. The description of alternatives will include a brief discussion of the functional requirements that make up each alternative.

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Chapter/Section	Annotation
4.1.2 Affected Environment	The affected environment section will include descriptions of existing conditions, and environmental baseline conditions (i.e., the environment up to mid-century). Analyses required to project baseline environmental conditions will be documented in a manner suitable for incorporation into an appendix and summarized as appropriate in the applicable subsection. Where no change to an existing environmental condition may be reasonably foreseen during the baseline period, the basis for no change will be stated.
4.1.2.1 Facility Operations • Defense Programs Activities • EM Activities • Other DOE Activities • Non-DOE Activities	This section will briefly describe operations at DOE facilities, including the existing and planned activities to be conducted over the baseline period at the site and within the region. Planned activities include the activities to be performed under the No Action Alternative, interim actions, and other reasonably foreseeable actions, including environmental restoration and waste management activities at the site. In essence, this section will identify all major changes that are anticipated to occur during the baseline period, and provide the basis for the presentation of environmental baseline topical area characterizations.
4.1.2.2 Land Resources • Land Use • Visual Resources • Regional Recreation	The existing and projected land resources of each Complex site and the surrounding region will be described in this section. Existing and projected land uses on and in the vicinity of each site will be characterized based on land ownership, historical and existing land use, existing land use plans and policies, future planned land uses, and community values/ attitudes toward development. For visual resources, the existing regional and local visual character of the viewshed at each Complex site will be described in terms of the landforms, water surfaces, vegetation, and man-made features that are present. For regional recreation, baseline conditions will be described based on an evaluation of available recreation opportunities in each region, current use levels at key recreation areas, and the ability of these areas to absorb increased use.

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
4.1.2.3 Air Quality and Noise • Meteorology and Climatology • Severe Weather • Atmospheric Dispersion • Air Quality • Noise	This section will briefly summarize air resources of the site and region, including regional meteorology and climatology, severe weather conditions, atmospheric dispersion characteristics, air quality, and acoustic conditions. The impact of site and regional activities will be considered in developing the baseline characterization. For the characterization of the candidate area(s), emphasis will be placed on evaluating the candidate area(s) relative to factors that could affect atmospheric dispersion (e.g. topography). Sensitive noise receptors such as certain types of wildlife in and near the candidate area(s) will be identified.
4.1.2.4 Water Resources • Surface Water • Ground Water	This section will briefly summarize the site and regional water resources to include surface water systems, surface water flow, surface water quality, surface water systems uses, surface water rights, and flooding. In addition, this section will summarize the major site hydrogeologic units, ground water flow, ground water levels, ground water quality, site and regional ground water use, and ground water rights. Major factors that will be considered in preparing the baseline characterization include future use of surface and ground water by the site and the regional population; site and regional projects that might significantly affect ground water elevations and surface water flows (e.g., water withdrawals for irrigation and potable use); and the impact of environmental restoration and waste management activities as they affect surface and ground water quality. The characterization of the candidate area(s) will emphasize those aspects of the area's water resources that will provide a basis for potential contaminant transport and water quality impact analyses.
4.1.2.5 Geology and Soils • Geology • Soils	This section will briefly summarize the site and regional geology. This will include summary descriptions of the stratigraphy, geologic structures, soils, and major geologic hazards such as earthquakes, volcanic conditions, (Continued)

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Chapter/Section	Annotation
	and soil failures. Emphasis will be placed on identifying soil conditions (e.g., erosion potential) and geologic hazards that would preclude constructing or operating a nuclear or hazardous material facility.
4.1.2.6 Biotic Resources • Terrestrial Resources • Wetlands • Aquatic Resources • Threatened and Endangered Species	This section will briefly describe the biotic resources at and in proximity to the site. This will include summary descriptions of terrestrial resources, wetlands, aquatic resources, and threatened and endangered species. Major factors to be considered in preparing the baseline characterization will include the potential destruction during the baseline period of onsite terrestrial and aquatic habitats and wetlands, the influence of future surface water withdrawals/usage and discharges on aquatic resources, and potential flora and fauna species which, while of current concern, may be listed as threatened or endangered in the future. For the characterization of the candidate area(s), emphasis will be placed on identifying terrestrial and aquatic habitats, important species (i.e., recreationally and commercially valuable species), wetlands and threatened and endangered species and species of concern.
4.1.2.7 Cultural and Paleontologic Resources • Prehistoric Resources • Historic Resources • Native American Resources • Paleontologic Resources	This section will briefly describe the prehistoric, historic, Native American and paleontologic resources of the site and surrounding region. The description will include areas and sites eligible for inclusion in the National Register of Historic Places.
4.1.2.8 Socioeconomics and Community Services • Population • Employment • Economy • Housing • Community Infrastructure and (Continued)	This section will briefly summarize the socioeconomic and community characteristics of the site region. This will include brief descriptions of population, employment, economy, housing, infrastructure and services, and local transportation. Almost all of these topical areas will require analysis of future baseline conditions. Major emphasis in the characterization will be placed on baseline (Continued)

PEIS ANNOTATED OUTLINE	
Chapter/Section	Annotation
Services • Local Transportation	population and development growth, particularly in proximity to the site. Baseline conditions for local and regional employment, labor availability, and community infrastructures will also be emphasized.
4.1.2.9 Radiation and Hazardous Chemical Environment • Radiation Environment • Chemical Environment • Accident Environment • Emergency Preparedness	This section will discuss the extent of radiological and hazardous substances in the environment of the site and surrounding region. The site and regional sources of radioactive and hazardous material will be characterized, and major site-specific sources will be discussed. Analyses of worker and offsite exposures will be presented for the baseline period. The analyses will account for planned activities and projects at the site under No Action. A summary of relevant health effects studies that have been performed on workers and the regional population will also be presented. The characterization of the candidate area(s) will summarize: (1) the onsite and offsite baseline releases of radioactive and nonradioactive material that affect or could affect the candidate area(s); and (2) the baseline releases of radioactive and nonradioactive substances within a 50-mile radius of the candidate area(s). This section will provide the results of the analyses of sources and exposures affecting the candidate area(s). Impact analyses to be presented under other sections of the PEIS, wherein facilities are proposed to be located within the candidate area(s), will use the results of this section as the basis for measuring changes in exposures and health effects. A discussion of emergency preparedness will also be presented, which describes the specific arrangements between the site and state and local emergency preparedness agencies.

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Chapter/Section	Annotation
4.1.3 Environmental Consequences	Impacts of the alternative actions at the site will be assessed within each topical area. These assessments will vary in coverage for the various disciplines (e.g., impacts to historical structures may be assessed for onsite areas only, whereas impacts to air quality may also be assessed at offsite locations). Within each topical area, impacts will be assessed for each alternative including No Action, and the various options beneath the alternatives.
4.1.3.1 Facility Impacts • EM Activities • Other DOE Activities • Non-DOE Activities • Waste Management	This section will assess the impacts of the reconfiguration alternatives on the operations of non-DP facilities. This section will also describe the short term waste management impacts of the reconfiguration effort. Additionally, a bounding analysis of potential long term environmental consequences of waste management will be performed to support technology selection decisions for the weapons complex.
4.1.3.2 Land Resources • Land Use • Visual Resources • Regional Recreation	The potential impacts of the reconfiguration alternatives on the land resources of each Complex site and the surrounding region will be described in this section. The analysis of land use impacts will consider direct impacts that could result from land use changes on or adjacent to each site, and indirect impacts resulting from population growth in the support communities for each site. Visual impacts will be assessed based on whether changes in existing facilities or the construction of new facilities would appear uncharacteristic in each site's visual setting and, if so, how noticeable the changes will be. Regional recreation impacts will be assessed based on evaluation of the ability of recreation areas to absorb increased use resulting from changes in population associated with the reconfiguration alternatives at each site.

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Chapter/Section	Annotation
4.1.3.3 Air Quality and Noise • Air Quality • Noise	This section will assess the impacts of the reconfiguration alternatives on air quality. This will include identifying new emission sources, describing emission rates of EPA criteria pollutants and toxic materials, identifying mobile emission sources, and assessing air quality impacts of routine releases against appropriate criteria and standards. This section will also describe the effects of noise on workers and the general public. This will include an assessment of compliance with applicable noise regulations and standards.
4.1.3.4 Water Resources • Surface Water • Ground Water	Impacts on surface waters from releases of hazardous and radioactive materials, from increased onsite water use and from sedimentation will be assessed. An assessment of water rights and allotments will be made. Water quality will be compared with applicable water quality standards.
4.1.3.5 Geology and Soils • Geology • Soils	This section will assess the impacts of the alternative actions on geology and soils. Geologic impacts include subsidence due to mining, slope instability as a consequence of construction activities and increased seismic activity due to fluid injection.
4.1.3.6 Biotic Resources • Terrestrial Resources • Wetlands • Aquatic Resources • Threatened and Endangered Species	This section will address the impacts of alternatives on important biotic resources (e.g., sensitive habitats and commercially and recreationally valuable species). Effects of construction and operation will be considered. Impacts to terrestrial and aquatic resources which will be addressed include loss of habitat and effects of effluents on flora and fauna. Impacts to wetlands will be described, including loss of or modification to wetlands due to activities such as dredging and filling. Effects on Federally and state-listed threatened and endangered species will be included in the assessment.

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Chapter/Section	Annotation
4.1.3.7 Cultural and Paleontologic Resources • Prehistoric Resources • Historic Resources • Native American Resources • Paleontologic Resources	This section will include discussions of the impacts of the alternatives on cultural resources. Impacts to prehistoric and historic resources, Native American resources, and paleontologic localities will be assessed.
4.1.3.8 Socioeconomics and Community Services • Population • Employment • Economy • Housing • Community Infrastructure and Services • Local Transportation	This section will assess the impact of the alternatives on socioeconomic conditions, including employment, population, public utilities, health care and human services, schools, police and fire departments, housing, and local transportation.
4.1.3.9 Human Health • Workers • General Public	This section will evaluate radiological and nonradiological risks and health effects to workers and the general public from normal operations. Pathways of exposure to be examined include direct radiation, inhalation, and ingestion of food and water.
4.1.3.10 Facility Accidents • Accident Experience • Programs for Mitigation of Accident Consequences • Risk • Accident Assessment	This section will contain information on the environmental consequences and risks of accidents, including severe accidents. Both radiological and nonradiological effects of facility accidents will be evaluated. As background to the accident section, information on the accident history of Complex facilities will be included, along with information on programs/procedures for mitigation of accident consequences. The assessment of environmental consequences will consider a range of accidents, including (Continued)

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	natural phenomena, severe weather and earthquakes, unplanned criticality, fire, explosions, spills, and operator error. Also included will be other hazards affecting risk such as collocation and nearby facilities effects. Impacts to both workers and the general public will be assessed. In performing the assessment, a generic order-of-magnitude type approach is planned, rather than the level of detail implied by a more formal Probabilistic Risk Assessment. This approach is appropriate for the PEIS where facility design is conceptual.
4.1.3.11 Decontamination and Decommissioning	This section will describe the procedures for potential decontamination and decommissioning (D&D) of Complex facilities and provide some limited information on the impacts of these procedures. The information contained in this section will be generic by necessity. The *EM PEIS* will contain more detail on D&D of Complex facilities. In addition, it is likely that additional project-specific NEPA documentation would be required before D&D would be allowed to proceed.
4.1.3.12 Monitoring and Mitigation • Monitoring Requirements and Commitments • Monitoring – Proposed Monitoring and Commitments • Mitigation Summary	This section will include a summary of the ongoing environmental monitoring and socioeconomic indicator assessment programs as well as those that will be implemented at the sites as part of any reconfiguration actions. These monitoring programs are essential in developing mitigation measures intended to reduce or avoid significant adverse environmental consequences and to measure compliance with mitigation commitments. A summary of mitigation measures to avoid, reduce, eliminate, or compensate for adverse environmental impacts of siting, construction, and operations will also be included. These mitigation measures will include comprehensive facility planning, engineering, and best available control technologies. A summary will combine and consolidate the mitigation measure descriptions presented in the previous chapters.

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4.N Repeat for Other Sites as Necessary (4.2 - 4.10)	Descriptions of the affected environment, alternatives and environmental consequences will be produced for the other Complex sites following the organization given above.
4.11 Intersite Transport of Weapons Complex Materials	The PEIS will identify and discuss the transportation of materials as part of Complex activities. Annual quantities of materials transported will be identified, except for those classified shipments for which bounding values must be used. The PEIS will identify and discuss the origins, destinations, and the modes (e.g., road and rail) used in transporting materials to Complex sites. Typical routes used to transport Complex materials will be identified with highway and road routes identified pursuant to DOT regulations (i.e., 49 CFR Part 171). These regulations require routing by the most direct interstate route with detours around population centers wherever possible. The annual number of shipments along each route will be identified. The packages and containers used in transporting Complex materials will be identified and discussed. The discussion of packages and containers will include a description of the packages and containers, applicable regulatory standards and criteria to be met by the packages and containers, and the approval or certification status of each package and container. Changes in the transport origins and destinations of materials, routing, and number of shipments for each reconfiguration alternative will be identified relative to the No-Action Alternative. The PEIS will evaluate the risks associated with incident free transport of Complex materials . The risks associated with incident free transport are primarily attributable to the transport of those Complex materials containing penetrating radiation (e.g., gamma rays or neutrons). The incident free transport risks to be calculated will include those to transport vehicle operators (Continued)

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	and the population near the transport routes. The PEIS will evaluate and identify risks associated with accidents involving the transport of Complex materials. The accident risks to be evaluated will include those from the transport of radioactive and hazardous materials. Accident severity categories will be used to define conditional probabilities and release fractions. Accident risks from radioactive material shipments will be calculated for both radiological and nonradiological consequences, where nonradiological consequences are the direct fatalities resulting from the accident rather than exposure to released radiological material. Accident risks to the public will be presented for both onsite and offsite accidents.
4.12 National and International Considerations 4.12.1 National 4.12.1.1 Energy Use and Conservation 4.12.1.2 Land and Ecological Resources 4.12.2 International 4.12.2.1 Levels of Stratospheric Ozone 4.12.2.2 Levels of Greenhouse Gases	This section will address cumulative effects of the alternatives that cannot be adequately addressed on a site-by-site or area-by-area basis. Cumulative effects that include both national and global environmental topics will be analyzed and evaluated including greenhouse effects, ozone depletion, energy conservation, and preservation of land and ecological resources. Cumulative effects will include the impacts of current DOE facilities, plus the impacts of new facilities and other planned DOE facilities. Non-DOE facilities will also be considered in the cumulative impacts analysis.
4.13 Unavoidable Impacts and Irreversible and/or Irretrievable Commitment of Resources	This section will discuss unavoidable adverse environmental impacts of the alternative actions. In addition, this section will describe the irreversible and irretrievable commitment of resources that may occur due to the implementation of the various options. This will include unavoidable use of land areas, and the (Continued) irretrievable use of materials in the construction and operation of the facilities.

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Chapter/Section	Annotation
4.14 Impacts on Long-Term Productivity	This section will discuss the impacts of the short-term uses of the environment on the maintenance and enhancement of its long-term productivity.
5. Environmental Permits and Approvals	This section provides a brief overview of the Environmental Permits and Approvals chapter.
5.1 Radioactive Air Emissions 5.2 Non Radioactive Air Emissions 5.3 Noise 5.4 River Status 5.5 Water Use and Availability 5.6 Dredge and Fill 5.7 Discharge to Surface Waters 5.8 Floodplains and Wetlands 5.9 Chemical and Material Storage 5.10 Waste Management 5.11 Threatened and Endangered Species and Migratory Birds 5.12 Historic Preservation 5.13 American Indian Religious Freedom Act/Native American Grave Protection and Repatriation Act 5.14 Prime and Unique Farmlands 5.15 Siting and Planning	The Environmental Permits and Approvals chapter will describe the environmental permits and approvals required for siting, construction, and operation of Complex facilities. This includes permits related to surface water discharges, air emissions, chemical storage, and solid waste management. It includes approvals related to endangered species, migratory birds, and historic preservation. Differences in state and local permitting requirements for the sites will be described.
References	This section will include citations to all references used in the PEIS.
Glossary	This section will contain a listing of important technical terms that may not be commonly used in the English language. The glossary defines the technical terms used in the PEIS. This includes both discipline-specific and DOE-unique terms.

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Chapter/Section	Annotation
Unite of Measure Conversion Table	This table will include conversions from English to metric units. The table will also provide conversions between prefixes such as micro, milli, and mega.
List of Preparers	This section will identify the preparers of the PEIS. This information may be in tabular form and includes both DOE and contractor-employed personnel. Information is provided for each preparer in the following areas: (a) name; (b) affiliation; (c) education; (d) experience; (e) technical specialty; and (f) PEIS responsibility.
Distribution List	This section will contain the distribution list for the PEIS. This list is the external distribution only and will not include DOE distribution. The list will include: (a) members of Congress; (b) Federal agencies including EPA, NRC, U.S. Army Corps of Engineers, USGS, SCS, NPS, FWS, USDA, and national laboratories; (c) state legislators; (d) state agencies; (e) local officials; (f) environmental and political action groups; and (g) organizations and individuals requesting the PEIS during the public scoping period.
Index	The index will be generated by the word processing system.
Appendix A Methodologies and Assumptions Applied to the Evaluation to Accidents	This appendix will describe the details of the accident assessment methodologies used, including a description of any computer models used, a discussion of the strengths and weaknesses of the models, a description of the scenarios used and assumptions made, and a listing of the model input parameters and output. This appendix will also contain a discussion of acceptable and unacceptable risks and risk levels.
Appendix B Methodologies and Assumptions Applied to the Evaluation of Health Effects	This appendix will contain a description of the methodologies and assumptions used in the evaluation of health effects.

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Appendix C-X	Methodologies and Assumptions Applied to the Evaluation of the Environmental Baseline Conditions and Environmental Consequences of Non-incident Operations	These appendixes will contain descriptions of the methodologies and assumptions used in the evaluation of the environmental baseline conditions and the consequences of the alternatives for Complex reconfiguration. This includes descriptions of any computer models used, discussions of the strengths and weaknesses of the models, descriptions of the scenarios used and assumptions made, and listings of the model input parameters and output. Appendixes will be included as needed to support/supplement information in the body of the PEIS.
Classified Appendix	Classified Material	Any classified material required to support the PEIS discussion of purpose, need, Complex 21 requirements, existing situations, affected environments, environmental consequences, or responses to concerns raised by the public will be grouped together in a Classified Appendix. The Classified Appendix will be bound separately and will not be available for general public review. It will be considered, however, in formulating the decisions contained in the ROD.

APPENDIX B:

SUMMARY OF RECONFIGURATION PEIS SCOPING COMMENTS AND PUBLIC COMMENTS ON INCORPORATION OF NEW PRODUCTION REACTORS

This appendix presents a summary of public scoping comments received on the Nuclear Weapons Complex Reconfiguration PEIS and public comments submitted on the November 29, 1991, *Federal Register* (56 FR 60985) notice announcing the decision to integrate the New Production Reactor (NPR) analysis into the Reconfiguration PEIS. PEIS scoping comments and public comments on incorporating NPR are summarized separately. All PEIS comments received from all sources, whether spoken or written, as well as all written comments received on the incorporation of NPR, are included in this summary. PEIS comments are summarized within a total of 21 issue categories. Within each category, summaries of subcategories of issues are presented, roughly in the order comments were originally received during the scoping process. The number of times a particular subcategory of issues was raised is also presented. Handling of issues in the PEIS is discussed in Section 4.3 of this Implementation Plan. Table B.1 presents a list of the issue categories and provides a cross reference to the specific sections of this Implementation Plan where they are reviewed along with planned disposition of the issues and analysis methodologies. A detailed summary of comments received through the PEIS public scoping process is presented in Table B.2, and Table B.3 presents a breakdown of the issues identified in form letter/post cards. Comments received on incorporating the NPR into the Reconfiguration PEIS are presented in Table B.4.

TABLE B.1–*Issue Categories and Location of Issues in the Implementation Plan*

	Issue Category	*Implementation Plan Section Number*
1.	Land Resources	4.3.1
2.	Air Quality and Noise	4.3.2
3.	Water Resources	4.3.3
4.	Geology and Soils	4.3.4
5.	Biotic Resources	4.3.5
6.	Cultural and Paleontological Resources	4.3.6
7.	Socioeconomics and Community Services	4.3.7
8.	Transportation	4.3.8
9.	General/Miscellaneous Environmental Comments	4.3.9
10.	NEPA Process and Regulatory Compliance	4.3.10
11.	National Nuclear Weapons Policies	4.3.11
12.	Reconfiguration Proposal and Alternatives	4.3.12
13.	Relationship to Other DOE Programs and Activities	4.3.13
14.	PEIS Scoping Process	4.3.14
15.	Public Involvement and Community Relations	4.3.15
16.	Waste Management	4.3.16
17.	Human Health	4.3.17
18.	Emergency Preparedness	4.3.18
19.	Conflicts With Social Issues	4.3.19
20.	General/Miscellaneous Comments	4.3.20
21.	Support Of or Opposition To DOE Policy	4.3.21

TABLE B.2.—*Summary of Public Scoping Comments*

Issue Number	Comment Summary	Number of Comments
Issue Category 1: LAND RESOURCES		
1	Decisions regarding the reconfiguration of the Pinellas Plant should consider the proximity of people (e.g., housing areas and schools) to the fencelines of the facility.	2
2	Changing demographics in the communities surrounding DOE facilities, including the proximity of developments and infrastructure projects, should be addressed in the PEIS.	2
3	Land ownership/land use issues at INEL should be examined in the PEIS. The U.S. Department of Agriculture owns the land, not the DOE, and is committed to a "multiple use" policy for use of the land. Use of this land for a nuclear weapons complex would essentially sacrifice the land for this purpose.	1
4	Impacts resulting from the acquisition of private land through purchase or eminent domain proceedings for the expansion of the Pantex Plant as proposed in the *Reconfiguration Site Proposal* for the Pantex Plant should be analyzed in the PEIS. The PEIS should discuss compensation procedures and how fair market value will be determined.	7
5	DOE needs to consider land use planning on the Hanford Site and potentially release some areas for uses other than defense production, including research and agriculture. Planning should ensure that the shoreline is preserved with an adequate corridor preserved for fisheries.	1
6	The effects of the additional development of agricultural lands near Idaho Falls and Amarillo, and the potential for impacts on traditional rural communities, loss of agricultural productivity, and displacement of farmers should be evaluated in the PEIS.	2
7	Concerned that construction of Complex 21 at the Oak Ridge Reservation would have an impact on visual resources because of security requirements, including special security fences (e.g., concertina wire) and the need to remove vegetation along the perimeter of the site.	1
8	Land use on ceded lands should be addressed in the PEIS. All land use options should be explored and Complex 21 planning should be integrated with existing land use planning efforts of the states, counties, and tribal authorities.	1
9	The PEIS should include a discussion of the land use plan for RFP after operations are relocated, including what uses are planned for the site, existing buildings, and infrastructure; which areas or buildings could be used by local governments, special districts, and the private sector; and how the buffer zone could be used.	1
10	The PEIS should include a discussion of how many people currently living on the proposed sites for Complex 21 would have to be relocated in order for the sites to be made available.	1
11	The PEIS should include a discussion of whether any agricultural land would be impacted by the program. The U.S. Department of Agriculture classification scheme should be used to describe the present use of agricultural land which could be affected. If this acreage is prime agricultural land (Class 2), consideration should be given to the CEQ memoranda (August 30, 1976 and August, 11, 1980) which urge the protection of prime agricultural land. Mitigation measures should be developed to avoid loss of any such valuable resources.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 2: AIR QUALITY AND NOISE		
1	DOE must prevent the release of radioactive and toxic chemicals into the air.	2
2	The PEIS should include an analysis of the extent to which future production will disperse additional contamination into the atmosphere. For example, at SRS, tritium, strontium, plutonium, and iodine-129 pose potential risks to those living downwind from the plant.	1
3	Radiological and non-radiological air quality impacts for each reconfiguration alternative should be evaluated in the PEIS.	1
4	The Texas Air Commission recommends that the Pantex Plant institute an ongoing ambient air quality monitoring program for non-radiological as well as radiological pollutants beyond the current Texas Air Control Board monitoring project to assure that reconfiguration activities at the Pantex Plant do not adversely affect public health or welfare.	1
5	Concerned about the effects of high winds and the potential of tornadoes in the Texas Panhandle. Facilities at the Pantex Plant are not built to withstand such high winds.	4
6	The modeling of emissions from the Hanford Site should consider the meteorology of the region, particularly with regard to the potential for downwind deposition of radioactive gases and particulates in Idaho.	1
7	Concerned about the relocation of plutonium processing facilities to an area of Tennessee (i.e., Nashville area) that is subject to frequent atmospheric inversions.	1
8	Total emissions that would result from all incinerators that would be associated with plutonium processing at the Oak Ridge Reservation should be considered in the PEIS.	1
9	The PEIS should include a description of the atmospheric transport and dispersion and population dose estimate models used in the analysis with full documentation.	2
10	The siting of new production facilities at the Oak Ridge Reservation which require a large increase in the workforce will have a detrimental effect on the air quality in the Oak Ridge area due to an increase in mobile source emissions. Anderson County is currently being considered for designation as a nonattainment area for ozone. Increased emissions of pollutants from commuter traffic, diesel trucks, and trains transporting materials should be estimated.	2
11	The air quality effects of implementing each of the reconfiguration scenarios at RFP should be analyzed in the PEIS.	1
12	Existing air quality conditions in terms of National Ambient Air Quality Standards (NAAQS), Federal Prevention of Significant Deterioration (PSD) increments, and state air quality standards should be discussed in the PEIS. State air quality laws should also be discussed.	1
13	Program activities which could adversely affect air quality in terms of ambient concentrations and the numbers of federal/state standards and increment violations should be identified in the PEIS. Potential toxic air pollutants should also be discussed in the PEIS.	1
14	The types and effectiveness of mitigation measures that will be used to protect air quality (e.g., vapor recovery systems, fumes incinerators, and dust control measures during the construction phase) should be discussed in the PEIS. Parties other than DOE which will be responsible for implementing air quality mitigation measures should be identified.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 2: AIR QUALITY AND NOISE (continued)		
15	DOE should coordinate with state/local/regional air pollution control agencies on air quality planning, air quality modeling, compliance with federal/state air quality standards, the need for air permits, air quality monitoring, and mitigation for adverse impacts.	1
Issue Category 3: WATER RESOURCES		
1	Concerned about potential contamination that might be present in the water table in the Texas Panhandle.	2
2	Concerned about contamination of fresh water if we keep constructing nuclear weapons with associated toxic pollution.	4
3	Concerned about the direction (flow) and extent of ground water contamination (onsite and offsite) at the Pinellas Plant. DOE needs to employ better technology in determining the hydrogeology and the extent of contamination near the Pinellas Plant.	4
4	Concerned about offsite contamination of water resources in the vicinity of the Mound Plant, including the nearby canal, drinking water wells, and septic systems.	4
5	Concerned about contamination at INEL and potential impacts on the Snake River aquifer which serves all of southern Idaho. The geology of this area is not understood very well.	24
6	Concerned about ground water contamination from past and future nuclear weapons testing at NTS.	1
7	Potential contamination of the Rio Grande River and its tributaries near Los Alamos because of radioactive contamination at LANL should be evaluated.	1
8	Ground water contamination at SRS and all other sites should be evaluated in the PEIS, including (a) the possibility that future production, transition activities, and/or Complex 21 activities will add to the contamination already carried by the aquifers; (b) the possibility that withdrawal of ground water for future production activities will impact the movement of contaminants within affected aquifer systems; and (c) the potential for discharges from future production activities on ground water flow and movement of contaminants.	1
9	The PEIS should include an evaluation of how (a) future production, transition activities, and/or Complex- 21 activities will add to the total volume of contamination of the surface waters, sediments, and swamps at SRS and all other sites; (b) the withdrawal of water from surface waters for future production will affect the transport and/or concentration of contaminants in those waters; and (c) the discharge of water from production facilities will affect the transport and/or concentration of contaminants in surface waters, including any possibility of resuspending materials which have accumulated in sediments.	2
10	Concerned about increased water consumption at INEL with construction of Complex 21 and NPR with regard to water consumption requirements and existing water rights.	14
11	Concerned that the manufacture of nuclear weapons at an expanded Pantex Plant would lead to the release of toxic materials that would pollute or threaten the quality of water in Amarillo area, including the Ogallala aquifer and Lake Meredith. More needs to be learned about how ground water is recharged to the Ogallala, how water moves through the sediments that underlie the plant, and the fate of contaminants as this transport takes place.	27

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 3: WATER RESOURCES (continued)		
12	Increased water needs both at the Pantex Plant and in the surrounding communities that would result with expansion of the plant and impacts on the affected water sources should be considered in the PEIS. Enlarging the Pantex Plant would not only increase the water usage there, but population growth in Amarillo due to plant expansion would also increase demands for water. Amarillo currently obtains a large percentage of its water from its well field just north of the plant. Ground water levels in these well fields have declined as much as 170 feet since 1950.	8
13	Concerned about the vulnerability of the Ogallala aquifer to contamination in the Pantex Plant area, because of the large depth to the ground water, low permeability of soil types in the area, and low recharge potential to the aquifer.	1
14	Contamination of the Tuscaloosa Aquifer resulting from past and future activities at SRS should be discussed in the PEIS.	5
15	Contamination of the Columbia River resulting from past and future activities at the Hanford Site should be discussed in the PEIS.	7
16	Concerned that the location proposed at the Hanford Site is in an area with known ground water contamination problems. The discharge of any additional liquids into the already contaminated ground water and soil would compound the cleanup of this area and would violate the State of Washington's environmental laws. The *Hanford Reconfiguration Site Proposal* fails to discuss how DOE will comply with the state's water discharge laws and permits.	1
17	Concerned about contamination of the Clinch River near the Oak Ridge Reservation.	2
18	Potential contamination of surface and ground water in the Oak Ridge area resulting from the release of radionuclides is of concern because of greater stream flows (and associated sediment transport) and greater than average rainfall. Radionuclides readily attach to stream sediments and the higher sediment flows can result in the contaminate getting into the food chain faster.	1
19	The PEIS should include an evaluation of projected water use associated with the Hanford Site and INEL, describing how it will be used, what sources will be used, how the water will be accessed, what water rights will be obtained, and how water use will effect instream and out-of-stream needs for fisheries and treaty rights, clean up needs, and Snake River water adjudication processes.	1
20	Questions what wastes will be discharged that could effect basalt, alluvial, and surface water quality. The PEIS should include a discussion of the types of effluents to be discharged, their sources, the volumes of discharge and location, and the cumulative liquid effluents to be discharged from INEL and Hanford, and an evaluation of the effects on the Columbia River and its tributaries.	1
21	The water quality effects of implementing each of the reconfiguration scenarios at RFP should be analyzed in the PEIS.	1
22	The PEIS should include an analysis of the affect of local geologic characteristics at the Oak Ridge Reservation, such as carbonate bedrock, complex fracture zones, or permeable aquifers, on the potential for the spread of contamination to offsite areas.	1
23	The projected effects on stream water quality of any new sewage treatment facilities that may be constructed for Complex 21 should be considered in the PEIS.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 3: WATER RESOURCES (continued)		
24	The effects of a worst-case accident on the drinking water supply in each region should be included in the PEIS.	1
25	All surface waters that may be affected by the proposed program should be identified in the PEIS, including existing and potential beneficial uses of these waters. Protected beneficial uses for streams, creeks, lagoons, tidal areas, and other surface waters could include cold and warm freshwater habitat; marine habitat; fish spawning and migration; shellfish habitat; wildlife habitat; preservation of rare, threatened, or endangered species; ground water recharge; freshwater replenishment; public drinking water supplies; agricultural supply; and water contact and non-contact recreation.	1
26	The PEIS should include a description of current drainage patterns in the program areas and an assessment of how altering drainage patterns and characteristics will affect drainage hydrology, surface runoff, erosion potential, soils vegetation, and water quality.	1
27	Potential affects on floodplains in the program areas should be discussed in the PEIS. Maps prepared by the Flood Insurance Administration and other appropriate agencies should be used to determine whether the proposed action is located in or will likely affect a floodplain. Compliance with Executive Order 1988 on floodplain management should be documented.	1
28	Current ground water conditions in the program areas and an assessment of any likely impacts to ground water quality and quantity from program activities (e.g., from construction activities and project operations such as loading and management of waste tanks, storage of hazardous materials or toxic substances, and hazardous waste treatment/storage/storage areas) should be described in the PEIS.	1
29	Mitigation measures to prevent or reduce adverse impacts to ground water quality should be identified in the PEIS, including a discussion of their effectiveness. DOE should work closely with state and local agencies which regulate the protection of ground water resources (i.e., state health department and water pollution control agencies).	1
30	The direction of ground water flow and how ground water and surface water are hydrologically connected should be discussed in the PEIS. The effects on the water table, artesian conditions, hydrologic gradient, aquifers and their use for potential or actual water supply, and water wells and their water quality should be analyzed.	1
Issue Category 4: GEOLOGY AND SOILS		
1	The proximity of DOE facilities (e.g., LLNL) to seismic faults should be discussed in the PEIS.	4
2	Concerned about the proximity of LANL to an active earthquake fault capable of generating a Richter scale magnitude 6.5 to 7.8 earthquake.	1
3	Concerned about potential volcanic activity in the vicinity of Yucca Mountain. Ash from nearby volcanic activity could make ground transportation to Yucca Mountain undesirable for many years.	1
4	Concerned about earthquake and volcanic hazards at INEL. The potential seismic hazards at the site have been underestimated and a complete seismic documentation analysis needs to be provided.	13

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 4: GEOLOGY AND SOILS (continued)		
5	The potential effects of a Richter scale magnitude 7.5 earthquake at the Pantex Plant should be evaluated in the PEIS. Although not perceived to be a seismically active area, the Texas Panhandle has a history of 18 seismic events since 1907 with magnitudes ranging from 3 to 5.4 on the Richter scale.	2
6	The potential for surface subsidence or collapse events associated with dissolution of deeply buried salt beds that lie beneath the Pantex Plant should be evaluated in the PEIS.	2
7	Concerned about the geological suitability of the Oak Ridge area, because of the potential for sink holes, geologic substructures, and/or a high water table.	2
8	Questions whether the hills at the Oak Ridge Reservation will result in additional construction costs associated with cut and fill problems during site development.	1
Issue Category 5: BIOTIC RESOURCES		
1	The expiration, within the last 5 years, of approximately 50 percent of the rangeland species at INEL should be analyzed in the PEIS.	1
2	If any cooling ponds are planned as part of Complex 21, potential impacts on migratory and resident birds that would be attracted to such open water should be considered in the PEIS. Cooling ponds should be covered.	1
3	The impact of construction and operations activities on biological resources, including threatened and endangered species, occupying the proposed site at the Oak Ridge Reservation should be evaluated in the PEIS.	3
4	Concerned about how wildlife and the environment will be affected by DOE facilities and their activities.	1
5	Questions what effects on fish biology and aquatic resources in the Columbia River and its Tributaries will occur or may occur as a result of effluent discharges and water use at INEL and the Hanford Site.	1
6	The effects of implementing each of the reconfiguration scenarios on the ecological resources at RFP should be analyzed in the PEIS.	1
7	Critical habitat areas, including wildlife feeding and drinking areas; fishery migration, spawning, or rearing areas; sensitive aquatic habitats such as wetlands; riparian resources; and critical habitat for threatened or endangered species, should be identified in the PEIS. Existing beneficial uses and resource values of these critical areas and potential impacts to them from the proposed program should be described.	1
8	Any thermal changes in water bodies as a result of the program and resulting impacts on the aquatic habitat and species should be discussed in the PEIS.	1
9	If wetlands or waters of the United States could be impacted by activities regulated by Section 404 of the Clean Water Act, the PEIS should contain a thorough discussion of the proposed program's consistency with federal guidelines for specification of disposal sites for dredged or fill materials (40 CFR Part 230).	1
10	DOE should demonstrate adequate coordination with the U.S. Fish and Wildlife Service regarding threatened and endangered species to identify any adverse effects, determine the effect, and take measures to eliminate it.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 6: CULTURAL AND PALEONTOLOGICAL RESOURCES		
1	Concerned about potential disturbance of 42 prehistoric Indian camps associated with playas on the Pantex Plant site and the potential for Indian burial grounds located within, or in the vicinity, of these playas. Additional archaeological investigations will need to be conducted if construction would involve disturbance of these sites.	1
2	The potential impacts of construction activities on the historic and cultural resources of southeastern Idaho should be considered in the PEIS.	1
3	DOE should demonstrate proper coordination with the appropriate state historic preservation officers. If adverse impacts are identified, DOE should request formal consultation with the Advisory Council on Historic Preservation as required by 36 CFR Part 800. Compliance with Executive Order 11593 should also be demonstrated.	1
Issue Category 7: SOCIOECONOMICS AND COMMUNITY SERVICES		
1	Closure of the Pinellas Plant would have a devastating impact on the economy of Pinellas County through the loss of $64 million in payroll, $2.5 million in vendor contracts, and elimination of a broad range of employment opportunities, particularly minority employment.	3
2	Concerned about the economic impacts of closing or relocating the Kansas City Plant on the Kansas City area, including the City of Grandview.	4
3	Employment impacts, including the availability of persons trained in appropriate skills, the availability of workers for cleanup, and programs to retrain and/or relocate workers as missions change, should be considered in the PEIS.	6
4	An evaluation of the socioeconomic impacts of production and modernization (including the closure of facilities) on local economies, and an analysis of infrastructure and other costs to local communities, should be included in the PEIS. The analysis should also consider whether other industries would provide a more diverse economic base at each location.	21
5	Concerned about the devastating effect the closure of the Mound Plant will have on the employees, the City of Miamisburg, and the surrounding area.	1
6	Socioeconomic impacts of the options being considered should be evaluated in the PEIS according to the specific conditions at each location under review. DOE should not assume that there is no support infrastructure readily available as was done in the *Reconfiguration Study*.	1
7	The PEIS should include a detailed evaluation of the economic consequences on the region surrounding RFP that could result for various alternatives, including plant closure, mid-term configuration, continued operations, and using the site in the non-nuclear and privatization programs. The evaluation should include an analysis of workers issues (e.g., other job and retraining opportunities), and potential impacts on local businesses, Jefferson County and other local governments (e.g., tax receipts and public and social services), and local school systems.	4
8	For facilities which have other activities not associated with the Complex (e.g., LLNL), the evaluation of socioeconomic impacts in the PEIS should consider what functions/activities would continue if nuclear weapons-related operations ceased, and the resulting changes in employment and potential for job conversion.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 7: SOCIOECONOMICS AND COMMUNITY SERVICES (continued)		
9	The PEIS should include a full analysis of the economic impact of nuclear weapons production on the United States. This economic impact should include every affected population center. Alternatives to continued nuclear weapons production should also be addressed in this economic evaluation. The north and central New Mexico economic impact evaluation should consider possible negative impacts on tourism.	1
10	Questions potential economic development gains in South Carolina from expansion of SRS. Expansion would have the potential to affect real estate development and tourism in other parts of South Carolina (e.g., Hilton Head and Beaufort) and reduce growth in business opportunities.	4
11	The PEIS should include an evaluation of the surge in growth in Idaho that would occur with expansion of INEL, and the potential effects on Idaho's small communities, recreational opportunities and tourism, public services, and housing availability.	19
12	DOE should be truthful about the exact number of jobs that would be brought into each community as a result of reconfiguration actions, including the number that would materialize with further downsizing of the Complex.	15
13	The economic impacts on communities where facilities are closed, including the effects on real estate values and the potential for a diminishing tax base, should be evaluated in the PEIS.	2
14	The PEIS should include an evaluation of the economic consequences to the host communities when Complex 21 draws to a close or Congress cuts off the funding during the construction phase.	5
15	The PEIS should include an evaluation of the economic impacts on the Amarillo area if an expanded Pantex Plant results in environmental contamination of the surrounding agricultural areas and the water supply.	4
16	The potential impacts to local governments and school districts as a result of expanding facilities such as the Pantex Plant should be considered in the PEIS. Payment of local taxes to the counties in which an expanded Pantex Plant would lie should be discussed in the PEIS.	2
17	DOE should work with minority business development groups and training programs so that employment opportunities associated with the reconfiguration are made available and business relationships with minority groups are established.	1
18	Mission changes at the Hanford Site should be considered in the PEIS with regard to compatibility with locally adopted growth management plans.	1
19	The PEIS should include an analysis of impacts on social programs, housing, education, health care, and other public services in the region of the selected reconfiguration site.	1
20	In-lieu of tax payments made by the Federal government should be evaluated in the PEIS. The Federal government has not payed their fair share of local government costs.	2
21	Potential spinoff industries that could result with implementation of Complex 21 should be considered in the PEIS. The analysis should be based on previous experience and differentiate between local and national effects.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 7: SOCIOECONOMICS AND COMMUNITY SERVICES (Continued)		
22	Concerned that although Complex 21 would provide a boost economically to the Oak Ridge area, there is also a possibility that the stigma attached to a weapons plant could actually be an economic hindrance to the area.	3
23	DOE should indicate in the PEIS whether it will fund the costs to local governments of providing the necessary community services to support the construction and operations workforce for Complex 21.	1
24	DOE should prioritize agriculture in the PEIS. Agriculture is an economic asset to the Texas Panhandle area and should be treated distinctively in evaluating impacts of the proposed reconfiguration at the Pantex Plant site.	1
25	The PEIS should include an evaluation of the energy costs of reconfiguration and the impact of the project on long-term energy supplies.	1
26	The work force at various stages of construction should be clearly defined in the PEIS in order to evaluate the need for transient housing and infrastructure. Craft requirements and their local availability should also be discussed.	1
27	Marketability problems of agricultural products when a threat of contamination is perceived by consumers should be addressed in the PEIS.	2
28	The fiscal implications and socioeconomic impacts associated with updating RFP at its current location and increasing its workforce should be considered in the PEIS.	1
29	DOE should provide specific information relative to the size and timing of the construction and operational workforces to support proper planning for schools, health care facilities, public services, housing, and infrastructure requirements (roads and utilities) in the Oak Ridge area.	1
30	The effect Complex 21 would have on property values in nearby communities should be considered in the PEIS.	1
31	The effect of solid waste generated by the facility and by the added worker population in each region on the life expectancy of local landfills and waste disposal sites should be evaluated in the PEIS. DOE should implement a program for the recycling of non-contaminated and non-hazardous wastes as part of its goal to maximize recycling in Complex 21.	1
32	The PEIS should include a discussion of the sewage and wastewater treatment requirements of the proposed program and potential impacts on existing wastewater treatment systems. The present capacity of sewage treatment and conveyance systems which may receive wastewater flows, and the impacts of increased flows on existing systems, especially their ability to meet National Pollutant Discharge Elimination System (NPDES) or state-issued permit conditions should be discussed in the PEIS.	1
Issue Category 8: TRANSPORTATION		
1	Potential impacts on the Amarillo Airport with expansion of the Pantex Plant should be considered in the PEIS.	2
2	The increased transportation of nuclear weapons in and out of Idaho if INEL is expanded and the potential for an increased number of accidents should be evaluated in the PEIS.	1
3	The PEIS should include an analysis of the impacts of closing Farm Road 2373 near the Pantex Plant as proposed in the *Reconfiguration Site Proposal* for the Pantex Plant.	2

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 8: TRANSPORTATION (Continued)		
4	Concerned that expansion of the Pantex Plant will affect potential expansion of the Amarillo Airport because of increased airspace restrictions.	3
5	Concerned about the dangerous road conditions near the Oak Ridge Reservation and the potential for increased use of these roads, including the increased transportation of nuclear materials on such roads.	5
6	Concerned that locating Complex 21 at the Oak Ridge Reservation will require the imposition of security restrictions on travel by the general public on roads (e.g., Highways 58 and 95) which are currently accessible to the public.	2
7	An analysis of the type of transportation facilities (e.g., railroads, waterways, or highways) that will be used to bring materials to the Oak Ridge Reservation and a determination of whether highways improvements will be made so that materials will not need to be transported through major population centers (e.g., the City of Oak Ridge) should be included in the PEIS.	1
8	The potential increase in the risks of accidents on highways used to transport materials needed at the Pantex Plant should be considered in the PEIS.	1
9	Hazardous materials transportation should be addressed in the PEIS.	1
10	The PEIS should include a transportation plan for both onsite and offsite transport of materials and waste. The plan should consider minimization of travel distances; the need for drivers and haulers to have special education, film badges, or other precautions; and travel routes which do not pass critical water supplies, fragile environments, or population centers.	2
11	The PEIS should include an analysis of the transportation requirements and risks to the environment resulting from reconfiguration of the Complex, including how wastes will be transported from closed facilities to new sites or disposal facilities, costs of transportation, and routes to permanent disposal sites.	4
12	The entire program of shipments and transportation of radioactive, hazardous, and mixed radioactive materials, including spent fuel rods and other nuclear waste, should be evaluated in the PEIS. The analysis should include shipments to, from, and between DOE sites, and consider offsite shipments of fuels, shipments to and from university reactors, vehicle and transport mode selection, routing to avoid populated areas, design and testing of containers, and shipments from overseas locations.	1
13	The adequacy of the nation's congested and deteriorating highways, bridges, and railroads used for the nuclear waste transport should be addressed in the PEIS.	1
14	The expected increased traffic and the need for upgrading local roads near the Oak Ridge Reservation should be analyzed in the PEIS. Anticipated impacts of increased traffic resulting from shipping and commuting traffic that should be considered include increases in accident rates, collision rates with domestic animals and wildlife, increased need for public transportation, and increased use of railroads and river barges.	1
15	Questions whether private carriers for transport of radioactive materials will be used and will these carriers be required to maintain commercial nuclear transportation insurance.	1
Issue Category 9: GENERAL/MISCELLANEOUS ENVIRONMENTAL COMMENTS		
1	Local conditions should be considered in the PEIS not only from a community standpoint, but also from a natural resources standpoint (e.g., ground water contamination has been discovered below SNL).	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 9: GENERAL/MISCELLANEOUS ENVIRONMENTAL COMMENTS (Continued)		
2	Consider impacts on neighboring communities, health, air, soil, surface water, ground water, and/or wildlife.	3
3	Need to consider how the relocation of RFP will affect decisions in the local communities with regard to how they will grow and how they intend to provide roads and utilities.	1
4	The environmental record of DOE and its contractors should be evaluated in the PEIS and should be considered in any reconfiguration plans.	3
5	Environmental and economic impacts at DOE weapons production facilities, including NTS, should be considered in the PEIS. Estimated future environmental consequences of continuing production based on past experiences should be evaluated, and a complete analysis of a no further production alternative should be provided.	3
6	Existing environmental contamination resulting from activities at LLNL and the dangers it presents to employees and the surrounding community is not recognized in the *Reconfiguration Study*. Environmental impacts of continued weapons work should be considered in the PEIS, because the site is located near three earthquake faults. In addition, LLNL has neglected to investigate offsite plutonium contamination, two sites at the facility are on the Federal Superfund list, and large quantities of toxic and radioactive materials are stored onsite.	1
7	DOE must consider the existing environmental damage at NTS before the nuclear testing program is modernized or continued, including the loss of geologic integrity at some testing areas, surface water contamination, and affected wildlife. In addition, each of the 500 testing holes contain high-level nuclear wastes.	7
8	The PEIS should include an analysis of the potential environmental consequences of the accidental detonation of a nuclear weapon in the production process.	2
9	More study of the potential consequences associated with earthquakes and the leaching of radioactive elements into the ground water needs to be undertaken at the Complex sites.	1
10	Environmental monitoring programs for air, water, and soil contamination at DOE facilities are woefully inadequate. Before reconfiguring the Complex or cleaning up the existing contamination, DOE needs to improve knowledge about the existing environment at each facility, including understanding ground water flow and the movement of contaminants between aquifers and identifying contamination in the aquifers.	1
11	Concerned about the environmental effects of siting a major nuclear weapons facility at INEL within the greater Yellowstone ecosystem, which encompasses the headwaters of three of the West's principle river systems, contains some of North America's largest populations of large mammals, and serves as one of the last strongholds in the lower 48 states for several threatened and endangered species.	2
12	The PEIS should include an evaluation of the environmental effects of the construction and operation of Complex 21 on the Snake River Plain ecology, including endangered species and the aquifer.	1
13	The irreversible commitment of land and other resources should be considered in the PEIS. The design constraints that relate to eventual decommissioning of the new weapons plants and the return of these sites to other productive uses should be detailed.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 9: GENERAL/MISCELLANEOUS ENVIRONMENTAL COMMENTS (continued)		
14	A full characterization of the surrounding human and natural environment at each location should be provided in the PEIS. The sensitivities of natural environmental features on and near each separate reservation or facility should be fully characterized, as well as, the characteristics, densities, and special sensitivities of the human population surrounding each facility.	1
15	The PEIS should include an evaluation of the potential environmental impact that the Pantex Plant could have on the surrounding region (e.g., Oklahoma), including effects on the Ogallala aquifer and the proximity of any hazardous substances to population centers, both in terms of the site and the transportation network for the site.	1
16	Potential effects on units of the U.S. National Park Service (NPS) or areas of NPS interest should be evaluated in the PEIS, including the major aquifer system associated with Death Valley National Monument, the Hanford Reach of the Columbia River, and the Craters of the Moon National Monument in Idaho.	1
17	The fact that the Pantex Plant has been proposed for listing on the National Priorities List as a Federal Superfund site should be discussed in the PEIS. The evaluation of environmental impacts should consider the conditions that resulted in the site scoring high in the Hazard Ranking System analysis.	2
18	Impacts on the food chain and water supply should be considered in the PEIS.	1
19	The PEIS should include an analysis of environmental issues such as global warming, ozone depletion, and acid rain.	1
20	DOE should avoid all actions which might contaminate additional air, water, and soil resources. A high priority should be placed on identifying all offsite cells of contamination, and designing future activities in such a way as to add no additional contamination to these areas.	1
21	The impacts of a reconfigured Complex on the ecosystem should include an analysis of the additive impacts of dispersed facilities versus a scenario of maximum consolidation.	1
22	Contaminants expected to be released to the local environment (i.e., atmosphere, surface waters, and ground water) should be identified and quantified in the PEIS. Anticipated discharges of cooling water, gases and particulates, treated wastewater, and toxic materials should be considered in the evaluation. The types and quantities of toxic materials that could be dispersed into the atmosphere or by water and sediment transport, and accumulated in the biological food chain should be defined.	1
23	The effects of DOE's high explosive testing programs should be discussed in the PEIS, including anticipated noise levels, frequency of explosions, generation of airborne dust and other particulates that are hazardous, impacts on wildlife populations, anticipated seismic consequences, and potential structural damage in the surrounding communities.	1
24	The source of energy for the heating of Complex 21 and the effect the heating plants will have on local air and water quality should be considered in the PEIS.	1
25	Questions whether the higher amount of precipitation at some of the candidate sites in the eastern U.S. implies a greater difficulty in containing contaminants than has been experienced at the dry sites in the western U.S.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 9: GENERAL/MISCELLANEOUS ENVIRONMENTAL COMMENTS (continued)		
26	Potential impacts to water quality, beneficial uses, and biological resources resulting from program activities should be evaluated in the PEIS. Water quality could be adversely affected by the placement of fill materials in wetlands and other waters of the United States; increased sedimentation, erosion, or turbidity; the runoff of hydrocarbons, heavy metals, toxic materials, or other pollutants; the accidental release of hazardous waste; and the accidental discharge of fuels or toxic materials. Mitigation measures (e.g., best management practices; nonpoint source controls) will be implemented to protect or improve water quality, beneficial uses, and biological resources should be described.	1
27	The PEIS should include a discussion of whether or not any pesticides will be used for vegetation clearance or control, maintenance and harvest operations, or the control of rat, mosquito, or other vector populations. If so, the type of pesticides, application rates, and application procedures should be addressed.	1
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE		
1	Future NEPA actions DOE intends to undertake for each option considered should be discussed in the PEIS.	1
2	DOE needs to fully comply with all laws and regulations (including emerging laws/regulations) for all activities. The PEIS should include a discussion of how DOE will bring its existing facilities into compliance.	67
3	There should be frequent announced and unannounced inspections at waste treatment facilities, with severe penalties for any violations and the fine money going to the local community. Penalties should also involve jail time for those who falsify data or violate health and safety laws after being warned not to violate such laws.	1
4	Privatization of production is not recommended as a means to reduce liability for accidents and injury, or for other purposes.	1
5	RFP is not in compliance with environmental, health, and safety laws, and there is no indication that DOE intends to restart it in compliance with these laws, including DOE's own orders.	6
6	DOE needs to demonstrate in the PEIS that it can build a new plant in compliance with all environmental, public health, and safety laws that exist today and with stricter laws in the future. There is no evidence that the technology exists for DOE to do that.	21
7	The PEIS should include a discussion of how DOE plans to comply with the State of Colorado's limits on storage of transuranic waste. In the past, DOE has used reclassification to make it look as if the waste flow has diminished and considered the use of supercompactors.	2
8	The State of Colorado is interested in assisting DOE in the preparation of a Congressionally mandated report on how RFP would be relocated in a 10-year time frame. The State also recommends that DOE consult with state and local officials and the plant work force in preparing the report.	1
9	The State of Colorado is concerned about how the PEIS (following the Record of Decision) will be presented to and used by the Congress, including key authorizing committees (e.g., to make funding decisions?).	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
10	The PEIS should include an evaluation of all reasonable alternatives, including those not within the jurisdiction of DOE. DOE has stated that the PEIS will not address issues and concerns which are either outside of the control of DOE or do not bear on the discussion regarding the nuclear weapons complex (e.g., actions of the President, Congress, DOD, or other Federal agencies, or the need for nuclear weapons or impacts of their use). A CEQ guidance issued by the Reagan administration states that "an alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS, if it is reasonable."	11
11	The PEIS impact evaluation should include a realistic assessment of the consequences if noncompliance with environmental regulations continues.	4
12	Federal Right-to-Know legislation should be amended to include Federal installations. The public should have access to environmental contamination information vital to protecting their health and safety.	4
13	The Federal Facilities Compliance Act should be passed to allow EPA and state governments to prosecute facilities for violations of environmental laws.	6
14	The *Reconfiguration Study* (page 155) states that regulatory compliance activities should be undertaken at minimum resource expenditure. This is the same old DOE that has resulted in over $200 billion worth of environmental problems nationwide, and inflicted unknown damage on workers and the public. The PEIS should include an analysis of the costs of achieving regulatory compliance, at whatever cost is required.	2
15	LANL and SNL, both central elements in the nuclear weapons and non-nuclear activities complex, have not been the subject of an EIS in the last 10 years. Environmental assessments for these facilities, compatible with the programmatic actions which are proposed, should be prepared.	1
16	The tribal governments (i.e., Pueblos) near LANL should demand that the DOE cease operations until it can prove that no toxic and radioactive materials are being exposed to the land, air, or water around Los Alamos or northern New Mexico.	1
17	The counties and communities surrounding LANL should demand that the DOE prove that laboratory operations and the proposed WIPP site meet all EPA standards. Existing operations and future plans should be halted until the DOE can document that EPA standards can be met. EPA standards should not be lessened or revised in favor of LANL or WIPP. No waste should be allowed to enter LANL or leave it without total public disclosure and approval.	1
18	DOE should be required to inform the public annually of the environmental impact of all of the Complex national laboratories and nuclear facilities, thus keeping the public updated on any potential hazards throughout the United States and beyond. An independent agency, such as the General Accounting Office, should monitor the DOE, and be required to report only to Congress and the public.	1
19	The *Reconfiguration Study* states in one section that strict compliance with applicable Federal and state environmental laws and regulations is expected by DOE facilities, but also states that DOE will need to negotiate compliance agreements with Federal and state regulators to address potential noncompliance issues. How can DOE say that all these facilities are expected to comply with environmental regulations, but then say noncompliance will be negotiated?	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
20	DOE is not in compliance at NTS with Federal and state permit requirements in the areas of air emissions, water releases, and solid waste disposal. Over half of all underground tests have leaked radiation into the atmosphere, and Rainier Mesa has surface fractures large enough to stand in. The Mighty Oaks underground test disaster in 1986 resulted in a radioactive release 2,000 times greater than Three-Mile Island. DOE has no quality assurance plan to ensure the integrity of its offsite radiation monitoring program. Wildlife have access to radioactively contaminated water in drainage ponds near Rainier Mesa.	1
21	The states should retain the authority to adequately regulate the operations of the affected facilities to ensure the safety of the their citizens and the environment. Fundamentally, adequate regulation by the states presupposes the clear authority to enforce all applicable Federal and state environmental laws at each facility.	7
22	The ability and will of each state's regulators to enforce environmental laws and regulations should be discussed in the PEIS. For example, the South Carolina Department of Health and Environmental Control has the will and the ability to carry on a strong regulatory program, but lacks adequate funding and resources. How can and will state governments find a way to make funding available in a way that will not compromise the integrity of the regulators? Some states just cannot currently afford a regulatory program.	3
23	The Texas Air Commission insists that all existing processes in any reconfiguration or modification of processes at the Pantex Plant consider the new requirements of the Federal Clean Air Act and assure that all provisions of the Federal and Texas Clean Air Acts and the Texas Air Control Board rules and regulations be met.	2
24	Any change in the mission or operation of the Pantex Plant must be undertaken with maximum consideration given to full compliance with published standards for protection against radiation. Best available technology should be used in design to ensure containment and control potential of radioactive contaminants. The Texas Bureau of Radiation requests active participation in the review of facility design with subsequent routine monitoring of process controls, such as local exhaust ventilation, containment features, and contaminant control procedures associated with the fabrication or reprocessing.	1
25	Decontamination and decommissioning of sites that will be closed will require detailed planning to assure that all affected parties are given the opportunity to communicate their particular needs. Compliance with applicable Federal and state laws should complement the sensitive approach to the restoration of the environment to pre-production condition. Protection of natural resources demands the total commitment of all concerned.	1
26	The current process for halting an environmental or safety violation at the existing Pantex site and what will be the related procedures at a plutonium processing plant should be discussed in the PEIS.	1
27	DOE should clearly describe in the PEIS its planned compliance with appropriate environmental rules, practices, and policies of the EPA, OSHA, and NRC during construction and operation of Complex 21, specifically with regard to which laws and regulations it will seek exemptions from.	4

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
28	DOE should provide a definitive statement as to whether Complex 21 will be entirely regulated by appropriate local, state, and federal regulatory agencies (e.g., OSHA and NRC) or whether some operational aspects will be "self-regulated" by DOE. DOE should agree to providing financial assistance to state and local governments to defray the expense of unique regulatory or environmental monitoring expertise required of those governments principally because of the presence of Complex 21.	3
29	Concerned that passage of the Johnston-Wallop bill (Senate Bill 341) will result in a preemption of state's rights with regard to independent oversight capacity.	1
30	Local and/or state oversight boards or agencies should established and provided with ample budgets to do independent studies and research and given necessary security clearances to allow them to evaluate environmental impacts of all existing and proposed projects. Money spent now for oversight to minimize environmental damage will not have to be spent later to clean up environmental problems.	2
31	The reconfiguration plan should include proposals to discourage future lying about environmental impacts for public relations purposes. Legal penalties should be developed for punishing people or corporations who knowingly coverup significant radiation releases.	1
32	The PEIS should examine how authority to impose fines and penalties against DOE, its officials, and facilities, and ending DOE's present exemption from fines for failure to meet basic standards which other industries must meet would enhance compliance with environmental and safety regulations.	1
33	The PEIS should consider the numerous safety violations and environmental contaminations that have already occurred at the Pantex Plant.	1
34	The PEIS should include an evaluation of DOE's past mistakes that have resulted in gross negligence of public safety and environmental risks at each of the existing facilities. The PEIS should specifically explain what means will be employed to avoid future disasters. Vague promises of yet-to-be invented technologies are unacceptable premises for rebuilding or expanding current facilities.	2
35	DOE should consider a true No Action alternative which would include the cessation of all production activities until the DOE is in full compliance with all environmental regulations.	1
36	Tribal comments should be solicited early in the process leading to a decision so that comments are able to influence the decision. Where tribal treaty rights, religious sites, or cultural resources are potentially impacted, tribal consultations should take place prior to the development of DOE's draft position. In keeping with the trust relationship, DOE must at a minimum be committed to the process of "Cooperation and Consultation" as required in Section 117(c) of the Nuclear Waste Policy Act.	1
37	DOE needs to provide assurances that private companies will protect all treaty rights and comply with environmental, health, and safety laws under privatization actions.	1
38	It is not appropriate for DOE Defense Programs personnel to determine whether an action meets the interim action decision test as allowed by 40 CFR 1506.1(c). The Congress, or at a minimum, the select panels of the House and Senate Armed Services Committees should make such decisions.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
39	DOE states that its facilities will need to comply with OSHA standards, yet DOE has been working in opposition to Congressional measures which would mandate DOE compliance with OSHA regulations.	1
40	Concerned that DOE may try to use the PEIS process to allow them to prepare a fewer number of EIS documents and to instead prepare more NEPA documents which do not require public participation. This same intent was behind a recent DOE Order.	1
41	DOE should provide routine environmental monitoring reports to the local communities as each new module is constructed that demonstrate adherence to pertinent regulations for construction activities.	1
42	DOE should define the processes and operations which would be used to treat or monitor effluents to the environment to ensure compliance with applicable standards, and periodically report the quantities released that could impact the public.	1
43	The person or persons who determine which laws and regulations are applicable to DOE should not be a DOE employee subject to disciplinary action or removal.	1
44	Questions whether DOE employees are required to comply with DOE Orders which conflict with other laws, regulations, and rules, and whether this is spelled out in DOE's regulations.	1
45	DOE needs to discuss in the PEIS the ways in which it complies with the CEQ guidelines implementing NEPA (40 CFR 1500.1) and how DOE has implemented procedures to make the NEPA process more useful to the public.	1
46	Existing laws applicable to DOE's operations which expressly prohibit or make compliance with NEPA regulations impossible should be discussed in the PEIS.	1
47	The PEIS should include an initial determination of the environmentally preferred configuration and sites so that significant problems can be avoided early in the process, rather than attempting to later avoid, minimize, or compensate for adverse environmental impacts in subsequent site-specific documents.	1
48	The PEIS should include an objective evaluation of all reasonable alternatives and, for alternatives which were eliminated from detailed study, an adequate discussion of the reasons for their having been eliminated.	1
49	The PEIS should include a clear explanation of the relationship between the program's cost-benefit analysis and any analyses of unquantified environmental impacts, values, and amenities, as required by the CEQ regulations (40 CFR 1502.23).	1
50	The length of analysis of environmental impacts in the PEIS should vary. If an environmental impact is determined to be slight, the assessment of the impact can be short. If a particular impact, or the impact of the total proposed action, is determined to be significant, the assessment should include a detailed analysis of the impact addressed over the life of the project.	1
51	Compliance with all pertinent regulations, including those regulating radiation emissions, spent fuel disposal, hazardous wastes, and treatment and discharge of cooling water, should be demonstrated in the PEIS.	1
52	Indirect, secondary impacts, and cumulative impacts should be addressed in the PEIS.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
53	The restatement of typical generalities in the compliance area should be avoided in the PEIS. Time schedules of specific goals that are designed to meet or exceed current environmental compliance standards should be addressed and prioritized in the PEIS. DOE should be encouraged to break from the past practice of compliance activities being regulation-driven, but rather, strive for a more active role in identifying currently unregulated, but potentially hazardous, practices.	1
54	Prioritized compliance goals should serve as a "red flag" to identify those facilities which are now functionally obsolete and cannot be economically upgraded to meet critical health, environmental, and safety standards. For such facilities, operations should be ceased immediately, or, at a minimum, be phased out as suitable alternatives become available. Specifically, if the anticipated reduced weapons requirements can be achieved by SRS or other Complex facilities, cessation of production operations at RFP, where the facilities will require significant modifications to meet current standards, should be expedited.	1
55	The PEIS and future site-specific EAs or EISs should include an assessment of the potential conflict of reconfiguration activities with ongoing or potential CERCLA/ SARA actions. Future activities should be undertaken in compliance with CERCLA/SARA requirements.	1
56	DOE should ensure that reconfiguration activities will not interfere with or delay Remedial Investigation/Feasibility Studies (RI/FS) or cleanup activities in accordance with DOE responsibilities under CERCLA/SARA and the National Contingency Plan.	1
57	DOE should contact appropriate state and local regulatory agencies to determine whether they have any statutory or regulatory concerns about the proposed program, as they relate to the identification, assessment, or cleanup of hazardous substances, hazardous waste, and toxic materials.	1
58	The potential applicability of RCRA regulations and state/county laws and regulations governing the generation, storage, transportation, treatment, and disposal of hazardous wastes should be discussed in the PEIS.	1
59	The PEIS should include a description of how the proposed program will meet RCRA permit requirements, including any RCRA corrective action requirements which may be necessary. New facilities that treat, store, or dispose of hazardous waste must obtain a RCRA permit prior to construction. Any features of the reconfiguration (e.g., radiation emissions, spent fuel disposal, fuel and other waste tanks; hazardous waste treatment/storage/disposal areas) that will require either a new RCRA permit or modification of a current Part B RCRA permit should be discussed in the PEIS.	1
60	The PEIS should include a statement that if hazardous materials, including radioactive materials and hydrocarbons, are accidentally released into the environment, the responsible party will immediately notify the National Response Center and provide details of the incident and any actions taken. Local Coast Guard or EPA offices may be notified in lieu of the National Response Center.	1
61	The PEIS should include a discussion of current RCRA requirements for both existing and new underground storage tanks (UST) systems, and the applicability of any state or local laws or regulations governing the assessment and cleanup of UST leaks. Any state or local regulatory requirements concerning existing and new UST systems should also be discussed, because Congress has given states the authority to adopt UST laws that are more stringent than federal RCRA requirements.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 10: NEPA PROCESS AND REGULATORY COMPLIANCE (continued)		
62	The PEIS should include a discussion of how the program will comply with state and local water quality management plans, state water quality objectives, and state-adopted, EPA-approved water quality standards. Under Section 313 of the Clean Water Act, DOE must meet state water quality standards regardless of the proposed activity and manage in a manner to protect or improve water quality where standards are not established.	1
63	The PEIS should include a discussion of how the proposed program will comply with EPA's Antidegradation Policy (40 CFR 131.12). This policy states that where the quality of surface waters exceeds levels necessary to support the propagation of fish and wildlife, that quality shall be maintained and protected unless a finding is made which allows a lower water quality to accommodate a more overriding economic or social purpose. Even if that finding is made, existing beneficial uses must be fully protected.	1
64	DOE should work closely with appropriate state water pollution control agencies to determine what pollution control measures should be adopted to implement the state's nonpoint source management plans in accordance with Section 319 of the Clean Water Act.	1
65	Any compliance problems with current sewage treatment and conveyance systems (e.g., enforcement actions, consent decrees, etc.) and potential impacts on wastewater compliance problems should be discussed in the PEIS.	1
66	DOE should work closely with state water pollution control agencies, state fish and game agencies, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service with regard to compliance with water quality standards; the protection of water quality, beneficial uses, and biological resources; and mitigation and monitoring for adverse impacts.	1
67	For each alternative discussed in the PEIS, appropriate mitigation measures not included in the proposed action or alternatives should be fully described as required by Section 1502.14(f) of the CEQ regulations.	1
68	DOE should demonstrate a commitment that no construction will take place where hazardous substances have been deposited or toxic spills have occurred until the requirements of CERCLA/SARA have been fully satisfied. Site selection or construction could be restricted if hazardous substances or spill sites are identified. The Remedial Design/Remedial Action activities would take priority over new construction at any contaminated sites until CERCLA/SARA compliance has been achieved.	1
69	The PEIS should include reference to any studies with regard to CERCLA/SARA compliance which DOE has performed or contracted, and the pertinent findings of such studies.	1
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES		
1	DOE needs to be more culturally sensitive to the communities and the people affected, and honor treaties that have been signed (e.g., Treaty of Ruby Valley with the Western Shoshone). Land for many DOE sites was taken against the will of the residents and is being used contrary to the will of the people (e.g., LANL, SNL, NTS, and WIPP).	933
2	There needs to be community involvement in the ownership and operation of the laboratories. Ownership and management of LANL should be local and not by the University of California.	2

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
3	DOE facilities should not sue the host state (e.g., University of California sued the State of New Mexico regarding the state's hazardous waste management programs); this will not build a working relationship with the states or the local communities. The PEIS should include an assessment of how the facilities have acted in cooperation with the communities and how they have acted in contravention with their cooperation.	2
4	All open air hazardous testing should be stopped in Bernalillo County, New Mexico (i.e., at SNL). If large buffer zones (i.e., 3-mile radius circles) are needed, such testing should not be conducted.	1
5	A cumulative environmental impact study should be done for the entire Kirtland Air Force Base-SNL area, including an assessment of contamination that already exists on National Forest lands, and the effects of past testing and dumping at SNL on ground water used by the City of Albuquerque.	1
6	Phase out the testing of nuclear weapons. The need to test weapons is not an adequate reason to continue weapons production because we have an adequate supply and the rest of the world is willing to sign a test ban treaty. The purposes of operations at NTS should initially be strictly limited and put on standby no later than 1995. Until the site is mothballed, each test should be of an existing design, modified only for safety, nuclear component reuse, or durability -- not for changes in yield or purpose. In addition, ensuring the safety of existing nuclear weapons should not be used to rationalize a renewed commitment to testing.	20
7	The construction and development of WIPP should not be used to justify the creation of more highly toxic and radioactive waste. WIPP will allow DOE to accelerate the production of nuclear weapons.	4
8	WIPP needs to be in full compliance with all EPA standards before the facility is allowed to open, including for testing.	1
9	DOE needs to get on with cleaning up the existing contamination problems at its facilities, either before additional facilities are built or shutting the Complex down (all or parts). Cleanup should be DOE's first priority.	323
10	DOE needs to work to expand the scope of the compensation for people exposed to nuclear tests and workers exposed at DOE facilities. Reparations are also due for expropriated lands and water.	12
11	The national laboratories (e.g., SNL and LANL) should focus on cleanup efforts or on research and development into finding substitutes for hazardous chemicals, energy efficiency, alternative energy sources, global warming, rain forest destruction, and/or conservation. The laboratories should also be involved in research and development into monitoring, inspection, and safeguard technologies for use in verifying negotiated arms control agreements.	106
12	Gas generation tests (i.e., alcove tests) proposed to be conducted at WIPP can be done anywhere and therefore no waste should be transported to WIPP.	1
13	DOE should allow the New Mexico Environmental Evaluation Group to finish the tests it is conducting regarding gas generation during transport of radioactive waste before shipping waste into the state. If there is evidence of some danger to the public, then other tests should be conducted by DOE or an independent review group.	1
14	A larger portion of DOE's budget should be set aside or redirected for the cleanup of facilities. DOE needs to demonstrate how it will ensure that adequate funds are available. Cleanup funds should be carefully monitored as to how they are spent.	26

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
15	A Manhattan-type project is needed to solve the waste problem, bringing together the best scientific minds, from both the private and federal sectors.	1
16	The *Reconfiguration Study* should discuss the plutonium that is missing and unaccounted for, how much has been lost previously, and how much (e.g., kilograms per bomb manufactured) will be lost in the future.	2
17	There needs to be adequate monitoring of DOE subcontractors.	2
18	DOE should provide sufficient funding for the cleanup of DOE sites; reconfiguration of the Complex should not compete with funding for cleanup activities. DOE should not use money to be used to clean up facilities to build new weapons facilities (i.e., hiding production money in the cleanup budget).	43
19	DOE needs to provide funds to the state and local communities to help with the economic burden if a facility is closed.	1
20	Questions cost-plus-award fee for General Electric based on performance evaluation. Too little emphasis is placed on environmental health and safety (10%) versus general management (35%). More weight needs to be given to environmental health and safety.	1
21	No new production of nuclear weapons should occur because no long-term solution to the waste problem has been found. Future efforts should go toward investigating disposal methods and cleaning up the already existing contamination resulting from previous production.	100
22	All DOE facilities and activities should be subject to external independent oversight and legal enforcement by agencies (e.g., EPA) whose mission is the protection of health, safety, and the environment and/or committees comprised of representatives outside the Federal government.	65
23	DOE should not keep producing weapons just to keep jobs; cleanup work could provide jobs for many workers. Workers can be reeducated, given money to further their education, or provided job retraining. Workers should be provided with adequate severance pay, retirement benefits (including early retirement), and medical care/health insurance.	52
24	Supports U.S. nuclear weapons policies. The nuclear weapons production complex is vital to our national security and world peace. Nuclear weapons play an important deterrence role.	31
25	DOE needs to consider contractor liability before replacing General Electric with a new contractor. DOE should require contractor liability for environmental and health damage at all DOE nuclear weapons-related facilities.	2
26	Contractor relationships, particularly conflict of interest, opportunities for price gouging and other abuse, and liability should be considered in the PEIS.	18
27	Supports "Nuclear Guardian Project," a citizens' effort to develop and assist in the long-term management of nuclear wastes.	5
28	Questions what outside monitoring mechanisms are acceptable to DOE.	1
29	Questions whether Amarillo can reject the expansion of the Pantex Plant if the city determines that it does not meet Amarillo's safety criteria.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
30	DOE should be more publicly accountable for and/or truthful about its activities; there has been too much secrecy in the past. Mechanisms for ensuring that openness becomes an integral part of DOE's operations should be evaluated in the PEIS.	89
31	The U.S. needs to live up to its obligations regarding the Non-Proliferation Treaty signed in 1974 and take efforts to reduce the arms race. Reconfiguration should be directed toward the treaty obligation. If not, the environmental impacts of additional weapons development worldwide with the continued proliferation of nuclear weapons should be discussed in the PEIS.	17
32	DOE needs to get on with developing a viable, long-term national energy policy for this country.	25
33	The U.S. should halt further sales of military equipment abroad or the releasing of information on nuclear weapons technology to other countries.	5
34	Questions DOE's capability to handle this project based on its past performance record regarding the nuclear weapons complex. DOE does not have the credibility to complete the process.	98
35	The *Reconfiguration Study* is a sham because DOE has already predetermined what plan it will undertake.	16
36	General Electric needs to take responsibility for cleaning up the contamination generated at the Pinellas Plant and other facilities before terminating its contract with DOE. General Electric should remediate the contamination and health problems at their expense, not the taxpayers.	16
37	Existing negotiated health and safety contracts need to be honored at facilities that are closed or converted.	1
38	DOE needs to demarcate nuclear weapons production activities (e.g., NPR) from the power plant industry. There is a trend to unify these production activities.	3
39	DOE should not permit monopoly control of the production, storage, and disposal technologies by contractors such as Westinghouse.	1
40	DOE needs to provide a summary of all health and safety, waste disposal, building code, and other environmental compliance violations which must be resolved before operations are resumed at RFP, including a realistic schedule for addressing all of the compliance issues. DOE also needs to determine which advisory groups will be used to verify compliance and approve resumption.	5
41	Concerned about DOE's decision to phase out the agency's internal Advisory Committee on Nuclear Facility Safety, headed by John Aherne, at the end of 1991. The committee has served as a competent check on DOE to date and is needed to verify safety aspects for the restart of RFP.	1
42	The entire amount DOE will have spent to restart RFP operations, starting with what has been spent since December 1989, should be reported in the PEIS. The figures should be broken down building by building, including specific projects to be completed in each building, and a timeline for completing each project. There needs to be accountability from DOE on the restart with respect to the money spent.	4
43	DOE needs to provide full funding for the interagency agreement with the State of Colorado, especially the dose reconstruction project and other health studies.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
44	DOE needs to provide funding for basic research and development for waste storage and disposal technologies, radiological impacts, and fate and transport in the environment, possibly by non-DOE groups.	1
45	DOE needs to provide funding for local technical advisory oversight panels, for citizen and independent oversight panels (e.g., one to review the REP building at RFP), and/or for more technical support by appropriate state agencies (e.g., Colorado Department of Health).	7
46	DOE should provide funding for the retraining of workers at RFP; for hourly workers, set up a training and education center and office to identify jobs and match up RFP employees; for professional staff, set up a consortium at the Colorado Center for Environmental Management to do research into decontamination and decommissioning, cleanup, and residue treatment technologies.	1
47	DOE needs to provide funding for water projects downstream from RFP.	1
48	Concerned about what assurances the public has that the reconfiguration process will not be gutted under the guise of budgetary limitations. DOE needs to prioritize the cleanup of the Complex, the conduct of health studies, and the future of workers such that it is resistant to future budgetary constraints.	1
49	Human error needs to be taken into consideration with respect to Technical Safety Appraisals, plans for resumption of operations (e.g., at RFP), and similar assessments. Many safety problems, accidents, and contamination incidents have been shown to have their root cause in human error.	1
50	DOE needs to establish a trust fund to ensure that workers and the affected public receive adequate medical insurance for nuclear weapons production-related illnesses that may appear decades from now, given the long latency period for many radiation and toxic-induced cancers. In addition, some workers may be denied insurance coverage when they leave nuclear weapons complex jobs.	15
51	DOE needs to make its legally obligated contributions to the Nuclear Waste Fund, established by Congress for repository characterization and construction. DOE has admitted that it owes the fund approximately $500 million.	1
52	The U.S. should vigorously pursue arms control agreements which will eliminate the need to modernize the Complex; specifically, the need to build NPR at SRS and relocate RFP.	9
53	Retrievable storage, if justified on the basis of future need of the material and processing necessary for the state of the storage, should not be funded from the environmental restoration budget, but from the defense and/or nuclear energy program budgets.	1
54	DOE needs to provide more details about what the relocation of RFP will mean to the communities that could receive its operations. DOE has created a misperception about what should be legitimate disincentives that communities should be considering (e.g., public health and safety and compliance with the environmental laws).	1
55	The relationship between conventional weapons and nuclear weapons should be closely examined in the PEIS. There is a possibility that with the dramatically changing world situation, conventional weapons will assume a greater importance in all defense systems and that nuclear weapons will be needed less and less.	4

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
56	Opposes the University of California's management of the nuclear weapons laboratories at Livermore and Los Alamos. The University's prestige lends credibility to the production of nuclear weapons and the students and faculty voted overwhelmingly to oppose the University's management role.	2
57	The role DOE plays in the nuclear arms race at sea (e.g., submarines) should be discussed in the PEIS.	1
58	Questions the management of the laboratories by the University of California. There have been cover-ups, self-serving lobbying in Congress, exaggerated reporting, restrictions of academic freedom, and dishonesty in dealing with Congress, the public, and its employees.	1
59	Questions the mechanisms that will be used to assure citizens that DOE and its contractors can be and will be held accountable and responsible for accidents, releases, and other incidents that may threaten the health of citizens in the name of national security. At the laboratories, the public should be informed as to which agency or organization will be held liable for the environmental, health, and safety impacts associated with continued research and development of nuclear weapons.	2
60	Funding should be directed into the research, testing, development, and deployment of non-nuclear strategic defense systems; modernizing existing offensive systems to prevent obsolescence, improve environmental safety, and maintain readiness and reliability; and development of a single stage to orbit rocket launch vehicle and the National Aerospace Plane.	45
61	The PEIS should explain if the proposed facilities would be in violation of the treaties to which the U.S. is a signatory, such as the Nuremberg Protocols, the Geneva Convention, and the United Nation's Genocide Treaty.	4
62	The management structure and resources necessary to ensure that DOE and its contractors safely design, develop, construct, and operate the facilities required for nuclear weapons production should be discussed in the PEIS, including consideration of quality management activities (e.g., standards, structure, process, and independent oversight). DOE should provide for an arm's length independently administrated means of monitoring the technical, structural, and process issues necessary to protect worker and public health with the authority to enforce corrective action of deficient performance on the DOE and its contractors.	4
63	DOE should refrain from influencing either the PEIS or national strategic policy, either as a body or through its prominent officials, as has occurred in the past.	1
64	The primary direction for DOE's near-term programs and policies should be on resolving existing problems with the Complex, including achieving satisfactory progress in meeting and maintaining standards for environment, safety, and health, and reducing the excessive and growing maintenance backlog resulting from past practices of deferring maintenance to meet production requirements.	2
65	The *Reconfiguration Study* (page 137) states that environmental, safety, and health projects will be given higher priority than production projects, but then goes on to state that deficiencies in these areas will only be corrected if the relative cost-effectiveness and benefits of the projects are found to be of similar merit to lower priority projects. Given the costs of ensuring health and safety of nuclear workers, and complying with the existing environmental regulations, it will never be cost effective for DOE to prioritize health and environmental safety.	1
66	Consideration should be given to using the uranium-235 and -233 isotopes as an alternative to the use of the plutonium-239 isotope in nuclear weapons.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
67	As long as weapons are designed, the policy should be to provide for the production of tritium. This should be accomplished at SRS.	1
68	The full cost of nuclear weapons production should be discussed in the PEIS, including the amount of money that is used to subsidize the industry and to provide a relatively no-risk situation to plant operators; the costs in health to workers and the exposed public during 30 years of mining and milling, manufacturing components, waste disposal, atmospheric and underground testing, and accidents; the cost of environmental pollution resulting from mining and milling, waste disposal, and the accidental release of hazardous and mixed and radioactive wastes; the cost of populations that have been bombed; and/or the cost of dropping property values of families owning homes near contaminated sites.	8
69	DOE has acted irresponsibly and is out of control. The agency needs to be reduced, made more socially responsible, reorganized, and/or shut down.	1
70	Concerned that DOE, without any public hearings and minimal public notification, has moved some operations from RFP to LANL and that there are proposals to expand such processing operations. The laboratory is involved in the actual production of nuclear weapons, supplementing functions that have been performed at RFP and elsewhere in the Complex for more than 5 years. Also concerned that the production of plutonium pits at the laboratory could be increased in the future without public involvement.	1
71	DOE should release all information about beryllium operations taking place at LANL because DOE has stated that LANL plutonium processing facilities could be used to process plutonium/beryllium sources. Workers at RFP have contracted berylliosis as a result of such operations. DOE should release all information about this disease and complete its ongoing health studies at RFP before initiating such operations at LANL.	1
72	DOE should estimate the cost to taxpayers of health and safety violations, medical expenses, and pensions of at-risk DOE employees, and related suits by residents in surrounding areas.	1
73	The *Reconfiguration Study* does not attempt to define the study's primary assumption and this country's nuclear weapons policy, objectives, or goals. It also does not address status, progress, or administration policy regarding international treaties.	1
74	Questions what is the DOE policy regarding the liability of landowners who produce vegetables and fruits, or lease lands, which are contaminated by radioactivity. Do landowners need to have people sign a contract when they come in and use land to farm?	1
75	Any and all relationships between future production and continued funding of existing and/or future environmental restoration and waste management programs at each site should be clearly explained in the PEIS.	2
76	The PEIS should include an evaluation of how future production activities will impact cleanup projects at individual sites through any combination of the following: capacity limitations, funding constraints, labor shortages, and shortfalls in technical or management resources.	1
77	DOE needs to release the nuclear weapons stockpile memorandum for public discussion and debate. The public should have the opportunity to be involved in determining how many nuclear weapons are needed.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
78	The dispersion of environmental impacts resulting from nuclear weapons production among thousands of out-sourced vendors with the proposed privatization of component and sub-system supply should be considered in the PEIS. However, the U.S. Government, as sole proprietor of the Complex, must bear full responsibility for its operations.	1
79	More of DOE's budget needs to be devoted to research and technology associated with nuclear waste disposal.	1
80	DOE needs to live up to promises made to the State of Idaho regarding the removal of nuclear waste which has been accumulating at INEL, including waste which was to be only temporarily stored at the site.	1
81	DOE needs to provide more funding for the National Environmental Research Park at INEL, a valuable national preserve for species of plants and animals in their native ecological settings.	1
82	The PEIS should discuss what specific responsibility the DOE will accept, by public statement and in dollar amount, for health problems developed as a result of exposure to the products and byproducts of nuclear weapons production.	1
83	Questions whether information will be made public as to the quantities and limits of storage of plutonium at Complex facilities and what agency will regulate such storage.	2
84	The PEIS should include a timetable for cleaning up the Pantex Plant, and a discussion of how, in the event of future contamination, area residents be assured of a timely cleanup.	2
85	Funding should not be diverted from the cleanup of the nuclear weapons sites to other projects such as the Superconducting Super Collider.	2
86	For states proposed to receive relocated facilities, DOE should execute a letter of understanding between the Secretary of Energy and the governor of each state setting forth what would be the rights and obligations of the various parties engaged in both the site selection process and in the eventual operation of the site.	3
87	Concerned that DOE has a track record of resistance and noncooperation with state officials and agencies around the country when states seek to alter DOE's plans and intentions.	1
88	One of the goals of Complex 21 is to "safely and reliably maintain weapons stockpiles." To meet this goal, who is going to check these weapons stockpiles and make sure they are safe, and who will check the people that check them?	1
89	Questions how neighboring families to the Pantex Plant will be compensated for health risks, damaged crops, and impaired quality of life.	5
90	Questions whether DOE has a drug abuse/alcoholism rehabilitation program for employees at each of the Complex facilities.	1
91	Questions what guarantee that local citizens have that in the future the DOE facilities will not be run by a contractor which is primarily owned by stockholders from a foreign country.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
92	DOE should establish a new method for determining the value of plutonium. The use of the economic discard limit fails to include the costs associated with such factors as environmental protection, long-term storage, and monitoring of waste products, and impacts on worker health and safety. The cost of plutonium operations should include the total life cycle cost of all related environmental and safety controls and potential hazards weighed against the purported benefit of adding the recoverable quantity of plutonium to the stockpile.	1
93	The PEIS should define the optimal proportions of DOE budgets for the next 50 years that will go toward production versus cleanup so that the public can debate whether or not waste management is given its due importance.	1
94	The Research, Development, and Testing Consolidation Panel should be restructured to ensure the consolidation which DOE desires. The panel as currently constituted guarantees almost little or no change will take place in RD&T activities.	1
95	The Tri-Party Agreement for the cleanup of the Hanford Site should be funded and carried out to completion. DOE should also not propose changes to it every year and delay its implementation.	4
96	DOE should make in-lieu of tax payments for the use of property which was taken from the counties that are part of the Hanford Reservation.	1
97	DOE needs to demonstrate how the reconfiguration process will not exceed its approved budget because of cost overruns.	1
98	The primary activities of a leaner Complex should be warhead dismantlement, treaty verification activities, and environmental cleanup.	1
99	The *Reconfiguration Study* is too narrow in scope. It should consider alternative tritium production techniques, including the NPR and a no-new-tritium option; warhead dismantlement; the safety of currently deployed nuclear weapons; and research and development activities related to arms control monitoring, inspection, and safeguards technology.	1
100	DOE should stop fighting passage of the Federal Nuclear Facilities Environmental Response Act, currently being considered by Congress. This bill is needed to provide for a national nuclear waste cleanup trust fund designed to guarantee funding for the cleanup of DOE facilities across the country and prevent the allocation of cleanup funds for production activities.	2
101	DOE should allow non-governmental organizations (e.g., the United Nations Environmental Commission or Greenpeace) to take their own samples and measurements at DOE facilities.	1
102	DOE needs to provide adequate compensation to all property owners affected by the proposed Complex 21, including compensation for all mineral, industrial, and agricultural production that is affected.	4
103	Contractual records should be included in public records kept pursuant to RCRA/CERCLA.	1
104	Transportation routes for nuclear waste, raw materials, and weapons should be subject to public hearings.	1
105	Questions whether DOE disagrees with any of the findings in the report prepared by the Congressional Office of Technology Assessment (i.e., *Complex Cleanup*) or any of DOE's reports on safety failings and environmental contamination.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
106	DOE should be aware that the storing of nuclear materials and waste was debated and defeated by the citizens in the Texas Panhandle several years ago.	1
107	The U.S. should stop importing nuclear waste from foreign countries and storing it at places such as INEL.	1
108	The U.S. should cooperate with other nations that possess nuclear weapons in an international effort to dismantle current stockpiles of weapons at least within the minimum standards of Assured Mutual Destruction.	1
109	The PEIS should thoroughly and carefully assess DOE's ability to effectively carry out both a cleanup and production mission at the Hanford Site. The addition of a weapons function could push DOE beyond its ability to carry out its critical environmental tasks, because of serious difficulties in securing needed people, materials, and services.	1
110	The issue of using only U.S.-made products should be considered; national security is threatened when non-U.S. products are used in U.S. weapons systems.	1
111	DOE has underestimated the cost of reconfiguration; the scale and cost can be reduced by focusing on system efficiency.	1
112	DOE should develop more in-house expertise and reduce its reliance on outside contractors.	1
113	The PEIS should discuss how DOE Orders and safety policies are developed and implemented, and how the public can become more involved in the development of such orders and policies. All DOE Orders and safety policies which may be written or changed in connection with the PEIS should be developed under public scrutiny with such orders published in draft form in the public record for public comment.	1
114	DOE must follow applicable regulations such as the Administrative Procedures Act and the DOE Organizational Act as it develops orders and objectives which apply to nuclear weapons production sites. The PEIS should discuss the promulgation of orders, directives, and standards which will be implemented or are being implemented.	1
115	The CAMP prioritization scheme presented in the *Reconfiguration Study* (page 137) implies that the only time the scheme has any effect is when there is a numerical tie between competing projects. Multipliers should be used to make the scheme more meaningful.	1
116	The *Reconfiguration Study* misrepresents the de facto mission and function of the U.S. nuclear weapons stockpile (i.e., "maintaining the nation's nuclear deterrent"). The actual mission of the Complex should be presented truthfully as "to maintain the means of pursuing whatever nuclear strategy the President and DOD decide on." The size of the stockpile has long surpassed the number needed to maintain deterrence.	1
117	The Pantex Plant *Site Reconfiguration Proposal* does not meet the minimum requirements for the relocation of RFP or for the collocated facility. Information regarding land availability, guaranteed water supply, public acceptability, and health of the Pantex labor force is misrepresented or inaccurate.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
118	The Oak Ridge Reservation *Site Reconfiguration Proposal* contains a number of shortcomings which undermines its credibility, and indicates that the purpose of the proposal is not a balanced, careful assessment of the assets and liabilities of the site, but rather a sales proposal. The proposal assumes that Oak Ridge exists and operates in a vacuum (e.g., does not consider the accident potential and safety hazard of nearby private projects), and contains baseless assertions that Complex 21 would result in no significant environmental impacts.	1
119	Questions whether the Reconfiguration Project Office (RPO) will duplicate the duties of other DOE/DP departments, and whether the RPO will be a reorganization of existing staff or will it warrant a new staff. Responsibilities of the RPO should be mandated in statute, in particular, the tracking of environmental, safety, and health laws and agreements. Compliance and protection of all treaty rights should also be guaranteed by the RPO.	1
120	The Complex 21 organization would be greatly improved if an additional department within DOE were established to effectuate a DOE policy which protects ceded lands treaty rights. This would, as a federal trustee, ensure that DOE activities do not adversely impact tribal treaty rights and the environment supporting those rights.	1
121	Independent and tribal involvement on the Technical Assessment and Selection Panel of the RPO is strongly recommended. DOE should amend the organizational structure of the RPO to include state, tribal, and public interest representation on its committees and panels.	1
122	Questions whether plutonium operations will continue to be self-regulating.	1
123	DOE should consider providing assistance to communities for economic diversification efforts to help offset the economic burdens placed on communities hosting DOE facilities.	1
124	DOE states in the *Reconfiguration Study* that, historically, "maintenance has frequently been limited to repairs of the most critical nature." This is not just a past practice, but is the officially stated policy regarding Hanford's plutonium processing plants. DOE runs things until they break and require a cessation of operations.	1
125	Questions why DOE classified a version of the *Reconfiguration Study*. There is no legitimate reason to keep any of the information concerning reconfiguration as classified. All information related to reconfiguration should be immediately declassified.	1
126	DOE has stated that the proposed relocation of RFP is based in part on public opposition to the plant. DOE should measure by objective and quantifiable means, the nature, scope, and magnitude of this opposition so that any decision on relocation based on public opinion is made on facts, not anecdotes.	1
127	The need for additional security for Complex 21 and the impact of this security on commuting and accessibility to the Oak Ridge Reservation should be considered in the PEIS.	1
128	DOE should pledge to assist local communities toward self-sufficiency in the contract awarding process by maximizing the application of the Secretary's principle of privatization, and establishing procurement selection criterion weighted toward acquiring goods and services locally and selecting major contractors for construction and operations committed to local diversification.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 11: NATIONAL NUCLEAR WEAPONS POLICIES (continued)		
129	DOE needs to plan for the decommissioning of existing weapons complex facilities and the eventual decommissioning of the new site so that the site can be made available for unrestricted use at the earliest possible date. Consideration of decommissioning alternatives and engineering features should be incorporated into the objectives for the design of Complex 21 facilities. A fund to guarantee effective decommissioning and site restoration should be established.	1
130	DOE should provide formal opportunities for local governments to address transportation issues such as routing for plutonium and high explosive shipments.	1
131	Questions whether the site selected for Complex 21 will be decontaminated, if contaminated, prior to commencement of construction activities.	1
132	The PEIS should focus not only on the safety of producing the current generation of weapons, but also the possible types of operations that may be required for future weapons systems.	1
133	The PEIS should include a detailed discussion of the quality assurance, quality control, and total quality management programs that will be used to ensure that environmental mistakes of the past are not repeated.	1
134	Questions whether the safety of the production of future generations of weapons can be adequately addressed in the PEIS in light of the secrecy surrounding work on these designs or designs that have not even been conceived yet.	1
135	DOE needs to further define "tritium contingency" and "supply of weapons-grade plutonium" as used on page 14 of the *Reconfiguration Study*.	1
136	The assumption on page 127 of the *Reconfiguration Study* regarding responding to DOD requirements carries with it an implication that DOE will only respond to DOD requirements authorized by the President, and will ignore any Congressional conditions contained in legislation authorizing expenditure of funds.	1
137	Questions why it is assumed that the Complex would be responsive to arms control treaties (page 27 of *Reconfiguration Study*). For what reason would the Complex not be responsive given that treaties are the supreme law of the land, equal in every way to statute law passed by Congress or decisional law passed down by the judiciary.	1
138	DOE should share budget information regarding implementation of the Tri-Party Agreement with the State of Oregon so the state can independently evaluate DOE's efforts.	1
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES		
1	Questions the feasibility of reducing the current stockpile (e.g., down to 15% of current size) with no reduction in the operations of the laboratories. A major reduction, consolidation, and/or elimination of some of the laboratories needs to be considered, because these laboratories have many redundant missions, such as researching and testing new nuclear designs.	15
2	DOE should consider, as part of the reconfiguration of SNL, the return the 16 sections (square miles) of land withdrawn from the U.S. Forest Service (Cibola National Forest) when the administrative withdrawal expires in October 1991. There are no permanent facilities on this land, and endangered species and archaeological sites have been harmed by activities on the land.	2

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
3	DOE and the nation need to maintain the capabilities of the national laboratories for the theoretical design of nuclear weapons, including engineering design, chemistry, metallurgy, limited testing, and criticality safety. The laboratories need to be able to attract and retain the right people. Reconfiguration of the Complex should be done to maintain these capabilities.	5
4	The *Reconfiguration Study* should include the option of non-modernization.	2
5	The PEIS should include a full discussion of the cost and implications of maintenance of long-term environmental monitoring and safety at RFP. If the facility is shut down, there should not be a reduction in the commitment to environmental monitoring and worker safety.	1
6	The PEIS should consider the role of nuclear weapons with regard to deterrence and the changing world situation. Strategic planning needs to be accomplished to determine the size of the stockpile required and how large a Complex the country will need to support. The *Reconfiguration Study* is not needs based; it is based on arbitrary determination or applying a scale factor to the present system. There is no consideration of the true needs of national security to dictate how we ought to reconfigure the Complex.	75
7	Concerned about increasing tritium production while at the same time reducing the nuclear stockpile. What will happen with the tritium left over?	1
8	DOE's need for the continued production of nuclear weapons should be evaluated openly. Options considered in the Reconfiguration PEIS should include no future production, maintaining only a minimum deterrent, and limits on the testing such as adoption of a Comprehensive Test Ban.	4,038
9	There is enough plutonium in stockpiles already and there is no justification for a national program to keep producing it. Consider recycling the current supply from warheads rather than building new facilities.	30
10	Cumulative impacts from past and future activities should be evaluated in the PEIS. Existing contamination should be considered in the impact evaluations.	9
11	The reuse of intact plutonium pits and/or nuclear warheads should be discussed in the PEIS. This option, as well as standardization of weapons, should be compared to continued reliance on the chemical recycling of plutonium pits and multiple warhead designs. Pit and warhead reuse may eliminate the need for the restart of RFP or the construction of a replacement facility. Extensive pit and warhead reuse would affect the design and size of the future nuclear complex.	107
12	The PEIS should include an assessment of the effects of privatization of non-nuclear manufacturing, including issues of contractor liability, conflicts of interest, weapons proliferation, and increased cost. DOE needs to ensure that transferring functions to the private sector will not disrupt the already established web of high technology that exists within the Complex. The private sector may not have the same dedication to the industry and environmental compliance, or the ability to advance the technology. The Complex provides many capabilities and technologies exist not available in the private sector.	11
13	A detailed statement on the production of nuclear materials for non-defense purposes in Complex 21 should be provided in the PEIS. At least one option should evaluate the impacts of producing these materials in non-DOE facilities.	2
14	DOE should consider conversion opportunities for all sites in the nuclear weapons complex (i.e., no longer produce nuclear weapons). Existing jobs should be converted into jobs that do not involve the production of nuclear weapons.	992

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
15	Criteria for determining when plutonium is to be recovered from scrap, residue, and other materials should be evaluated in the PEIS.	1
16	Storage options for plutonium-contaminated materials and plutonium pits from retired warheads that do not rely on chemical processing should be considered in the PEIS.	1
17	DOE should minimize the total area affected by production activities. Too much land, air, and water has already been contaminated by past activities.	10
18	The PEIS should include an inventory of the existing facilities that will become a part of Complex 21, facilities that will be improved in-place, and new facilities that will be constructed. Provision should be made for detailed mapping of as-built conditions of the Complex prior to any reconfiguration or consolidation.	2
19	Questions what is proposed to be moved to the Pantex Plant. DOE should provide a complete and comprehensive description of all activities proposed for the Pantex location.	12
20	Questions what new technologies are planned to be used in the Pantex Plant expansion, when will they be disclosed, and what warranties of safety do these technologies promise.	5
21	Questions what other communities, other than Amarillo, Texas, have expressed an interest in the reconfiguration project.	1
22	Nuclear weapons complex facilities should not be located near populated areas, rivers, or ground water. Waste disposal sites should be located away from people, rivers, and ground water, and not in areas that are geologically unstable.	4
23	Questions need for tritium capacity (i.e., establishing a new production facility) that is twice what is currently being produced, particularly in light of the General Accounting Office report that states that there are sufficient supplies for any anticipated needs of the nuclear weapons stockpile for the next several years. The General Accounting Office also suggested that with a smaller stockpile requirement, the use of a linear accelerator for tritium production becomes more feasible. This method should be studied as a safer and less environmentally damaging method.	51
24	Concerned about the environmental impacts of reuse of all or portions of the RFP site, and if DOE does maintain some presence, whether other parts of the site could be used for non-Federal uses (e.g., mixed commercial/industrial uses) or would this be precluded because it is a Federal reservation.	1
25	DOE should assess "the underlying purpose and need for which the agency is responding" with regard to reexamining the fundamental policy upon which its modernization plan is based -- the continued development of nuclear weapon systems. This is required by NEPA and DOE cannot legally avoid this obligation. This assessment should include the need for nuclear warhead testing and restarting existing and proposed tritium reactors and plutonium recycling facilities.	94
26	A zero weapons option should be considered. This option would be a Complex that existed only for the purposes of decommissioning and decontaminating weapons and facilities. The PEIS should include an evaluation of the minimum level of activities that the Complex would have to support if there was no nuclear weapons production in the future. Certain facilities will still be needed; for instance, for dismantling warheads that are retired by treaty or otherwise.	52

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
27	If nuclear weapons production is to continue, DOE should consolidate the sites and minimize side-effects on nearby communities and decrease required support staff. Minimizing the number of nuclear weapons production sites and the downsizing of each site to increase efficiency is in the best interest of the country.	5
28	The reconfiguration proposal for the Pinellas Plant should ensure that plutonium will not be kept onsite.	1
29	Recommends a thorough cleanup of all sites with consolidation to no more than six sites with extra precautions to protect against contamination by toxic and radioactive materials. The other sites should be converted to other uses. It does not make any sense to open new sites which will inevitably become contaminated.	1
30	Criteria developed for determining conversion of sites to other uses (e.g., non-nuclear weapons production) should give high weighting to sites located in highly populated areas.	1
31	Restrictions on development (e.g., residential or commercial) in proximity to sites that are retained should be considered.	1
32	A smaller Complex is indicated in light of plans for a smaller arsenal (15 to 85% smaller).	4
33	Concerned about consolidation of Complex facilities. Multiple locations for facilities should be maintained to present less of a target in the event of a hostile act by a foreign nation.	3
34	Questions exclusion of DOE's Piketon Plant (Portsmouth Uranium Enrichment Plant) from the *Reconfiguration Study*.	1
35	The *Reconfiguration Study* should address the decommissioning of nuclear weapons. This process will result in waste and storage problems which will require a major investment.	1
36	Questions the assumptions made for the Mound Plant used in the *Reconfiguration Study* with regard to the condition of facilities and equipment; difficulty in meeting and maintaining environmental, health, and safety standards; its maintenance backlog; population encroachment; changing safeguards and security threats and difficulty in meeting new standards and requirements; and not considering the Mound Plant as the site for consolidation of work now performed at other facilities. The Mound Plant has state-of-the-art facilities and has been responsible for dealing with environmental, health, and safety issues.	4
37	The specific arms control assumptions used for determining each arsenal reduction scenario used in the *Reconfiguration Study* need to be clearly spelled out to justify the need for interim production at RFP and the long-term need to rebuild the Complex.	1
38	Sites should be selected in the reconfiguration process based on their past record with regard to environmental, safety, and health compliance. Geographic location should not be a determining factor because industry and population growth will change over time.	2
39	The potential for the reuse of nuclear materials for other purposes (e.g., for power plants or powering satellites) than building more nuclear weapons should be considered in the PEIS.	5

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
40	The PEIS, or a separate EIS, should demonstrate the need for the restart of RFP in the near term and address the health, safety, and environmental impacts of doing so before the plant resumes operations. The plant has major structural deficiencies that do not meet Federal safety standards for natural disasters and the buildings threaten worker safety.	5
41	The *Reconfiguration Study* should contain plans for the decontamination and decommissioning of RFP, which are essential for the plant's closure.	3
42	DOE needs to clearly demonstrate that a need for pit fabrication (Building 707), plutonium reprocessing (Buildings 771 and 776/777), and plutonium recovery (proposed Plutonium Recovery Modification Project/Residue Elimination Project) at RFP cannot be met elsewhere in the Complex, at a facility that is less hazardous to the public health and environment. For example, could existing plutonium reprocessing needs be handled at SRS and LANL?	2
43	Opposes the construction of any new facility at RFP, specifically the Residue Elimination Project (REP), unless it is clearly demonstrated that it will be used only for cleanup and decommissioning. The current proposal for the REP allows for its use for future production. DOE should instead stabilize the plutonium waste for disposal at WIPP or elsewhere, which would decrease the amount of plutonium available for proliferation.	3
44	The PEIS should include specifics on the relocation of RFP, including the advantages and disadvantages of relocating it with Oak Ridge and Pantex, and whether such a consolidation would be for all operations or just pit fabrication. The relocation discussion should focus on how to relocate the operations in a way that minimizes risks to the public, workers, and the environment.	2
45	DOE should consider Configuration B (Maximum Consolidation) to phase out as much of the Complex as possible. The *Reconfiguration Study* does not go far enough in terms of acknowledging the severity of the problems Complex-wide, which would dictate a much more comprehensive scaling back.	4
46	DOE needs to refer to the 1989 Environmental Audit of the Complex and the 1991 Office of Technology Assessment report in the *Reconfiguration Study*. DOE should also refer to other documents such as Technical Safety Appraisals and Environmental Restoration Assessments.	1
47	Transition activities (page 37 of the *Reconfiguration Study*) involving restoring disrupted operations and assuring their future continuity should not be part of the *Reconfiguration Study*.	1
48	DOE needs to institute the idea of modular construction to provide flexibility in adjusting production capacity. This would allow for a smaller Complex that could respond relatively quickly to any unforeseen threats to our national security that might be alleviated by building a larger arsenal.	8
49	There needs to be independent oversight of the Complex 21 reconfiguration process. Responsible oversight (e.g., by the Arms Control Disarmament Agency) can help ensure that the future Complex is no larger than needed and is built to inflict the least possible environmental damage. DOE needs to seek input from individuals on both sides of the nuclear fence, and state and local officials, to ensure that all perspectives are considered.	20
50	To ensure that safety and reliability are of prime importance in the planning and building of Complex 21, construction materials and equipment design need to be adequate for the job and meet the required specifications.	2

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
51	DOE needs to reduce the costly "custom shop" nature of the Complex. Warhead refinements have gone beyond the point of diminishing returns. The missiles should be designed to fit the warhead rather than vice versa. By relying on relatively few versatile warhead models, using interchangeable parts, and standardized production processes, the need for specialized manufacturing and assembly lines can be reduced.	9
52	The U.S. does not need anything more than the two dozen warhead models it already has. Further improvements, such as earth penetration ability, area kill (microwave), and directed energy weapons, add nothing to our security, but require a large nuclear research, development, and testing program.	10
53	The PEIS should address how the decline of the U.S. arsenal will also affect the need for the replacement of nuclear weapons. If each weapon has to be remade after 30 years, then to maintain an arsenal of 5,000 weapons, the U.S. would need to manufacture approximately 170 warheads per year, far smaller than the capability at RFP and other sites.	1
54	A full disclosure of the 40-year record at RFP regarding health, safety, waste, and contamination of air, earth, water, and plant and animal life needs to be made part of the PEIS. The DOE should contract with the Rocky Flats Environmental Monitoring Council to commission a non-DOE committee to write the sort of background study that would be useful for communities interested in receiving RFP's plutonium operations.	3
55	DOE should ensure a mechanism for modifying its plans to account for future reductions in the size of the nuclear arsenal, even if such reductions are not initiated until after the completion of the reconfiguration PEIS. The Complex should not be built for the largest stockpile case with operations at a lower level; it should be built for the smallest stockpile case, anticipating that it will not have to be expanded given the changing world situation.	2
56	In developing the stockpile cases, the sizing criteria should be openly discussed. The number of weapons in the nuclear arsenal or the amount of tritium or plutonium needed to maintain those weapons should not be a national security secret. Secrecy has contributed to wasteful spending and environmental mismanagement. The PEIS should include an unclassified discussion of the need for production with sufficient detail for the public to understand the rationalization for specific proposals.	2
57	The U.S. should negotiate with the Soviets a verified warhead dismantling program, accompanied by a cutoff in the production of weapon-grade fissionable material. DOE contemplates substantial retirements of nuclear weapons, but it has not gone beyond suggesting that the plutonium components, the pits of dismantled weapons, be stored in a new facility at the Pantex Plant. If the Soviets were to do the same, a highly unstable situation would develop, in which both sides held huge inventories of critical nuclear weapon components in readily accessible form.	8
58	The PEIS should very clearly describe the implications of reducing the size of the stockpile with regard to needed facilities/activities (e.g., plutonium production or reprocessing). With a smaller arsenal, the Complex will be focused more on the problem of how to store and ultimately dispose of dismantled warheads and the plutonium they contain.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
59	The 1991 Defense Authorization Act asked the President to prepare a comprehensive technical report on the onsite monitoring techniques, inspection arrangements, and national technical means that could be used by the United States to verify the actions of other nations with respect to (a) dismantling of nuclear warheads; (b) a mutual United States-Soviet ban leading to a multilateral global ban on the production of additional quantities of plutonium and highly enriched uranium for nuclear weapons; and (c) the end use or ultimate disposal of any plutonium or highly enriched uranium recovered from the dismantlement of nuclear weapons. This should be taken into account in analyzing the design of Complex 21 in the PEIS.	1
60	The *Reconfiguration Study* states that "a vigorous research, development, and testing program will be needed to maintain confidence in the nuclear weapons program and the deterrent stockpile." DOE needs to be more specific when presenting arguments for nuclear testing. Safety and reliability can be ensured without actually exploding nuclear materials; that is, by detonating the conventional triggers in the absence of plutonium or uranium.	1
61	The PEIS should include an analysis of how restrictions on nuclear testing, including a Comprehensive Test Ban Treaty, fit into DOE's plans to modernize the entire complex. The *Reconfiguration Study* only references a separate, outdated, congressionally mandated study. The PEIS should address the economic, environmental, and health implications of a Comprehensive Test Ban.	24
62	DOE needs to demonstrate the need for the mid-term reconfiguration plans (e.g., restarting the two tritium reactors at SRS and the restart of plutonium reprocessing operations at RFP), while at the same time minimizing public health risks.	3
63	The use of spent fuel rods for the production of highly enriched uranium for use in production reactors should be discussed in the PEIS.	1
64	The PEIS should include an analysis of a broad range of alternatives for plutonium recovery. Plutonium recovery operations should be reevaluated and eliminated or at least redesigned, if there is not sufficient justification to warrant continued operation of existing facilities and processes. DOE's implicit proposal to continue its current processing system (i.e., conversion of the plutonium material to an oxide form, without the normal hydrofluorinations) is not the only alternative and does not seem to be warranted in light of reduced need for plutonium acknowledged by DOE. The long-term value of converting and storing plutonium in a retrievable or irretrievable form should be analyzed thoroughly.	1
65	Plutonium processing alternatives should be evaluated on the basis of a number of criteria, including the amount of waste produced by alternative processes; the type of waste produced (e.g., based on toxicity and physical/chemical characteristics); the availability of treatment, storage, and disposal capacity to deal with the wastes; and the availability of source reduction and waste minimization alternatives to reduce or eliminate the waste. Each alternative should be analyzed to include a ratio of all the waste generated (e.g., radioactive, mixed, hazardous, aqueous, organic, and metallic) per unit of plutonium recovered and per unit of plutonium scrap processed. Alternatives should be in full compliance with DOE Order 5400.1 for waste minimization.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
66	DOE should not exclude non-weapons-related activities from the PEIS. Nuclear power-related research, such as development of the Atomic Vapor Laser Isotope Separation process at LLNL, should be considered. Failing to address these activities together with weapons programs will underestimate the environmental, health, and safety impacts. In addition, programs that subsidize nuclear power development make nuclear weapons proliferation more likely, and encourage reliance on a potentially dangerous energy technology with an unsolved waste problem.	10
67	Questions DOE wanting to centralize the nuclear weapons industry, particularly from the standpoint of security and safety, or natural disasters. The PEIS should address the security and reliability of one site as compared to several, and consider the increased threat of terrorism and other disturbances for each location and toward private and municipal facilities in each region. The impact of proposed countermeasures should also be addressed.	9
68	DOE should identify research activities which are not being pursued outside of the national laboratories, such as development of theoretical and computer simulations of complex physical phenomena. Such research, while useful in weapons design, has other many other applications.	1
69	The U.S. Fish and Wildlife Service suggests that, although the criteria for Complex 21 sites do not require consolidating sites at an existing facility, that consideration be given to consolidating sites at existing facilities, where possible, to avoid environmentally sensitive areas.	2
70	Exclusion of some of the most controversial and secretive sites from the PEIS undermines the validity of the process, such as Office of Naval Reactors facilities. Although the Navy nuclear propulsion program is not part of the nuclear weapons complex, this segment of DOE has suffered from a complete lack of oversight with regard to environmental, health, and safety problems.	1
71	Questions whether the current corporations (e.g., EG&G at the Mound Plant) that operate non-nuclear manufacturing facilities could be allowed to move production of non-nuclear components to their private business.	1
72	The PEIS should include a discussion of whether changes in national political and world power relationships, such as the end of the Cold War and demise of the Warsaw military alliance, will affect the national policy of nuclear deterrence. Assumptions in the *Reconfiguration Study* (Section 2.1.2) regarding deterrence, arms control, and the changing political environment conflict with one another.	2
73	DOE's emphasis on vigorous and aggressive technology transfer to private industry should be reevaluated. Transfers should not occur if the technology is primarily only applicable to mass destruction or warfare, or is achieved only at significant environmental cost. The transfer of waste cleanup technology should be encouraged.	3
74	The PEIS should identify what the costs for the different alternatives proposed will be, including a no production alternative.	2
75	Alternatives to continued nuclear weapons testing and production, and the accompanying toxic radioactive poisoning of the environment, should be discussed in the PEIS.	915
76	A schedule with milestones for each facility should be included in the PEIS.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
77	Stringent economic justification should be required for all proposed alternatives in the PEIS. The stated margin-of-error on projected costs of plus or minus 50 percent is laughable and unacceptable, and illustrates the need for a comprehensive study of whether dollars dislocated into weapons programs increase or decrease the nation's economic vitality. Vague references to technology transfer will not suffice as economic justification for continuing weapons programs.	1
78	Concerned about future activities at LANL. If LANL continues to expand its weapons production capabilities, the core research and development mission of the laboratory will be severely reduced or disappear altogether. LANL attitudes toward conversion, non-weapons activities, and technology transfer are extremely poor, shortsighted, and inadequate.	3
79	The *Reconfiguration Study* states that "under the No Action alternative, only those projects needed to accomplish the Department's defense mission will be pursued." The No Action alternative is actually a ruse for continuing weapons production in much the same manner as is done today. DOE can label almost any activity as necessary for accomplishing the Department's defense mission. The No Action alternative should include another scenario -- pursuit of only those projects needed for compliance with Federal, state, and local laws, regulations, and orders.	1
80	Projects such as the Special Nuclear Materials Laboratory proposed at LANL, the NPR, and the RFP Plutonium Recovery Modification Project facility are labeled as transition activities by DOE. They are not needed to sustain the Department's defense mission, and these projects would, in fact, foreclose options that should be considered in the PEIS. The PEIS should include an analysis of the minimum requirements for maintaining a nuclear arsenal without building these proposed interim facilities.	1
81	Operations from RFP should not be relocated because they are inherently dangerous, there is no place to dispose of the wastes that are generated by such operations, the health effects of such operations are still unknown, the current operations do not comply with safety standards or environmental laws, and the current facility is a disrupting economic activity in the Denver area. Given the controversial nature of these issues, relocation of the RFP operations will only serve to be a divisive issue in the communities near the proposed relocation sites.	1
82	In selecting new elements in the Complex, priority should not be given to the isolation of facilities. Isolation separates people from the facilities which may affect them through downwind dispersion events. Locating facilities where they are more highly visible makes them more accountable.	1
83	Questions whether the idea of consolidating as yet unspecified RD&T functions into individual and possibly disconnected entities called Centers of Excellence would enhance the overall weapons RD&T performance, or become cumbersome stumbling blocks -- effectively decreasing efficiency, cooperation, and communication. Success will depend entirely on how they are defined and managed. Maintenance of the highest quality technical base should be continued with independent scientific judgment, beneficial competition, and peer review.	1
84	All elements of national security (e.g., economic, environmental, and energy) require a science and technology base even better than what was needed in the past. It is essential that in restructuring the nuclear weapons laboratories, care is taken to preserve the characteristics which make them versatile, innovative, creative, and productive, and upon which we must now build in order to address the expansion of the agenda for national well-being.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
85	The testing of the non-nuclear components of warheads should be considered. The safety systems in triggers do not require a nuclear explosion to determine whether or not they work. Testing could be continued to test those particular components without having any nuclear explosions or the risk of radionuclides being released into the environment.	3
86	NEPA states that the no-action alternative should consider the impacts or the consequences of not proceeding with a project. Not proceeding with this project does not mean continuing current operations, it means stopping all operations, as has occurred already at RFP, SRS, and Hanford.	2
87	The implications of potential arms reduction treaties and weapons retirement on the need for more weapons materials (e.g., plutonium, uranium, and tritium) and a new weapons complex should be considered in the PEIS.	2
88	Questions DOE's premise that the existing infrastructure at the sites being considered for consolidated operations is an asset and will therefore reduce the actual cost associated with the reconfiguration effort. However, the conditions of the sites being proposed for the relocation of operations from RFP, Pantex, and/or Y-12 may be a liability, not an asset. The worst-case scenario would be better defined by the legacy of a half century of neglect, mismanagement, and misplaced priorities from which the Complex is currently suffering than by an imaginary assumption that new plants will be built in the middle of a grassy field. The upper bound of cost would be more accurately reflected and the expenses necessary to address existing problems than in the assumption that no supporting infrastructure currently exists.	2
89	The PEIS should include a study of the potential for the remediation of any process that is proposed.	1
90	The PEIS should include a discussion of the necessary monitoring mechanisms needed to evaluate, minimize, and fully remediate the expected environmental impacts of the entire Complex operation.	1
91	The PEIS should address how a scientifically valid study of a technology that does not yet exist can be conducted.	3
92	Reconfiguration Option B is not a reasonable alternative environmentally, with regard to downsizing the Complex, and in terms of costs. This option leaves out numerous unreasonable alternatives (e.g., using existing plutonium facilities at SRS and pit reuse) and the relocation of Y-12 and Pantex operations is not cost effective.	1
93	Regardless of which reconfiguration option is adopted, the Complex should be designed to utilize nuclear materials to the maximum extent possible so that as little waste as possible is generated. Consideration should be given to reprocessing waste materials into nuclear fuels.	1
94	RFP and the Pantex Plant should be reconfigured into an environmental management mode with all functions transferred to the Oak Ridge Bear Creek Site. All remaining nuclear-related functions at the Hanford Site should also be relocated to Oak Ridge. Y-12 should not be transferred because of the high cost and the difficulty in siting at a new site. The prohibitive nature of current environmental, health, and safety regulations, community right-to-know laws, and the not-in-my-backyard syndrome would make such a siting nearly impossible.	1
95	Nuclear-related work at LLNL and SNL should be eliminated, converted, and redesigned with remaining functions transferred to LANL.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
96	Insufficient thought has been given to the available options presented in the *Reconfiguration Study*. A third option, Configuration C (presented by speaker), should be considered. This option would be less expensive, be more in line with the reconfiguration goals, and provide far greater internal security and consolidation. Configuration C would not transfer as much responsibility to the private sector.	1
97	Reconfiguration of the Complex should include the following: terminate non-nuclear operations at the Mound and Pinellas plants and transfer functions to the Kansas City Plant; Keep INEL in-place, but stress environmental management; eliminate tritium producing facilities at SRS, but maintain tritium loading facility and reserve center with emphasis shift to environmental management; and continue present operations at NTS until greater testing restrictions are in-place.	1
98	The need for a backup tritium loading facility should be eliminated because tritium loading will not be a critical function in the future.	1
99	The Strategic Arms Reduction Treaty (START) has changed the stockpile cases presented on page 92 of the *Reconfiguration Study*. Partial compliance with the treaty requirements will reduce the stockpile such that adoption of Modular Approach 1 is the most sensible approach, along with a no tritium production before 2010.	1
100	Proposed missions at the Hanford Site should not use lands to the north and east of the Columbia River; DOE should use lands which would be the least desirable for return to the public for uses other than DOE programs.	1
101	DOE should consider using its facilities for the construction of various facilities including waste transmutation plants, reactors for electricity generation, alternative energy systems (e.g., wind and sun), coal gasification plants, or a fuel-recycle complex.	1
102	Complex 21 facilities and processes should be designed first, to reduce the potential for accidents; second, to mitigate the accident; third, to contain the accident; and finally, to isolate the facility such that if the first three measures fail, the public will still be protected. A large buffer zone between the public and the facilities should also be provided in case the accident is not contained.	1
103	Alternative engineering that will do away with the need to use plutonium and other fission-type reactions in weapons should be considered.	1
104	Reconfiguration of the Complex should involve a policy of maximizing privatization and technology transfer opportunities. Privatization and technology transfer would expand the tax base and employment diversity in those communities that currently host government-owned, contractor-operated plants and soften the blow that would be caused by facility closure and relocation of operations.	3
105	The most important capacity of the modernized Complex should be the capability to dismantle nuclear warheads and dispose of the considerable amounts of chemical and nuclear materials they contain.	1
106	The PEIS should clearly define how technology will be proven before it goes into production. Institutional arrangements should include both DOE's technology development program and a highly effective and powerful independent certification program.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
107	Questions whether Complex-21 will be built as it designed with all the necessary safety features, or whether a lack of funding will cheapen the configuration by requiring the elimination of some of the system's redundancy and other important factors.	1
108	Questions whether DOE will give Congress a realistic cost estimate even if such a cost estimate were too high.	1
109	Concerned about the potential for adverse impacts on the operation of the Oak Ridge National Laboratory (e.g., reduced access to user facilities by non-DOE persons and diminished interactions between Oak Ridge and non-citizen scientists on basic research matters) because of the security associated with locating Complex 21 at the Oak Ridge Reservation.	1
110	Questions what restrictions will be placed on siting new research and development demonstration facilities outside the security area at the Oak Ridge Reservation, and to what extent will the presence of Complex 21 preclude the location of major new research and development facilities that require substantial amounts of land.	1
111	Concerned about the type and number of principal subcontractor support facilities that will be required for construction and operation of Complex 21 at the Oak Ridge Reservation, and whether the areas for these facilities will be designated or will they be located as "strip highway"-type developments between the nearby interstate highways and boundaries of the site.	1
112	DOE needs to examine the technical and design capabilities of its Facilities Manager when selection of a design organization occurs. Engineers who work at DOE facilities have a vested interest in the successful and safe operation of the facilities, more so than Architect-Engineering firms not associated with the facilities.	1
113	Reconfigured plants that contain significant amounts of radioactivity should be placed in deep and hardened sites, preferably far underground, or in tunnels into mountains, old mines, or caverns.	1
114	The nuclear weapons laboratories should be reconfigured to continue studying and evaluating designs for nuclear explosives, but not the testing of such designs.	1
115	The proposed site for Complex 21 at INEL could be described as a "pristine" site and is a prime example of undisturbed sagebrush steppe, and as such, is beneficial for research on the ecology of area. DOE should consider already disturbed sites near Lincoln Boulevard which have better access and would protect this valuable scientific location.	1
116	The WPPSS reactor at the Hanford Site should not be used for producing nuclear weapons materials.	1
117	Questions whether any processing plant devoted to the clean up of existing plutonium for the sole purpose of preparing it for eventual safe disposal is proposed.	1
118	The *Reconfiguration Study* (page 156) cites the need for "seismic upgrades at the Rocky Flats Plant, SRS, INEL, and LLNL." Questions whether these upgrades refer to studies, monitoring, upgrading buildings, or all of these.	1
119	Any land status changes that occur as a result of privatization actions need to be identified in the PEIS.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
120	Interim operations of plutonium production facilities needs to be further defined and clearly presented in the PEIS. The PEIS should include a discussion of how such operations will be justified, which sites and reactors will be restarted, the effect on treaty rights on ceded lands, feed material (volume and type) and water inputs required, resulting material outputs, compliance of restarted reactors with environmental laws, and how plutonium operations will interface with DOE cleanup plans and federal facility agreements.	1
121	The PEIS should include a more accurate assessment of costs for Complex 21, including costs for transition to Complex 21; the NPR; upgrades to existing SRS reactors; addressing safety, health, and environmental deficiencies throughout the Complex; implementation of stricter regulations; decommissioning, decontaminating, and relocating RFP; anticipated costs overruns; and other contingencies.	1
122	Additional reconfiguration scenarios for RFP should be considered in the PEIS, including continued full-scale nuclear and non-nuclear production; retention of only the non-nuclear operations; retention of non-nuclear operations in combination with other non-nuclear operations from other DOE facilities; consolidation of nuclear materials production and manufacturing operations in place at Pantex and Oak Ridge Y-12 to RFP; use of RFP for other Federal uses; and relocation of RFP to another site in Colorado.	1
123	DOE should consider long-term plans for the use of facilities and their buffer zones following closure and restoration activities, including how these areas can eventually be brought into community tax roles. The feasibility of the federal government assisting local governments in building infrastructures to allow development of sites and their buffer zones following closure and restoration.	1
124	An alternative that involves no restart of operations at RFP and wisely uses already limited resources to establish new areas for relocating RFP should be considered in the PEIS.	1
125	Mid-term configurations that would allow all RFP production activities to relocate on the most accelerated schedule possible (i.e., similar to that proposed for the non-nuclear components) should be considered.	1
126	The No Action alternative as described could possibly still allow DOE to reconfigure the Complex along the same lines as presented in the *Reconfiguration Study*.	1
127	Questions why estimated costs for decontamination and decommissioning (D&D) are not included in the total project costs (page 95 of *Reconfiguration Study)* and whether DOE is attempting to conduct D&D off-budget. DOE has not explicitly stated that these costs are included in the ER&WM PEIS. One could conclude that DOE is trying to ignore billions of dollars in necessary cleanup.	1
128	DOE has determined that "all residues, wastes, and plutonium oxide currently existing, or produced from future operations, do not need to be reprocessed for weapons production." DOE should specifically declare what it intends to do with this plutonium material.	1
129	The phaseout of plutonium production at the Hanford Site is not dependent on the outcome of decisions concerning Complex 21. Because of this and the incumbent transition at Hanford to solely cleanup activities, DOE should not consider Hanford as a possible site for transfer of RFP nor the consolidation of other nuclear weapons activities.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 12: RECONFIGURATION PROPOSAL AND ALTERNATIVES (continued)		
130	An evaluation of the ability of RFP to operate safely within the current and future mission of Complex 21 should be included in the PEIS, including the costs of and impacts of modernizing (and downsizing if appropriate) RFP in-place. Comparisons of costs and impacts should be made to other facilities in the Complex, some of which are also deteriorating and in need of upgrades. RFP may compare favorably when costs are evaluated.	1
131	The need for new infrastructure (e.g., roads, power plants, and water plants) that will have to be constructed to make the site suitable for Complex 21 should be discussed in the PEIS.	1
132	Questions why, if there may be variations of the two options discussed in the *Reconfiguration Study* or other options that may eventually be adopted, are they omitted from the study.	1
133	The CEQ regulations implementing NEPA [§1500.2 (c)] state that an agency shall "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning uses of available resources as provided by § 102 (2) (E) of the Act." Arbitrarily limiting Complex 21 to two alternatives, both of which contemplate maintenance of the status quo ante, is no choice. Alternatives involving alternate uses of available resources or alternative technologies should be considered.	1
134	Section 2.1.3.2 of the *Reconfiguration Study* states that the Environmental, Safety, and Health Team developed a set of assumptions used in preparing the study. These assumptions should be have been made available for public comment and need to be incorporated into the PEIS. Similarly, the specific long-term options for reconfiguration developed by the Complex Reconfiguration Team should have been included in the study and need to be incorporated into the PEIS.	1
135	In both reconfiguration options identified in the NOI, DOE states that the preferred alternative will include the relocation of nuclear weapons functions and closing of weapons complex facilities at RFP. For this scenario, plans for an envisioned phase-out period, at which time the plant's activities will be gradually transferred to DOE's Office of Environmental Restoration and Waste Management for oversight, should be addressed in the PEIS.	1
136	The new role for RFP should be as a prototype for waste management and cleanup for the weapons complex. Given the current waste management dilemma at RFP, it is an ideal candidate for testing new treatment technologies on the highly heterogeneous waste streams generated by the Complex.	1
Issue Category 13: RELATIONSHIP TO OTHER DOE PROGRAMS AND ACTIVITIES		
1	NPR capacity should be considered in the PEIS. The nature of the PEIS allows for a more comprehensive analysis than that offered by the single-mission NPR Capacity EIS and NPR is an integral part of the plans for Complex 21. The NPR Record of Decision should be delayed until the PEIS process is complete. If the ROD is not delayed, the consideration of alternatives in the PEIS will be limited. A key principle guiding the reconfiguration plan is the minimization of costs, sites, and facilities. The decision to proceed with one or more NPRs will influence each of these factors. The only way a full range of alternatives for the future Complex can be adequately considered is if all components are included in the Reconfiguration PEIS.	2,809

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Implementation Plan

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 14: PEIS SCOPING PROCESS (continued)		
11	DOE should exercise its authority now to involve cooperating Federal agencies in the PEIS process or the process will suffer from a lack of involvement. DOE has not designated a single Federal, state, or tribal cooperating agency. The participation of such agencies should be an integral part of the long-term planning activities relevant to the programmatic evaluation of the Complex.	4
12	DOE should create a single External Advisory Panel for both the Reconfiguration and ER&WM PEISs.	4
13	DOE needs to hold additional scoping meetings in Idaho. Boise, Pocatello, Twin Falls, Ketchum, and Moscow are reasonable sites so that all Idahoans have a chance to be part of the process. DOE has held meetings in more than one site for other projects.	21
14	Questions the seating arrangement at the scoping meeting with the DOE panel sitting above the public; such an arrangement creates an impression that the panel is above the citizens speaking before them.	7
15	The announcement process for the scoping meeting was very limited and/or the announcements were not sent out far enough in advance of the meetings. In the future, there needs to be a larger mailing list, posting of notices near the subject facilities, and/or placement of larger advertisements in local newspapers.	13
16	The advertising for the Mound Plant scoping meeting was too limited. The meeting should have been advertised all over Ohio, because the state is host to four DOE facilities.	1
17	DOE should not be conducting scoping meetings on its own operations; it is a conflict of interest. DOE has placed an impediment in the way of serious debate by declaring that the need for nuclear weapons and the impact of their use is beyond the scope of the PEIS.	1
18	Questions the holding of three public meetings by DOE on RFP, including the PEIS scoping meeting, so close together (i.e., in a little over 1 week).	3
19	Questions the statement in the NOI for the PEIS that DOE determined that "the reconfiguration of the nuclear weapons complex would be a major Federal action within the meaning of NEPA." This statement, along with those following it related to other alleged determinations, is incorrect. DOE made no such determination; DOE was sued by over 20 environmental and peace groups which resulted in DOE deciding to prepare the PEIS.	2
20	Hearings should be held in Utah because the state has been affected by nuclear testing and fallout.	2
21	Notification for the scoping meeting in Las Vegas was inadequate and limited. Announcements should have placed in major newspapers throughout the region, including in Southern California, Arizona, Utah, and Nevada.	2
22	The scoping meetings should not have been held in the communities which benefit economically from nuclear weapons production. People in these communities represent only a small percentage of Americans nationwide.	3
23	The transcripts for the PEIS scoping meetings should be made available in the same locations as the transcripts and comments for the ER&WM PEIS, not just the 14 identified reading rooms.	1
24	Questions the holding of concurrent scoping meetings in separate rooms (e.g., at Idaho Falls); this does not allow people the opportunity to hear what is being said in both rooms.	3

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 14: PEIS SCOPING PROCESS (continued)		
25	The people who actually make the decisions about going ahead with major new weapons systems (e.g., from the DOD, White House, and State Department) should be at the scoping meetings and listen to what is being said.	1
26	Meetings should be held on government or state property that provides easy access to everyone. Holding meetings in hotels is a waste of taxpayer money.	1
27	DOE should consider having a large map showing the geography near each meeting location so that the panel and meeting participants could visualize where people are from or areas discussed in the testimony.	1
28	The purpose of scoping meetings, as intended in NEPA, is not to "gauge public reaction" as was stated in a DOE press release.	1
29	DOE should not hold meetings in large rooms where the sound bounces all around and makes it difficult for hearing-impaired people to clearly hear what is being said.	1
30	The overheads used in the DOE presentation at each scoping meeting should be included as part of the official transcript that is placed in the DOE reading rooms.	1
31	The announcements for the scoping meetings did not provide enough information on the topic to be discussed.	1
32	DOE willfully disseminated misleading and inaccurate information to the public prior to the scoping meeting at Oak Ridge. DOE officials continually attempted to direct the public's understanding of the scoping process to potential impacts on the natural environment. DOE's activities indicated its own recognition that impacts on the economic environment could be enormous--with positive and negative impacts.	1
Issue Category 15: PUBLIC INVOLVEMENT AND COMMUNITY RELATIONS		
1	DOE needs to prepare community involvement/relations plans because of the need to build working relationships with the communities where DOE facilities are located. The plans should acknowledge some of the defects of previous DOE operations.	1
2	Concerned that DOE listens to what the public has to say and that positive results will be derived from the meetings.	25
3	DOE and SNL should join the Greater Bernalillo County Environmental Working Group so the citizens of Albuquerque would have direct access to DOE to get their concerns out in the open. Kirtland AFB has agreed to join and allow public oversight of activities.	2
4	DOE needs to set up citizens advisory groups for each of the facilities that are part of the cleanup, restoration, and modernization process to provide for interaction between the citizens and DOE decision-makers. The advisory groups need to be funded so people can come to meetings, take off work, and, if necessary, hire technical experts.	8
5	Provide mechanisms, including holding regular public meetings, for local community participation in monitoring and decision-making at DOE facilities.	11
6	DOE should be actively involved in tripartite council at Kansas City Plant (between the IAMAW union, DOE contractor, and DOE) to better appreciate and understand problems of contractor and union members and allow contractors and union members to relate to DOE positions.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 15: PUBLIC INVOLVEMENT AND COMMUNITY RELATIONS (continued)		
7	DOE should declassify material and end the use of the Unclassified Controlled Nuclear Information designation. Meaningful public participation is impossible without adequate information.	1
8	Questions whether Amarillo will be able to evaluate the PEIS before accepting any expansion of the Pantex Plant.	1
9	There is a need for more open communications between DOE and the public. Need for more accurate dispersal of information; no more secrecy and fabrications.	28
10	DOE needs to include the public and educate them as to what is going on at the nuclear facilities, and to inform them as to how DOE is dealing with problems in the industry.	8
11	A newsletter should be distributed on the progress of the cleanup at the Pinellas Plant.	1
12	There is a need for accurate, concise, and timely communications throughout the process, particularly between DOE and its contractors (e.g., EG&G at Mound Plant). Workers at DOE facilities should not be subjected to rumors about the reconfiguration process.	2
13	There needs to be greater public involvement in the economic conversion of facilities, including the involvement of labor and management and the establishment of alternative use committees.	2
14	The Site Evaluation Panel should conduct meetings and hearings to let the public provide input into their evaluations. Without public input on the criteria to be evaluated, the process will be inadequate and leave open to questioning the panel's recommendations proposed as alternatives in the PEIS.	2
15	DOE needs to eliminate the use of acronyms in their bulletins and news fact sheets or provide an acronym/abbreviation list.	2
16	Individuals that speak at the scoping meetings or provide written testimony should be mailed a copy of the "responsiveness summary."	1
17	There is a need for a citizen dispute resolution process. There is no method for citizens to come in and present a point or argue a point or disrupt operations short of a civil lawsuit.	1
18	Proposals submitted for the relocation of RFP's operations to one of the five proposed sites should be made available to the general public for review.	4
19	The citizens near each affected facility need to have access to all pertinent information regarding the reconfiguration process and have ample opportunity to meaningfully participate in the reconfiguration decision-making process.	2
20	The DOE should fund, within the scope of the PEIS, blue ribbon citizens panels to independently study the proposed activities. There is a need for an open dialogue and debate to ensure that information is properly disclosed and evaluated. The risks involved need to be carefully analyzed.	2
21	Public school curriculum should include an explanation of the shortcomings of nuclear waste management.	1
22	The PEIS should consider provisions for citizen participation in independent licensing, regulation, and enforcement of safety standards for all new production facilities.	298

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 15: PUBLIC 'NVOLVEMENT/COMMUNITY RELATIONS (continued)		
23	The private, internal process used by DOE which directed the sites to submit proposals for Complex 21 severely compromised DOE's ability to make a clear decision based on the findings of the PEIS. The DOE Field Offices were placed into an advocacy role prior to the commencement of the legally mandated public decision-making process. The public was not provided with fair and impartial information by DOE concerning its plans. Spokespersons for DOE downplayed the significance of real public concerns and provided false assurances that everything would be taken care of.	1
24	DOE should establish significant interaction and public information programs at Oak Ridge, sponsor education programs to train and develop qualified personnel for the future, provide a visitors' center, and expand the local museum operations.	1
Issue Category 16: WASTE MANAGEMENT		
1	Questions assumptions regarding waste management in the *Reconfiguration Study* with regard to the availability and use of WIPP and/or Yucca Mountain. Neither of those facilities are necessarily going to happen and it has been stated that if WIPP opens, that no waste will be received after 2013. The study states the Complex will not be fully operational until 2015.	20
2	Waste management, including the storage of transuranic wastes, at new/expanded facilities (e.g., relocated RFP and consolidated non-nuclear manufacturing facilities) needs to be considered, specifically with regard to generated waste that will be stored throughout the lifetime of Complex 21 at those facilities, including the potential storage of transuranic wastes. The PEIS needs to address the potential contamination of the air, water, and ground.	32
3	Concerned about how DOE intends to safely dispose of accumulated nuclear waste (high-level, low-level, and transuranic). DOE needs to find new technologies for safe storage and/or disposal.	73
4	Aboveground retrievable storage systems onsite at the plants that produce the waste and materials should be used so the waste containers can be monitored and repaired. Onsite storage reduces transportation risks created when materials are moved.	17
5	There is no way that you can design for zero effluent and it is not necessary to have zero effluent in any operations. There will always be a minute amount of material (e.g., hydrocarbon or radioactivity) that cannot be captured.	2
6	Concerned about incineration of nuclear waste (or the use of other thermal processes) at DOE facilities (e.g., RFP Plant). DOE has not proven that particles of plutonium can be contained safely within filters and not released to the atmosphere. Incineration is not acceptable in populated areas. There have been no long-term studies of human health and environmental effects.	8
7	Concerned that WIPP is not safe for the storage of wastes because of water leaking into the caverns, the underground reservoir of brine (which could lead to contamination of a New Mexico aquifer and eventually the Gulf of Mexico), and hydrogen sulfide gas.	12
8	The oversight of nuclear waste management and/or cleanup should be turned over to an independent regulatory authority (e.g., Department of Health and Human Services) because DOE has neither the capability nor credibility to carry out the cleanup. The oversight agencies should have the authority to shut facilities down if there are environmental, health, and safety problems.	23

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
9	The waste should be kept where it is generated and not transported (e.g., to WIPP) to reduce the risk to people in this country. Waste kept onsite can be monitored, whereas burying it at WIPP is a big gamble.	12
10	Concerned about the transportation of wastes to WIPP and/or between facilities, including the conditions of the roads, the adequate testing of containers, and the experience of the trucking firm selected to haul the waste. The safety and security of radioactive material transportation at each phase of the production and waste stream cycle should also be considered for each alternative discussed in the PEIS.	16
11	DOE insists on putting the waste material in the ground. Are no other alternatives available?	1
12	Concerned that DOE will use the "below regulatory concern" policy that the Nuclear Regulatory Commission has adopted for deregulation of low-level radioactive waste in its cleanup programs.	7
13	Concerned that hazardous wastes generated at RFP have nowhere to go. RFP is at an impasse regarding the storage of its hazardous wastes and is in violation of Federal law and is approaching its storage limits as established by the State of Colorado. Idaho will not accept any more waste from RFP and the proposed NTS facility is not yet opened. Incineration of wastes is unacceptable to the citizens of Colorado and questioned by DOE scientists.	4
14	Concerned that radioactive waste should not be placed on the highways because of the generation of gases; questions whether the waste can be shipped safely.	1
15	DOE needs to again define the word cleanup at Hanford; nuclear reactors from submarines and portions of an old power plant keep going up the Columbia River to Hanford. Questions reclassification for disposal in local landfills.	2
16	DOE needs to disclose information about past waste management practices at each of the sites.	2
17	Consider other ideas/concepts to deal with waste materials in terms of actual treatment to change them into more benign forms, such as accelerated transmutation of waste or treating the waste with chemicals to make it less dangerous. Risk analyses should be performed for each alternative.	14
18	Specific parameters for the cleanup of DOE sites need to be established.	5
19	Mechanisms to minimize or eliminate the need for transportation of nuclear and hazardous materials should be discussed in the PEIS.	1
20	Discussion on various parameters/concerns to be considered in operating an incinerator at RFP to dispose of radioactive and toxic materials.	1
21	Supports waste minimization efforts, but cautions that the result is a more concentrated waste stream.	1
22	Waste should not be imported to RFP.	1
23	Only wastes that cannot be recycled or reused, or have been treated to reduce toxicity to the maximum extent, should be handled.	1
24	DOE needs to get serious about the cleanup of existing facilities and the elimination of high-level radioactive substances (e.g., plutonium). DOE needs to investigate alternative approaches to vitrification.	1
25	Concerned about disposal and management of wastewater sludges containing radionuclides.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
26	Questions the use of the term "cleanup" when discussing nuclear wastes. The more appropriate term would be "containment" because the waste is not cleaned up or decontaminated.	1
27	The "new and improved" Complex should not repeat the waste management problems of the past.	2
28	There needs to be a study by an independent agency to determine the extent of water pollution, toxic waste, and air pollution in the Pinellas Plant area.	3
29	DOE needs to clean up the Pinellas Plant even though it was not designated a Superfund site. Waste management practices are threatening the water and air.	1
30	Research and development into closed-loop waste management systems that will result in zero emissions and zero discharge are needed. If zero emissions are not possible, the only acceptable standard is lowest achievable emissions rate.	4
31	DOE needs to establish a healthy and safe methodology of characterizing sites and the wastes that are onsite. People have been injured or exposed during the cleanup process (e.g., at Fernald in Ohio).	2
32	DOE operations which generate waste should not resume until an agreement is reached between the State of Colorado, EPA, and DOE regarding how and when existing waste will be reduced in volume, stabilized onsite, or moved offsite. Until a comprehensive waste management plan that reflects a realistic assessment of the status of WIPP, the supercompactor, and legal restrictions for storage of transuranic-mixed waste are developed, no further production should take place.	1
33	DOE needs to clearly define the term "waste," or define when a waste becomes a waste or stops being a waste or stops being a product. This concept is very important with regard to nuclear materials processing.	1
34	A cleanup/waste disposal plan for LLNL should be prepared before more waste is produced. The plan should detail how proper treatment and storage of wastes will be accomplished and define how "clean is clean" before it is shipped offsite. Shipping the waste offsite to another location is not cleaning it up. Onsite storage should be examined along with its impacts on land use, the facilities necessary, and the treatment and decommissioning of the facilities that are currently being used. Those decommission facilities become waste when they cease to be used.	3
35	The public should be informed about the amount and nature of waste to be generated by research, development, and continued production of nuclear weapons, including the future technologies in a reconfigured complex, the impact of future production on environmental restoration activities, and the cumulative impact from past and future nuclear weapons production.	304
36	Questions whether DOE plans to monitor the disposal sites for 250,000 years (the period plutonium remains dangerous) and, if so, what will the total cost amount to. Are the storage containers designed to last that long?	3
37	Questions what the guidelines are now and what they will be in the future for a vehicle carrying radioactive hazardous waste, and whether DOE plans to continue the transportation of hazardous materials on public roads without notifying local officials.	2
38	The PEIS should include a detailed inventory and description of all toxic and radioactive wastes for each facility, a list of the chemicals and quantities of the toxic materials, and a list of the isotopes, level of activity, and type of radiation (i.e., particles [alpha, beta, and gamma], as well as the energy level).	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
39	The PEIS should include a detailed description of the disposal of toxic and radioactive material, including the packaging, type of disposal facility, and means of transportation from each facility.	1
40	The PEIS should include a discussion of the cost of the cleanup operations, broken down for each site by material, labor, and overhead, and include a schedule with milestones for accomplishing the cleanup at each site. In addition, a detailed description of the final restoration of the site defining the area that will be safe for public access should be included.	4
41	The PEIS should describe in detail how much new radioactivity will be created in the testing, fabrication, and maintenance of each nuclear weapon, either by class or explosive tonnage.	1
42	The PEIS should describe the steps that will be taken to prevent future contamination to avoid the catastrophic destruction currently encountered at nuclear weapons facilities, including the type of oversight required, who will perform the surveillance, and what kind of quality assurance and quality control program will be required.	1
43	The PEIS should explain how wastes from continued manufacturing and testing will be disposed, including a description of the quantities, activity levels, and location of disposal sites.	3
44	The amount and nature of radioactive contamination produced by every underground test at NTS should be discussed in the PEIS, including the extent of escape of radioactivity from tests into the environment, the effects of venting from underground tests, and the long-term impacts on the environment if testing is continued.	3
45	Concerned about the storage at NTS of radioactive and toxic chemical waste from the cleanup of RFP.	1
46	DOE needs to find some way to demonstrate to the public that it is not shipping and transporting contaminated waste all over the place.	1
47	DOE should consider the use of dry-cast storage using geopolymers instead of underground storage methods.	1
48	Concerned about the integrity of Yucca Mountain as a waste repository because the containers will not last an eternity and the facility will leak.	1
49	Questions the storage of low, medium, and high-level nuclear waste at NTS with regard to where the waste will be stored and how it will be transported.	1
50	How radioactive waste and contaminated components of weapons will ultimately be disposed of should be addressed in the PEIS. It is not enough to claim that the waste problems are being considered elsewhere or assume that the material will be recycled into new weapons. It is critical that the stream of waste flowing through the weapons complex be minimized. With regard to waste which nonetheless gets generated by the reconfigured complex, long-term radioactive and mixed-waste disposal issues should be discussed in the PEIS.	5

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
51	The PEIS needs to address the indefinite storage of plutonium and uranium contaminated weapons components at the Pantex Plant, because there is currently no high-level nuclear waste disposal facility in operation in the United States. The PEIS should also evaluate the impact of the signing of the Strategic Arms Reduction Treaty on weapons disassembly at Pantex and discuss the amount of increased fissile materials that could be stored there, how long the radioactive material from disassembled nuclear weapons would be stored, and where it will ultimately be disposed of.	20
52	DOE needs to recognize that new production plants will generate radioactive and chemical waste which will be added to existing waste. Environmental responsibility must be firmly grounded in plans for all new facilities. DOE should not merely anticipate the development of new technology or the siting of new facilities as it did in the recently released NPR EIS. Instead, DOE needs to develop and demonstrate the ability to handle the waste which will be generated by additional production before new facilities are constructed. The demonstration and testing of these techniques and technologies should be overseen by independent observers.	1
53	The impacts of interim and long-term storage of nuclear waste resulting from nuclear weapons production should be considered in the PEIS.	3
54	Waste minimization and source reduction should a major goal in the operation of facilities in Complex 21 and should be seriously addressed in the PEIS, including identifying waste streams and emissions to be generated, applicable regulatory requirements, and strategies to ensure compliance.	11
55	The PEIS should include an assessment of the cumulative environmental impacts resulting from weapons production centralization, including the accumulation of waste from past and future activities (e.g., Complex 21 and NPR). Two of the proposed sites (i.e., Oak Ridge Reservation and Pantex Plant) are Superfund sites, as is RFP	3
56	The PEIS should address when existing wastes at INEL and the Pantex Plant will be completely cleaned up, where the waste will go, and how it will be transported.	2
57	The PEIS should address how DOE will guarantee that contamination of the ground water, soil, and air with uranium, chromium, mercury, lead, organic solvents, and PCBs that has occurred at the Oak Ridge Y-12 Plant and the Pantex Plant will not occur at INEL with relocation of operations from those facilities to Idaho.	1
58	Questions various assumptions for specific waste management operations at INEL and other Complex sites.	1
59	Potential waste management problems that could result from the centralization of all production operations should be discussed in the PEIS.	1
60	Questions whether the placement of all plutonium particle waste at WIPP would exceed the capacity of the repository instead of leaving it at each Complex site.	1
61	Questions whether there any authorized permit disposal facilities currently available for all waste that will be produced in Complex 21 following source reduction.	2
62	Questions what agencies have oversight authority over nuclear materials and waste handling and storage at DOE facilities, and do these agencies have the power to shut a facility down if there are safety problems.	2

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
63	The PEIS should include a discussion of whether nuclear water waste will be stored onsite, and if not, what other storage sites are planned, where are they located, what mode of transportation will be used, and what routes will be designated for transportation.	4
64	The PEIS should describe how offsite accidental contamination will be cleaned up, contained, and mitigated.	1
65	The following waste and wastewater management characteristics should be considered in the PEIS: minimization of processed waste waters, including waste segregation, recycling, and reuse of waste waters to the maximum extent; irrigation of waste waters as a final disposal option; identification of waste streams requiring special treatment or handling methods; and state-of-the-art treatment available for processed waste.	1
66	Various concerns/questions regarding proposed hazardous waste treatment and processing facility (i.e., incinerator) to be built at the Pantex Plant.	1
67	To ensure the development of a sound process for the cleanup of plutonium waste, the following should be discussed in the PEIS: the conduct of an independent assessment of plutonium contaminated waste, an analysis of options for containment and monitoring, the involvement of Congress in any decision to convert recovered plutonium oxide into plutonium metal, and safeguards and security issues related to preventing other parties from obtaining small quantities of plutonium materials and the need for DOE to comply with international verification agreements.	1
68	Proper storage of excess plutonium metal is extremely important because of its toxic nature, the potential for criticality accidents, and the need for maintaining necessary safeguards. DOE should promote an open evaluation of storage alternatives with particular attention given to compliance with existing and future international agreements, containment of the plutonium, control of oxidation, and independent oversight of the storage regime.	1
69	The primary mission of the Hanford Site should be the cleanup of past contamination with fully contained processes.	1
70	The costs of cleaning up an accident that occurs during the shipping of radioactive materials to or from a site should be evaluated in the PEIS.	1
71	The waste cleanup program at the Hanford Site should be continued and accelerated. A Hanford Waste Management District should be formed as a joint effort between the State of Washington and the DOE to facilitate the cleanup under the Tri-Party Agreement. The cleanup efforts should focus on waste minimization and recycling. Various cleanup steps are proposed that could be taken immediately.	1
72	Questions the current amount of nuclear waste that has been buried or is in secure storage at the Oak Ridge Reservation.	1
73	Previous releases of mercury and cesium-137 at the Oak Ridge Reservation do not pose any real threat to the public or the environment. A majority of these contaminants are buried deeply in river sediments.	1
74	The PEIS should include a complete description of all current releases of pollutants into the environment, including releases from research, production, operational waste management, and inactive waste sites. The description should be provided on a reservation-wide basis, and for larger sites, for each distinct facility (e.g., Y-12, K-25, and X-10 at Oak Ridge).	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
75	Concerned about whether transuranic wastes generated as part of Complex 21 at the Oak Ridge Reservation will be sent outside of Tennessee for interim storage and final disposal, or will they become the problem of the State of Tennessee. Questions what is the probability that Roane County will be the location of interim storage or final disposal of those wastes, and how much land would be required for such activities.	1
76	DOE should support amendments to RCRA that would require a moratorium on construction of trash incinerators and management of incinerator ash as a hazardous waste.	1
77	A time limitation should be placed on the storage of waste materials in "temporary storage areas" or "staging areas" as described in the Pantex Plant siting proposal.	1
78	Nuclear waste should be disposed of in cavities drilled adjacent to the bore holes used for nuclear device testing at NTS. The nuclear device would seal surrounding bore holes through melting and plastic deformation of the soil near the fireball, and a natural burial ground would be created. The would be a better solution than burial in containers at a storage site.	1
79	Questions whether samples of earth from underground nuclear testing at NTS qualify as radioactive or toxic waste, and if so, what are the plans to properly dispose of such waste.	1
80	DOE should establish a new method for determining the value of plutonium because of its potential connection with RCRA mixed-waste recycling activities.	1
81	The safety and security of radioactive materials in each phase of the production and waste stream cycle should be considered in the PEIS.	1
82	The PEIS should include a description of a goal and program to minimize the number and quantity of DOE shipments of nuclear, hazardous, and mixed materials to, from, and between DOE sites, and provisions to keep shipments related to activities out of highly populated areas.	1
83	Remediation activities at DOE facilities should consider not only past activities, but also the impacts of current operations. Past contamination, current operations, and remediation efforts themselves may have cumulative impacts on human health and the environment. Remediation efforts should also not focus exclusively on historical records or other indications of past releases. General grid surveys should be used to supplement studies of known or suspected release areas.	1
84	Questions how plutonium processing wastes that would be generated with the relocation of RFP operations to the Pantex Plant would be disposed of.	1
85	Questions whether the discharge of any contaminants other than hazardous and radioactive waste will be limited to zero for facilities above Class I aquifers and below Maximum Contaminant Levels for facilities above Class 2 aquifers (page 53 of *Reconfiguration Study*). The *Reconfiguration Study* also needs to define disposal facility and Class 1 and 2 aquifers.	1
86	Questions whether studies have been done to establish the accumulation of contaminants beneath disposal facilities with respect to the loading rate of effluent, because although contaminants may be disposed at levels below the Maximum Contaminant Levels (MCL), the potential exists for these contaminants to accumulate in the subsurface to levels well above the MCLs.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 16: WASTE MANAGEMENT (continued)		
87	The *Reconfiguration Study* (page 59) states that no "new treatment facilities or disposal in a geologic repository will be required." Questions what are the treatment facility or deep geologic repository alternative options available should the current options become unacceptable.	1
88	The PEIS should include a full analysis of onsite dry-cask storage as an alternative to transportation, including the risks and costs associated with the processing, handling, and transportation of wastes and retired weapons relative to the risks and costs associated with the various dry-cask storage technologies recently approved by the NRC.	1
89	DOE should evaluate the impact of developing waste management plans for individual facilities to assure the safe short-term storage of wastes prior to the implementation of long-term storage alternatives. The plans should be in compliance with all applicable federal and state waste storage regulations.	1
90	The final disposition of any stored wastes left over after production ceases and environmental restoration begins should be discussed in the PEIS.	1
91	DOE must publicly and specifically state what it intends to do with the plutonium that is extracted from future waste management activities at PUREX and other similar facilities. If the plutonium is part of the stockpile then Defense Programs should pay for these operations, and if the plutonium is considered waste, then DOE should announce its plans for handling the disposal.	1
92	DOE should continue research, development, and testing of casks for remote-handled transuranic wastes to be shipped to WIPP.	1
93	DOE should determine whether any hazardous substances are known or suspected to be on proposed program sites. The PEIS should include a discussion of whether hazardous substances could pose a threat to public health, safety, or the environment as a result of contamination of air, soils, surface water, or ground water. Hazardous substances of concern would include low-level radioactive waste, mixed waste, asbestos, polychlorinated biphenyls (PCBs), spilled fuels, petroleum or volatile liquids in underground storage tanks, waste paints, solvents, heavy metals, and pesticides.	1
94	If the proposed program will result in the generation of any hazardous waste, mixed waste, or nonhazardous solid waste, the potential type and volume of RCRA hazardous wastes that will be generated should be identified in the PEIS. Compliance with RCRA requirements and state/county hazardous waste requirements should also be discussed in the PEIS.	1
95	The PEIS should include an assessment of whether any RCRA-regulated underground storage tank (UST) systems exist on sites proposed for reconfiguration activities, and whether there is any contamination of soils or ground water resources due to leaks or discharges from UST systems. Any DOE studies/projects/proposals to assess and cleanup contamination problems caused by UST leaks should be included in the PEIS and in site-specific EAs or EISs.	1
Issue Category 17: HUMAN HEALTH		
1	General concern about health risks to and health problems of people living near facilities because of past activities and/or continued operations, particularly those facilities located near populated areas.	39

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
2	DOE needs to make health, accident, and safety information readily available. There needs to be better recordkeeping and improved capabilities to retrieve the data. Adequate assessment of the scope of the environmental and health impacts requires complete identification and full disclosure of the amounts and rates of release from all sources of contamination.	42
3	Concerned about risks/accidents from transporting plutonium waste along routes in New Mexico to WIPP.	1
4	Concerned about expansion of the Pantex Plant for health reasons.	1
5	Concerned about the health risks to workers at RFP and the public because the plutonium processing buildings do not meet DOE's standards for earthquake, flood, and wind safety, and because plutonium is lodged in building air ducts.	2
6	DOE needs to demonstrate that health and safety for workers and the public are the first priority, not the production and/or testing of additional weapons. Production activities should not be continued and/or resumed unless the sites are run in a safe, secure, and environmentally sound manner, and pose no near- or long-term health danger to workers and the public. Health studies should be conducted at all sites.	69
7	The PEIS should include a risk assessment of the potential exposures to workers and the public from all sources, including both radioactive and hazardous materials, and the effects of waste handling, past contamination, and cleanup operations.	40
8	DOE should be required to use scientific inquiry and established health data in its assessment of health effects.	1
9	Nuclear waste storage sites should be open to public witness and scrutiny at every level, because waste storage management affects the health and safety of all. This should include environmental monitoring by surrounding and affected communities.	1
10	Questions the safety of operations with respect to threats to human health, water runoff, ground water, and crops and animals in an agricultural community (e.g., Amarillo). Nuclear waste storage should not take place in a large agricultural area with a precious ground water resource.	2
11	Health studies should be funded separately from the DOD and DOE.	1
12	Discussion on various parameters/concerns which should be considered in conducting quantitative risk assessments.	2
13	Emergency response models should be used rather than quantitative risk assessments. Reducing exposure, not hazard (i.e., parts per million), should be of concern.	1
14	Continuous emissions monitoring results for Building 771 at RFP should be made publicly available, not just the hourly emission averages.	1
15	New, lower-level exposure standards (e.g., 1.5 rems per year versus 5 rems per year) should be used for worker and general population radiation exposure based on recent studies that show a higher risk at lower exposures.	7
16	Members of the general public, public interest groups, and workers should be represented on commissions, such as the International Committee on Radiation Protection, that set standards for exposure.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
17	There needs to be monitoring and/or study of the health effects of radiation on (and risks to) populations living in proximity (including downwind areas) to the facilities in the Complex, as well as the workers at these facilities. There is a need to understand what the problems are now in order to formulate standards for the future.	65
18	The monitoring of health effects should be conducted by an outside agency (e.g., U.S. Department of Health and Human Services) or a separate agency (e.g., non-governmental) composed of physicians and scientists. There is a conflict-of-interest having DOE operating the Complex as well as conducting the health studies. Information and funding need to be provided in a timely manner by DOE and its contractors, and public input should be solicited. A priority list for health assessments at operating sites needs to be established.	53
19	Concerned about long-term health effects associated with disposal of waste materials and use of hazardous chemicals (e.g., PCBs); what will such products do to the environment and then to the communities years down the road?	1
20	DOE facilities should work toward eliminating the discharge (i.e., zero discharge) of chlorinated organics and various other solvents (e.g., Freon-113 and trichloroethylene) to the air, because many people in this country are contaminated and have these chemicals in their adipose tissue. These chemicals also contribute to the ozone depletion problem.	1
21	DOE needs to work cooperatively with people living close to Complex facilities to eliminate potential exposures to offsite contaminants. Such people should be relocated away from the facilities.	1
22	DOE needs to evaluate the health effects (e.g., cancer rates and rates of other diseases) around its facilities and determine if they are higher than the average level nationally to see if each facility is a health hazard. The potential health hazards of the modernization options also need to be evaluated to determine the impact of reconfiguration actions.	1
23	Concerned about potential health and environmental risks from past and/or future nuclear weapons production activities resulting from contamination of the local environments.	12
24	Concerned about health problems near the Hanford Site because of water contamination and air emissions.	1
25	Recommends a study of the long-term health effects of low-level radiation to the residents of Pinellas County. The study should consider data from employees and residents living near the plant and be conducted and/or reviewed by an impartial/independent agency.	8
26	Monitoring/testing of ground water and residential wells and air sampling for radiation and toxic chemicals in the vicinity of the Pinellas Plant should begin immediately.	5
27	Health records and environmental contamination information should be made available to qualified independent agencies and scientists so that unbiased research can be conducted.	12
28	Concerned about health concerns among workers and the general population resulting from waste management problems at LANL.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
29	The *Reconfiguration Study* does not adequately address the health and safety concerns that have been repeatedly cited by various governmental and non-governmental organizations and committees/panels. There is a lack of any specific plan to assure worker safety or public health in either the development of new production facilities or the cleanup of facilities slated for decommissioning.	2
30	Dose reconstruction studies should be conducted for each of the facilities.	4
31	An independent advisory committee should be established to inform and assist DOE and to review development of health and safety policies at each facility.	6
32	There is no evidence that the Pinellas Plant is causing any undue influences on health and family living (i.e., environmental and health problems) in the vicinity of the plant.	1
33	Concerned about the health problems (including high cancer death and heart disease rates in Pike County), high radon levels, and/or offsite contamination in the vicinity of the Piketon and/or Fernald DOE facilities in Ohio. Health studies should be conducted and these sites should be cleaned up.	7
34	DOE needs to demonstrate that the disposal practices it chooses pose no near- or long-term health threats to workers and the public, and that they comply with all environmental, safety, and health laws.	2
35	Concerned about the level of removal of plutonium found in the air ducts of the facilities at RFP. The plant operator is only removing 20 percent (of an estimated 62 pounds). DOE's Advisory Panel on Nuclear Safety recommended that DOE remove the maximum amount prior to any restart, not the minimum amount that DOE appears to be removing. The public should not have to rely on high efficiency particulate filters and low risk scenarios to be assured that the plutonium will not be released.	4
36	RFP should not be allowed to restart operations until conclusive health studies of the risk to the workers and the public are completed.	2
37	There is no evidence to date that any of the significant health and safety issues with respect to RFP have been addressed despite the formation of several blue-ribbon panels to study the health concerns. In addition, the recent release of health records has indicated several other health concerns that should be added to the list.	1
38	Health studies of workers and the public need to consider the latency period and genetic transmission with regard to exposure to beryllium and plutonium.	1
39	The lack of studies demonstrating significant risk of low-level radiation is not reassuring; the large population numbers needed to statistically demonstrate significant risk are not available. The use of bad data is worse than the recognition of no data at all.	1
40	Dismayed at the lack of interest shown by DOE in following up on workers contaminated during DOE operations, including testing activities.	3
41	The PEIS should include an evaluation of the psychological impacts of past, current, and proposed weapons production activities on workers in the weapons complex, on surrounding communities, and on the U.S. citizenry. Psychosocial issues and impacts on the psychosocial environment need to be taken into account in adequately weighing the risk of continued weapons production.	14

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
42	DOE should recognize previous radiation exposure/damage to people from past weapons production and testing. New exposures need to be assessed in view of the cumulative damage and existing health problems in the population. One should not assume "no prior exposure" as the norm.	2
43	Reliance on cancer mortality risk estimates is a completely inadequate and unacceptable method of dealing with chronic morbidity problems related to radiation exposure in the population at risk.	3
44	Reproductive experience and genetic and teratogenic health effects should be given high priority in the documentation of past experience and projection of future impacts.	2
45	A legally acceptable health baseline needs to be developed prior to considering the impacts of any new exposures to radiation. The exposed population should be continuously monitored for changes in blood or urine parameters, chronic disease patterns, and reproductive problems when a new facility is opened. Any negative changes in baseline parameters should trigger automatic shut-down of the facility according to pre-agreed upon guidelines.	2
46	The PEIS should address changes in policy and administration that will ensure the public receives timely and accurate information on hazardous releases at any of the facilities, including independent assessments of the health risks of any one event and the cumulative risk based on the totality of events. Such policy should include checks and balances to ensure that there will be no future deliberate releases for some experimental purpose.	2
47	The PEIS should address the criteria that will be used to determine whether a hazardous release incident is a potential health hazard, whether and how the public should be informed, and the kinds of backup or independent monitoring/audits that will be used to ensure that DOE follows its own regulations and that the citizens' right to know about a potential cancer-causing exposure is protected.	2
48	The term "reasonable risk" should be clearly defined in the PEIS.	1
49	DOE should analyze DOE Order 5400.5 regarding allowable exposure levels to radioactive and toxic materials and amend it as appropriate. The recommended acceptable limits continue to decrease and many of the DOE's limits are absurdly high.	4
50	Questions what are the past and current concentrations of radioactive and hazardous substances found in the food chain as a result of DOE activities, and how have these affected the world's population.	1
51	All proposals for the continuation of nuclear weapons production should include a thorough, credible analysis by a non-defense agency of the implications for human health and environmental well-being.	1
52	The environmental monitoring program at LANL is insufficient and inadequate. The dosimeters used are not industry-standard, are not properly maintained, and read too infrequently. A greatly enhanced monitoring system should be implemented including providing free yearly bio-assays and soil samples for members of the public adjacent to the laboratory property, providing free thermoluminescent dosimeter monitoring devices to the public, and the installation of a continuous-running alpha-beta-gamma log that would be available for public view.	1
53	There should be continuous monitors placed at different locations around DOE facilities so that the public can check the readings on a regular basis.	3

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
54	The short and long-term costs to workers, their families, and the general public from exposure to radioactive materials and toxic chemicals that are used in the production of nuclear weapons needs to be evaluated. The benefits of reducing the use of toxic chemicals as recommended by the EPA should be evaluated.	1
55	The environmental and health effects of the chemicals (e.g., carbon tetrachloride and freon) used in plutonium reprocessing and other production operations should be considered in the PEIS.	3
56	The dispersion of airborne radioactive materials resulting from an accident should be discussed in the PEIS.	1
57	New exposure risks from continued underground nuclear testing at NTS with regard to the cumulative damage and already existing health problems in downwind areas in Utah need to be evaluated.	1
58	The PEIS should address the specific health risks associated with each product and byproduct that will be used or created at each facility.	1
59	Questions various assumptions used in the assessment of health effects resulting from specific waste management operations at INEL and other Complex sites.	1
60	DOE needs to make every effort to accurately describe the risks associated with weapons production, both from the standpoint of workers and from the view of the general public. DOE should present all of the data that exist today and accurately characterize the state of the scientific community's incomplete knowledge about such risks. Risks to workers and the public should be characterized for not only operations involving the use of radioactive materials, but also for operations involving the use of other hazardous materials, particularly carcinogenic organic compounds used on a daily basis.	3
61	Questions what are the current radiation exposure levels in Amarillo and the surrounding area.	1
62	The PEIS should address how DOE proposes to eliminate the dispersion of radiation and chemical contaminants at the Pantex Plant. People living downwind of the plant have a higher incidence of cancer.	1
63	DOE has been unsuccessful to date in its efforts to handle or store plutonium in weapons plant; none of the plants can be cited as being models of safety.	2
64	Independent studies of present contamination levels in the sediments of Lake Meredith and in the Ogallala Aquifer need to be conducted. Both are sources of drinking water for the Amarillo, Texas area. DOE should ensure that future independent monitoring and recording will be conducted.	1
65	Questions on what research basis does DOE set their standards for exposure, how those standards are tested, how they are monitored and reported, and what basis will be used for revision of standards. Both EPA and DOE have been slow to adopt revised radiation standards even in light of evidence indicating that the risk of cancer from exposure to low doses of ionizing radiation is higher than previously believed.	1
66	There are a number of recent studies that have shown that childhood cancers and birth defects are sensitive indicators of the risk of low level radiation. Presently there are a large number of childhood leukemias and rare childhood cancers in the Pantex Plant area. Is there a correlation between these childhood cancers and the Pantex operations, and how will cleanup and reconfiguration actions affect these totals in the future?	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
67	DOE should allocate funding to appropriate state health departments or academic centers for the ongoing development and maintenance of childhood cancer and reproductive outcome data bases, and ensure that these data bases are maintained to provide a monitor for the past and future risks from nuclear weapons production operations.	1
68	The Pantex Plant now limits plant worker exposure levels to 1 rem annually; the DOE standard is 5 rems. Questions whether the Pantex Plant will accept the higher rem exposures limits with reconfiguration, and what research is being done to determine safe levels of worker to radiation and contaminant exposure.	1
69	With reconfiguration, will the rate of lymphomas and leukemias in plant workers increase. There are reports of brain cancer deaths at other facilities and hints of excess melanoma deaths at weapons laboratories. Questions what incidence of brain tumors and melanomas there is currently among Pantex workers.	1
70	Investigators have recently found more than 12 cases of berylliosis in workers at RFP. After reconfiguration, that statistic, double the rate found in other industries using beryllium, could be in the private sector with higher safety requirements.	1
71	Questions what epidemiological studies related to beryllium exposure are being kept on Pantex Plant workers, and what monitoring is being done and how is it being reported.	1
72	Concerned about the environmental, safety, and health procedures and controls at the Pantex Plant. Recent DOE reports have stated that risks have not been adequately and quantitatively characterized and that the contractor has not conducted comprehensive environmental monitoring.	1
73	Questions what standard of safety DOE will require for the expansion of facilities. DOE should not expand facilities unless they can provide absolute assurances of safety and health standards to protect people and the environment. The PEIS should identify relevant safety standards and regulations and discuss safety measures which will be taken.	4
74	DOE with a coalition of environmental groups should formulate and publish a compromise appraisal of the hazards of plutonium and other chemicals involved in nuclear weapons production to resolve conflicting views regarding the safety of such substances.	1
75	Concerned that relocation of RFP to the Pantex Plant will result in the release of radioactive iodine into the air to determine its effect on the population.	1
76	The possibility of a Level 9 accident should be considered in the PEIS. There have been three Level 9 accidents in the past 10 years.	1
77	Although there is some incidence of cancer near DOE facilities (e.g., Hanford Site), other areas of the country have higher cancer rates. Some money should be redirected to study cancer in these areas.	1
78	Potential releases during normal operations and as a result of an accident should be considered in the PEIS. Accident possibilities to be considered should include serious accidents and near misses of types that have occurred in the past at similar facilities.	1
79	The people of Tennessee need to be assured that the millions of gallons of water used by the proposed plant would be free of low levels of plutonium.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
80	Plutonium can be handled safely with provision of the following: well-designed facilities approved by outside experts, detailed operating procedures, adequately trained and certified operators, detailed maintenance procedures that deal with safety requirements, adequate waste-handling procedures and facilities approved by outside experts, and funds for decommissioning provided up front and placed in escrow to protect them from diversion for other purposes.	1
81	A survey of current subsurface and surface radioactivity across the Pantex site and out to a radius of 50 to 100 miles should be conducted.	1
82	Concerned that the Pantex Plant is generating an electromagnetic pulse that is interfering with camcorders in nearby communities.	1
83	The PEIS should address safety concerns during fire fighting in areas/facilities in which enriched uranium (including hexafluoride) and plutonium are handled.	1
84	The PEIS should include the expected discharge of production activity radionuclides into the local atmosphere and the effects on the population and activities over a 50-mile radius.	1
85	The PEIS should include an evaluation of the impact of the radionuclide dosage from production activities on the local food chain and its effects.	1
86	The use of carcinogenic compounds in Complex 21 should be severely limited.	1
87	Offsite contamination from past production practices needs to be fully documented. Detailed soil surveys need to be performed in areas of at least 250-mile radius around plutonium production or milling facilities. The survey protocol should be designed to search specifically for fallout deposits likely to have been transported under the influence of low wind speeds, the lee eddy effect, temperature inversions, or high pressure subsidence. A survey of fallout deposition patterns resulting from nuclear testing should also be performed.	1
88	The PEIS should fully reference all documentation regarding the atmospheric transport model and dose calculation model used in estimating public health impacts. All fieldwork performed to verify ground-level concentrations should also be cited, and where models are upgrades of earlier models which have been field-checked, all predecessor models should be named.	1
89	The current array of offsite monitors is inadequate for the purposes of accurate estimation of ground-level concentrations at distances greater than 25 miles from the facilities. Rings of additional ambient air monitors need to be established every 25 miles or so, out to 200 miles from the facilities, and spaced no more than 25 miles from each other.	1
90	Additional dose calculations should be performed wherever new operations are contemplated at sites which have been used in the past to determine the cumulative dose impact resulting from past activities combined with present activities, in addition to doses contemplated resulting from present activities alone.	1
91	Questions what provisions will be made for monitoring the area around the Pantex Plant, and whether the public will be made aware of safety hazards (e.g., air, water, or soil contamination) in a timely manner.	1
92	The PEIS should include a cost-benefit study which consider the worst-case scenarios for each alternative for catastrophic accidents onsite and during transportation of nuclear materials. The liability responsibilities of specific government, tribal, and private agencies/corporations should be clearly stated.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 17: HUMAN HEALTH (continued)		
93	Acceptable risk should not be determined by DOE (e.g., the Technical Assessment and Selection Panel of the RPO) unless independent parties are involved.	3
94	Independent variables need to be clearly defined if the RADTRAN computer model is used for risk assessments. For example, to reflect a more accurate risk assessment for communities, the variable for average truck transportation accidents should local characteristics and not be based on state or national averages.	1
95	Questions how DOE will coordinate ecological and health monitoring and studies with existing studies and monitoring programs conducted by the Washington Department of Ecology, Pacific Northwest Laboratory, the Center for Disease Control, and other agencies and contractors, and who will be involved and who will have access to the information.	1
96	Questions whether there will be specific studies and monitoring of toxic and radioactive accumulation in the organs and tissues of game and non-game wildlife and livestock, and the uptake of contaminants by plants on or near ceded lands.	1
97	The economic and health and safety impacts of making occupational and public health exposure limits the same (i.e., make worker exposure limits as stringent as public health limits) should be evaluated.	1
98	Comprehensive health studies should be accomplished to monitor leukemia and other cancer rates among Complex worker populations through better use of the transuranic registry.	1
99	DOE anticipates that radiation release requirements will be more stringent in the future as a result of changing public attitudes regarding acceptable levels of risk. However, the public was never consulted about past or current releases because DOE still maintains sole control over the amounts of radiation it releases into the environment. States have only been allowed a limited role in regulating atmospheric emissions when the pollutants reach the site boundaries.	1
100	The total accumulation dose to Complex 21 workers and the general public with the concentration of all nuclear weapons production work in one location should be discussed in the PEIS. The increased incidence of cancer, diseases, and other public health problems in the same population should also be evaluated.	1
101	The PEIS should include a discussion of which carcinogens will be used or produced in Complex 21 processes, their effects on production workers and the public, where and how they may be released to the environment and plans for their disposal. DOE plans to comply with applicable EPA regulations regarding handling, use, and disposal of such materials should also be detailed.	1
102	Any potential significant new sources of electromagnetic radiation (EMR) should be identified in the PEIS. The PEIS should include a plan for siting any support facilities that may generate significant new sources of EMR to reduce any potential or perceived environmental and public health concerns.	1
Issue Category 18: EMERGENCY PREPAREDNESS		
1	Questions the lack of emergency plans for the facilities or the transportation of nuclear materials.	3
2	Concerned about the provision of adequate emergency measures, including cleanup and control plans, for transport of waste to WIPP.	4

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 18: EMERGENCY PREPAREDNESS (continued)		
3	Concerned about the shipment of hazardous and radioactive materials through highly populated neighborhoods (e.g., near the Pinellas Plant) that do not have any kind of emergency response team.	1
4	DOE should use knowledge of the effects of previous accidents to prepare for future accidents.	1
5	There needs to be a greater community early warning plan for evacuations (e.g., at the Mound Plant).	1
6	A risk assessment and contingency planning for the materials and end products associated with the Complex should be included in the PEIS. The PEIS should thoroughly consider the program requirements and impacts in plausible worst-case scenarios (i.e., that nuclear weapons were deliberately or otherwise detonated in the U.S. or elsewhere or that some other major failure of the containment of high level radioactive materials occurs).	2
7	The PEIS should include an evaluation of the lack of preparation of physicians and hospitals for any kind of accident that might occur during the transportation of waste materials to WIPP.	1
8	DOE needs to conduct hazard analyses of all hazardous materials used or located at the Pantex Site, to determine the probable impact on the off-site population if these materials were involved in a disaster. Of particular interest will be issues relating to the safe handling and transportation of the radioactive materials prior to processing, reprocessing, or reclamation, and the waste generated as a result of these operations. Staging, storage, and disposal of special nuclear materials which would accumulate as a result of arms reduction may require future evaluation and consideration.	2
9	DOE needs to continue the ongoing dialogue between each facility (e.g, Pantex Plant) and state and local emergency management officials to ensure that each party is aware of the hazardous situations that the facilities pose to the local communities and that local industries pose to each facility. Plans need to be developed to effectively prepare for and respond to any emergency situation that may occur. All parties need to participate in frequent and comprehensive joint exercises with realistic scenarios that accurately represent the potential dangerous situations that occur both onsite and offsite. DOE also needs to continue to provide security clearances for designated state and local government officials.	1
10	DOE should recognize that state and local emergency management officials have been working with the Federal Emergency Management Agency and nuclear power plant officials. As a result, terminology has been defined, guidance developed, and plans and procedures established. DOE, when creating new directives, should include as much of this tried and proven experience as is practical, such that state and local emergency managers do not have to learn and practice different procedures for similar emergency situations.	1
11	DOE should recognize that not all states conduct emergency management activities in the same way. Therefore, when a Federal or regional directive conflicts with state or local plans and procedures, DOE should allow individual sites (e.g., the Pantex Plant) the latitude to request an exception to the directive so that the site can interface with the existing state and local emergency plans to the maximum extent possible.	1
12	The PEIS should include a discussion of various scenarios of potential accidents at an expanded Pantex Plant and the emergency response preparedness required.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 18: EMERGENCY PREPAREDNESS (continued)		
13	Questions how citizens would be notified, and what they are to do, in case of an incident or accident at the Pantex Plant or another facility.	3
14	The PEIS should include a description of the escort requirements for shipments, anti-sabotage precautions, evacuations plans in the event of a transport accident, and provisions for coordination with state and local governments and the Federal Emergency Management Agency ion transportation matters.	1
15	Concerned about what emergency preparedness assurances will DOE provide to communities and tribes with regard to full emergency protection prior to transporting materials, available funding, and the responsibilities of states, counties, and tribes for costs and liabilities.	1
16	The impact on local emergency response programs due to increases in the movement of wastes from closed facilities should be analyzed in the PEIS.	1
17	DOE should develop and maintain emergency response procedures and train and equip local first responders.	1
18	A description of the emergency preparedness planning and testing that will be conducted for the Complex 21 site should be included in the PEIS.	1
19	The U.S. EPA strongly recommends the development of a spill prevention and emergency preparedness plan for hydrocarbons, hazardous waste, and all other hazardous/toxic/flammable materials.	1
Issue Category 19: CONFLICTS WITH SOCIAL ISSUES		
1	Resources should be committed to research and development of non-nuclear energy sources. DOE should promote solar energy, wind energy, and other alternative/ renewable sources.	153
2	DOE should shut the Complex down and invest the money in alternative energy sources and/or the development of economic opportunities and education for the poorest sectors of this country. The existing contamination should be cleaned up.	10
3	Irregularities (i.e., improper transfers of money) in government spending associated with weapons production are not good because the country is suffering from financial problems, and siphons away tax dollars needed to feed the poor.	1
4	Existing facilities should be converted, and workers retrained, to enable the facilities to pursue other work ventures that will benefit society, including waste cleanup, energy, and transportation-related research.	98
5	Redirect DOE funds and/or expertise to educate and revitalize our communities and improve the environment.	14
6	Dismayed over the need to spend billions on the cleanup of sites (e.g., Hanford) at the expense of spending that money on human services and the environment.	1
7	Questions spending large amounts (billions of dollars) on defense (including weapons production and the reconfiguration process) and very little on education, housing, the environment, and basic human needs.	4,301
8	Funds in the Federal budget for nuclear weapons or reactor production should be used for cleaning up contaminated sites, for compensating people who have been harmed at the sites, and for medical research to guarantee that health effects are minimized in the future.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS		
1	There are too many nuclear weapons in the world. Questions the need for the number we currently have given the current world situation. The U.S. needs to negotiate for a smaller number.	7
2	New Mexico has been greatly affected by DOE facilities, particularly with regard to the number of toxic waste sites at DOE facilities in the state (730 of 3,700 sites identified nationwide). DOE has had very little regard for the people who live near the sites.	1
3	New Mexicans have not had much say regarding DOE decisions affecting the state (e.g., WIPP); providing testimony for 5 to 10 minutes at a hearing or meeting is the only means of public input. New Mexicans are the victims and have been paying for their own victimization.	1
4	DOE should be aware of the Southwest Organizing Project's *Community Environmental Bill of Rights* (see ALB-009) and work within it.	1
5	The impact on future generations should be considered in the decision. People are concerned about the safety of our future (i.e., will they have full lives) because of the environmental, safety, and health problems associated with the Complex.	23
6	Facilities should be located in affluent neighborhoods; current facilities are placed on or near Indian, Spanish, Black, and poor white communities.	6
7	Longstanding habitual practices by veteran employees continue to aggravate environmental degradation in and around DOE facilities (e.g., RFP), despite claims of increased environmental, health, and safety awareness.	1
8	Supports the positive steps (e.g., technology) that have been taken to clean up the Kansas City Plant.	1
9	In talking about the future of DOE facilities, we need to look at what the present conditions are and what the past was, so we can learn some lessons. We do not seem to have learned the lessons of the past yet, and we are moving to the future too quickly.	4
10	The *Reconfiguration Study* is too scientific and technical to understand; it is meant for scientists. There are too many acronyms used in the document. The use of the English language in the document does not make it intelligible to the public (e.g., creating new words) or is incorrect (e.g., giving inanimate objects life).	4
11	New Mexico has suffered concomitant health and social problems that have accompanied DOE facilities in the state, including racism, economic exploitation, and the destruction of the environment through nuclear research, chemicals, and increased population. New Mexico provides more funding per student to the Los Alamos schools than any surrounding school district with the rationale that they need a better educational system than the surrounding communities. Such attitudes will not allow others to make advancements in employment.	5
12	DOE has done nothing for New Mexico. The state was in the bottom third in the nation in employment, education, and economic development 50 years ago and is there in 1991.	1
13	Radioactive waste has contaminated areas adjacent to LANL resulting in no crop production because of contaminated water. Contamination has occurred elsewhere because of nuclear waste; protection of the air, water, and land is needed.	1
14	DOE should review comments made at previous public meetings on RFP that reflect concerns regarding the facility, particularly health and safety concerns.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
15	The PEIS needs to include the impacts of the use of nuclear weapons.	10
16	Biomass (e.g., cannabis) should be used to meet the nation's energy needs.	2
17	The PEIS should include an alternative which looks at non-violent ways of trying to resolve human conflicts. We have always had human conflicts and we always will.	1
18	The *Reconfiguration Study* should reflect the workers and their talents and the valuable contribution they make to our national well-being.	1
19	DOE needs to use its influence to make sure the White House and/or Congress does not ignore what the public has to say in the PEIS hearings.	4
20	A cradle-to-grave hazardous waste program is needed that prevents disease and other problems, not an end-of-the-pipe approach. It should consider factors such as medical costs to the community, environmental costs, and the cost of fear in neighbors.	1
21	The League of Woman Voters of North Pinellas will be monitoring the activities associated with the cleanup of the Pinellas Plant.	1
22	The existing facilities should be cleaned up and operations put on hold (mothballed) to await developments on the international scene. If the current trend toward abolishing nuclear weapons does not continue, we could then start up production again.	2
23	The government has carried out a number of secret experiments on a number of unwitting human subjects, including former employees and members of the general public, resulting in severe health effects to many of the individuals.	2
24	Concerned about the risk of internal and external sabotage at existing facilities (and during transport of hazardous wastes and radioactive materials) that could cause serious health hazards and the risk that plutonium and other components of nuclear weapons will be stolen from DOE facilities. DOE needs to examine and inform the public about how much plutonium has been lost and misappropriated from existing facilities.	2
25	DOE needs to do a cost-benefit analysis to see if the reconfiguration proposal is worthwhile and how it fits into our economic priorities.	32
26	Statement from or about a victim of exposure to radiation and/or other contaminants.	8
27	Reconfiguring the Complex and reducing the number of sites will minimize the likelihood of terrorist attacks.	1
28	The *Reconfiguration Study* should focus on the human element not on technology -- humans are what technology is supposed to serve.	1
29	Nuclear weapons production and the whole war mentality of the country have contributed to anxiety and depression among the public.	1
30	DOE needs to retrain workers in the career of their choice and help them start new businesses or use the skills they have to develop new businesses.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
31	Reducing the stockpile is no excuse to compromise the importance of quality, security, and reliability of weapons components. Closing selected Complex sites and losing their selected capabilities will severely hinder our ability to meet possible future stockpile requirements. The technology needs to go forward, not be thrown away.	2
32	Every human has the right to work at a job which acknowledges and affirms the dignity of human labor, provides adequate compensation in both wages and benefits to the worker, and promotes the immediate good of society while providing benefits for future generations.	1
33	DOE needs to deal forthrightly in discussing "plutonium" and the associated health and safety effects which can result from exposure to it.	2
34	All funds proposed to be spent on modernization for the next 3 years should be set aside and sequestered in a new fund to be created for liabilities to the environment that have been incurred from past nuclear weapons production. DOE should not spending billions on reconfiguration when we do not know how we will meet the costs from past production and we have a large budget deficit.	1
35	There is no way to safely and reliably maintain a weapons stockpile, especially a nuclear weapons stockpile.	1
36	The dollar costs of site development should take into account public health, worker welfare (including retraining), and site clean-up costs, as well as acquisition and construction costs.	1
37	Comments provided on the NPR program and the Draft EIS for that project.	65
38	DOE should print all of its EISs on recyclable paper that does not contain dioxin. DOE should also abandon its proclivity for writing multi-volume EISs.	2
39	The PEIS needs to clearly address the consequences that Complex activities have on the environment. It needs to consider the consequences of each contributing activity and how they interrelate, and how actions in one area have consequences on the others; that is, the waste generated at one facility does not magically disappear, and has impacts on other parts of the country. The risks need to be fully disclosed to the people nearby so that a community where you propose building a new site is aware of what happened to former site communities.	1
40	Concerned about activities associated with the bio-medical laboratories at LLNL with regard to the experimentation on animals and the treatment and disposal of the carcasses.	1
41	The *Reconfiguration Study* should include the names and addresses of those who wrote it; the document is faceless and nameless.	1
42	DOE should reject the notion that the only options available are unilateral disarmament or continued production under dangerous conditions that threaten the environment and the safety and health of our citizens. The design, testing, and production of nuclear weapons is fundamentally incompatible with protection of human health and the environment. Until DOE breaks out of its institutional denial, there can be no meaningful impact analysis of the Complex.	2
43	Questions why the University of California is involved with the laboratories at a time when funding is being drastically cut back for the University's schools of medicine, nursing, and public health.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
44	Opposes continued deregulation of the nuclear industry as called for in the National Energy Strategy. Deregulation demonstrates blatant disregard for the life of this planet. U.S. energy policy needs to go in a different direction.	1
45	Concerned about employment practices and policies at LANL.	1
46	The PEIS should include an analysis of the risks and costs of a nuclear war if future generations of nuclear weapons are actually used. Such risks and costs need to be considered as part of the environment impact. The PEIS should also include a probability analysis of nuclear war in the presence, or absence, of a Comprehensive Test Ban Treaty.	1
47	Citizen participation should be part of the PEIS process because as long as DOE and its contractors are preparing the PEIS, and using data compiled by DOE, the document will never be credible. DOE should open itself up to outside studies done by environmental research groups that are objective in their approach.	3
48	Reconfiguration plans should not compromise both the laboratories and the local economies which attempt to support them by compromising the laboratories' ability to maintain a diverse mission and address a broad range of problems. DOE should also consider placing in the private sector all those nontechnical and nonclassified positions that are commonly provided by the private sector elsewhere, including providing educational activities and programs to allow affected employees to upgrade their career opportunities by transitions to jobs more aligned with changing missions.	1
49	Part of DOE's mission as defined in the Atomic Energy Act of 1954 has been accomplished -- developing atomic weapons. These are impotent and obsolete, and no longer needed. DOE needs to get on with the other parts of its mission -- to promote world peace, improve the general welfare, increase the standard of living, and strengthen free competition and private enterprise. Other purposes include disseminating, with appropriate safeguards, scientific and technical information, encouraging scientific and industrial progress, enforcing international controls, and promoting international cooperation in common defense and security.	1
50	People should be more concerned about environmental contamination which is occurring across the U.S. border in Mexico where environmental standards are very lax. Some of these plants are much more of a threat to our health than the laboratories are.	1
51	The DOE needs to ensure, through the PEIS process, that all reasonable alternatives have been examined. The full cycle in designing and building the new complex should be considered; everything from mining the ore to disposing of the waste. DOE needs to demonstrate that these things can be done safely. If the facts are adhered to, then DOE can be held accountable for its decisions on alternative technologies, and responsible individuals and organizations can play a proper role by insisting that DOE and themselves deal only with facts.	1
52	Corporations involved in the reconfiguration process may be in possible violation of the U.S. Constitution.	1
53	DOE is taking advantage of the State of South Carolina because of its virtually nonexistent environmental protection laws and the poor economic conditions of the SRS region.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
54	The PEIS needs to address various factors associated with overloading of a site (e.g., SRS) with a concentration of many components of the nuclear weapons production process, such as potential environmental and public health risks at already contaminated sites; risks arising from management problems involving an operation that is too large; difficulties in dealing with contractors; and accountability for safety and cost containment.	1
55	The basic policy of government not to establish environmental policies as a priority is really environmental neglect, or worse, a democratic value to be a servant of enlightened public interests. Sound policy decisions respecting environmental priorities and public values are needed.	1
56	Concerned about the possibility of relocating any of the Complex-21 sites with questionable or no representation (i.e., union representation) for the workforce. SRS has a completely non-union workforce, with the exception of the security guards. Non-represented workers have little or no input into their work or quality of work life, and are most often very hesitant to approach their employer with health, safety, or environmental concerns for fear of reprisals because they are not protected by the Whistle Blowers Act.	1
57	Questions why the DOE is willing to risk the health, safety, and future of people living in rural areas (e.g., Idaho) with a project that is considered too dangerous to be located in more populated areas.	4
58	People are being ask to support and/or comment on a non-specific reconfiguration of the Complex. Lack of specific knowledge about reconfiguration plans (e.g., the total cost involved) prevents the accurate assessment of the risks involved.	6
59	DOE should strongly consider moving RFP to a unpopulated area that is away from any community's drinking water source.	1
60	DOE has stated that it will only consider locations where they are welcome. Will DOE allow local communities sufficient time to conduct a public referendum on DOE's expansion plans at each site.	2
61	DOE needs to reward instead of persecute safety-conscious contractor employees whose only wish is to do things by the book.	1
62	DOE needs to radically change its culture to become a government operation which serves the interest of the public and not the interests of the military industrial complex.	2
63	DOE should support and encourage passage of the Nuclear Ethic Law, or at least, incorporate its intent into agency operating procedures.	1
64	Although DOE is legally required to only consider the environmental impacts of the reconfiguration, the PEIS should clearly present the technical and economic problems and benefits of each alternative site being considered so that the public can have an opportunity to influence the site selection.	1
65	The social impacts of a continued policy of U.S. threatened use of nuclear weapons should be considered in the PEIS, including the uncertainty of humanity's future.	1
66	The PEIS should include an analysis of the environmental impact of the reconfiguration on other nuclear weapons states and on those countries that do not have their own nuclear weapons programs (i.e., what will it force them to do?).	1
67	Decision-makers who support Complex 21 and believe DOE's safety assurances should be required to store nuclear waste in their backyards.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
68	Complex 21 should not be a public works project to achieve economic development.	1
69	There needs to be an unclassified, international study of the properties of a laboratory nuclear dynamo.	1
70	The PEIS should include an evaluation of the opportunity costs that are incurred because of lands that cannot be released for development by a private tax-paying industry, the time spent by local leaders working and planning for a major development such as Complex 21 as opposed to working on other community needs, or the expenditure of funds for Complex 21 diverts money for other projects at DOE facilities.	1
71	The costs and benefits to local areas if the stigma of having a nuclear weapons plant inhibits or increases economic diversification should be analyzed in the PEIS.	1
72	DOE needs to ensure in preparing the PEIS that clarity and perspective are dominant themes. Failure to do so will contribute to public and media misunderstanding.	1
73	Supports nuclear energy development and power production and its spinoff technologies such as nuclear medicine.	2
74	Concerned that the Oak Ridge Reservation will become the focal point for anti-nuclear demonstrations that now occur at several U.S. locations and the increased potential for terrorist activities. The increased potential for terrorist activities will increase the need for counter-terrorist and -intelligence activities in the East Tennessee area by local, state, and federal agencies, which may infringe upon civil liberties. Enhanced security concerns will increase the workload of local law enforcement agencies and the increased demonstrations and the potential for increased terrorism may adversely affect the public image of Roane County and the City of Oak Ridge.	1
75	The reconfiguration effort should be based on the best knowledge available; expert testimony is needed in the fields of foreign and military affairs and science and engineering. The in-house expertise of the national laboratories should be used.	1
76	Weapons material should be thought of as nuclear waste that will not be generated, but which will continued to be stored in new weapons until a permanent waste storage solution is discovered and proven.	1
77	The U.S. educational system is lacking in needed instruction to teach people how to use their minds and how to think.	1
78	The idea that the transfer of military technology to U.S. industry can enhance economic competitiveness is unsupported by evidence and is probably false. There is a great deal of evidence that the drain of 50 percent of all American scientists and engineers into military-related work harms the competitiveness of our commercial sector.	1
79	DOE should examine the human element when contemplating administrative changes and implementing changes in the designs of various systems. DOE needs to change the culture of secrecy, autocracy, and politics to a more cooperative, team-oriented culture. The current level of secrecy threatens to undermine the confidence of the public and employees at each facility.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 20: GENERAL/MISCELLANEOUS COMMENTS (continued)		
80	The ramifications of DOE playing various communities against each other in a bidding war for Complex 21 should be examined as to its impact on the relations between the communities.	1
81	Concerned that DOE will link expansion of the Pantex Plant with a requirement that the Texas High Plains accept a nuclear waste disposal site.	1
82	DOE needs to guarantee "whistleblowers" jobs and benefits protection. Reward, instead of persecute safety-conscious employees whose only wish to do things by the book.	2
83	The *Reconfiguration Study* consists of a great deal of generality with very few specifics which makes the document very difficult to comment on. The reader must read between the lines to get some sense about what is really being said. A document of this nature should be to the point, well documented and referenced, and contain specifics to allow the review and comment by concerned entities.	1
84	DOE should address the impacts of its weapons production on the social welfare of the communities and regions asked to do the work resulting from the extreme burden of secrecy (i.e., kids do not know what their parents do for a living) and moral and other disagreements that divide communities.	2
85	DOE statements that it has always sought to observe the best engineering and management practices with regard to the operations of its plants is an outright lie. The abysmal record of accidents, equipment malfunctions, workplace hazards, and persecution of conscientious whistleblowers is irrefutable that DOE has not always sought to observe the best.	1
86	DOE has claimed that it "identified additional problems at its facilities." DOE is playing fast and loose with the truth as it was the work of whistleblowers, citizens organizations, and investigations by the Congress and states which revealed most of these problems to DOE.	1
87	DOE needs to make certain that those who prepare the PEIS are recognized as qualified to do so in order to ensure the credibility of the PEIS and later site-specific EISs.	1
88	DOE should help accelerate the availability of detailed 1990 Census data for each proposed region to assist in planning for additional growth.	1
89	Questions statement in the *Reconfiguration Study* that a goal of Complex 21 is "to safely and reliably support whatever nuclear deterrent objectives are set by the President and funded by Congress." This sentence comes across as an attempt to elevate the role of the President and denigrate the role of Congress. Congress does not merely fund objectives selected by the President. Article I of the U.S. Constitution attaches legal obligations, requirements, and restrictions to appropriations legislation which DOE is legally bound to observe.	1
90	DOE recognizes in the *Reconfiguration Study* that there are social and political impacts associated with the Complex, yet these aspects are not part of the scoping and PEIS processes.	1
Issue Category 21: SUPPORT OF OR OPPOSITION TO DOE POLICY		
1	Opposes/disagrees with DOE nuclear weapons programs and policies for various reasons. The Complex should be reconfigured to a smaller size and/or nuclear testing, development, and production should be halted and treaties negotiated.	2,704

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 21: SUPPORT OF OR OPPOSITION TO DOE POLICY (continued)		
2	Opposed to nuclear weapons, nuclear energy, and/or nuclear materials, based on moral grounds or international law, and/or because of concerns about safety, the waste disposal problem and the need to minimize waste generation, and the number of weapons in existence.	308
3	Supports discontinuation of nuclear weapons production (i.e., close down all or parts of the Complex) as part of the prevention of nuclear war (deterrence) and weapons proliferation, and preventing/reducing environmental, health, and safety problems and concerns.	549
4	Supports expansion/enlargement of the Pantex Plant for various reasons, including local support and contribution made to local community by employees; it is an asset to the community; good safety record; necessary employees, facilities, and utilities can be provided; quality of life provided in area; modern facility capable of expanding; Amarillo provides good infrastructure and social amenities; and/or the local economy is currently stressed.	4,770
5	Opposed to the expansion and/or operation of the Pantex Plant for various reasons, including potential air, water (e.g., Ogallala aquifer), and soil contamination; associated impacts on local agricultural and cattle industry; potential health and safety problems with increased handling of hazardous materials; and/or the need to acquire additional lands for the expansion. Property near the plant has been offered up without the consent of the people own the land.	349
6	The Hanford Site should not be reopened as a nuclear weapons production plant and should be cleaned up. It should not be used for the relocation of RFP because new production activities will just add to the existing waste management, health, and environmental problems.	74
7	Supports the continued operation and/or expansion of the Pinellas Plant because of its positive economic and employment impact and contributions to the community by its employees.	13
8	Opposed to the operation and/or expansion of the Pinellas Plant, because of its location in a populated area, existing environmental problems, local environmental sensitivities, and/or the production of nuclear weapons.	295
9	Opposed to the restart of plutonium operations (i.e., continued operation) at RFP. The plant should be shut down because of the existing environmental problems, noncompliance with environmental and safety laws, health concerns, inadequate facilities, and/or its proximity to populated areas. Use resources to clean up the facility and restore the environment to its original state, including conversion to nonmilitary uses.	43
10	Supports restarting/continuation of operations at RFP.	3
11	Supports the shutting down of plants such as RFP and opposes the relocation of any nuclear weapons plant to any state.	8
12	Supports halting nuclear testing. The U.S. needs to sign the Comprehensive Test Ban Treaty and seek world-wide nuclear disarmament.	144
13	Supports continued operation and/or expansion of the Kansas City Plant because of its positive economic and employment impact, the contributions to the community by its employees, the environmental awareness and health and safety consciousness of Allied-Signal, the good relationship with the labor unions, and/or the quality management of Allied-Signal.	32

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 21: SUPPORT OF OR OPPOSITION TO DOE POLICY (continued)		
14	Supports the retention of non-nuclear operations at RFP by allowing privatization of non-nuclear manufacturing activities or consolidation of certain non-nuclear activities (including waste management and treatment technology research) at RFP, provided DOE can demonstrate that it can perform such activities in manner that fully complies with all environmental, health, and safety laws.	2
15	Supports continued operation and/or expansion of the Mound Plant because of its positive economic and employment impact, the contributions to the community by its employees, the environmental awareness and health and safety consciousness of EG&G, the good relationship with the labor unions; and/or the quality management of EG&G.	9
16	Supports the relocation of RFP plutonium operations to another location. DOE should engage in a process which will accomplish this at the earliest possible date.	3
17	Supports expansion of SRS as a site for a consolidated nuclear weapons complex, because of the existing nuclear support facilities and infrastructure, land availability, technical expertise of work force, support of the surrounding community and the State of South Carolina, good safety record, the contribution the plant and its employees make to the local communities, and/or the economic and employment benefits it provides.	358
18	Opposes the expansion of INEL as the site for the relocation of RFP and possibly other facilities (i.e., Pantex and Y-12) because of associated population growth and associated social changes, DOE's noncompliance with environmental laws and regulations in the past, the potential threat to the local environment, continued overuse of ground water, and DOE's mismanagement of its facilities.	149
19	Supports the continuation and/or expansion of operations at the Oak Ridge Y-12 Plant, because of land availability, support of local communities in east Tennessee, trained and knowledgeable work force, and long-standing experience and relationship with the DOE.	4,085
20	Opposed to the startup of WIPP and/or the Yucca Mountain facility.	6
21	Opposed to the continuation and/or expansion of operations at SRS (including construction of the NPR), because of continuing accidents; the health, safety, and environmental risks posed; ground water contamination and other environmental problems; potential for geologic activity at the site; and/or because South Carolina has lax environmental regulations and is already a dumping ground for too much hazardous/radioactive wastes. The facility should be shut down and cleaned up.	51
22	Supports the no-project (No Action) alternative.	11
23	Supports the continued operation and/or expansion of LANL because of its positive economic and employment impact; contributions to the community by its employees; the environmental awareness and health and safety consciousness of the management; the contribution the research at the facility has made to society and national security; and/or the good working relationship with the labor unions.	13
24	Opposed to any plutonium processing or production at LANL.	3
25	Supports the continuation of operations at NTS because of the strong environmental, safety, and health protection programs, and adequate medical facilities.	1

TABLE B.2.-*Summary of Public Scoping Comments*-Continued

Issue Number	Comment Summary	Number of Comments
Issue Category 21: SUPPORT OF OR OPPOSITION TO DOE POLICY (continued)		
26	Supports the continued operation and/or expansion of INEL because it is the most isolated site with a smaller population density; the facility's good safety record; positive economic and employment impact; contributions to the community by its employees; the environmental awareness and health and safety consciousness of the management; the existing infrastructure; the contribution the research at the facility has made to society and national security; and/or the good working relationship with the labor unions.	197
27	Supports expansion of the Pantex Plant, but only with implementation of strong environmental, safety, and health controls and monitoring programs to ensure the health and safety of workers, nearby neighbors, the region's agricultural economy, and the ground water supply; a strong cooperative program with the State of Texas and/or local governments to provide full and meaningful independent oversight of all new or continuing activities at the facility; funding for local emergency planning and response programs; and/or providing compensation for land acquisition and agricultural losses.	19
28	Supports the continued operation and/or expansion of the Hanford Site because of the existing nuclear support facilities and infrastructure, land availability, technical expertise of work force, support of the surrounding community, good safety record, the contribution the plant and its employees make to the local communities, and/or the economic and employment benefits it provides.	10
29	Opposes expansion and/or continuation of operations at the Oak Ridge Reservation, because of continuing accidents; the health, safety, and environmental risks posed; potential for surface and ground water contamination and other environmental problems; the potential for seismic activity at the site; and/or the dangerous roads near the facility used for transporting hazardous materials. The facility should be cleaned up and/or shut down.	678
30	Supports the expansion of operations at the Oak Ridge Reservation, but only if local governments are allowed input on the design criteria for the facilities; a citizen's environmental, safety, and health board is created to represent community interests; funding for research and development at Oak Ridge is not diminished as a result of funding Complex 21; DOE assumes a portion of the local tax burden to pay for needed services required as a result of the expansion; and DOE stipulates that the contractor will comply with the Beneficial Tax Act of 1990 or make equivalency tax payments to local governments.	2

TABLE B.3.—*Issues Identified in Form Letters Received During the Scoping Process*

Issue Number	ISSUES IDENTIFIED	Number of Comments
1	• The *Reconfiguration PEIS* should be linked to the *Environmental Restoration and Waste Management PEIS* • The *Reconfiguration PEIS* should consider the New Production Reactor capacity • DOE's need for continued production of nuclear weapons should be evaluated openly. Options considered in the PEIS should include no future production, maintaining only a minimum deterrent, and limits on testing • Government spending priorities on defense, education, housing, the environment, and other human needs • Opposition to nuclear weapons due to environmental concerns	2,099
2	• The PEIS should consider alternatives to continued nuclear weapons testing and production, and management of waste stream generation. • DOE's need for continued production of nuclear weapons should be evaluated openly. Options considered in the PEIS should include no future production, maintaining only a minimum deterrent, and limits on testing • The PEIS should consider conversion opportunities for all sites in the nuclear weapons complex. Existing jobs should be converted into jobs that do not involve nuclear weapons production • Questions government spending priorities on defense, education, housing, the environment and other human needs • DOE needs to honor treaties and Native American rights in its planning	910
3	• Statement in favor of siting NPR at INEL	56
4	• Support for the continued operation and/or expansion of INEL for various reasons	153
5	• Opposition to the relocation of Rocky Flats plutonium facility to Oak Ridge due to environmental concerns such as increased risks of cancer from highly toxic plutonium and chemicals needed for processing; increased probability of plutonium spills from shipments in and out of Oak Ridge; increased contamination to water and soil from toxic waste produced by the plant; and increased security risks of being a weapons production plant	79

TABLE B.3.—*Issues Identified in Form Letters Received During the Scoping Process*—Continued

Letter Number	ISSUES IDENTIFIED	Number of Comments
6	• Support for the continuation and/or expansion of operations at the Oak Ridge Y-12 Plant, because of land availability, support of local communities in east Tennesses, trained and knowledgeable work force, and long-standing experience and relationship with the DOE.	3,916
7	• Support for the expansion of the Pantex Plant provided that the safety, environmental and health concerns of the region are protected or opposes the expansion of the Pantex weapons facility.	2,535 (support) 112 (oppose)
8	• Support for or opposition to the expansion of the Pantex Plant	1,719 (support) 90 (oppose)
9	• The Reconfiguration PEIS should be linked to the Environmental Restoration and Waste Management PEIS. • The *Reconfiguration PEIS* should consider the New Production Reactor Capacity. • DOE's need for continued production of nuclear weapons should be evaluated openly. Options considered in the PEIS should include no future production, maintaining only a minimum deterrent, and limits on testing • Questions government spending priorities on defense, education, housing, the environment and other human needs	299
10	• The *Reconfiguration PEIS* should be linked to the *Environmental Restoration and Waste Management PEIS* • The *Reconfiguration PEIS* should consider the New Production Reactor capacity. • DOE's need for continued production of nuclear weapons should be evaluated openly. Options considered in the PEIS should include no future production, maintaining only a minimum deterrent, and limits on testing. • Questions government spending priorities on defense, education, housing, the environment and other human needs. • The GE/DOE plant in Pinellas County, Florida must be closed and the site fully cleaned up. Extreme urban density is a key reason closure is necessary	283

TABLE B.3.—*Issues Identified in Form Letters Received During the Scoping Process*—Continued

Issue Number	ISSUES IDENTIFIED	Number of Comments
11	• The PEIS should provide a full, detailed explanation of how DOE intends to manage wastes generated by future production and how the generation of additional wastes will impact ongoing cleanup activities • The PEIS should consider provisions for citizen participation in independent licensing, regulation and enforcement of safety standards for all new production facilities • DOE's need for continued production of nuclear weapons should be evaluated openly	294
12	• Support for the halt to nuclear testing. The U.S. needs to sign the Comprehensive Test Ban Treaty and seek world-wide nuclear disarmamanent.	12
13	• The *Reconfiguration PEIS* should be linked to the *Environmental Restoration and Waste Management PEIS* • The *Reconfiguration PEIS* should consider the New Production Reactor capacity. • DOE's need for continued production of nuclear weapons should be evaluated openly. Options considered in the PEIS should include no future production, maintaining only a minimum deterrent, and limits on testing	56
14	• Opposes expansion and/or continuation of operations at the Oak Ridge Reservation, because of continuing accidents; the health, safety, and environmental risks posed; potential surface and ground water contamination and other environmental problems; and/or the facility should be cleaned up and/or shut down. • Supports discontinuation of nuclear weapons production (i.e., close down all or parts of the Complex) as part of the prevention of nuclear war (deterrence) and weapons proliferation, and preventing/reducing environmental, health, and safety problems and concerns. • Questions government spending priorities on defense, education, housing, the environment, and other human needs.	323
15	• Supports the choice of the Pantex Plant as a major and enlarged player in the reconfiguraton and down-sizing of the nation's nuclear arsenal	93

TABLE B.3.—*Issues Identified in Form Letters Received During the Scoping Process*— Continued

Letter Number	ISSUES IDENTIFIED	Number of Comments
16	• Supports the choice of the Pantex Plant as a major and enlarged player in the reconfiguraton and down-sizing of the nation's nuclear arsenal	15
17	• Supports the choice of the Pantex Plant as a major and enlarged player in the reconfiguraton and down-sizing of the nation's nuclear arsenal	29
18	• The PEIS should consider all integral components of Complex 21, including other programmatic actions. The entire realm of the nuclear weapons production complex should be included. • The scope of the PEIS should include all actions which DOE has termed "interim actions," including the NPR, the restart of production reactors at SRS, the Special Nuclear Materials Laboratory at LANL, and/or the interim RFP actions.	26
19	• Supports expansion of SRS as a site for a consolidated nuclear weapons complex, because of the existing nuclear support facilities and infrastructure, land availability, technical expertise of work force, support of the surrounding community and the State of South Carolina, good safety record, the contribution the plant and its employees make to the local communities, and/or the economic and employment benefits it provides.	302

TABLE B.4.—*Issues Identified During the Public Comment Period 11/29/91-1/6/92—Incorporating NPR Analysis into the Reconfiguration PEIS*

Issue Number	SUMMARY OF PUBLIC COMMENTS	Number of Comments
1	Supports the integration of the NPR EIS and the Reconfiguration PEIS into one document.	6
2	DOE should reassess whether additional tritium production is necessary in light of recent Administration decisions to reduce the nuclear weapon stockpile. The PEIS should consider the potential effects of future arms reductions, including impacts on the size and construction schedule for new production facilities as well as the need for building such facilities at all.	173
3	The integrated EIS should take a realistic look at waste management requirements for increased tritium production. The PEIS should evaluate the impacts of continued production of nuclear weapons components on the cleanup of existing contamination. A scientifically and publicly credible process for managing wastes generated by the NPR must be established.	168
4	Since tritium would be produced at SRS under the "No Action" alternative and under other alternatives, these options are essentially the same.	1
5	Now that the NPR EIS has been incorporated into the Reconfiguration PEIS, DOE should ensure that all comments submitted on the NPR EIS receive full consideration.	164
6	The PEIS should evaluate the impacts of nuclear weapons retirement and dismantlement, including mechanisms for safe, verifiable storage of nuclear weapons materials.	165
7	The PEIS should fully evaluate non-reactor tritium production options such as a linear accelerator. This option should be scrutinized using realistic projections of tritium requirements, and must explore power supplies for the facility that go beyond the coal and nuclear-fired plants analyzed in the Draft EIS on NPR. Installed energy efficiency and conservation, hydroelectric power, and solar electric power alternatives should (Continued)	163

TABLE B.4.—*Issues Identified During the Public Comment Period 11/29/91-1/6/92—Incorporating NPR Analysis into the Reconfiguration PEIS*—Continued

Issue Number	SUMMARY OF PUBLIC COMMENTS	Number of Comments
	be evaluated. Reduced tritium requirements should be taken into account since they will substantially decrease the size and therefore the electrical needs of any accelerator.	
8	Supports efforts to build a new reactor at the SRS for various reasons. Aiken offers numerous advantages over other potential locations due to the people, the climate and the available land.	1
9	DOE should proceed with haste in building a new reactor. With all the turmoil in the USSR, things are more unstable than ever. We are not living in a safe nuclear world. We must be prepared.	1
10	Objects to spending billions of dollars on new tritium production facilities instead of using the money to find solutions to the existing waste problem or to ensure public and worker health and safety. The PEIS should consider the costs of nuclear weapons production on other parts of the federal budget, such as cleanup of DOE facilities, education, housing and other social programs.	7
11	DOE should accept comments on other issues besides the NPR and tritium production.	1
12	Opposed to NPR and nuclear weapons production for various reasons, including environmental concerns, health and safety, need for cleanup, and moral concerns.	8
13	Citizen participation in the enforcement of safety standards for the NPR, independent licensing and regulation must be established to assure enforcement of safety standards and monitoring.	4
14	DOE's proposed integration scheme is seriously flawed. The "No Action" alternative which calls for a restart of (Continued)	1

TABLE B.4.—*Issues Identified During the Public Comment Period 11/29/91-1/6/92—Incorporating NPR Analysis into the Reconfiguration PEIS*—Continued

Issue Number	SUMMARY OF PUBLIC COMMENTS	Number of Comments
	K- or L- Reactors is unsafe and unnecessary. The United States cannot demonstrate a reasonable need for additional supplies of tritium and, therefore, should move toward the permanent closure of the existing Savannah River Reactors. The newly integrated PEIS must consider the alternative of a moratorium on tritium production.	
15	Hanford is not a site which should be considered for future nuclear weapons material production. Hanford has too many cleanup problems now; people in the area have already been damaged enough by activities associated with Hanford.	1
16	Opposed to DOE's plans for using the PEIS as a substitute for complete EISs on site-specific projects. It is doubtful that the PEIS analysis will be able to include sufficient detail to support site-specific actions.	1
17	Suggests that DOE consider another round of public hearings across the country, based on new information. That way the public who desires to be part of this decision, and who participated in the PEIS hearing process, can have an opportunity to measure the total impact of possible new complex designs, including the NPR.	1
18	It is doubtful that the original Draft EIS on the NPR can be saved since it is based on information from 1988/89 reports. All measurements of impacts, including waste to be produced, were based on a need that was not proven and no longer exists.	1
19	Since DOE has opened the PEIS to a study on an accelerator as a possible source for tritium, there is a need for public scoping or comment on the accelerator inclusion.	1
20	Concerned about the environmental problems at the Savannah River Site and the recent decision to restart the nuclear reactor at SRS.	3

TABLE B.4.—*Issues Identified During the Public Comment Period 11/29/91-1/6/92—Incorporating NPRAnalysis into the Reconfiguration PEIS*—Continued

Issue Number	SUMMARY OF PUBLIC COMMENTS	Number of Comments
21	DOE should solicit public comment on the Implementation Plan for the Reconfiguration PEIS containing fully updated information.	1
22	DOE should analyze all reasonable means of meeting remaining tritium needs. This must include an analysis of sources both separately, and in combination that could serve to meet requirements. This analysis should include detailed information on the design, construction schedule and size of any potential production facility.	1
23	DOE should release restricted information and unclassified controlled nuclear information on nuclear weapons material supply and requirements as well as a host of safety matters. Long-standing restrictions on public access to this information must be reduced. Public discussion about the Reconfiguration PEIS will be seriously hampered without improved access to such information.	1
24	The Reconfiguration PEIS should be linked to the EM PEIS. DOE cannot adequately evaluate the costs and environmental hazards of rebuilding the complex without considering such issues as associated waste management projects, impacts on environmental restoration activities, and the need for interim and long term storage of wastes.	3
25	DOE should reevaluate its NPR siting options. The Federal Register notice indicates that only Hanford, INEL, and SRS are potential sites for new tritium production facilities. However, recent decisions regarding the NPR program compel DOE to consider other facilities as possible production sites.	1
26	DOE should fully consider the impacts of and alternatives to nuclear fuels reprocessing for operation of an NPR. The wastes resulting from reprocessing have an environmental (Continued)	1

TABLE B.4.—*Issues Identified During the Public Comment Period 11/29/91-1/6/92—Incorporating NPR Analysis into the Reconfiguration PEIS*—Continued

Issue Number	SUMMARY OF PUBLIC COMMENTS	Number of Comments
	impact that may be greater in the near-term than routine reactor operations. The interrelationship between the operation of a reactor and the environmental impacts from reprocessing provides another example of the need to consolidate the two PEIS's.	
27	All nuclear weapons facilities with the exception of Pantex (for disarming and dismantlement) should be closed and cleaned up as soon as possible. Because there is no need for further new designs for warheads, all testing for "reliability" and "effects" should end immediately.	1

APPENDIX C:

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT CONTRACTOR AND SUBCONTRACTOR DISCLOSURE STATEMENTS

The Programmatic Environmental Impact Statement prime contractor, Tetra Tech, Inc., and all four principal subcontractors have provided NEPA disclosure statements (pursuant to 40 CFR 1506.5(c)) to the Department of Energy. These statements are provided on the following pages.

Attachment No.11
Request for Proposal
DE-RP02-90DP00196

QUALIFICATION CRITERION NO. 1

NEPA DISCLOSURE STATEMENT FOR
PREPARATION OF PEIS FOR DOE NUCLEAR
WEAPONS COMPLEX MODERNIZATION

CEQ Regulations at 40 CFR 1506.5(c), which have been adopted by the DOE (10 CFR 1021), require contractors who will prepare an EIS to execute a disclosure specifying that they have no financial or other interest in the outcome of the project. The term "financial interest or other interest in the outcome of the project" for purposes of this disclosure is defined in the March 23, 1981, guidance "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations", 46 FR 18026-18038 at Question 17a. and b.

"Financial or other interest in the outcome of the project" includes "any financial benefit such as a promise of future construction or design work in the project, as well as indirect benefits the contractor is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients)". 46 FR 18026-18038 at 18031.

In accordance with these requirements, the offeror and any proposed subcontractors hereby certify as follows: (check either (a) or (b) to assure consideration of your proposal).

(a) [X] Offeror and any proposed subcontractor have no financial or other interest in the outcome of the project.

(b) [ ] Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests

1.

2.

3.

Certified by:

SIGNATURE

Linda M. Hoyt
NAME

Senior Contracts Administrator,
Tetra Tech, Inc.
TITLE

02 November 1990
DATE

Tetra Tech, Inc. Disclosure Statement

Attachment No.11
Request for Proposal
DE-RP02-90DP00196

QUALIFICATION CRITERION NO. 1

NEPA DISCLOSURE STATEMENT FOR
PREPARATION OF PEIS FOR DOE NUCLEAR
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(b) [ ] Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests

1.

2.

3.

Certified by:

SIGNATURE

Scott R. Willis
NAME

Sr. Vice President,
HALLIBURTON NUS
TITLE

March 5, 1991
DATE

HALLIBURTON NUS Disclosure Statement

Attachment No.11
Request for Proposal
DE-RP02-90DP00196

QUALIFICATION CRITERION NO. 1

NEPA DISCLOSURE STATEMENT FOR
PREPARATION OF PEIS FOR DOE NUCLEAR
WEAPONS COMPLEX MODERNIZATION

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"Financial or other interest in the outcome of the project" includes "any financial benefit such as a promise of future construction or design work in the project, as well as indirect benefits the contractor is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients)". 46 FR 18026-18038 at 18031.

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(a) [X] Offeror and any proposed subcontractor have no financial or other interest in the outcome of the project.

(b) [ ] Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests

1.

2.

3.

Certified by:

SIGNATURE

James B. Hodson
NAME

Chief Executive Officer, SRA
TITLE

29 October 1990
DATE

SRA Disclosure Statement

Attachment No.11
Request for Proposal
DE-RP02-90DP00196

QUALIFICATION CRITERION NO. 1

NEPA DISCLOSURE STATEMENT FOR
PREPARATION OF PEIS FOR DOE NUCLEAR
WEAPONS COMPLEX MODERNIZATION

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"Financial or other interest in the outcome of the project" includes "any financial benefit such as a promise of future construction or design work in the project, as well as indirect benefits the contractor is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients)". 46 FR 18026-18038 at 18031.

In accordance with these requirements, the offeror and any proposed subcontractors hereby certify as follows: (check either (a) or (b) to assure consideration of your proposal).

(a) [X] Offeror and any proposed subcontractor have no financial or other interest in the outcome of the project.

(b) [ ] Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests

1.

2.

3.

Certified by:

Matthew Palmer
SIGNATURE

Matthew R. Palmer
NAME

Senior Contracts Administrator,
Maxwell S-CUBED
TITLE

05 December 1990
DATE

Attachment No.11
Request for Proposal
DE-RP02-90DP00196

QUALIFICATION CRITERION NO. 1

NEPA DISCLOSURE STATEMENT FOR
PREPARATION OF PEIS FOR DOE NUCLEAR
WEAPONS COMPLEX MODERNIZATION

CEQ Regulations at 40 CFR 1506.5(c), which have been adopted by the DOE (10 CFR 1021), require contractors who will prepare an EIS to execute a disclosure specifying that they have no financial or other interest in the outcome of the project. The term "financial interest or other interest in the outcome of the project" for purposes of this disclosure is defined in the March 23, 1981, guidance "Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations", 46 FR 18026-18038 at Question 17a. and b.

"Financial or other interest in the outcome of the project" includes "any financial benefit such as a promise of future construction or design work in the project, as well as indirect benefits the contractor is aware of (e.g., if the project would aid proposals sponsored by the firm's other clients)". 46 FR 18026-18038 at 18031.

In accordance with these requirements, the offeror and any proposed subcontractors hereby certify as follows: (check either (a) or (b) to assure consideration of your proposal).

(a) [X] Offeror and any proposed subcontractor have no financial or other interest in the outcome of the project.

(b) [ ] Offeror and any proposed subcontractor have the following financial or other interest in the outcome of the project and hereby agree to divest themselves of such interest prior to award of this contract.

Financial or Other Interests

1.

2.

3.

Certified by:

W.M. Lamb
SIGNATURE

W.M. Lamb
NAME

President, Lamb Associates, Inc.
TITLE

26 October 1990
DATE

Lamb Associates Disclosure Statement

APPENDIX D:

FEDERAL REGISTER NOTICES

This appendix contains copies of the Notices of Intent for preparing the NWCR PEIS, the announcement requesting public comment on incorporating the NPR into the Reconfiguration PEIS, and the Notice of Intent for preparing the Nonnuclear Consolidation EA.

INTENT TO PREPARE PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT FOR RECONFIGURATION OF THE NUCLEAR WEAPONS COMPLEX

(56 FR 5590)

5590 Federal Register / Vol. 56, No. 28 / Monday, February 11, 1991 / Notices

DEPARTMENT OF ENERGY

Intent To Prepare Programmatic Environmental Impact Statement for Reconfiguration of the Nuclear Weapons Complex

AGENCY: Department of Energy

ACTION: Notice of intent to prepare a programmatic environmental Impact statement for reconfiguration of the nuclear weapons complex.

SUMMARY: The Department of Energy (DOE) announces its intent to prepare a programmatic environmental impact statement (PEIS) for reconfiguring its nuclear weapons complex, pursuant to section 102(2)(C) of the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321*et seq.*) and the Council on Environmental Quality (CEQ) regulations (40 CFR parts 1500-1508). In order to assist with modernization, DOE proposes to reconfigure its existing nuclear weapons complex to create a smaller, less diverse, more efficient complex at the present sites, or at relocated or consolidated sites. The PEIS will analyze the environmental consequences of alternative long-term reconfiguration strategies for the DOE nuclear weapons complex, envisioned to be in place early in the 21st century ("Complex 21"), and weigh these against the consequences of maintaining the existing configuration. The PEIS also will be used to support DOE decisions regarding the configuration of its plutonium facilities in the mid-term (in about the year 2000).

Through the PEIS, DOE proposes to develop a comprehensive strategy to establish a long-range reconfiguration plan and avoid piecemeal improvements. If DOE decides to proceed with reconfiguration, the plan would detail how DOE would achieve Complex 21.

Concurrently with this Notice, DOE issuing the Nuclear Weapons Complex Reconfiguration study ("Reconfiguration Study") which reassesses the current problems facing the complex: DOE has prepared both a classified and an unclassified version. The Reconfiguration Study contains material which is expected to serve for certain assumptions and analyses in the PEIS. The unclassified version of the Reconfiguration Study is publicly available upon request at the address given below.

DATES: Written comments on the scope of the nuclear weapons complex PEIS are invited from the public. To ensure consideration in preparation of the PEIS, comments must be postmarked by September 30,1991. Late comments will be reconsidered to the extent practicable.

DOE will hold public scoping meetings near all sites analyzed in detail in the PEIS. DOE intends to announce the location, date and time for those public meetings in a Notice in the **Federal Register** in March 1991, and by other means as appropriate. The announcement of the meetings will be at least two weeks prior to any meetings. The public meetings will provide the public with an opportunity to present oral comments as well as written material.

ADDRESSES: Written comments on the scope of the PEIS, requests for copies of the unclassified Reconfiguration Study, requests for further information on the DOE nuclear weapons complex reconfiguration program, and requests for copies of the unclassified portion of the PEIS (when available) should be sent to: James R. Nicks, Deputy Director, Complex Reconfiguration Task Force, DP-27, room GA-045, U S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC, 20585, (202) 586-1537.

FOR FURTHER INFORMATION CONTACT: For general information on the DOE NEPA review the process, please contact: Carol M. Borgstrom, Director, Office of NEPA Oversight, EH-25, U. S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC, 20585, (202) 586-4600.

SUPPLEMENTARY INFORMATION: *Purpose and need for this action.* DOE needs its nuclear weapons complex to be configured in such a way as to safely and reliably support whatever nuclear deterrent stockpile objectives are established in the future by the President and Congress. The purpose of DOE's proposal to reconfigure the existing complex is to achieve a complex that is smaller, less diverse, and less expensive to operate. Reconfiguring the nuclear weapons complex would serve as a means to maximize efficiency and minimize public health risks. DOE will use the PEIS to assess the environmental impacts of alternative options for configuring the nuclear weapons complex. In determining the configuration, DOE will ensure that regulatory and institutional requirements are met and DOE's national defense mission is satisfied.

DOE nuclear weapons complex. The DOE nuclear weapons complex consists of 13 major facilities located in 12 states. Major facilities, and their primary responsibilities within the complex, are listed in Table 1. The complex produces nuclear material; performs research development, and testing of nuclear devices; designs and manufactures nuclear weapons; provides surveillance of and maintains nuclear weapons in the national stockpile; and retires and disposes of nuclear weapons. The complex is organized into three functional elements: (1) Plans for nuclear materials production and manufacturing; (2) plants for nonnuclear manufacturing; and (3) laboratories and test sites used for research development and testing. There is some functional overlap at individual sites (as noted in Table 1).

By law, DOE is charged with providing nuclear weapons to support the United States nuclear deterrent policy (the Atonic Energy Act of 1954, as amended, 42 U.S.C. 2001*et seq.*) The mission of the DOE nuclear weapons complex is to provide the Department of Defense with safe, secure, reliable, operative nuclear weapons and components so that the United States can maintain an effective, viable nuclear deterrent into the foreseeable future, and to accomplish this in a way that protects the health and safety of workers and the public, and protects the environment.

Table 1

The DOE Nuclear Weapons Complex

Functional Element: Nuclear Materials Production and Manufacturing Sites [1]

Hanford Site (Richard, Washington) [2]—Chemical separations (spent fuel reprocessing) and plutonium production support.

Idaho National Engineering Laboratory (Idaho Falls, Idaho)—Chemical processing of naval reactor spent fuel to recover enriched uranium for use as fuel in production reactors

Pantex Plant (Amarillo, Texas) [3]—Assembling high explosives, nuclear components, and explosives,

[1] Prior to October 1, 1990, the Feed Materials Production Center, Fernald, Ohio, was part of the nuclear weapons complex. It used for producing uranium metal cores for nuclear material producing reactors. It is now managed by DOE's Office of Environmental Restoration and Waste Management.

[2] Management of some nuclear weapons complex aspects of the Hanford Site is expected to be transferred to DOE's Office of Environmental Restoration and Waste Management in 1991; if so, these aspects may not be addressed in this PEIS. In that event, they would be addressed as appropriate, in NEPA documents prepared by DOE's Office of Environmental Restoration and Waste Management.

[3] These sites have overlapping assignments for both the nuclear materials production and manufacturing functional element and the nonnuclear manufacturing functional element.

nuclear components into nuclear weapons: repairing and modifying weapons; dissembling and retiring weapons: and evaluating and testing nuclear stockpile.

Rocky Flats Plant (Denver, Colorado)[3] Fabricating plutonium and uranium components: recovering/recycling plutonium.

Savannah River Site (Aiken, South Carolina) — Chemical separations (spent fuel reprocessing), producing weapons-grade plutonium, tritium, and other special isotopes; fabricating reactor fuel and targets: tritium loading facility; and research and development process support.

Y-12 Plant [Oak Ridge, Tennessee)[3] Producing weapons components, producing and blending uranium alloys, and producing lithium compounds; recovering materials from fabrication process and retired weapons.

Functional Element: Nonnuclear Manufacturing Sites

Kansas City Plant (Kansas City, Missouri)—Manufacturing, surveillance, and evaluating nuclear weapons comments.

Mound Plant (Dayton, Ohio) — Manufacturing, surveillance, and evaluating nuclear weapons components, recovering and purifying tritium wastes and providing backup tritium loading capability.

Pantex Plant (Amarillo, Texas)[3]— Fabricating high explosive components.

Pinellas Plant (Clearwater Florida) — Producing miniaturized neutron generators, radioisotope thermoelectric generators, thermal batteries, and other weapons components.

Rocky Flats Plants (Denver, Colorado)[3]— Fabricating beryllium components and other nonnuclear metal parts.

Y-12 Plant (Oak Ridge, Tennessee)[3]— Producing and assembling nonnuclear weapons components.

Functional Element: Weapons Research, Development and Testing Sites

Lawrence Livermore National Laboratory (Livermore, California) — Research and development of nuclear warheads; designing and testing advanced technology concepts: maintaining weapons design program.

Los Alamos National Laboratory (Los Alamos, New Mexico)—Research and development of nuclear warheads: designing and testing advanced technology concepts; maintaining weapons design program.

Sandia National Laboratories (Albuquerque, New Mexico) — Engineering nuclear weapons systems ordinance: designing and developing nonnuclear components; field and laboratory testings; and manufacturing engineering.

Nevada Test Site (Las Vegas, Nevada) — Underground nuclear testing.

To meet this mission DOE's nuclear weapons complex must maintain the nuclear weapons stockpile in readiness, certify the reliability and safety of nuclear weapons, and modernize the stockpile based on requirements approved by the President. The nuclear weapons stockpile is established by the President to meet Department of Defense Requirements for national security; short-term requirements are documented annually through the President's Nuclear Weapons Stockpile Memorandum.

The NEPA Process. NEPA requires review of any major Federal action which may significantly affect the quality of the human environment. The review is documented through an EIS. The NEPA process is described in the CEQ regulations implementing NEPA (40 CFR parts 1500-1508). DOE has issued additional NEPA procedures (DOE NEPA regulations at 10 CFR part 1021, DOE NEPA Guidelines (52 FR 4,7661, December 15,1987, as amended (54 FR 12474, March 27, 1989, and 55 FR 37174, September 7,1990), DOE Order 5440.1C, and Secretary of Energy Notice 15-90). The draft and final PEIS will be prepared in accordance with these requirements.

A PEIS is a broad-scope environmental analysis of a program or policy (40CFR 1500.4(i)). A PEIS provides an opportunity for NEPA review to coincide with meaningful points in an agency planning and decisionmaking (40 CFR 1502.4(b)). A PEIS may be used to support later NEPA documents of narrower scope (called "tiering"), such as site-specific or project-specific NEPA reviews. NEPA documents tiered from the PEIS would focus on specific actions when they are ripe for review (40 CFR 1502.20).

Following preparation of an EIS, an agency issues a Record of Decision (ROD), to document its decision (40 CFR 1505.2). The ROD explains how the EIS analysis was balanced against other factors leading to the agency's decision.

Nuclear weapons complex reconfiguration PEIS. DOE has determined that reconfiguration of the nuclear weapons complex would be a major Federal action within the meaning of NEPA; and that the several actions anticipated under the reconfiguration effort are connected (40 CFR 1508.25) and would constitute a broad agency program (40 CFR 1502.4). Accordingly, DOE has decided that a PEIS is appropriate to analyze the environmental consequences of reconfiguring the nuclear weapons complex and to factor environmental considerations into DOE decisions regarding this program.

Reconfiguration plan. DOE will use the decisions arising from the PEIS to develop a comprehensive reconfiguration plan to guide DOE in implementing the nuclear weapons complex of the 21st century, called Complex 21. The plan will cover such things as identifying sites to carry out (maintain, relinquish or acquire) specific nuclear weapons complex functions now performed at the sites listed in Table 1; schedules for transferring responsibilities from one location to another or bringing new facilities (if any) on-line; and the extent of government-owned and private facilities to be used. The plan will be consistent with the emerging international security environment and flexible enough to accommodate the likely range of deterrent contingencies. An announced by DOE on August 14, 1990, the Secretary of Energy has directed that DOE use the following principles to the development of the plan; therefore these principles will guide development of Reconfiguration Alternatives considered in the PEIS.

In reconfiguring the nuclear weapons complex, DOE will:

- Emphasize compliance with laws, regulations and accepted practices regarding industrial and, weapons safety; safeguarding the health of complex workers and the general public; protecting the environment; and security of nuclear materials and weapons components.
- Safely and reliably maintain the nuclear weapons stockpile as directed by the President and funded by Congress.
- Minimize costs associated with the weapons stockpile.
- Minimize the number of weapons production sites and the size of individual sites.
- Maximize transfer of nonnuclear materials production activities to the private sector.
- Maintain redundancy in key capabilities that could significantly and rapidly degrade the effectiveness of the complex if lost.
- Minimize the use of hazardous materials and the number and size of waste streams.
- Provide for proper disposal of hazardous and radioactive waste.
- Identify existing nuclear weapons complex sites that may be transferred to DOE's Office of Environmental health impacts and maximum flexibility to increase complex capacity should the requirement arise.
- Maintain the capability to retire large numbers of nuclear weapons if required by stockpiles downsizing.

DOE will make certain other assumptions to guide development of both the reconfiguration alternatives in the PEIS and the reconfiguration plan. Preliminary assumptions include:

- Nuclear weapons will remain a prime component of national security for the foreseeable future; DOE must maintain the nuclear weapons complex so that it is capable of reliability responding to potential national security needs, including the capability to produce nuclear materials and other components needed for the manufacture of nuclear weapons.
- Maintenance and operation of the complex must comply with all applicable laws, regulations and Federal policy over which DOE has no control, existing at the time PEIS is prepared.
- Adequate facilities will be provided for disposal of nuclear, hazardous and mixed waste. This is being addressed in a separate DOE environment restoration and waste management PEIS.

The PEIS will not address issues and concerns that are either outside the control of DOE or do not bear on the decisions regarding nuclear weapons complex reconfiguration now before DOE. Specifically, the following items are considered beyond the scope of the PEIS:

- The need for nuclear weapons, or impacts of their use.
- Actions of the President, Congress, Department of Defense, or other (non-DOE) Federal agencies.
- DOE projects or facilities which are not part of the nuclear weapons complex.
- Management and disposition of waste. This is being addressed in a separate DOE environmental restoration and waste management PEIS.

PEIS alternatives, The PEIS will examine alternative configurations for the nuclear weapons complex, developed in accordance with the above principles. Although DOE has not yet developed a preferred alternative for the PEIS, the preferred alternative will embody those principles. Specifically, the preferred alternative will included: (1) Relocating the nuclear weapons functions now assigned to the Rocky Flats Plant, near Denver, Colorado and closing the nuclear weapons complex facilities at that plant; and (2) maximizing consolidation of the nonnuclear manufacturing complex with the goal of having only one dedicated nonnuclear manufacturing site within Complex 21. The preferred alternative will also address consolidation of other nuclear materials production and manufacturing functions, and consolidation of functions now performed at the nuclear weapons complex research, development and testing facilities.

DOE plans to examine consolidation possibilities for all weapons complex functions through the PEIS, including shifting certain activities to other sites within the complex and transferring certain nonnuclear activities to the private sector; however, it would not be feasible or prudent to relocate some weapons complex facilities. DOE is looking at candidate sites to identify reasonable alternatives for maximum consolidation within the nuclear materials production and manufacturing functional area of the nuclear weapons complex. In determining the alternative configurations for this function of the nuclear weapons complex, among other things DOE will examine candidate sites to determine if any are suitable for: (1) Receiving the nuclear weapons functions now assigned to the Rocky Flats Plant; or (2) collocating nuclear materials production and manufacturing functions now assigned to other sites with the relocated Rocky Flats Plant functions. It is possible that the range of existing weapons complex sites does not include all reasonable options; therefore DOE will evaluate additional sites for relocation of these facilities. In addition, the PEIS may examine mission changes or relocation of certain facilities now located at the Savannah River Site, near Aiken, South Carolina, depending on the outcome of decisions related to new production reactor capacity, currently being addressed by DOE in a separate EIS.

To assist with the development of the alternatives to be analyzed in the PEIS, DOE has established a Site Evaluation Panel to review candidate DOE and non-DOE sites for the potential relocation of nuclear materials, production and manufacturing functions currently located at the Rocky Flats Plant, and the potential collocation of other facilities. Concurrently with this Notice of Intent, DOE is publishing in the **Federal Register** a Notice of Availability of an Invitation for Site Proposals ("Invitation") for reconfiguring the nuclear weapons complex. The Invitation solicits proposals for a site to receive collocated nuclear materials production and manufacturing facilities, explains the criteria which the Site Evaluation Panel will use to qualify and evaluate proposed sites, and provides a list of information requirements. The Invitation allows non-DOE entities to submit non-DOE sites for consideration, and specifies candidate DOE sites that will be considered for potential relocation of nuclear materials production and manufacturing facilities.

Table 2 lists the candidate DOE sites, identified by DOE, which meet the initial screening criteria (sites which contain a minimum of 5,000 contiguous acres DOE Federally-owned, unobstructed land, and have adequate resources to meet electrical power and potable water requirements, as discussed in detail in the Invitation) and have no inherent mission incompatibility. DOE will compile information packages for these candidate sites to meet the information requirements listed in the Invitation. The Site Evaluation Panel will evaluate both the DOE sites listed in Table 2 and non-DOE sites proposed in response to the invitation, using the same information requirements and qualification and evaluation criteria, (provided in the Invitation), to determine whether any would be reasonable alternatives to receive relocated nuclear materials production and manufacturing functions; reasonable alternatives will be analyzed in the PEIS.

DOE and non-DOE sites which qualify for further consideration will be announced in a **Federal Register** notice on or about July 1,1991, and will be subject to further evaluation by the Site Evaluation Panel and DOE management to determine the set of reasonable alternatives for inclusion in the PEIS analysis. The decision whether or not to relocate any facilities, and selection of relocation site (if any), will be included in the ROD ensuing from this PEIS.

Table 2

Candidate DOE Sites to be Considered for Potential Relocation of Nuclear Materials Production and Manufacturing Facilities

Site

Hanford Site, Richland, Washington,

Idaho National Engineering Laboratory, Idaho Falls, Idaho

Oak Ridge Reservation , Oak Ridge, Tennessee

Pantex Site, Amarillo, Texas

Savannah River Site, Aiken, South Carolina

Note: DOE will examine these candidate DOE sites to determine if any are suitable for: (1) Receiving the nuclear weapons functions now assigned to the Rocky Flats Plants; or (2) collocating nuclear materials production and manufacturing functions now assigned to other sites with the relocated Rocky Flats Plant functions. The listed DOE sites contain a minimum of 5,000 contiguous acres of Federally-owned, unobstructed land; and have adequate resources to meet electrical power and potable water requirements (as discussed in detail in the Invitation) and have no inherent mission incompatibility. Inclusion on this list does not imply that DOE or the SEP have concluded that these sites have been qualified under the terms of the Invitation or are reasonable siting alternatives for analysis in the PEIS; nor does it preclude additional DOE sites from being considered reasonable as a result of the public opinion process.

PEIS alternatives will be sufficiently detailed to allow for meaningful consideration of their comparative merits. This will include, but is not limited to, consideration of constructing and operating additional facilities; moving existing

facilities; decommissioning and decontaminating existing facilities; and phasing these actions over time. However, following completion of the PEIS and the associated ROD, DOE intends to prepare subsequent site-specific NEPA reviews for construction and operation of individual projects, if any, identified in the ROD. Decommissioning and decontamination projects, if any, will be considered in subsequent project specific NEPA reviews in accordance with the environmental restoration and waste management PEIS and its related ROD.

The CEQ regulations require evaluation of a "No Action" alternative in the PEIS. Under the No Action alternative for reconfiguration, Complex 21 would not be developed and the existing configuration would continue. However, the complex would not be static: DOE would continue to make those modifications and upgrades necessary to ensure compliance with Federal, state, and local laws and regulations. If Complex 21 were not developed, DOE proposals to address facility deterioration or technical obsolescence, and the potential for closure of, addition to, or relocation of current complex functions, would continue to be considered over time on a case-by-case basis; however, specific project proposals would not be projected or assessed under the No Action alternative in this PEIS.

DOE is developing a Capital Asset Management Process for managing its capital-related funding for the nuclear weapons complex. Through this process, DOE plans to identify certain maintenance, repair and renovation actions that would take place regardless of the alternative selected. Some of these are continuation of ongoing actions, and some are revised procedures needed to achieve environmental, health, safety, or regulatory compliance. Together, these actions are considered to be common to any alternatives and form a technical baseline. Their impacts will be analyzed under the No Action alternative in the PEIS.

Mid-term configuration. In addition to the alternatives for the long-term configuration of Complex 21, the PEIS will also examine alternatives for a mid-term configuration for the plutonium fabrication functions of the existing complex in about the year 2000. This analysis is predicated on the potential need for a means to supply plutonium weapons components in the event that DOE elects to cease operation of these functions at the Rocky Flats Plant prior to implementing Complex 21. Alternatives would include accelerating constricting, testing, and operating plutonium fabrication functions for Complex 21; constructing an interim facility; retrofitting an existing facility; or No Action (continue to operate the Rocky Flats Plant until Complex 21 is in place). The analysis will be sufficiently detailed to support decisions regarding siting and constructing (if appropriate) plutonium facilities to meet mid-term needs.

Environmental Issues. The PEIS will identify and analyze direct, indirect, and cumulative effects resulting from the configuration of the complex, including potential effects from constructing and operating proposed support facilities (if any), and transporting radioactive, hazardous or mixed (both radioactive and hazardous) materials. The PEIS will consider impacts to public and worker health and safety; natural ecosystem including, but not limited to, air quality, water resources, plants and animals; the cultural environment including, but not limited to, land use, historic resources and archaeological sites; and the socioeconomic situation. The PEIS will address the potential consequences of both normal and accidental radiological and nonradiological releases. The PEIS will examine other relevant issues identified by DOE or the public through the scoping process.

Configuration decisions. Following preparation of the final PEIS, DOE will issue a ROD to document its decisions on the long-term configuration of the nuclear weapons complex and how DOE will accomplish this. The ROD will explain how DOE has balanced environmental considerations against other factors, such as cost and engineering feasibility, in reaching its decision. Among other things, the ROD will include a decision regarding the siting of weapons complex facilities, now located at the Rocky Flats Plant, and collocation of other facilities.

It is anticipated that the ROD will serve as the basis for a final reconfiguration plan for Complex 21. The plan will help guide DOE in future site-specific, and project-specific decisionmaking. If necessary, the PEIS and the reconfiguration plan may be supplemented later, if there is a need to change or augment the programmatic decisions.

In addition to the ROD on the configuration of Complex 21, DOE will prepare ROD to address the mid-term configuration for the plutonium fabrication functions of the weapons complex. If DOE determines that there is a need to establish a means to manufacture plutonium parts prior to implementation of Complex 21, this ROD would establish the timing and method to meet that need. The ROD will address whether replacement plutonium facilities would be needed in the mid-term, and, if so, siting and construction considerations for those facilities. The ROD on the mid-term configuration may be issued independently from the ROD on Complex 21.

Interim actions. DOE may propose, analyze, and implement some actions pertaining to the nuclear weapons complex in the interim while the PEIS is being prepared. However, under the provisions of the CEQ regulations, while the PEIS is in progress DOE may not:

> Undertake in the interim any major Federal action covered by the program which may significantly affect the quality of the human environment unless such action:
>
> (1) Is justified independently of the program;
>
> (2) Is itself accompanied by an adequate environmental impact statement; and
>
> (3) Will not prejudice the ultimate decision on this program. Interim action prejudices the ultimate decision on the program when it tends to determine subsequent development or limit alternatives.
>
> (40 CFR1506.1(c))

DOE is currently in the process of preparing or contemplating several EISs on actions related to those covered by this PEIS. There are listed in Table 3, with an explanation of their relationship to this PEIS. DOE intends to complete related EISs according to their current schedules. As part of the EISs listed in Table 3, DOE has requested (or will soon request) public comment on the scope of the NEPA review, their scope will not be revisited in this PEIS

Classified material. DOE will review classified material, including the classified vision of the Reconfiguration Study, while preparing the PEIS. DOE anticipates that the completed PEIS, and its associated ROD, may include classified material which will not be available for general public review. This material would, however, be considered by DOE in reaching a decision on configuration of the complex. The ensuring nuclear weapons complex reconfiguration plan would include an unclassified summary document which should be available for public distinction and a classified report which would not be made available to the general public.

Table 3

Related DOE Environmental Impact Statements (EISs) in Preparation or Under Consideration

Programmatic EISs

Environmental restoration and waste management PEIS —Current status: Notice of Intent (NOI) published on October 22, 1990 (55 FR 42633).

Relationship to reconfiguration PEIS: Will analyze alternative means for managing DOE's nuclear, hazardous, mixed, and other wastes; transportation implications of waste disposal and environmental restoration, at DOE sites. Will address the waste management implications or activities within the nuclear weapons complex; however the volume of waste generated by the nuclear weapons complex is a small portion of use total volume of waste considered. Will describe environmental restoration activities which would be required for the eventual decontamination and decommissioning of DOE facilities, including those at weapons complex sites.

New production reactor EIS — Current status: NOI published on September 16, 1988 (53 FR 36094); draft EIS scheduled to be issued early in 1991.

Relationship to reconfiguration PEIS: Will analyze alterative means of providing tritium capacity to meet the nation's defense requirements well into the 21st century, including selection of one or more sites and/or technologies for production reactors. Would be an "interim action" under the CEQ regulations; serves as the DOE's programmatic look at new tritium production capacity. Project-specific siting and technology decisions made through this EIS will be considered to be part of Complex 21, and would serve as part of the "no action" alternative in the PEIS.

Site-wide EISs

Lawrence Livermore site-wide EIS — Current status: NOI published on October 5, 1990 (55 FR 41048); draft EIS scheduled to be issued by December 1991.

Relationship to reconfiguration PEIS: Will analyze impacts of continuing near-term operations at the Lawrence Livermore National Laboratory and Sandia National Laboratory, Livermore, to meet the requirements of both NEPA and the California Environmental Quality Act. Will look at alternative locations for activities that are not part of the weapons complex; consideration of relocation weapons functions will be examined in the PEIS.

Rocky Flats site-wide EIS Current status: Authorized by Secretary on September *24, 1990: NOI* scheduled to be published in early 1991.

Relationship to reconfiguration PEIS. Will analyze impacts of management of the Rocky Flats Plant until Complex 21 is implemented; consideration of relocating plutonium facilities in the mid-term, and all weapons facilities in the long-term, will be examined in the PEIS.

Project-specific EISs

Plutonium Recovery Modification Project — Current status: NOI published on May 30, 1990 (55 FR 21919); schedule for issuing the draft EIS depends on project funding.

Relationship to reconfiguration PEIS: Will analyze impacts of constructing and operating the project at the Rocky Flats Plant, either solely as a means to process plutonium resides now stored on-site, or, in addition to reprocessing, as a means for recovering plutonium metal from scrap and returned weapons components. Would be an "interim action" under the CEQ regulations. Consideration of relocating plutonium facilities in both the mid-term and long-term will be examined in the PEIS.

Savannah River reactor operation EIS — Current status: Draft EIS published in May 1990; final PEIS issued in December 1990 (DOE/EIS - 0147); ROD issued on February 4, 1991.

Relationship to reconfiguration PEIS: Analyzes impacts of continued operation of one, two, and/or three existing production reactors at the Savannah River Site, at least until new production reactor capacity is demonstrated. Serves as the basis for the "no action" alternative in the New Production Reactor EIS. Could serve as part of the environmental baseline for the " no action" alternative in the PEIS, depending on DOE decisions regarding the New Production Reactor EIS. The PEIS will examine the future long-term mission of the production reactors as well as other nuclear weapons complex functions now located at the site.

Special nuclear materials laboratory — Current status: NOI published on January 12,1990 (55 FR 1251); schedule for issuing the draft EIS depends on project funding.

Relationship to reconfiguration PEIS: Will analyze impacts of constructing and operating a new laboratory building at Los Alamos National Laboratory. The new laboratory would replace an older, obsolete building and consolidate certain functions currently performed to support the Los Alamos Plutonium Facility. Would be an "interim action" under the CEQ regulations.

Note: DOE's Office of Environmental Restoration and Waste Management may prepare other, project-specific NEPA reviews of environmental restoration, waste management, or decommissioning and decontamination; these are not listed here.

DOE Configuration Review Committee. In 1988, through the National Defense Authorization Act for Fiscal Years 1988/1989 (Pub L. 100-180), Congress directed that a study be conducted and a plan prepared by the President "for the modernization of the nuclear weapons complex that takes into account the overall size, productive capacity; technology base and investment strategy necessary to support long-term security objectives." The product of that study, the "Nuclear Weapons Complex Modernization Report," was submitted to Congress by the President on January 12, 1989. It called for extensive modernization of DOE nuclear weapons complex facilities over the next 15 to 20 years, and a major program of environmental restoration and waste management.

After the report was submitted to Congress, DOE identified additional problems at its facilities, particularly with respect to environmental compliance and waste management issues. As a result, the Secretary of Energy established the Configuration Review Committee in September 1989 to examine the assumptions and conclusions of the President's report to Congress pertaining to modernization of the nuclear weapons complex. (The Secretary formed a separate Departmental organization, the Office of Environmental Restoration and Waste Management, to address those problems on a programmatic basis. As noted above, DOE is preparing a separate PEIS to examine environmental restoration and waste management issues.)

The Configuration Review Committee has prepared a Reconfiguration Study which presents a reassessment of the current problems facing the complex, outlines expectations for the complex of the 21st century and charts a proposed course for achieving Complex 21. The study examines the requirements needed to ensure that DOE's national security responsibilities will be carried out efficiently, and in a manner that will protect the environment and safeguard the health and safety of the employees and public. The Reconfiguration Study contains material which is expected to serve as a basis for certain assumptions and analyses in the

PEIS, although the PEIS may analyze a broader range of issues and alternatives. DOE has prepared both a classified and an unclassified version of the Reconfiguration Study; DOE will consider the classification material while preparing the PEIS. The unclassified version of the Reconfiguration Study is publicly available from DOE upon request.

Invitation to comment. DOE invites comments on the scope of this PEIS from all interested parties, including affected Federal, State and local agencies and Indian tribes. DOE solicits comments regarding the scope of the PEIS analysis, suggestions on significant environmental issues, alternatives to be included in the PEIS, and other content.

To ensure consideration in preparing the draft PEIS, written comments must be postmarked by the date indicated above. Late comments will be considered to the extent practicable.

Agencies, organizations, and the general public are invited to present oral comments pertinent to preparation of the PEIS at public scoping meetings. DOE will also accept written material at the meetings. Written and oral comments will be given equal weight in the scoping process.

DOE will hold public scoping meetings in Washington, DC, near each of the 13 major sites of the nuclear weapons complex, and near any other site identified by the Site Evaluation Panel for consideration for relocation of the weapons complex facilities now located at the Rocky Flats Plant, and collocated facilities. The time, date and location for these meetings will be announced by DOE in the **Federal Register** in about March 1991, and/or at the time DOE announces the list of qualified candidate sites identified by the Site Evaluation Panel (expected to be on or about July 1,1991). Public meetings will be held at least two weeks after notice is given in the **Federal Register**. The meetings also will be publicized in local media and other means as appropriate.

The **Federal Register** Notice announcing the meetings will provide rules for conduct of the meetings. In general, DOE will designate a presiding officer to chair each meeting. The presiding officer will establish the order of speakers and any additional procedures necessary to conduct the meetings. Speakers will be asked to register to speak, and given equal time to present their remarks (approximately five minutes each). DOE will not question speakers; however, the presiding officer may ask speakers to clarify their statements to assure that DOE fully understands the comment. DOE will prepare transcripts of the scoping meetings and make these available for public review.

DOE will announce the availability of the draft PEIS, when completed, in the **Federal Register**, and will solicit public review and comment on the unclassified portion of the draft PEIS. Comments on the draft will be considered in preparing the final PEIS.

Supporting documents. The unclassified Reconfiguration Study, the EISs listed in Table 3, transcripts of the public scoping meetings, and other unclassified supporting information will be available for public review at the DOE public reading rooms listed below.

California
U. S. Department of Energy
San Francisco Operations Office
1333 Broadway
Oakland, California 94612.
(415) 273-4428

Colorado
U. S. Department of Energy
Rocky Flats Public Reading Room
Front Range Community College Library
3645 West 112th Avenue
Westminster, Colorado 80030
(303) 469-4435

Idaho
U. S. Department of Energy
Idaho Operations Office
Public Reading Room
1776 Science Center Drive
P. O. Box 1625
Idaho Falls, Idaho 83402
(208) 526-1191

Illinois
U. S. Department of Energy
Chicago Operations Office
9800 South Cass Avenue
Argonne, Illinois 60439
(708)972-2010

New Mexico
U.S. Department of Energy
Albuquerque Operations Office
Pennsylvania and 8th Streets
P.O. Box 5400
Kirtland Air Force Base, New Mexico 87115
(505) 845-5163

Nevada
U.S. Department of Energy
Nevada Operations Office
2753 South Highland Drive
Las Vegas, Nevada 89193
(702) 295-1274

South Carolina
U. S. Department of Energy
Reading Room
University of South Carolina
Aiken Campus Writing Center
171 University Parkway
Aiken, South Carolina 29801
(803) 648-6851 (ext. 3262)

Tennessee
U. S. Department of Energy
Oak Ridge Operations Office
Freedom of Information Officer
200 Administration Road, room G-209
P. O. Box 2001
Oak Ridge, Tennessee 37831
(617) 576-9344 or 576-1216.

Washington
U. S. Department of Energy
Richland Operations Office
825 Jadwin Avenue, room 157
P.O. Box 1970
Mail Stop A1-65
Richland, Washington 99352
(509) 376-8583

Washington, DC
U.S. Department of Energy Freedom of Information Reading Room, room 1E-190
Forrestal Building
1000 Independence Avenue, SW
Washington, DC 20585
(202) 586-6020

For information on the availability of specific documents and hours of operation, please contact the reading rooms at the telephone numbers provided.

Signed in Washington, DC this 6th day of February, 1991, for the United States Department of Energy.

Paul L. Ziemer,
Assistant Secretary, Environment, Safety and Health

(FR Doc. 91-3206 Filed 2-8-91; 8:45 am)

Opportunity for Public Comment, Programmatic Environmental Impact Statement for Nuclear Weapons Complex

(56 FR 60985)

Federal Register / Vol. 56, No. 230 / Friday, November 29, 1991 / Notices 60985

DEPARTMENT OF ENERGY

Opportunity for Public Comment, Programmatic Environmental Impact Statement for Reconfiguration of the Nuclear Weapons Complex

AGENCY: Department of Energy

ACTION: Notice of opportunity for public comment, incorporating the New Production Reactor capacity analysis into the programmatic environmental impact statement for reconfiguration of the nuclear weapons complex.

SUMMARY: The Department of Energy (DOE) invites public comment on incorporating its New Production Reactor (NPR) capacity environmental impact statement (EIS) into the Department's programmatic environmental impact statement (PEIS) for reconfiguring the nuclear weapons complex. On November 1,1991, the Secretary of Energy announced his decision to integrate the two EIS's, which was made in light of the President's announcement of September 27, 1991, to further reduce the Nation's stockpile of nuclear weapons. The President's initiative allows DOE an opportunity to conduct an integrated examination of the reconfiguration and NPR programs. This approach would result in integrating the programmatic analysis regarding tritium supply with the programmatic analysis of other functional elements of the weapons complex. The "Draft EIS for the Siting, Construction and Operation of NPR Capacity," which analyzed both programmatic and project-specific alternatives for tritium capacity, was issued for public review and comment in April 1991 pursuant to the National Environmental Policy Act (NEPA), as amended (42 U.S.C. 4321 *et seq.),* and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR parts 1500-1508). DOE received numerous public comments regarding the draft NPR capacity EIS and the scope of the Reconfiguration PEIS, including comments on the relationship between the two documents.

DATES: The public comment period on incorporating the NPR capacity EIS into the Reconfiguration PEIS will extend on January 6,1992. To ensure their consideration in the preparation of the PEIS, comments must be postmarked or delivered to DOE headquarters by that date.

FOR FURTHER INFORMATION CONTACT: Written comments and requests for further information on the DOE nuclear weapons complex reconfiguration program should be sent to: Howard R. Canter, Deputy Assistant Secretary, Weapons Complex Reconfiguration Office, DP-40, room 4C-014, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-2700.

SUPPLEMENTARY INFORMATION: On September 16.1988. DOE issued a Notice of Intent (NOI) to prepare an EIS on its proposal to site, construct, and operate NPR capacity and related support facilities (53 FR 36094). DOE held 14 public scoping meetings in November and December 1988, as part of the scoping process for the EIS; the public comment period ended December 15, 1988.

On February 11,1991, DOE issued a NOI to prepare a PEIS on its proposal to reconfigure its existing nuclear weapons complex to create a smaller, less diverse, more efficient complex at the present sites or at relocated or consolidated sites (56 FR 5530). The PEIS will analyze the environmental consequences of alternative long-term reconfiguration strategies for the DOE nuclear weapons complex, envisioned to be in place early in the 21st century ("Complex 21"), and weigh these against the consequences of maintaining the existing configuration. DOE held 15 public scoping meetings from March to August 1991. as part of the scoping process for the PEIS; the public comment period ended September 30,1991.

The NPR proposal was identified as an interim action to Reconfiguration PEIS, within the meaning of 1506.1(c) of the CEQ regulations because DOE had determined that new tritium production capacity was needed on an urgent schedule, and therefore believed that the NPR proposal was justified independently of the Complex 21 proposal. The NPR EIS was to serve as the DOE's programmatic look at new tritium production capacity and any new facility built as a result of that analysis would be part of Complex 21. A Notice of Availability of the draft NPR EIS was published on April 19,1991(56 FR 16078), and DOE held 13 public hearings; the public comment period on the draft EIS ended June 17,1991.

DOE received numerous public comments regarding the draft NPR capacity EIS and the scope of the Reconfiguration PEIS, including comments on the relationship between the two documents.

On September 27,1991, the President announced his initiative to further reduce the Nation's nuclear weapons stockpile. The Secretary has determined that this announcement has created both the opportunity and necessity to integrate the examination of the tritium production capacity issue along with the reconfiguration program. This redirection of the PEIS effort will ensure that DOE's long-range planning and decision-making are fully consistent with the President's goals.

As stated in the "Nuclear Weapons Complex Reconfiguration Study," published by DOE in January 1991. and in the NOI for the Reconfiguration PEIS, the PEIS will analyze alternative configurations for the weapons complex and compare them to a "no action" (no reconfiguration) baseline alternative. The Reconfiguration Study outlined two reconfiguration options, designated A and B. Under Reconfiguration Option A, the plutonium recycling and manufacturing functions now performed at the Rocky Flats Plant near Denver, Colorado, would be relocated; the nonnuclear manufacturing functions now performed at Rocky Flats would be either transferred or privatized; and remaining configuration of the weapons complex would be upgraded in place. Under Reconfiguration Option B, either the nuclear materials functions now performed at the Pantex Plant near Amarillo, Texas, or the uranium processing functions now performed at the Y-12 Plant near Oak Ridge, Tennessee, or both, would be collocated with the plutonium functions from Rocky Flats. Candidate sites being considered for relocation of these functions under either Option A or B are the Hanford Site near Richland, Washington; the Idaho National Engineering Laboratory; near Idaho Falls, Idaho: the Oak Ridge Reservation near Oak Ridge. Tennessee; the Pantex Plant and the Savannah River Site near Aiken, South Carolina. The possibility of relocating other mission elements would be examined in the interests of further consolidating the weapons complex.

DOE intends to integrate the programmatic analysis of tritium supply capacity into the Reconfiguration PEIS as follows. Under the "no action" alternative, tritium would continue to be produced at the K- or L- Reactors at the Savannah River Site. Under other alternatives, tritium would be supplied by siting, constructing

Deputy Assistant Secretary, Weapons Complex Reconfiguration Office, DP-40, room 4C-014, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586-2700.

DOE intends to integrate the programmatic analysis of tritium supply capacity into the Reconfiguration PEIS as follows. Under the "no action" alternative, tritium would continue to be produced at the K- or L- Reactors at the Savannah River Site. Under other alternatives, tritium would be supplied by siting, constructing, and operating new tritium production capacity at the Savannah River Site, the Idaho ,National Engineering Laboratory, or the Hanford Site. Sizing and scheduling for tritium supply capacity will be reexamined in light of the President's initiative to reduce the nuclear weapons requirements.

The draft NPR EIS analyzed the potential environmental impacts of three reactor technologies at three DOE sites. The technologies analyzed were a heavy-water reactor, a light-water reactor, and a modular high-temperature gas-cooled reactor. The sites analyzed were the Hanford Site, the Idaho National Engineering Laboratory, and the Savannah River Site. These sites are also being considered for relocation of other nuclear functions, now carried out at the Rocky Flats, Pantex, and Y-12 Plants, as described above. Accordingly, the effects of collocating tritium supply with other nuclear functions will be assessed in the PEIS for all three sites. DOE will reassess whether other technologies would be reasonable alternatives for tritium supply, given the President's initiative. The PEIS analysis may include sufficient detail to support decisions regarding construction of tritium supply, plutonium recycling, and uranium processing facilities; however the PEIS is intended primarily to support programmatic decisions regarding configuration of the weapons complex and serve as a basis for tiering subsequent project-specific environmental reviews for new facilities, if any, to be constructed as part of Complex 21.

INVITATION TO COMMENT: DOE invites interested parties, including affected Federal, State and local agencies and Indian Tribes, to comment on the ramifications of integrating the analysis of the environmental effects of tritium supply capacity into the analysis of reconfiguring the nuclear weapons complex. DOE will consider these comments when preparing the Reconfiguration PEIS. DOE will solicit public review and comment on the draft PEIS when completed and will consider those comments when completing the final PEIS.

Public comments received in response to this notice will be made available for review in the public reading rooms established previously for the Reconfiguration PEIS effort.

Signed in Washington, DC this 25th day of November, 1991 for the United States Department of Energy,

Richard A. Claytor

Assistant Secretary, Defense Programs.

[FR Doc. 91-28695 Filed 11-27-91; 8:45 am]

BILLING CODE 6450-01-M

Plans to Prepare an Environmental Assessment for Nonnuclear Consolidation Within the Nuclear Weapons Complex

(57 FR 3046)

3046 Federal Register / Vol. 57, No. 17 / Monday, January 27, 1992 / Notices

DEPARTMENT OF ENERGY

Plans To Prepare an Environmental Assessment for Nonnuclear Consolidation Within the Nuclear Weapons Complex

AGENCY: Department of Energy.

ACTION: Notice of plans to prepare an environmental assessment for nonnuclear consolidation within the nuclear weapons complex.

SUMMARY: The Department of Energy (DOE) announces its plans to prepare an environmental assessment (EA) on its proposal to consolidate certain nonnuclear facilities in the nuclear weapons complex. This will allow DOE to accelerate the proposed consolidation of nonnuclear facilities in response to Presidential initiatives to reduce the Nation's nuclear weapons stockpile. The DOE sites involved in the nonnuclear consolidation proposal are the Kansas City Plant in Kansas City, Missouri; the Mound Plant in Miamisburg, Ohio; the Pantex Plant near Amarillo, Texas; the Pinellas Plant in

Largo, Florida; the Rocky Flats Plant in Golden, Colorado; Sandia National Laboratories in Albuquerque, New Mexico; the Savannah River Site near Aiken, South Carolina; and the Y-12 Plant near Oak Ridge, Tennessee. DOE proposes to consolidate certain nonnuclear activities at the Kansas City Plant, relocate others to the Pantex, Savannah River, Y-12 and Albuquerque sites, and phase out nonnuclear manufacturing activities at the Mound, Pinellas, and Rocky Flats plants. The proposed action was included in the broader DOE programmatic proposal to reconfigure the weapons complex to be smaller, less diverse, and more efficient to operate; DOE is preparing a programmatic environmental impact statement (PEIS) on the reconfiguration proposal. DOE has determined that the proposal to consolidate nonnuclear facilities can be analyzed in an EA prior to completion of the Reconfiguration PEIS.

DATES: DOE plans to complete the EA by the end of fiscal year 1992 (October 1992).

FOR FURTHER INFORMATION CONTACT: Requests for further information on the DOE nuclear weapons complex reconfiguration program should be directed to: Howard R. Canter, Deputy Assistant Secretary, Weapons Complex Reconfiguration Office, DP-40, room 4C-014, U.S. Department of Energy, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586-2700.

SUPPLEMENTARY INFORMATION:

Nonnuclear Consolidation Proposal

DOE proposes to consolidate certain nonnuclear elements of the complex at one location, to relocate other nonnuclear aspects, and to phase out the weapons mission at certain locations. Specifically, DOE proposes to do the following:

• Collocate tritium activities now done at the Mound and Pinellas plants with the tritium activities now done at the Savannah River Site; all of these tritium activities would be done at the existing Replacement Tritium Facility at the Savannah River Site.

• Collacate high explosives work now done at the Mound Plant with the high explosives work now done at the Pantex Plant, which would result in a very small addition to the amount of high explosives already used at Pantex.

• Collocate the beryllium work now done at the Rocky Flats Plant with similar machining work now done at the Y-12 Plant.

• Relocate the manufacture of neutron generators from the Pinellas Plant to be collocated with Sandia National Laboratories at Albuquerque, where they are now designed.

• Retain the pit support functions now done at the Rocky Flats Plant with the pit fabrication work now done at Rocky Flats Plant, wherever this fabrication work will be located as a result of the Reconfiguration Record of Decision (ROD).

• Consolidate the remaining nonnuclear activities now done at the Mound, Pinellas, and Rocky Flats plants at the Kansas City Plant.

• Phase out the weapons mission at the Mound and Pinellas plants, together with certain nonnuclear work at the Rocky Flats Plant, and turn over the government-owned, contractor-operated weapons facilities at these locations to the DOE Office of Environmental Restoration and Waste Management for cleanup, restoration, or decontamination and decommissioning as appropriate.

In addition, DOE is now evaluating whether or not certain developmental work now done at the nonnuclear manufacturing sites should be reassigned to one or more of the DOE national laboratories. If DOE decides to pursue this option, it may become part of the proposed action for the nonnuclear consolidation EA.

The purpose of the proposed action is to effect better management of nonnuclear manufacturing activities within the complex, and to decrease the long-term operating costs of this aspect of the complex. Consolidation is preferred as soon as possible in order to achieve desired cost savings while maintaining the skill and technology base within the weapons complex. The products and services produced by this element of the complex are needed to manufacture nuclear weapons and test individual components. Although some of these components involve small amounts tritium, these activities are collectively referred to as the nonnuclear functional element of the complex because they do not involve the production of nuclear materials, nor the manufacture of principal weapons components from uranium, plutonium, or tritium.

Many nonnuclear weapons components are manufactured and supplied by the private sector. This proposal does not include components currently manufactured by the private sector. Where practical and cost effective, DOE may transfer the manufacture of some additional selected products to the private sector under existing procurement procedures.

The Rocky Flats Plant currently performs some nonnuclear manufacturing work with depleted uranium. This work is not part of this proposal because it is not scheduled to be phased out prior to consolidation.

DOE will analyze four alternatives to the proposed action in the EA: the "no action" alternative, consolidation at Mound, consolidation at Pinellas, and consolidation at Rocky Flats. For each of these alternatives, the functions now performed at the alternative consolidations site would not be relocated. If transferred, the tritium, high explosives, and beryllium work, and the manufacture of neutron generators would be collocated as in the preferred alternative. Some beryllium work is now done at the Y-12 plant: under a Rocky Flats consolidation alternative the Y-12 beryllium work would not be collocated with the Rocky Flats beryllium work because it is considered to be integral to other Y-12 operations which are not part of this proposal. The remainder of the nonnuclear activities, including those now performed at the Kansas City Plant, would be relocated to the alternative consolidation site.

Relationship to Reconfiguration PEIS

On February 11, 1991, DOE published a Notice of Intent (NOI) to prepare a PEIS on its proposal to reconfigure its existing nuclear weapons complex to create Complex-21: a smaller, less diverse, more effective complex at the present sites, or at relocated or consolidated sites [56 FR 5590]. The NOI made reference to the nonnuclear manufacturing function of the weapons complex, and indicated that the Secretary's preferred reconfiguration alternative would include maximizing consolidation of nonnuclear manufacturing facilities with the goal of having only one dedicated nonnuclear manufacturing site within the reconfigured complex. DOE conducted a PEIS public scoping period from February 11, 1991, to September 20, 1991, and held fifteen public scoping meetings including meetings near each of the sites affected by the nonnuclear manufacturing activities and other weapons complex activities at these sites. The PEIS is being prepared pursuant to the National Environmental Policy Act (NEPA), as amended (42 U.S.C. 4321 *et seq.*), the

Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR parts 1500-1508), and DOE Guidelines for compliance with NEPA (52 FR 47662), as amended (54 FR 12474 and 55 FR 37174).

On September 27, 1991, the President announced his initiative to continue to reduce the nuclear weapons stockpile. The Secretary has determined that this announcement provides an opportunity to accelerate nonnuclear consolidation without impacting national defense or the remainder of the reconfiguration program. To help achieve early decisions regarding consolidation, the Secretary has decided to conduct the environmental analysis of nonnuclear consolidation separately from the programmatic review of the remainder of the complex.

DOE believes that the NEPA review of the nonnuclear consolidation proposal can be separated from the Reconfiguration PEIS because consolidating nonnuclear manufacturing is not expected to result in significant environmental impacts and any decision regarding nonnuclear consolidation would neither affect nor be affected by other reconfiguration decisions which may be made in the Reconfiguration ROD.

Accordingly, DOE will analyze nonnuclear consolidation aspects of Complex-21 in an EA prior to completion of the PEIS. If the EA analysis supports a finding of no significant impact (FONSI), DOE plans to proceed with nonnuclear consolidation and incorporate the nonnuclear consolidation decisions into the PEIS analysis as actions common to all alternatives. If the EA does not support a FONSI, then the assessment of environmental impacts for consolidating nonnuclear functions will be incorporated into the Reconfiguration PEIS and no actions would be taken to consolidate the nonnuclear manufacturing activities unless they were included in the Reconfiguration ROD.

This Notice concerns only nonnuclear consolidation activities and sites which will be analyzed in the separate EA. The possibility of consolidating or relocating other mission elements will be examined in the PEIS. The Reconfiguration PEIS will continue to analyze other weapons mission elements at the Pantex Plant, the Rocky Flats Plant, Sandia National Laboratories, the Savannah River Site, and the Y-12 Plant, as discussed in the Reconfiguration NOI and subsequent **Federal Register** notices related to the Reconfiguration effort.

When completed, the EA and its related FONSI will be placed in the fourteen DOE public reading rooms established for the Reconfiguration PEIS.

Issued in Washington, DC, this 21st day of January, 1992.

Richard A. Claytor,

Assistant Secretary, Defense Programs

[FR Doc. 92-1892 Filed 1-24-92, 8:45 am]

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