
Formerly Utilized Sites Remedial
Action Program (FUSRAP)

Maywood Chemical Company Superfund Site

ADMINISTRATIVE RECORD

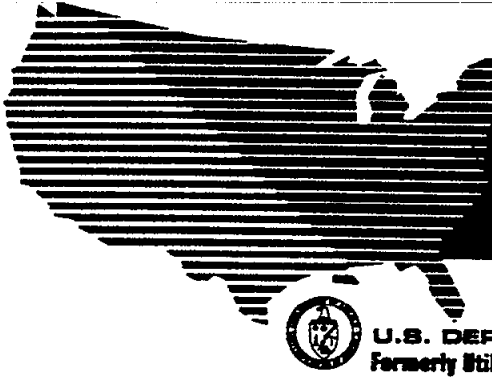
Document Number

MISS- 028.



**US Army Corps
of Engineers®**

Administrative Record Requirements for FUSRAP



U.S. DEPARTMENT OF ENERGY
Formerly Utilized Sites Remedial Action Program

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is one of several Department of Energy (DOE) programs created to address radioactive contamination exceeding guidelines at sites throughout the U.S. FUSRAP is responsible for 33 sites in 13 states—some of the FUSRAP sites are Superfund sites. This fact sheet has been prepared to address community outreach requirements set by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Fact sheets are one part of an effort to provide public information on environmental restoration and waste management.

An administrative record is a collection of documents that forms the basis for selecting a response action at a Superfund site. Under Section 113(k) of CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA), the Environmental Protection Agency (EPA) requires the establishment of an administrative record for every Superfund response action and that a copy of the record be made available for public review at or near the site. DOE is committed to performing response actions at all FUSRAP sites in compliance with CERCLA, whether they are Superfund or non-Superfund sites.

CERCLA requires that the administrative record be reasonably available for public review during normal business hours. The record should be treated as a noncirculated reference document (i.e., it may not be removed from the repository), thus allowing the public greater access to the record and minimizing the risk of loss or damage. Documents will be added to the record as the site work progresses. People may photocopy documents contained in the record according to the photocopying procedures at the local repository.

If the documents in the administrative record become damaged or lost, the local repository

manager may request replacement documents from the DOE site manager. Periodically DOE may send relevant supplemental documents and indexes directly to the local repository to be placed with the initial record.

The administrative record will be maintained at the local repository until further notice. Questions about maintenance of the record should be directed to the DOE site manager. DOE welcomes comments on documents in the administrative record.

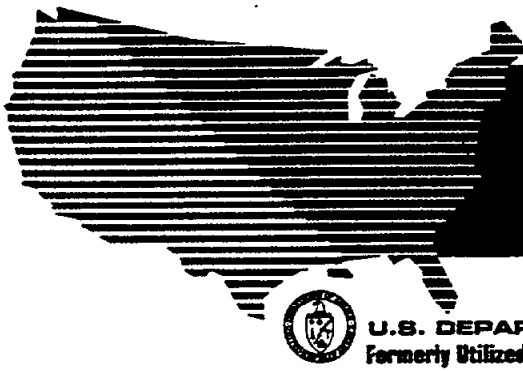
DOE may hold formal public comment periods at certain planning stages of response actions. The public is encouraged to use these formal review periods to submit comments. Send any such comments or site-related questions (please indicate the site location) to the following address:

Formerly Utilized Sites Remedial Action Program
U.S. Department of Energy
Former Sites Restoration Division
P.O. Box 2001
Oak Ridge, Tennessee 37831-8723

For more information, please call:

(615) 576-9048

Maywood Public Library
459 Maywood Avenue
Maywood, NJ 07607
201-845-7755



FUSRAP Activities at Maywood, New Jersey



U.S. DEPARTMENT OF ENERGY
Formerly Utilized Sites Remedial Action Program

This fact sheet has been prepared to address community outreach requirements set by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Fact sheets are one part of an effort to provide public information on environmental restoration and waste management.

The U.S. Department of Energy (DOE) is conducting a comprehensive study that will lead to the selection of a remedy for the Maywood, New Jersey, FUSRAP site. The site is made up of various residential, commercial, state, municipal, and federal properties in Maywood, Rochelle Park, and Lodi, New Jersey. The properties are contaminated to varying degrees with radioactive materials. The primary contaminant present at the Maywood site is radioactive thorium.

To select the remedy for the properties, DOE is working closely with the Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP). DOE and EPA have developed a federal facilities agreement, which defines the specific responsibilities of the agencies and the environmental review process. The public will be directly involved in the decision-making process.

The radioactive materials at Maywood are of very low concentrations. When these materials are stored safely, they are not dangerous to human health or the environment. However, because these low-level radioactive materials have been spread to residential and business properties where they are uncontrolled, they could be hazardous over long exposure periods.

The situation currently affecting Maywood and its neighboring communities began more than 70 years ago. From 1916 to 1956, the Maywood Chemical Works extracted radioactive thorium from monazite sand to use in manufacturing gas lantern mantles. Thorium wastes from that process were pumped into settling ponds in an area west of the Maywood Chemical Works plant.

Over the years, some of the waste material migrated off the site onto neighboring properties. The wastes spread in a variety of ways. Some area residents took loads of dirt from the waste area to use as fill around homes and businesses. Some of the waste was covered up and separated from the main plant when New Jersey Route 17 was built. The waste materials also spread through water runoff along the course of the old Lodi Brook.

The Maywood Chemical Works stopped the thorium-producing process in 1956 and Stepan Chemical bought the property in 1959. Stepan began cleaning up the waste disposal area west of Route 17; to accomplish this, Stepan obtained a radioactive materials license from the Atomic Energy Commission (AEC), a predecessor of DOE. About 19,000 yd³ of waste material was removed from the Route 17 area and buried in three locations on the Stepan property. AEC surveyed the areas that Stepan had cleaned and released

them for use with no radiological restrictions under the standards of 1969. At the time, neither AEC nor Stepan knew that additional radioactive material was present in another, unsurveyed area on the northeast corner of the property. Stepan sold the remainder of the property to Ballod Associates in the early 1970s.

The Nuclear Regulatory Commission (NRC) and NJDEP were notified when radioactivity was detected in 1980. These agencies conducted several radiological surveys over the next several months. The surveys confirmed that contamination existed near the old waste disposal area and on the Stepan property, in areas to the north and south, and on several residential and commercial properties.

EPA began investigating the areas in 1982. During September 1983, the Maywood site and its other properties were listed on the EPA National Priorities List (NPL). The NPL lists sites that EPA has declared in top-priority need of characterization (study) and remedial action.

In 1983, Congress authorized DOE to clean up waste associated with thorium processing at the Maywood site. DOE gave responsibility for Maywood to its Formerly Utilized Sites Remedial Action Program (FUSRAP). FUSRAP had been established in 1974 to identify sites that were used by the government or its contractors in the early years of the nation's atomic energy program, to study and determine whether they were contaminated, and to ensure that those sites were cleaned to meet current environmental standards. FUSRAP currently includes 33 sites in 13 states. Because FUSRAP was already successfully operating, work at Maywood began almost immediately.

Beginning in 1984, a number of radiological surveys were performed by DOE contractors beginning in 1984 to find all contaminated properties. These surveys identified several contaminated properties in Maywood, Rochelle Park, and Lodi. When a contaminated property was located, it was characterized (or studied) to pinpoint the exact locations, types, and degree of contaminated materials present.

DOE negotiated with Stepan to get access to approximately 12 acres of land to use as a temporary storage site so that the contaminated material could be removed from the properties. This storage area, referred to as the Maywood Interim Storage Site, was purchased from Stepan in 1985. The storage site was designed to safely hold the radioactive materials until permanent disposition of the waste could be agreed upon. DOE developed an environmental monitoring

program for the Maywood Interim Storage Site that monitors the air, surface water, and groundwater to ensure that stored materials do not affect the environment.

Approximately 35,000 yd³ of contaminated material was removed from private properties in Maywood and Rochelle Park during 1984 and 1985, and almost 500 yd³ was removed from properties in Lodi. This material was placed at the Maywood Interim Storage Site.

Cleanup of properties was stopped in 1986 pending resolution of concerns expressed by Maywood Borough Council regarding bringing contaminated material from other communities to the Maywood Interim Storage Site. However, DOE and its subcontractors have continued to identify and survey properties. DOE has also continued to maintain and monitor the environment of the Maywood Interim Storage Site and has published annual environmental monitoring reports discussing the monitoring program and its results.

Currently, 82 properties have been identified as contaminated with waste from Maywood Chemical Works. Of these, 25 have been fully cleaned and the contaminated material has been stored at the Maywood Interim Storage Site.

Activities conducted by DOE at Maywood are being coordinated with EPA Region II according to requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). All FUSRAP work performed at Maywood will follow the strict regulation of these two acts, which cover everything from how field investigations will be conducted to how alternatives for corrective action are to be chosen and how decisions will be made. The process, known as the CERCLA/NEPA process, also includes activities to keep the public informed and involved in decision-making.

The work at Maywood will be conducted in accordance with the federal facilities agreement entered into by DOE and EPA. The agreement defines the steps, the responsibilities, and the schedule for the activities at Maywood. The activities will be conducted through a remedial investigation/feasibility study-environmental impact statement process. During the remedial investigation, the remaining contaminated properties at Maywood will be studied to determine the amount of contamination present and to identify the possible pathways through which contamination could spread or pose a risk to the public or the environment.

Once the investigative field work is done and the results are reported, the feasibility study/environmental impact statement will be prepared. The feasibility study reviews alternatives for addressing the contaminated properties, assesses the risks of the alternatives, evaluates the treatment technologies and costs, and presents the best option. Throughout the public meetings and review and comment periods, the public will be directly involved in deciding what will be done at Maywood. When the decision is made and documented by a Record of Decision, remedial action (or final cleanup) will proceed. Each action taken in the remedial action must be in compliance with CERCLA/NEPA and state regulations.

While performing the remedial investigations, contamination may be identified that presents immediate risks or has a high potential for spreading contamination. These properties may be cleaned up immediately through a removal action, but any such action would also be evaluated and documented.

Copies of documents related to the Maywood site are available to the public in the information repository/administrative record located at the Maywood Public Library, 459 Maywood Avenue, Maywood, New Jersey.

Acronyms Used

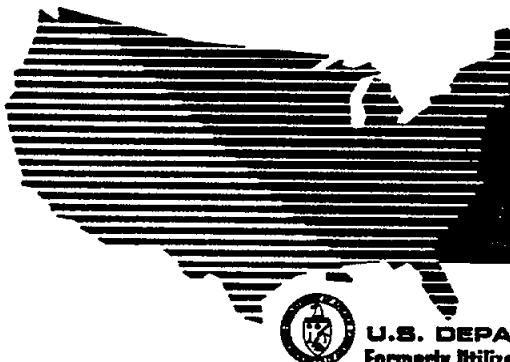
AEC	Atomic Energy Commission
CERCLA	Comprehensive Environment Response, Compensation, and Liability Act
DOE	Department of Energy
EPA	Environmental Protection Agency
FUSRAP	Formerly Utilized Sites Remedial Action Program
NEPA	National Environmental Policy Act
NJDEP	New Jersey Department of Environmental Protection
NRC	Nuclear Regulatory Commission

For more information please write or call:

William Seay
 Robert G. Atkin, Site Manager
 U.S. Department of Energy
 Former Sites Restoration Division
 P.O. Box 2001
 Oak Ridge, TN 37831-8223

(615) 576-0948

4



FUSRAP Formerly Utilized Sites Remedial Action Program

U.S. DEPARTMENT OF ENERGY
Formerly Utilized Sites Remedial Action Program

This fact sheet has been prepared to address community outreach requirements set by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Fact sheets are one part of an effort to provide public information on environmental restoration and waste management.

The Formerly Utilized Sites Remedial Action Program (FUSRAP) is one of several U.S. Department of Energy (DOE) programs created to address radiological contamination in excess of guidelines at a number of sites throughout the United States. DOE and its predecessor agencies, the Manhattan Engineer District (MED) and the Atomic Energy Commission (AEC), used many of these sites for processing and storing uranium and thorium ores during the 1940s, 1950s, and 1960s. Some of these sites were owned by the federal government; others were owned by universities or other institutions; and still others were privately owned.

Generally, sites that became contaminated through the uranium and thorium operations during the early period of the nation's nuclear program were decontaminated and released for use under the regulations in effect at the time. Since radiological guidelines were not as strict then as today, trace amounts of radioactive materials remained at some of the sites. Erosion and building demolition and construction resulted in some of the radioactive residues mixing with large volumes of soil and rubble, thereby spreading the contamination.

To further assess these sites and take appropriate remedial action, the federal government initiated FUSRAP in 1974. Initial site activities focus on reviewing old records and surveying sites to determine if contamination exists and if remedial action is required. If this survey determines that the site requires remedial action, it is authorized under FUSRAP. Limited remedial action began at some sites in 1979, and major remedial action has been under way since 1981. Currently, FUSRAP includes 33 sites in 13 states (see map). Remedial action has been completed at nine of the sites, and partial remedial action has been completed at nine others.

Objectives

The objectives of FUSRAP are to:

- Identify and evaluate all sites formerly used to support early MED/AEC nuclear work and determine whether the sites need decontamination and/or control.
- Decontaminate and/or apply controls to these sites so that they conform to current applicable guidelines.
- Dispose of and/or stabilize all generated residues in a radiologically and environmentally acceptable manner.

- Accomplish all work according to appropriate federal laws and regulations, local and state environmental and land-use requirements to the extent permitted by federal law, and applicable DOE orders, regulations, standards, policies, and procedures.
- Certify the sites for appropriate future use.

Organization

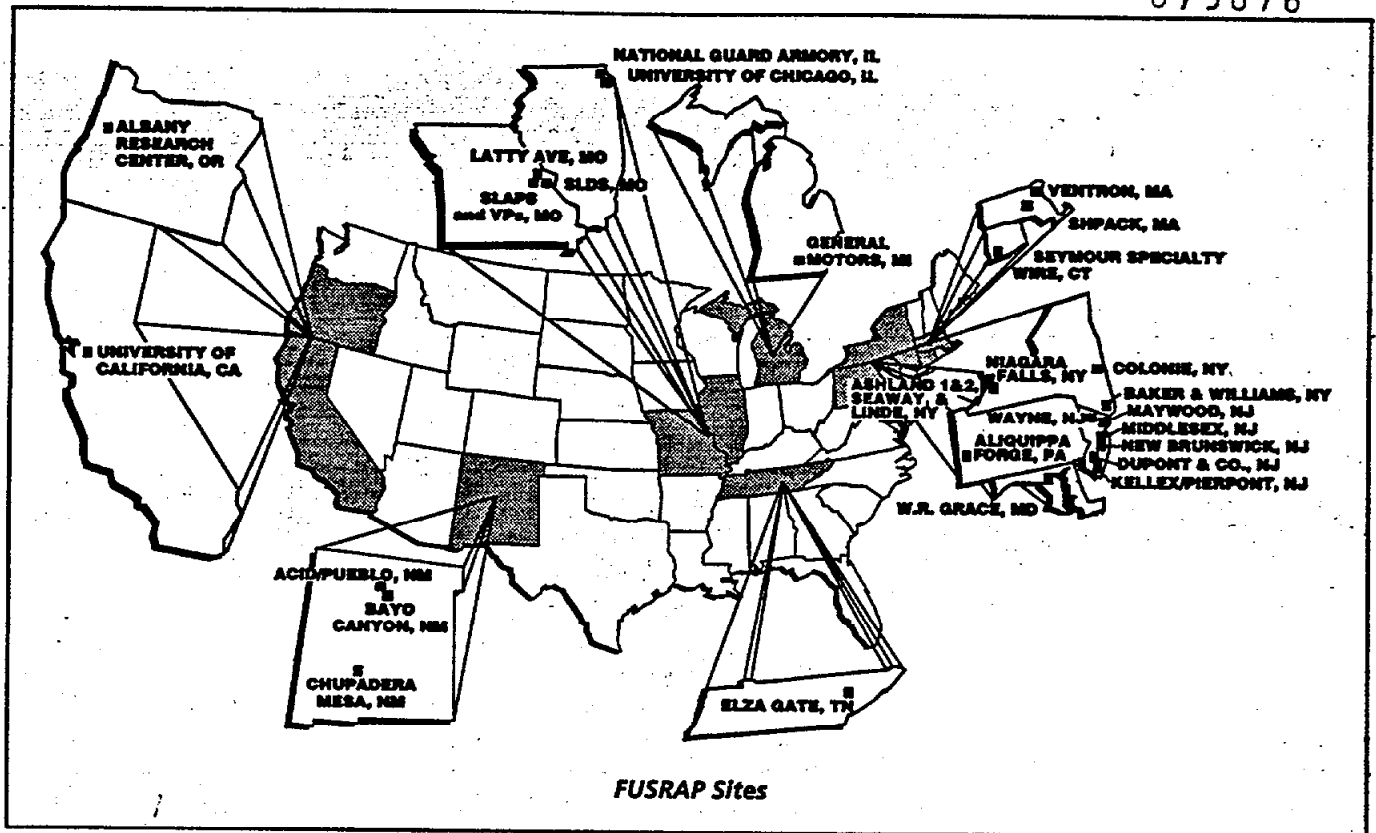
At DOE Headquarters, FUSRAP falls under the responsibility of the Director, Office of Environmental Restoration and Waste Management.

Technical, administrative, and financial management of FUSRAP field activities are the responsibility of the Former Sites Restoration Division (FSRD) of the DOE Oak Ridge Operations Office (ORO). Bechtel National, Inc. (BNI) the FUSRAP project management contractor, is responsible to FSRD for planning and implementing FUSRAP activities. BNI analyzes site conditions and evaluates and implements appropriate remedial actions; it also conducts environmental monitoring before, during, and after remedial action. BNI also administers subcontracts, coordinates the sequence of operations, controls the relationships among subcontractors, and ensures execution and documentation of project work in accordance with DOE guidance.

Argonne National Laboratory participates in preparing environmental compliance documentation required by NEPA and CERCLA to ensure that all feasible remedial action alternatives for a site have been evaluated and that the approach chosen is environmentally acceptable.

The radioactivity at FUSRAP sites does not present an immediate health hazard under current land use because the materials have very low concentrations and people are not exposed to them for prolonged periods of time. Although these materials are not a hazard, they will remain radioactive for thousands of years, and could cause a potential for increased health risks if the use of the land were to change.

Under the guidelines established for FUSRAP, the sites will be remediated to a very conservative standard that takes into consideration possible future land uses, such as residential development, crop production, and the installation of drinking water wells.



Acronyms Used

AEC	Atomic Energy Commission
BNI	Bechtel National, Inc.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	Department of Energy
FSRD	Former Sites Restoration Division
FUSRAP	Formerly Utilized Sites Remedial Action Program
MED	Manhattan Engineer District
NEPA	National Environmental Policy Act
ORO	Oak Ridge Operations Office



Principal Laws and Regulations Affecting the FUSRAP Cleanup Program



U.S. DEPARTMENT OF ENERGY
Formerly Utilized Sites Remedial Action Program

This fact sheet has been prepared to address community outreach requirements set by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Environmental Policy Act (NEPA). Fact sheets are one part of an effort to provide public information on environmental restoration and waste management on the FUSRAP project.

Several federal laws guide environmental restoration in the United States. Each has a different emphasis, but together, they target the most pressing hazardous waste sites in the nation. The Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980—also known as Superfund—provides for the funding, study, and implementation of cleanup efforts. Another applicable law is the National Environmental Policy Act (NEPA) of 1969, which requires federal agencies to consider possible environmental effects when making decisions. Both laws require public involvement under a well-defined set of activities and schedules. It is the policy of the Department of Energy (DOE) that community relations requirements be combined under the more comprehensive CERCLA umbrella. Investigations, analyses, and documentation for these two laws will also be combined and integrated to streamline regulatory review and reduce paperwork.

The Environmental Protection Agency (EPA) emphasizes that the cleanup process is dynamic and flexible, and is tailored to the specific circumstances of each site. A phased approach of study is used to help maximize efforts. Researchers first collect available data to learn about the general conditions at a site. As a basic understanding is reached, they begin to identify possible cleanup alternatives. To fill in gaps of information and to test potential cleanup methods, they collect additional data, which is used to focus researchers' understanding and to refine alternatives. This interactive progression of study goes back and forth between data collection and testing, and the development and refinement of alternatives, until enough information has been collected to identify sound alternatives. The goal of gathering this information is not to remove all uncertainty (an impossible task), but to gather enough information to make and support an informed decision on which remedy appears to be the most appropriate for a given site.

Descriptions of the principal federal laws under which FUSRAP operates are provided in this fact sheet. While provisions vary in detail, the end goal remains constant—to protect the safety of human health and the environment.

CERCLA: Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986

CERCLA is a 1980 federal law that was extensively amended in 1986. The act created a special tax that goes into a trust

fund, commonly known as Superfund, to investigate and to perform remediation of abandoned or uncontrolled hazardous waste sites. CERCLA consists of three phases: (1) a preliminary assessment, (2) a thorough study of the site, exploration of alternatives, and selection of a remedial action plan, and (3) design and implementation of the chosen plan.

- 1) The CERCLA preliminary assessment/site inspection (PA/SI) is used to determine which sites should be placed on the National Priorities List (NPL). The NPL identifies the most serious uncontrolled or abandoned hazardous waste sites. The assessment focuses on the potential for contamination. If the assessment determines that further action is needed, a site inspection is performed to assess the threat to the public and the environment. The site is scored using a brief, on-site investigation. Sites that exceed a certain score are added to the NPL.

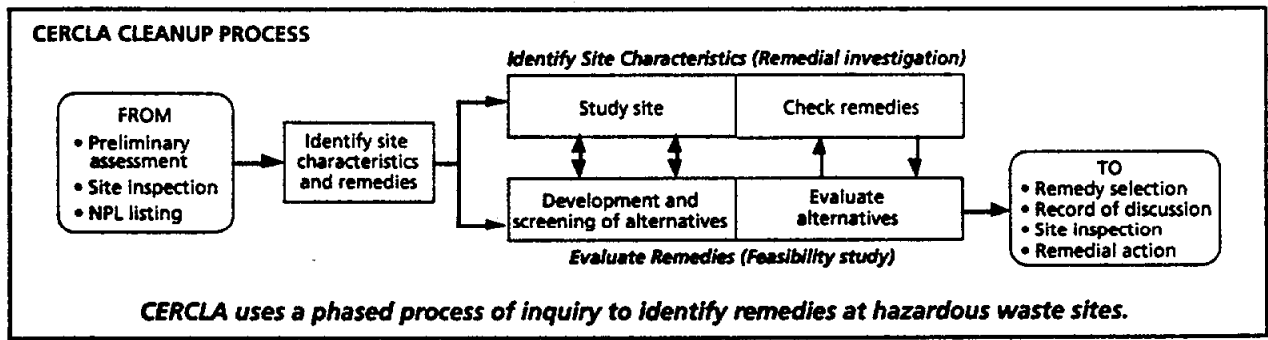
The NPL may also list hazardous sites named by states as their top priority sites and sites determined to pose a significant threat to public health, welfare, or the environment.

- 2) A remedial investigation/feasibility study (RI/FS) is conducted for sites placed on the NPL. The RI/FS has several components.

The first stage involves planning. All work performed during the RI/FS follows general principles developed during a scoping, or planning, phase. Existing data on a hazardous waste site is evaluated to develop a cleanup strategy, identify likely objectives, and prepare a work plan. A sampling analysis plan is developed so that any decisions made are developed using the most accurate and best documented data possible.

The next step is the remedial investigation portion of the cleanup, during which extensive sampling and analysis activities are performed. The feasibility study, which is performed simultaneously, uses the data to develop a range of alternatives for remediation. One alternative is selected, and entered into the record of decision (ROD), which records the preferred method and manner of remediation. The record also considers public comments and community concerns.

- 3) A remedial design/remedial action (RD/RA) is conducted to implement the decision, and to monitor the performance of the environmental restoration.



NEPA: National Environmental Policy Act (NEPA) of 1969

NEPA is the federal law that sets basic policy on protection of the environment. The principal purpose of NEPA is to determine if a major federal action has significant environmental effects. NEPA requires federal agencies to evaluate all environmental impacts before implementing actions.

If an action clearly has no significant impact, a categorical exclusion fulfills the obligation. If an action may have environmental consequences, an environmental assessment (EA) or an environmental impact statement (EIS) may be necessary. In preparing an EA, data are collected and analyzed to determine whether impacts are sufficient to justify the preparation of the more complete EIS study, or whether a "finding of no significant impact" is found.

If an EIS is required, NEPA requires public participation early in the process of identifying conditions at the site and in the assessment of alternatives. Public involvement, or "scoping," ensures that real problems are identified early, concentrates energies and effort on those areas requiring resolution, and provides for a balanced and thorough EIS. The NEPA scoping process is different from that of CERCLA. NEPA scoping focuses on public participation, while CERCLA scoping concentrates on planning.

As part of the CERCLA/NEPA process, DOE establishes an administrative record containing all documents that form the basis for the selection of a response action. A copy of the administrative record is made available to the public at a location near the site, usually a library. Availability and location of the administrative record are announced in newspaper advertisements and fact sheets.

Other Laws and Standards

A variety of other laws or standards may also apply to specific sites. Brief summaries follow:

- The Toxic Substances Control Act regulates certain classes of chemicals, including polychlorinated biphenyls (PCBs).
- The Resource Conservation and Recovery Act created a management system for hazardous wastes, requiring that safe and secure procedures be used in treating, transporting, storing, and disposing of hazardous wastes. Facilities must hold permits to handle these wastes and are required to operate within specific guidelines.
- The Clean Air Act is a federal law that controls emissions of waste into the air. Special protective equipment and permits are required.
- The Clean Water Act is a similar federal law that controls the amount of waste that can be released into surface water bodies or publicly owned treatment systems.

- The Safe Drinking Water Act is designed to protect drinking water resources. This law is incorporated into CERCLA provisions dealing with groundwater protection.
- National Emission Standards for Hazardous Air Pollutants limit air emissions of pollutants.

Cleanup activities are regulated by a federal facilities agreement (FFA) between DOE, EPA, and the state. The agreement prioritizes cleanup activities, assigns agency roles and responsibilities, and establishes procedures for document review and interaction among the agency officials.

Combined Investigations

Many laws and regulations have been enacted to ensure the protection of human health and the environment. Often, they are written to regulate particular discharges under particular circumstances, such as chemical releases into groundwater. At any one waste site, one or more laws may apply, or none, depending on the extent of contamination and the types of contaminants. The regulations and standards that pertain to a particular site are determined early to ensure that all applicable and/or appropriate requirements are met.

On FUSRAP, it is not unusual for a site to require environmental restoration under multiple regulations. DOE plans to integrate technical and community relations activities under provisions of CERCLA, making adjustments to incorporate special requirements of NEPA where necessary.

Acronyms Used	
CERCLA	Comprehensive Environmental Response, Compensation, and Liabilities Act
DOE	Department of Energy
EA	environmental assessment
EIS	environmental impact statement
EPA	Environmental Protection Agency
FFA	federal facilities agreement
NEPA	National Environmental Policy Act
NPL	National Priorities List
PA/SI	preliminary assessment/site investigation
PCBs	polychlorinated biphenyls
RD/RA	remedial design/remedial action
RI/FS	remedial investigation/feasibility study
ROD	record of decision