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Formerly Utilized Sites Remedial Action Program (FUSRAP)

ADMINISTRATIVE RECORD

for Maywood, New Jersey



U.S. Department of Energy

FEDERAL REGISTER NOTICE

Announcing Public Meeting in Maywood on December 6 and DOE's Intent to Prepare a Remedial Investigation/Feasibility Study-Environmental Impact Statement

**Response Actions at a FUSRAP Site in
Maywood, NJ: Intent To Prepare a
Remedial Investigation/Feasibility
Study-Environmental Impact
Statement**

AGENCY: Department of Energy.

ACTION: Notice of intent to prepare a
Remedial Investigation/Feasibility
Study-Environmental Impact Statement.

SUMMARY: Notice is hereby given that the Department of Energy (DOE), as part of its Formerly Utilized Sites Remedial Action Program (FUSRAP), intends to conduct a comprehensive environmental review and analysis of the Maywood site to determine the nature, extent, and environmental impacts of existing contamination at the site and to evaluate alternative response actions. The Maywood site is comprised of the Maywood Interim Storage Site (MISS) and various vicinity properties—including the adjacent Stepan Company property and numerous residential, commercial, and governmental (Federal, State, and municipal) properties in Maywood, Rochelle Park, and Lodi, New Jersey. The environmental review and analysis will integrate the requirements of both the National Environmental Policy Act (NEPA) and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA)—hereafter referred to as CERCLA. The environmental impact statement (EIS) requirements under NEPA will be incorporated into the remedial investigation/feasibility study (RI/FS) requirements of CERCLA. The resulting report will be the RI/FS-EIS. DOE also announces its intent to conduct a public scoping meeting.

ADDRESSEES: Comments or suggestions on the scope of the RI/FS-EIS and requests to speak at the scoping meeting discussed below in the Scoping section should be addressed to: Mr. Lester K. Price, Director, Technical Services Division, U.S. Department of Energy, Oak Ridge Operations Office, Post Office Box E, Oak Ridge, Tennessee 37831, (615-576-0948).

FURTHER INFORMATION: For further information on DOE's EIS process, please contact: Ms. Carol Borgstrom, Director, Office of NEPA Oversight, EH-25, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202-586-4600).

For further information on DOE's RI/FS process, please contact: Ms. Kitty Taimi, Director, Office of Environmental Compliance, EH-22, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585, (202-586-9024)

DATES: Written comments or suggestions postmarked on or before December 17, 1990 will be considered in the course of implementing the integrated CERCLA/NEPA process and its documentation. Comments or suggestions postmarked after that date will be considered to the maximum extent practicable. A scoping meeting will be held at the Nellie K. Parker School, 261 Maple Hill Drive, Hackensack, New Jersey 07601, on December 6, 1990, at 7:00 p.m. local time. Requests to speak at this meeting should be forwarded to Mr. Price at the above address by December 3, 1990. Requests to speak may also be made during registration for the meeting.

SUPPLEMENTARY INFORMATION:

Background.

The FUSRAP was established in 1974 by the Atomic Energy Commission (AEC), a predecessor agency of the DOE. The primary objective of FUSRAP is to identify and decontaminate sites where radioactive contamination remains from the early years of the nation's atomic energy program or from commercial operations causing conditions that Congress has mandated DOE to remediate. The goals of decontamination under FUSRAP are to (1) control radioactive contamination at the sites, in compliance with applicable or relevant and appropriate requirements for the protection of human health and the environment, and (2) to the extent possible, certify the sites for use without radiological restrictions following decontamination.

The Maywood site is in a highly developed area that is north-northwest of downtown Manhattan (New York

City) and northeast of Newark, New Jersey. The site is located within the borough of Maywood, the borough of Lodi, and the township of Rochelle Park, New Jersey. The Maywood site includes the MISS; the Stepan Company property (former Maywood Chemical Works), a vicinity property; and numerous other vicinity properties (residential, commercial, Federal, State, and municipal). (A vicinity property is an area, not owned or controlled by DOE, that is radioactively contaminated above DOE guidelines for residual radioactive material as a result of previous processing of radioactive materials.) The MISS and Stepan Company property are adjacent to each other on the site of the former Maywood Chemical Works property. The MISS contains an interim storage pile. The Stepan Company property contains three sites on which radioactive processing wastes, left from past Maywood Chemical Works operations, were buried by the Stepan Company. The other vicinity properties are roughly to the south and west of the MISS in Maywood, Lodi, and Rochelle Park.

The Maywood site became radioactively contaminated as a result of thorium processing at the former Maywood Chemical Works. In addition, some properties in the borough of Lodi became contaminated as a result of materials being removed from the Maywood site for fill or stream deposits being carried by Lodi Brook, which originates at the Maywood Chemical Works. Radioactive contaminants identified for the Maywood site are those associated with the thorium-232 and uranium-238 radioactive decay chains.

The Maywood Chemical Works was established in 1895. In 1916, the company began processing monazite sand to extract thorium for use in manufacturing gas mantles for various lighting devices and to extract rare earth metals. The company continued extraction operations until 1956 and processing operations with stockpiles until 1959. Process wastes from manufacturing operations were pumped to areas surrounded by earthen dikes on property west of the plant. Subsequently, some of these contaminated wastes migrated onto adjacent properties. In 1932, New Jersey Route 17 was built through the Maywood Chemical Works property over the earthen dikes, separating the property into two areas. Tunnels were constructed under Route 17, apparently to allow continued access between the two areas.

In 1954, the AEC (now the Nuclear Regulatory Commission) issued a

license to the Maywood Chemical Works to possess, process, manufacture, and distribute radioactive materials, specifically thorium. The Stepan Company (at that time the Stepan Chemical Company) purchased the Maywood facility in 1959 but has never been involved in the manufacture or processing of any radioactive materials at this facility. In 1961, the AEC issued the Stepan Company a license for storage of radioactive materials because of the contaminated wastes buried on-site. Beginning in 1963, the Stepan Company began to stabilize or excavate and rebury radioactive materials on-site. A number of radiological surveys of the property and its vicinity have been conducted to identify the locations of radioactive contamination resulting from past manufacturing and processing activities. Limited chemical sampling has also been performed.

In December 1982, the Environmental Protection Agency (EPA) proposed to include the Maywood site (i.e., the former Maywood Chemical Works site) on its National Priorities List under CERCLA; this listing occurred on September 8, 1983, under the designation, "Maywood Chemical Company Site."

Subsequently, DOE was authorized to undertake a decontamination research and development project at the Maywood site under the FUSRAP by the Energy and Water Development Appropriations Act of 1984, Public Law No. 98-50. In September 1985, a 4.7-ha (11.7-acre) portion of the Stepan Company property was transferred to DOE for use as a storage facility for contaminated materials in order to expedite the cleanup of properties associated with Maywood Chemical Works contamination. This piece of property was designated as the Maywood Interim Storage Site or the MISS.

In 1984, DOE began a program to identify, survey, and designate vicinity properties for cleanup, and then characterize and conduct decontamination actions on the designated properties. To date, 82 vicinity properties have been designated for cleanup. Of the 82 designated properties, 25 have been fully and 1 partially decontaminated, 47 have been characterized, and 9 have been designated but not yet characterized. Designation for cleanup is currently being considered for 10 additional properties.

Soil excavated during decontamination of the 26 fully or partially decontaminated vicinity properties is currently stored on the

MISS pending a decision on its final disposition. The interim storage pile at the MISS contains about 27,000 m³ (35,000 yd³) of contaminated materials. Removal actions at designated but not yet decontaminated properties would result in the excavation and storage of additional contaminated materials at the MISS. Decontamination efforts have been suspended pending resolution of issues with the borough of Maywood.

The Maywood site—i.e., the MISS, Stepan Company property, and other vicinity properties—may also be contaminated with nonradioactive contaminants. The EPA is conducting a separate RI/FS to determine the nature and extent of nonradioactive contaminants at the Stepan Company property and adjacent properties and to evaluate alternative response actions. At the MISS, limited chemical characterization has detected low levels of volatile organic compounds and one semivolatile organic compound in groundwater. Several metals at levels above background and various organic compounds at low levels were detected in the soil; however, no characteristic hazardous waste, as defined in 40 CFR part 281 (subpart C), has been identified. The EPA has performed additional chemical characterization at the Stepan Company site and adjacent properties. Volatile and semivolatile contaminants were detected at low levels, but no characteristic hazardous waste has been identified.

The responsibility for cleanup of contamination identified at the Maywood site will be divided between DOE and the EPA, based upon DOE's assigned responsibility under the 1984 congressional authorization and a negotiated Federal Facilities Agreement (FFA) between DOE and EPA Region II. The FFA was executed by both parties on September 19, 1990 and is currently available for public review and comment. The public comment period expires on November 19, 1990. The final agreement shall become effective after resolution of significant public comments, if any. Under the FFA, DOE will assume responsibility for:

- All contamination, both radioactive and chemical, whether commingled or not, at the MISS.
- All radioactive contamination occurring on any vicinity property that is above DOE action levels and is related to thorium processing at the former Maywood Chemical Works, and
- Any chemical or nonradioactive contamination on vicinity properties that

- Is mixed or commingled with radioactive contamination above DOE action levels, or
- Originated at the MISS, or
- Was associated with specific thorium manufacturing or processing activities at the former Maywood Chemical Works that resulted in the radioactive contamination.

The FFA does not assign responsibility to DOE for managing areas, other than the MISS, that are only chemically contaminated with no connection to processing or radioactive materials at the former Maywood Chemical Works.

Environmental Review Process

The DOE intends to conduct a comprehensive environmental review and analysis to meet the requirements of CERCLA and NEPA for implementing response actions at Maywood and three other New Jersey sites for which DOE has responsibility for remediation under FUSRAP. The three other sites—located at Wayne, Middlesex, and New Brunswick—have similar contaminants and environmental issues. The Wayne site is located 21 km (13 mi) west of the Maywood site in Passaic County, and the Middlesex and New Brunswick sites are located 50 km (31 mi) southwest of the Maywood site in Middlesex County. The Maywood site involves about 280,000 m³ (340,000 yd³) of contaminated materials whereas the Wayne site involves 83,000 m³ (109,000 yd³) and the Middlesex site 68,000 m³ (88,000 yd³). The New Brunswick site is a recently assigned FUSRAP site and, as such, specific information (i.e., site description, estimated waste volume, and waste characteristics) has not yet been incorporated into planning documents for the new Brunswick site. Because the four sites are not located near each other, DOE is planning to conduct separate response actions under CERCLA at each site.

The CERCLA environmental review and analysis process has two major phases, a remedial investigation and a feasibility study, which are also the titles or partial titles of the reports resulting from these phases. It is DOE policy to integrate the requirements of the CERCLA and NEPA processes for remedial actions at sites for which it has responsibility. Under the integrated policy, the CERCLA process is supplemented, as appropriate, to meet the procedural and documentary requirements of NEPA.

The integrated CERCLA/NEPA process begins with a scoping and planning phase that culminates in a series of planning documents, including

the RI/FS work plan. In the work plan, the problems at a site are scoped by analyzing existing data, identifying the contaminants of concern, projecting potential exposure routes, identifying any additional specific information that is available, and specifying tasks required throughout the entire remediation process to fully remediate the site problem.

From the work plan, a field sampling plan is written to obtain the required data. Companion documents include the health and safety plan, the quality assurance project plan, and the community relations plan. The health and safety plan specifies the procedures needed to protect workers and the general public. The quality assurance project plan specifies the procedures, detection levels, and data quality checks to be used in laboratory analyses. The community relations plan outlines procedures to ensure that the public is kept informed and given an opportunity to offer input.

The RI phase of the remediation decision-making process includes activities associated with site investigations, sample analyses, and data evaluation, which are performed to characterize the site and determine the nature and extent of contamination. In addition, applicable or relevant and appropriate requirements must be identified to determine what standards, criteria, regulations, or other constraints should be applied to the proposed action; and bench-scale or pilot studies may be performed to test potentially applicable technologies. The RI phase also includes a baseline risk assessment, i.e., a quantitative assessment of the primary health and environmental threats under various scenarios, including a no-action scenario.

The FS phase is based upon the RI results and includes screening of remedial technologies, identification and screening of response alternatives, development of general performance criteria for each alternative, and detailed evaluation and comparison of plausible alternatives (consistent with both CERCLA and NEPA). Alternatives to be considered include (1) no action; (2) treatment and disposal of wastes either on-site or off-site (off-site disposal would be considered generically, not specifically); and (3) containment or institutional control alternatives that control the threats posed by the hazardous substances and/or prevent exposure.

Examples of specific alternatives for the Maywood site that could be retained through screening include, but are not limited to: (1) no action, (2)

decontamination of the site, and (3) in-site stabilization of the wastes at the site. (The no-action alternative will be developed, as required under NEPA and CERCLA, to provide a baseline for assessing the impacts of the alternatives being considered.)

The RI and FS phases can be carried out concurrently. The data collected during the RI phase influence the development of the remedial alternatives in the FS phase, which in turn affects the data needs and scope of treatability studies and can result in additional field investigations.

The RI/FS process will be supplemented as necessary to satisfy NEPA and Council on Environmental Quality regulations (40 CFR parts 1500-1506). The DOE has determined that an EIS is the appropriate NEPA document for the Maywood site. It is DOE policy to prepare an EIS implementation plan to record the results of the NEPA scoping process and to present the approach for preparation of an EIS. An EIS implementation plan will be prepared following the scoping meeting and will be appended to the work plan for Maywood.

The DOE intends to use the RI/FS-EIS for the Maywood site as a lead document for CERCLA/NEPA compliance for the four New Jersey FUSRAP sites. The Maywood RI/FS-EIS will address common issues and cumulative impacts associated with response actions at all of the sites. The CERCLA-NEPA documents for the other sites will present site-specific impacts and summarize, reference, and update the information presented in the lead Maywood document as appropriate.

In addition to the RI/FS for the Stepan Company property, EPA Region II is currently conducting an RI at the Lodi municipal well field in Lodi, New Jersey. The RI/FS-EIS for the Maywood site will include an assessment of the potential impacts of remedial activities proposed for the Lodi well field the Stepan property. Any cumulative impacts identified will be factored into development of the final remedy for the Maywood site.

Nothing in this NOI or in other documents to be prepared is intended to represent a statement on the legal applicability of NEPA to remedial actions under CERCLA.

Preliminary List of Potential Issues

Potential issues related to response actions at the Maywood site include potential environmental impacts as well as factors that may result from or be influenced by implementation of one or more of the remedial alternatives. The preliminary list that follows is based on

issues that have been raised relative to other DOE proposals of this nature. Interested parties are invited to participate in the scoping process discussed below and to help refine this list to arrive at the significant issues to be analyzed in depth in the integrated CERCLA/NEPA process and to eliminate from detailed study the issues that are not significant.

The potential major issues that may require analysis in the integrated CERCLA/NEPA process are as follows:

1. Potential radiological impacts in terms of both radiation doses and resulting health risks:

- On people, including workers and the public, i.e., individuals and the total population, children and adults, present and future generations;

- Along transportation routes and near other sites relevant to the proposed alternatives:

- Associated with routine operations and accidents

- Associated with various pathways to humans, including surface waters, groundwaters, gases, dusts, particulates, and biota;

- Due to natural forces such as erosion and flooding; and

- Associated with human intrusion into the contaminated materials.

2. Potential chemical impacts in terms of doses and resulting health risks:

- On people, including workers and the public; i.e., individuals and the total population, children and adults, present and future generations;

- Along transportation routes and near other sites relevant to the proposed alternatives;

- Associated with routine operations and accidents;

- Associated with various pathways to humans, including air, soil, surface waters, groundwaters, and biota;

- Due to natural forces such as erosion and flooding; and

- Associated with human intrusion into the contaminated materials.

3. Potential engineering and technical issues:

- The most reasonable engineering options for each type of waste/residue;

- Probable duration of isolation;

- Rates and magnitude of loss of containment;

- Related to site-specific geohydrology and ecology;

- Related to site-specific wind dispersion patterns; and

- Site characterization and research and development work necessary before the decision or before actual implementation of an alternative.

4. Potential issues relative to mitigative measures and monitoring:

- Health-physics procedures for workers; and

- Control measures for erosion, gases, and dusts.

5. Potential institutional issues:

- Project-specific criteria for decontamination, effluents, environmental concentrations, and release of a site for use without radiological restrictions;

- Future institutional controls (monitoring and maintenance); and

- Institutional issues that need to be resolved before an alternative can be implemented.

6. Potential socioeconomic issues:

- Effects on land uses, values, and marketability; and

- Effects on local transportation systems.

7. Cumulative impacts associated with issue categories 1-6 above for the remedial actions proposed to be taken or reasonably foreseeable at the Maywood, Wayne, Middlesex, and New Brunswick sites and at the Lodi well field.

8. Issues related to the CERCLA criteria for selection of a remedial action:

- Overall protection of human health and the environment;

- Compliance with applicable or relevant and appropriate requirements;

- Long-term effectiveness and permanence;

- Reduction of waste toxicity, mobility, and volume through treatment;

- Short-term effectiveness;

- Implementability;

- Cost;

- State acceptance; and

- Community acceptance.

Scoping

The results of the integrated CERCLA/NEPA assessment process for the Maywood site will be presented in the RI/FS-EIS. The draft work plan and companion documents, fact sheets, technical reports, and other information related to DOE activities at the Maywood site have been placed in the Maywood Borough Library at the address noted below. When information repositories are established for the other New Jersey sites, Maywood documents related to those sites will also be placed there.

The scoping process will involve all interested agencies (Federal, State, and local), groups, and members of the public. Comments are invited on the alternatives and the issues to be considered in the integrated CERCLA/NEPA process, as discussed in this NOI and in the draft RI/FS-EIS work plan. A public scoping meeting is scheduled starting at 7 p.m., to be held on December 6, 1990 in Nellie K. Parker School, 261 Maple Hill Drive, Hackensack, New Jersey 07601. This will be an informal meeting but a complete record will be taken and copies of the transcript will be made available as detailed below.

The meeting will be presided over by an independent facilitator, who will explain DOE procedures for conducting the meeting. The meeting will not be conducted as an evidentiary hearing.