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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
UNITED STATES DEPARTMENT OF ENERGY

MAYWOOD INTERIM STORAGE SITE

FEDERAL FACILITY AGREEMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND THE
UNITED STATES DEPARTMENT OF ENERGY

IN THE MATTER OF:	)	
	)	
The U.S. Department of Energy's	)	FEDERAL FACILITY AGREEMENT UNDER CERCLA SECTION 120
	)	
Maywood Interim Storage Site	)	Administrative Docket Number: II CERCLA-FFA-00101

Based on the information available to the Parties on the effective date of this FEDERAL FACILITY AGREEMENT (Agreement), and without trial or adjudication of any issues of fact or law, the Parties agree as follows:

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ATTACHMENT 1. DESCRIPTION OF PROPERTY
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I. JURISDICTION

Each Party is entering into this Agreement pursuant to the following authorities:

(i) The U.S. Environmental Protection Agency (U.S. EPA), Region II, enters into those portions of this Agreement that relate to the Remedial Investigation/Feasibility Study (RI/FS) pursuant to Section 120 (e)(1) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. § 9620(e)(1), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499 (hereinafter jointly referred to as CERCLA) and Executive Order 12580;

(ii) U.S. EPA, Region II, enters into those portions of this Agreement that relate to Operable Units and Remedial Actions pursuant to Section 120(e)(2) of CERCLA and Executive Order 12580;

(iii) the U.S. Department of Energy (DOE) enters into those portions of this Agreement that relate to the RI/FS pursuant to Section 120(e)(1) of CERCLA, Executive Order 12580, the National Environmental Policy Act, 42 U.S.C. §4321, the Atomic Energy Act of 1954 (AEA), as amended, 42 U.S.C. §2201, and the Congressional Committee Reports accompanying the FY 1984 and FY 1985 Energy and Water Appropriations Acts, PL 98-50 and PL 98-360, respectively;

(iv) DOE enters into those portions of this Agreement that relate to Operable Units, Removal Actions and Remedial Actions pursuant to Section 120(e)(2) of CERCLA, Executive Order 12580 and the AEA.

U.S. EPA agrees that in the exercise of its jurisdiction it will recognize DOE's authorities under the AEA.

II. PURPOSE

A. The general purposes of this Agreement are to:

(1) Ensure that the environmental impacts associated with past and present activities at the Site are thoroughly investigated and appropriate Remedial Action taken as necessary to protect the public health or welfare or the environment;

(2) Establish a procedural framework and schedule for developing, implementing and monitoring appropriate response actions at the Site in accordance with CERCLA, the NCP, and Superfund guidance and policy;

(3) Evaluate all past investigative and response actions taken at the Site by DOE and all related documentation to determine

whether they are the Functional Equivalent of, and consistent with those actions and documentation required by CERCLA, as amended, the NCP, and Superfund guidance and policy;

(4) Facilitate cooperation, exchange of information and participation of the Parties in such actions; and

(5) Ensure that removal and Remedial Actions at the Site will be in compliance with federal and state applicable or relevant and appropriate requirements (ARARs).

B. Specifically, the purposes of this Agreement are to:

(1) Identify Removal Actions (Removals) which are appropriate at the Site prior to the implementation of final Remedial Action(s) for the Site. EPA should be informed of proposed and planned Removal Actions and notified as early as possible prior to their occurrence as described in Part X (Removal Actions). This process is designed to enhance communication among the Parties about all activities at the Site.

(2) Identify Operable Unit alternatives which are appropriate at the Site prior to the implementation of final Remedial Action(s) for the Site. Operable Unit alternatives shall be identified and proposed to the Parties as early as possible prior to formal proposal of Operable Units to U.S. EPA pursuant to CERCLA. This process is designed to promote cooperation among the Parties in identifying Operable Unit alternatives prior to selection of remedial measures to address the Operable Unit.

(3) Establish requirements for the performance of a RI to determine fully the nature and extent of the threat to the public health or welfare or the environment caused by the release or threatened release of FUSRAP Waste at the Site and to establish requirements for the performance of a FS for the Site to identify, evaluate, and select alternatives for the appropriate Remedial Action(s) to prevent, mitigate, or abate the release or threatened release of FUSRAP Waste at the Site in accordance with CERCLA.

(4) Identify the nature, objective and schedule of response actions to be taken at the Site. Response actions at the Site shall attain that degree of cleanup of hazardous substances, pollutants or contaminants mandated by CERCLA.

(5) Implement the selected Removal Actions and final Remedial Action(s) in accordance with CERCLA, the NCP, and Executive Order 12580.

(6) Provide for continued operation and maintenance of the selected Remedial Action(s) as necessary.

(7) Assure compliance with federal and state hazardous waste laws and regulations for matters covered by this Agreement.

III. PARTIES

The Parties to this Agreement are U.S. EPA and DOE. The terms of this Agreement shall apply to and be binding upon U.S. EPA and DOE, and all subsequent owners, operators and lessees of the MISS until the site is deleted from the National Priorities List (NPL). Upon request, DOE will notify U.S. EPA of the identity and assigned tasks of each of its contractors performing work under this Agreement upon their selection. Nothing herein shall be construed as an agreement to indemnify any person. DOE shall notify its agents, employees, response action contractors for the Site, and all subsequent owners, operators and lessees of the MISS of the existence of this Agreement until its termination. Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such Party to this Agreement.

IV. DEFINITIONS

Except as set forth below or otherwise explicitly stated in this Agreement, the terms used in this Agreement shall have the meanings set forth in CERCLA, 42 U.S.C. §9601, et seq., and the NCP. In addition:

A. "Agreement" shall refer to this document and shall include all Attachments to this document.

B. "ARAR" or "applicable or relevant and appropriate requirement" shall mean "legally applicable" or "relevant and appropriate" standards, requirements, criteria or limitations as those terms are used in CERCLA §121(d), 42 U.S.C. 9621(d).

C. "Attachment" shall mean all addenda to this Agreement, including but not limited to any additional definitions, any revised list of documents, submittals or reports, any revised Timetables and Deadlines, and any revised list of Vicinity Properties or other areas to be addressed pursuant to this Agreement. Upon agreement of all Parties, subject to dispute resolution procedures set forth in Part XV of this Agreement, all such Attachments shall be appended to and made an integral and enforceable part of this document.

D. "Authorized Representative" shall include a Party's contractors acting in any capacity, including an advisory capacity, when so designated by that Party.

E. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C § 9601, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499.

F. "Days" shall mean calendar days, unless business days are specified, measured from the date of receipt by any Party as evidenced by the signature of the receiving Party. Any Submittal or written statement of dispute that under the terms of this Agreement would be due on a Saturday, Sunday or holiday shall be due on the next business day.

G. "Feasibility Study" or "FS" means that study which fully evaluates and develops Remedial Action alternatives to prevent or mitigate the migration or the release of hazardous substances, pollutants or contaminants at and from the Site.

H. "Formerly Utilized Sites Remedial Action Program" or "FUSRAP" means a Department of Energy program to develop, identify, clean up or otherwise control sites containing residual radioactive materials from the early years of the United States Atomic Energy Program or from commercial operations that resulted in conditions Congress has mandated for DOE to remedy.

I. "Functional Equivalent" shall mean all DOE activities or elements of work undertaken or performed prior to the effective date of this Agreement, including but not limited to, documents, submittals, contracts or actions that upon review by U.S. EPA are determined to meet appropriate substantive objectives, standards, and requirements set forth pursuant to CERCLA, as amended, the National Contingency Plan (NCP), and U.S. EPA guidelines, regulations, rules, and criteria. These standards shall be applied by U.S. EPA in the same manner and to the same extent that such standards are applied to any nongovernmental entity in accordance with recognition of DOE's statutory authorities or responsibilities.

J. "FUSRAP Waste" shall mean and be specifically limited to all contamination, both radiological and chemical, whether commingled or not, on the MISS and all radiological contamination above DOE's action levels related to past thorium processing at the Maywood Chemical Works (MCW) site occurring on any Vicinity Properties. Also included are any chemical or non-radiological contamination on Vicinity Properties that would satisfy either of the following requirements:

(1) The chemical or non-radiological contaminants are mixed or commingled with radiological contamination above DOE's action levels; or

(2) The chemical or non-radiological contaminants originated in the MISS or were associated with the

specific thorium manufacturing or processing activities at the Maywood Chemical Works site which resulted in the radiological contamination.

K. "MISS" shall mean the Maywood Interim Storage Site located in Maywood, New Jersey as identified in Part V (Site Description).

L. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300, and any amendments thereof.

M. "NJDEP" shall mean the New Jersey Department of Environmental Protection, its employees and Authorized Representatives.

N. "Operable Unit" shall mean any discrete element of the Site Remedial Actions implemented prior to the selection of all Remedial Actions for the Site. Remedial Actions for Operable Units shall be selected on the basis of RI/FS documentation leading to a Record of Decision. While portions of or complete Operable Units may be addressed through Removal Actions under the jurisdiction of DOE, Operable Units will be addressed through a Record of Decision.

O. "Quality Assured Data" means the data which have undergone quality assurance as set forth in the approved Quality Assurance Project Plan.

P. "Remedial Action" or "RA" shall mean those actions consistent with the permanent remedy, as specified in a Record of Decision, taken to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future public health or welfare or the environment.

Q. "Remedial Design" or "RD" shall mean the technical analysis and procedures which follow the selection of remedy, as specified in a Record of Decision, for a site and result in a detailed set of plans and specifications for implementation of the Remedial Action.

R. "Remedial Investigation" or "RI" means that investigation conducted to fully determine the nature and extent of the release or threat of release of hazardous substances, pollutants or contaminants and to gather necessary data to support the corresponding Feasibility Study and the risk assessment.

S. "Removal Actions" or "Removals" shall mean those actions taken, with the prior written notification pursuant to Part X, in the event of a release or threat of release of hazardous substances, pollutants or contaminants that poses a threat to human health or welfare or the environment in accordance with Section 300.415(b) of the NCP.

T. "Site" shall include the MISS, Vicinity Properties and any other areas where hazardous substance, pollutants or contaminants that migrated from the MISS or were released as a result of activities at the MISS as discussed in Part V (Site Description) of this Agreement are suspected or found. It shall also include any areas contaminated because of activities related to the Site, whether contamination occurred before or after operations at the Site, whether or not any hazardous substances, pollutants or contaminants were removed from the MISS by people who were unaware of the presence of contamination.

U. "Submittal" shall mean every document, report, schedule, deliverable, work plan or other item to be submitted to U.S. EPA pursuant to this Agreement.

V. "Timetables and Deadlines" shall mean schedules as well as that work and those actions which are to be completed and performed in conjunction with such schedules, including performance of actions established pursuant to the dispute resolution procedures set forth in Part XV of this Agreement.

W. "U.S. DOE" or "DOE" shall mean the U.S. Department of Energy, its employees, contractors, agents, successors, assigns and Authorized Representatives.

X. "U.S. EPA" or "EPA" shall mean the United States Environmental Protection Agency, its employees and Authorized Representatives, unless otherwise stated.

Y. "Vicinity Properties" shall mean those properties not included within the MISS but which are or were contaminated by FUSRAP Waste, and which currently are or were authorized to be remediated under DOE's FUSRAP program and any additional properties added pursuant to Part XVII.

V. SITE DESCRIPTION

For purposes of this Agreement, the approximately 12 acre parcel in the Borough of Maywood and the Township of Rochelle Park, Bergen County, New Jersey, formerly owned by the Stepan Company, which is contaminated by radioactive, chemical and (potentially) mixed waste, (Attachment 1) shall constitute the Maywood Interim Storage Site (MISS). The Parties may change the Site description as provided for in Part XVII (Additional Work) on the basis of additional investigations including the Site Remedial Investigation performed by DOE as described in Part XI (Remedial Investigation) below and Attachment 2.

The MISS is an area established to provide an interim storage site for contaminated materials originating from the former Maywood Chemical Works (MCW). The MISS lies in a highly

developed area in the Borough of Maywood and the Township of Rochelle Park, in the County of Bergen, New Jersey. The MISS is a fenced lot occupying 11.7 acres of property which was previously owned by Stepan Company. The MISS is bounded by New Jersey Route 17 on the west; a New York, Susquehanna, and Western Railroad line on the north; and commercial/industrial areas on the south and east. The MISS currently encompasses a storage pile covering approximately 2 acres and containing 35,000 yd^3 of low level radioactive and mixed waste and an area that has been prepared for a second storage pile.

The Site also includes numerous Vicinity Properties in the proximity of the former MCW that have FUSRAP Waste. The surveying of additional properties is continuing. Because these Vicinity Properties are numerous and have not all been designated, a description of each property is not practical in this document.

All of the designated properties, including the MISS, shall hereafter be referred to as the Site.

VI. FINDINGS OF FACT

For the purpose of this Agreement only, the following constitutes a summary of facts upon which this Agreement is based. None of the facts related herein shall be considered admissions by any Party with respect to any unrelated claims by a Party or by persons not a Party to this Agreement.

(1) During the 1940s and 1950s, the Manhattan Engineering District (MED) and its immediate successor, the Atomic Energy Commission (AEC), conducted several programs involving research, development, processing, and production of uranium and thorium, and the storing of their processing residues. Nearly all of this work involved some participation by private contractors and/or institutions. Generally, privately-owned and institutionally-owned sites that became contaminated during this early period of the nuclear program, and have since been converted to other use, were decontaminated or stabilized in accordance with the guidelines and survey methods then in existence.

(2) However, radiological guidelines have since become more stringent. As a result, the Department of Energy (DOE) initiated the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 with the singular mission of identifying, decontaminating, or otherwise controlling sites where low activity radioactive contamination (exceeding current guidelines) remains from the early years of the nation's atomic energy program or commercial operations causing conditions that Congress has authorized DOE to remedy.

(3) DOE has authority under the Atomic Energy Act to conduct Remedial Actions at a number of sites around the country. In addition to its authority under the Atomic Energy Act, Congressional Committee Reports accompanying the FY 1984 and FY 1985 Energy and Water Development Appropriations Acts, Public Laws 98-350 and 98-360, respectively, authorized DOE to conduct a decontamination research and development project at various New Jersey locations where radioactive contamination is present.

(4) From 1916 through 1956, Maywood Chemical Works processed monazite sand to extract thorium and rare earths for use in the manufacture of industrial products such as mantles for gas lanterns. The residues or tailings from the processing operation, clay-like dirt, contained significant levels of radioactive materials. Some of these process wastes were removed from the Maywood Chemical Works for use as mulch and fill on nearby properties, thereby contaminating those properties with radioactive elements. Some of the material also migrated off-site via natural drainage. During this period, radiological and other products were produced, a portion of which was purchased under various government contracts.

(5) In 1954, the Atomic Energy Commission (AEC) issued License R-103 to the MCW, thereby allowing it to continue to possess, process, manufacture and distribute radioactive materials under the auspices of the Atomic Energy Act of 1954.

(6) Stepan Company purchased the Maywood Chemical Works property in 1959 and was issued an AEC radioactive materials license in 1961.

(7) Based on AEC inspections and information related to the Ballod property on the west side of Route 17, the Stepan Company agreed to perform Remedial Action. The cleanup began in 1963. In 1966, 8,360 cubic yards of waste were removed from the area west of Route 17, and buried on the Stepan Company property, an area now covered by grass. In 1967, 2,053 cubic yards of waste were removed from the same general area and also buried on the Stepan Company property, an area which is now a parking lot. In 1968, Stepan Company obtained permission from the AEC to transfer an additional 8,600 cubic yards of waste from the south end of the Ballod Property and bury it on Stepan property, where a warehouse was later built.

(8) At the request of Stepan Company, a radiological survey of the south end of the Ballod property west of Route 17 was conducted by the AEC in 1968. Based on the findings of that survey, clearance was granted for release of the property for unrestricted use. At the time of the survey, the AEC was not aware of contaminated waste materials still present in the northeast corner of the property. In 1968, the portion of the Stepan Company property west of Highway 17 was sold to a private

citizen who later sold it to the current owners, Ballod and Associates.

(9) In September 1980, an area resident discovered the presence of radioactive contamination on property that had formerly belonged to the Stepan Company.

(10) The discovery that radioactive contamination still existed was reported to the New Jersey Department of Environmental Protection (NJDEP). State representatives conducted surveys and soil sample analyses which identified the presence of thorium-232 and radium-226 on the property. The findings were reported to the Nuclear Regulatory Commission (NRC) in November 1980.

(11) This information prompted the NRC to request a comprehensive survey to assess the radiological condition of the property. The survey was performed by Oak Ridge Associated Universities with the assistance of a representative from the Region I office of the NRC in February 1981. The NRC also requested that an aerial radiological survey of the Stepan Company site, the Ballod and Associates property, and the surrounding area be conducted. This survey, which was conducted by EG&G in January 1981, resulted in the discovery of other anomalies (radiation readings distinctly higher than those of surrounding areas). Elevated gamma radiation readings (greater than the local background level) were detected directly over the Stepan plant, as well as immediately to the west and south of the plant. Two other points of elevated background gamma radiation were detected approximately 0.5 mi from the center of the plant: one to the northeast of the plant and the other to the south of the plant.

(12) The Maywood Site is on the National Priorities List (NPL), 40 CFR Part 300, Appendix B, which has been issued pursuant to Section 105 (a)(8)(B) of CERCLA, 42 U.S.C. §9605 (a)(8)(B). The site was included on the NPL on September 8, 1983.

(13) Through Congressional action (PL98-50) in 1984, the site was included in DOE's FUSRAP program whereby DOE was authorized to conduct a decontamination research and development project related to the radioactive contaminants. Neither DOE nor its predecessor agencies had a role in the generation of this contamination.

(14) DOE, acting under its FUSRAP appropriation, initiated soil removal from affected residences in July, 1984. Subsequent funding has permitted further assessment and, where warranted, removals by DOE. Since no adequate low-level radioactive disposal sites exist, DOE negotiated a Memorandum of Understanding with the Borough of Maywood, dated August 10, 1984, to allow it to store the removed soils on a part of the original Maywood Chemical Company property. This property, the Maywood

Interim Storage Site (MISS), was transferred to DOE by Stepan as part of its funding of cleanup in September, 1985.

(15) The storage pile at the MISS currently contains approximately 35,000 cubic yards of contaminated material. In addition, there are an estimated 32,000 cubic yards of FUSRAP Waste buried on the MISS.

(16) The principal radioactive contaminant found at the Site has been thorium-232 with lesser amounts of radium-226 and uranium-238.

(17) Concurrent with DOE's radiological characterization of the Site, Ebasco Services, Inc. performed a characterization study of non-radiological pollutants for EPA.

(18) The soils analyzed in 1986 by Ebasco from the Vicinity Properties exhibited elevated concentrations of volatile organics (methylene chloride, acetone, methyl ethyl ketone (MEK), benzene, toluene, and ethylbenzene in the ppm range), acid extractables, and six metals (As, Cd, Cr, Pb, Be and Ni varying in concentrations up to several hundred ppm). In addition, nine pesticides (Dieldrin, Lindane, Endosulfan I, Endosulfan sulfate, Aldrin, alpha-BHC, DDE, DDD, and DDT) were detected in various levels up to several hundred ppb. Some soil borings also exhibited the presence of gasoline and fuel oil components, various methylated benzenes, caffeine and the essential oils alpha-pinene and d-limonene.

(19) Many of the substances referred to in the preceding paragraph are hazardous substances within the meaning of Section 101(14) of CERCLA, 42 U.S.C. §9601(14).

(20) On April 27, 1987, U.S. EPA issued Special Notice to Stepan Company and all persons whom it knew to be an owner of property which was found to be chemically contaminated. Following such issuance to these potentially responsible parties, U.S. EPA received a good faith offer and undertook negotiations with Stepan Company to perform an RI/FS at these contaminated properties. U.S. EPA issued the Order on Consent to Stepan Company on September 21, 1987 to perform such RI/FS.

(21) Between August and October, 1987 and March and April, 1988 U.S. EPA's contractor, EBASCO Services Inc., collected split samples of soil and groundwater, respectively, from the Stepan Company property where monitoring wells were being installed by DOE's contractor, Bechtel National Inc.

(22) The soil sample analyses show detection of volatile and semi-volatile organic compounds, including benzenes, toluene, and xylenes; pesticides, including Beta-BHC and 4,4'-DDT; and contaminants of the metals/CN/phenol series, including aluminum,

cadmium, lead, barium, and nickel. The above groundwater analyses show detection of volatile and semi-volatile organics compounds, including benzenes, toluene, xylenes, 1,2-dichloroethene and phenol; pesticides, including Beta-BHC, 4,4'-DDT, dieldrin and aldrin; and contaminants of the metals/CN /phenol series, including aluminum, arsenic, lead, cadmium, nickel, and barium.

(23) By letter dated January 6, 1989, U.S. EPA notified Stepan Company of the presence of hazardous substances, pollutants or contaminants in the groundwater and soil on the Stepan Company property and also advised Stepan Company that investigation of the Stepan Company property should be undertaken and that such investigation should be undertaken as part of the RI/FS which Stepan Company was conducting, pursuant to the Order on Consent.

(24) It is anticipated that such RI/FS field activities will commence during 1990.

VII. U.S. EPA DETERMINATIONS

The following determinations represent the basis for this Agreement. None of the determinations contained herein shall be considered admissions by any Party with respect to any unrelated claims by a Party or any claims by persons not a party to this Agreement.

On the basis of the results of the testing and analyses described in the Findings of Fact, infra, and U.S. EPA files and records, U.S. EPA has determined that:

(1) The Maywood Interim Storage Site (MISS) located in Maywood, New Jersey, constitutes a facility within the meaning of Section 101(9) of CERCLA 42 U.S.C. §9601(9);

(2) DOE is the owner of the MISS facility and is responsible for all response actions related to FUSRAP Waste associated with the MISS and all Vicinity Properties and all contamination related to the MISS;

(3) Hazardous substances, pollutants or contaminants within the meaning of Section 101(14) of CERCLA, 42 U.S.C. §§9601 (14) and (33) and §§9604 (a)(12) (not associated with activities of DOE or its predecessor agencies) have been disposed of at the MISS;

(4) There have been releases and threatened releases of hazardous substances, pollutants or contaminants into the environment within the meaning of 42 U.S.C. §§9601 (22), 9604, 9606 and 9607 at and from the MISS;

(5) The prior and/or continuing presence of radionuclides in the waste materials at the site, in the underlying groundwater, and in soils in nearby properties constitute a release and threatened release of hazardous substances, pollutants or contaminants into the environment as defined in Section 101(22) of CERCLA, 42 U.S.C. §9601 (22);

(6) Radionuclides present at the site include thorium, uranium, radium and radon, which are defined as hazardous air pollutants in Section 112 of the Clean Air Act and are therefore hazardous substances as defined in Section 101(4) of CERCLA, 42 U.S.C. §9601(14);

(7) With respect to those releases and threatened releases, the DOE is a responsible person within the meaning of 42 U.S.C. §9607;

(8) The actions to be taken pursuant to this Agreement are reasonable and necessary to protect the public health or welfare or the environment and are consistent with the National Contingency Plan (NCP);

(9) A reasonable time for beginning and/or completing the actions required by this Agreement has been provided for in Attachment 3; and

(10) The schedule for completing the actions required by this Agreement complies with the requirements of Section 120(e) of CERCLA, 42 U.S.C. §9620(e); and

(11) From 1985 to the present, DOE has been an "owner or operator" of the MISS within the definition of Section 101(20) of CERCLA, 42 U.S.C. §9601(20), and has been an owner or operator of the MISS within the meaning of Section 107(a) of CERCLA, 42 U.S.C. §9607(a).

The Parties have determined that the Submittals, actions, and other elements of work required by this Agreement are necessary to protect the public health or welfare or the environment.

VIII. SCOPE OF AGREEMENT

Under this Agreement DOE shall:

1. In conducting Removal Actions, if any, comply with the provisions of Part X (Removal Actions);

2. Identify and address Operable Units as described in Part IX (Operable Units), and Attachment 2 to this Agreement;

3. Conduct a Remedial Investigation on the Site as described in Part XI (Remedial Investigation) and Attachment 2 to this Agreement;

4. Conduct a Feasibility Study of the Site as described in Part XII (Feasibility Study) and Attachment 2 to this Agreement, incorporating the results of the RI;

5. Develop Remedial Action alternative(s) for the Site and implement those Remedial Actions selected for the Site as described in Part XIII (Remedial Action) and Attachment 2 to this Agreement;

These matters are set forth in more detail in Parts IX-XIII (Operable Units, Removals, RI, FS, RA) and in Attachment 2 to this Agreement. In the event of any inconsistency between Parts I-XLIII of this Agreement and the Attachments to this Agreement, Parts I-XLIII shall govern unless and until duly modified pursuant to this Agreement.

Upon request by DOE, or its contractors, for guidance with respect to any issue related to DOE's obligations under this Agreement, U.S. EPA shall determine within thirty days of such request whether there exists a published guidance document applicable to the subject of the DOE inquiry and provide DOE with the same, or advise DOE of the source of such document. If no published guidance document is available, U.S. EPA will determine whether any pre-publication draft of such document can be made available to DOE and the conditions, if any, upon which such a pre-publication draft may be provided to DOE or its contractor. If U.S. EPA determines that no pre-publication draft is available, or can be provided to DOE, U.S. EPA shall use its best efforts to make DOE aware of the Agency's position with respect to any issue raised by DOE.

Deliverables:

DOE agrees to submit to U.S. EPA certain deliverables within the time periods specified in Part XVI to fulfill the obligations and meet the purposes of this Agreement. The deliverables are listed in Part XIV (Consultation) and are described in detail in Attachment 2 to this Agreement. The schedule for the submittal of the deliverables will be established as described in Part XVI and will become Attachment 3.

IX. OPERABLE UNITS

DOE shall identify Operable Units for the Site as part of the Work Plan. While portions of or complete Operable Units may be addressed through Removal Actions under the jurisdiction of DOE, Operable Units will be addressed through a Record of Decision.

Single or multiple Operable Units may be addressed in each Record of Decision.

X. REMOVAL ACTIONS

A. Any Removal Action conducted on the Site shall be conducted in a manner consistent with this Agreement, CERCLA and the NCP.

B. DOE shall be solely responsible for the determination of the areas to be addressed through Removal Actions.

C. DOE shall provide U.S. EPA with written notification of any proposed Removal Action a minimum of sixty (60) days prior to initiating the proposed action unless the removal is required to mitigate an emergency condition as outlined in (D) below.

D. If there is an immediate threat to public health or welfare or the environment which requires an immediate response, DOE may take action. However, DOE must notify the U.S. EPA Project Manager orally within 24 hours of when the threat is discovered and inform the Project Manager of the actions to be taken. Response actions will be documented in the quarterly reports.

E. Nothing in this Agreement shall alter DOE's authority with respect to Removal Actions conducted pursuant to Section 104 of CERCLA, 42 U.S.C. §9604 and Executive Order 12580.

XI. REMEDIAL INVESTIGATION

DOE shall develop, implement and report upon a RI of the Site. The RI documents shall be subject to the review and comment procedures described in Part XIV. Any field investigation efforts and the documentation relative to these efforts preceding this Agreement shall be reviewed by U.S. EPA to determine whether they are the Functional Equivalent of the actions and documentation required by CERCLA, as amended, the NCP, and Superfund guidance and policy. This documentation will be made available by DOE to U.S. EPA. DOE reserves the right to utilize the procedures identified in Part XV, Resolution of Disputes, of this Agreement. The RI shall be conducted in accordance with the requirements and time schedules set forth in Attachment 3 and Part XVI of this Agreement. The RI shall meet the purposes set forth in Part II (Purpose) of this Agreement. The scope of the RI shall be established in the Work Plan. Part of the RI may include a survey for additional areas containing hazardous substances that were contaminated as a consequence of activities at the MISS. The RI of these areas shall be addressed under this Agreement in the same manner as sites and Vicinity Properties identified before this Agreement was signed. The Parties specifically agree that all criteria contained in Attachment 2 to

this Agreement relate solely to the scope of the RI and do not reflect a predetermination of any clean-up level criteria. The Parties further agree that final clean-up level criteria will only be determined following completion of the Risk Assessment. Within thirty (30) days of the effective date of this Agreement, DOE shall initiate discussions with NJDEP and U.S. EPA to develop a proposed list of New Jersey state ARARs. Determination of federal ARARs shall be made in accordance with Part XIV, Section F.

XII. FEASIBILITY STUDY

DOE shall design, propose, undertake and report upon a FS for the Site. The FS documents shall be subject to the review and comment procedures described in Part XIV. The FS shall be conducted in accordance with the requirements and time schedules set forth in Attachments 2 and 3 and Part XVI of this Agreement. The FS shall meet the purposes set forth in Part II (Purpose) of this Agreement.

Any response actions and the documentation relative to these actions performed prior to this Agreement shall be reviewed by U.S. EPA to determine whether they are the Functional Equivalent of the actions and documentation required by CERCLA, as amended, the NCP, and Superfund guidance and policy. This documentation will be made available by DOE to U.S. EPA. DOE reserves the right to utilize the procedures identified in Part XV, Resolution of Disputes, of this Agreement.

XIII. REMEDIAL ACTION SELECTION AND IMPLEMENTATION

Following completion of the RI and the FS and consultation with U.S. EPA as described in Part XIV, DOE shall publish its proposed Remedial Action plan(s) for public review and comment in accordance with CERCLA §117(a) and applicable state law and comply with all other applicable provisions of CERCLA §117. Upon completion of the public comment period, all Parties will consult as to the need for modification of the proposed Remedial Action plan(s) and additional public comment based on public response. When public comment has been properly considered, DOE shall submit its draft Record of Decision in accordance with applicable guidance. Review and consultation with U.S. EPA shall be conducted on the draft Record of Decision in accordance with Part XIV. If the Parties agree on the draft Record of Decision, the draft Record of Decision shall be adopted by U.S. EPA and DOE. DOE shall prepare the final Record of Decision. If the Parties are unable to reach agreement on the draft Record of Decision, final selection of the Remedial Action(s) for the Site shall be made by the U.S. EPA Administrator, which is not subject to dispute resolution by DOE, and U.S. EPA shall then prepare the

final Record of Decision. This does not preclude any rights of the Parties pursuant to Part XXXI (Reservation of Rights). Notice of the final Record of Decision adopted shall be published by the Party preparing it and shall be made available to the public prior to commencement of the Remedial Action, in accordance with CERCLA §117(d).

Following final selection of the Remedial Action, DOE shall design, propose and submit a Remedial Action Implementation Plan, including appropriate Timetables and schedules, to U.S. EPA for review and comment as described in Part XIV. Following consultation with U.S. EPA as described in Part XIV, DOE shall implement the Remedial Action(s) in accordance with the requirements and time schedules set forth in Attachments 2 and 3 and Part XVI of this Agreement. A dispute arising under this Part on any matter other than the final selection of a Remedial Action shall be resolved pursuant to Part XV (Dispute Resolution).

The purpose of the Remedial Action Implementation Plan is to establish procedures for implementation of selected response actions.

EPA and DOE acknowledge that as of the signing of this Agreement, no off-site disposal facility has been identified which is currently licensed and permitted to accept the combinations of hazardous substances which have been identified at the site. The parties recognize that the establishment and permitting of such a facility will be a difficult and time consuming process. Therefore, in an effort to minimize the time required to implement the selected remedial action, EPA and DOE agree to continue their efforts to identify and evaluate disposal options during the pendency of the RI/FS.

XIV. CONSULTATION WITH U.S. EPA REVIEW AND COMMENT PROCESS FOR DRAFT AND FINAL DOCUMENTS

A. Applicability: The provisions of this Part establish the procedures that shall be used by the Parties to provide the Parties with appropriate notice, review, comment, and response to comments regarding RI/FS and Remedial Design/Remedial Action (RD/RA) documents, specified herein as either primary or secondary documents. In accordance with Section 120 of CERCLA, DOE will normally be responsible for issuing primary and secondary documents to U.S. EPA. As of the effective date of this Agreement, all draft and final documents for any deliverable document identified herein shall be prepared, distributed, and subject to dispute in accordance with Paragraphs B through J below.

The designation of a document as "draft" or "final" is solely for purposes of consultation with U.S. EPA in accordance with this Part. Such designation does not affect the obligation of the Parties to issue documents, which may be referred to herein as "final," to the public for review and comment as appropriate and as required by law.

B. General Process for RI/FS and RD/RA documents:

1. Primary documents include those documents that are major, discrete portions of RI/FS or RD/RA activities, including all documents relating to Operable Units. Primary documents are initially issued by DOE in draft subject to review and comment by U.S. EPA. Following receipt of comments on a particular draft primary document, DOE will respond to the comments received and issue a draft final primary document subject to dispute resolution. The draft final primary document will become the final primary document 30 days after the period established for review of a draft final document if dispute resolution is not invoked. If dispute resolution is invoked, the draft final primary document will become the final primary document in accordance with the dispute resolution process described in Part XV (Resolution of Disputes).

2. Secondary documents include those documents that are discrete portions of the primary documents and are typically input or feeder documents. Secondary documents are issued by DOE in draft subject to review and comment by U.S. EPA. Although DOE will respond to comments received, the draft secondary documents may be finalized in the context of the corresponding primary documents. A secondary document may be disputed at the time the corresponding draft final primary document is issued.

C. Primary Documents:

1. DOE shall complete and transmit drafts of the following primary documents to U.S. EPA for review and comment in accordance with the provisions of this Part.

1. RI/FS Work Plan, including the Sampling and Analysis Plan
2. Community Relations Plan
3. Risk Assessment
4. RI Report
5. FS Report
6. Proposed Remedial Action Plan
7. Remedial Design
8. Remedial Action Implementation Plan

2. Only the draft final documents for the primary documents identified above shall be subject to dispute resolution. DOE shall complete and transmit draft primary documents in accordance

with the Timetable and Deadlines established in Part XVI of this Agreement.

D. Secondary Documents:

1. DOE shall complete and transmit drafts of the following secondary documents to U.S. EPA for review and comment in accordance with the provisions of this Part:

1. Post-screening Investigation Work Plan (if appropriate)
2. Treatability Studies (if appropriate)

2. Although U.S. EPA may comment on the drafts of the secondary documents listed above, such documents shall not be subject to dispute resolution except as provided by Paragraph B hereof. Target dates shall be established for the completion and transmission of draft secondary documents pursuant to Part XVI of this Agreement.

E. Meetings of the Project Managers on Development of Documents:

The Project Managers shall meet approximately every sixty (60) days, except as otherwise agreed by the Parties, to review and discuss the progress of work being performed at the site and on the primary and secondary documents. Prior to issuing any draft document specified in Paragraphs C and D above, the Project Managers shall meet to discuss the document results in an effort to reach a common understanding, to the maximum extent practicable, with respect to the results to be presented in the draft document.

F. Identification and Determination of Potential ARARs:

1. For those primary documents or secondary documents that consist of or include ARAR determinations, prior to the issuance of a draft document, the Project Managers shall meet to identify and propose, to the best of their ability, all potential ARARs pertinent to the document being addressed. Draft ARAR determinations shall be prepared by DOE in accordance with Section 121(d)(2) of CERCLA, the NCP and pertinent guidance issued by U.S. EPA, which is not inconsistent with CERCLA and the NCP.

2. In identifying potential ARARs, the Parties recognize that actual ARARs can be identified only on a site-specific basis and that ARARs depend on the specific hazardous substances, pollutants and contaminants at a site, the particular actions proposed as a remedy and the characteristics of a site. The Parties recognize that ARAR identification is necessarily an iterative process and that potential ARARs must be re-examined throughout the RI/FS process until a ROD is issued.

G. Review and Comment on Draft Documents:

1. DOE shall complete and transmit each draft primary document to U.S. EPA on or before the corresponding Deadline established for the issuance of the document. DOE shall complete and transmit the draft secondary document in accordance with the target dates established for the issuance of such documents established pursuant to Part XVI of this Agreement.

2. Unless the Parties mutually agree to another time period, all draft primary and secondary documents shall be subject to a 60-day period for review and comment. Review of any document by U.S. EPA may concern all aspects of the document (including completeness) and should include, but is not limited to, technical evaluation of any aspect of the document, and consistency with CERCLA, the NCP, Executive Order 12580 and any pertinent guidance or policy issued by U.S. EPA. Comments by U.S. EPA shall be provided with adequate specificity so that DOE may respond to the comment and, if appropriate, make changes to the draft document. Comments shall refer to any pertinent sources of authority or references upon which the comments are based, and, upon request of DOE, U.S. EPA shall provide a copy of the cited authority or reference. In cases involving complex or unusually lengthy documents, U.S. EPA may extend the 60-day comment period for an additional 20 days by written notice to DOE no later than ten (10) days prior to the end of the 60-day period. In appropriate circumstances, this time period may be further extended in accordance with Part XXXIII (Extensions) hereof. On or before the close of the comment period, U.S. EPA shall transmit by next day mail their written comments to DOE.

3. Representatives of DOE shall make themselves readily available to U.S. EPA during the comment period for purposes of informally responding to questions and comments on draft documents. Oral comments made during such discussions need not be the subject of a written response by DOE on the close of the comment period.

4. In commenting on a draft document which contains a proposed ARAR determination, U.S. EPA shall include a reasoned statement of whether it objects to any portion of the proposed ARAR determination. To the extent that U.S. EPA does object, U.S. EPA shall explain the bases for its objection in detail and shall identify any ARARs which it believes were not properly addressed in the proposed ARAR determination.

5. Following the close of the comment period for a draft document, DOE shall give full consideration to all written comments on the draft document submitted during the comment period. Within 60 days of the close of the comment period on a draft secondary document, DOE shall transmit to U.S. EPA its written response to comments received within the comment period.

Within sixty (60) days of the close of the comment period on a draft primary document, DOE shall transmit to U.S. EPA a draft final primary document, which shall include DOE's response to all written comments received within the comment period. While the resulting draft final document shall be the responsibility of DOE, it shall be the product of consensus to the maximum extent possible.

6. DOE may extend the 60 day period for either responding to comments on a draft document or for issuing the draft final primary document for an additional 20 days by providing written notice to U.S. EPA at least ten (10) days prior to the end of the period. In appropriate circumstances, this time period may be further extended in accordance with Part XXXIII hereof.

H. Availability of Dispute Resolution for Draft Final Primary Documents:

1. Dispute resolution shall be available to the Parties for draft final primary documents as set forth in Part XV. Draft final primary documents shall be subject to a thirty (30) day period for U.S. EPA review and comment.

2. When dispute resolution is invoked on a draft primary document, work may be stopped in accordance with the procedures set forth in Part XV regarding dispute resolution.

I. Finalization of Documents:

The draft final primary document shall serve as the final primary document if no Party invokes dispute resolution regarding the document or, if invoked, at completion of the dispute resolution process should DOE's position be sustained. If DOE's determination is not sustained in the dispute resolution process, DOE shall prepare, within not more than 35 days after receipt of written resolution of the dispute, a revision of the draft final document which conforms to the results of dispute resolution. In appropriate circumstances, the time period for this revision period may be extended in accordance with Part XXXIII hereof.

J. Subsequent Modifications of Final Documents:

Following finalization of any primary document pursuant to Paragraph I above, either Party may seek to modify the document, including seeking additional field work, pilot studies, computer modeling or other supporting technical work, only as provided in Paragraphs 1 and 2 below.

1. Either Party may seek to modify a document after finalization if it determines, based on new information (i.e., information that became available, or conditions that became known, after the document was finalized) that the requested modification is

necessary. U.S. EPA or DOE may seek such a modification by submitting a concise written request to the Project Managers of the other Parties. The request shall specify the nature of the requested modification and specifically define the new information on which the request is based.

2. In the event that a consensus is not reached by the Project Managers on the need for a modification, either U.S. EPA or DOE may invoke dispute resolution to determine if such modification shall be conducted. Modification of a document shall be required only upon a showing that: 1) the requested modification is based on significant new information, and 2) the requested modification could be of significant assistance in evaluating impacts on the public health or welfare or the environment, in evaluating the selection of remedial alternatives, or in protecting human health or welfare or the environment.

3. Nothing in this Subpart shall alter U.S. EPA's ability to request the performance of additional work pursuant to Part XVII of this Agreement (Additional Work) which does not constitute modification of a final document.

XV. RESOLUTION OF DISPUTES

Except as specifically set forth elsewhere in this Agreement, if a dispute arises under this Agreement between the Parties, the procedures of this Part shall apply. The Parties shall make reasonable efforts to informally resolve disputes at the Project Manager or immediate supervisor level. If resolution cannot be achieved informally, the procedures of this Part shall be implemented to resolve a dispute.

A. Within thirty (30) days after: (1) the period established for review of a draft final primary document pursuant to Part XIV of this Agreement, or (2) any action which leads to or generates a dispute (including a failure of the informal dispute resolution process), the disputing Party shall submit to the Dispute Resolution Committee (DRC) a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing Party's position with respect to the dispute and the information the disputing Party is relying upon to support its position. Within thirty (30) days of receipt of notice of dispute, the other Party may submit a written statement of position.

B. Prior to the issuance of a written statement of dispute, the disputing Party shall engage the other Party in informal dispute resolution among the Project Managers and/or their immediate supervisors. During this informal dispute resolution period the Parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

C. If agreement cannot be reached on any issue within the informal dispute resolution period, the disputing Party shall forward the written statement of dispute to the Dispute Resolution Committee (DRC) thereby elevating the dispute to the DRC for resolution.

D. The DRC will serve as a forum for resolution of disputes for which agreement has not been reached through informal dispute resolution. The Parties shall each designate one individual and an alternate to serve on the DRC. The individuals designated to serve on the DRC shall be employed at the policy level (Senior Executive Service (SES) or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Agreement. The U.S. EPA representative on the DRC is the Emergency and Remedial Response Division Director of U.S. EPA's Region II. DOE's designated member is the DOE Technical Services Division Director. Written notice of any delegation of authority from a Party's designated representative on the DRC shall be provided to the other Party pursuant to the procedures of Part XXI (Notification).

E. Following the receipt of all statements of position or the expiration of the period provided for their submittal, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period, the written statement of dispute shall be forwarded within seven (7) days to the Senior Executive Committee (SEC) for resolution.

F. The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The U.S. EPA representative on the SEC is the Regional Administrator of U.S. EPA's Region II. DOE's representative on the SEC is the DOE Oak Ridge Operations Manager. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, the U.S. EPA's Regional Administrator shall issue a written position on the dispute. DOE may, within twenty-one (21) days of the Regional Administrator's issuance of U.S. EPA's position, issue a written notice elevating the dispute to the Administrator of U.S. EPA for resolution in accordance with all applicable laws and procedures. In the event that DOE elects not to elevate the dispute to the Administrator within the designated twenty-one (21) day escalation period, DOE shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

G. Upon escalation of a dispute to the Administrator of U.S. EPA pursuant to Subpart F, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior

to resolving the dispute, the U.S. EPA Administrator shall meet and confer with the Secretary of the DOE to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide DOE with a written final decision setting forth resolution of the dispute.

H. The pendency of any dispute under this Part shall not affect DOE's responsibility for timely performance of the work required by this Agreement, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Agreement which are not affected by the dispute shall continue and be completed in accordance with the applicable schedule.

I. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Emergency and Remedial Response Division (ERRD) Director for U.S. EPA's Region II requests, in writing, that work related to the dispute be stopped because, in U.S. EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or welfare or the environment, or is likely to have a substantial adverse effect on the remedy selection or implementation process. To the extent possible, U.S. EPA shall give DOE prior notification that a work stoppage request is forthcoming. After stoppage of work, if DOE believes that the work stoppage is inappropriate or may have potential significant adverse impacts, DOE may meet with the U.S. EPA Region II ERRD Director to discuss the work stoppage. Following this meeting, and further consideration of the issues, the U.S. EPA Region II ERRD Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the Division Director may immediately be subjected to formal dispute resolution. Such dispute may be brought directly to either the DRC or the SEC, at the discretion of DOE.

J. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Part, DOE shall incorporate the resolution and final determination into the appropriate plan, schedule or procedures and proceed to implement this Agreement according to the amended plan, schedule or procedures.

K. Resolution of a dispute pursuant to this Part of the Agreement constitutes a final resolution of that dispute arising under this Agreement. All Parties shall abide by all terms and conditions of any final resolution of dispute obtained pursuant to this Part of this Agreement.

L. Resolution of disputes may include a determination of the length of any time extensions which are necessary.

XVI. PROJECT SCHEDULES

A. Within forty-five (45) days of the effective date of this Agreement, DOE shall propose Deadlines for completion of the following draft primary documents:

1. RI/FS Work Plan, including the Sampling and Analysis Plan
2. Community Relations Plan
3. Risk Assessment
4. RI Report
5. FS Report
6. Proposed Remedial Action Plan

Within forty-five (45) days of receipt of the proposed Deadlines, U.S. EPA shall review and provide comments to DOE regarding the proposed Deadlines. Within forty-five (45) days following receipt of the comments DOE shall, as appropriate, make revisions and reissue the proposal. The Parties shall meet as necessary to discuss and finalize the proposed Deadlines. If DOE and U.S. EPA agree on proposed Deadlines, the finalized Deadlines shall be incorporated into the appropriate Work Plans and become Attachment 3. If DOE and U.S. EPA fail to agree within forty-five (45) days of DOE's receipt of U.S. EPA's comments on the proposed Deadlines, U.S. EPA's position shall be binding upon DOE unless DOE invokes dispute resolution within five (5) days of the close of the expiration of said forty-five (45) day period pursuant to Part XV of this Agreement. The final Deadlines established pursuant to this Paragraph shall be published by U.S. EPA, in conjunction with DOE and become Attachment 3.

B. Within forty-five (45) days of issuance of the Record of Decision, DOE shall propose Deadlines for completion of the following draft primary documents:

7. Remedial Design
8. Remedial Action Implementation Plan

These Deadlines shall be proposed, finalized and published utilizing the same procedures set forth in Paragraph A above.

C. The Deadlines set forth in this Part, or to be established as set forth in this Part, may be extended only as explicitly provided in this Agreement. The Parties recognize that one possible basis for extension of the Deadlines for completion of the Remedial Investigation and Feasibility Study Reports is the identification of significant new Site conditions during the performance of the Remedial Investigation.

XVII. ADDITIONAL WORK OR MODIFICATION TO WORK

A. In the event that U.S. EPA determines that additional work, or modification to work, including remedial investigatory work, engineering evaluation and/or minor field modifications, is necessary to accomplish the objectives of this Agreement, notification of such additional work or modification to work, with appropriate Deadlines, shall be provided to DOE. DOE agrees, subject to the dispute resolution procedures set forth in Part XV, to implement any such work.

B. Any additional work or modification to work determined to be necessary by DOE shall be proposed by DOE and shall be subject to the review and comment procedures described in Part XIV of this Agreement prior to initiation of any work or modification to work.

C. Within thirty (30) days following a modification pursuant to Subpart A or B, the DOE Project Manager shall prepare a memorandum detailing the modifications and shall provide or mail a copy of the memorandum to the other Project Managers.

D. Any additional work or modification to work approved pursuant to Subpart A or B of this Part shall be completed in accordance with the standards, specifications, and schedule determined or approved by the Parties. If any additional work or modification to work will adversely affect work scheduled or will require significant revisions to an approved Work Plan, the U.S. EPA Project Manager shall be notified immediately of the circumstances by DOE followed by a written explanation within ten (10) business days of the initial notification.

E. Any additional work or modification of work agreed to pursuant to this Agreement shall be governed by the provisions of this Agreement.

F. Additional properties may be proposed by the Parties for further Remedial Investigation pursuant to this Agreement on the basis of data or measurements which identify contamination that may have originated from the MISS prior or subsequent to DOE ownership. Additional properties may be proposed, pursuant to the provisions of this Agreement, for inclusion in the Feasibility Study or Remedial Action phase provided there is data indicating the property is contaminated with FUSRAP Waste. The process for such proposal and addition shall be initiated as follows:

1. By DOE:

    a. A proposal recommending that additional properties be included for response action shall be sent to U.S. EPA at the address listed in Part XVII of this Agreement.

b. If U.S. EPA agrees to the addition, the properties shall be included within the scope of this Agreement, and an addendum shall be attached and incorporated herein.

c. If U.S. EPA does not agree to the addition of the properties, U.S. EPA shall make a written determination about whether the properties shall be included. DOE may initiate the Dispute Resolution procedures of Part XIV and shall provide to U.S. EPA a written statement of position with respect to the dispute within 30 days. After the 30-day period, or, if invoked, after the termination of the Dispute Resolution procedures, an addendum shall be attached and incorporated herein specifying the addition of any new properties.

2. By EPA:

a. EPA shall prepare and transmit to DOE a proposal for addition of specific properties. The proposal shall include justification.

b. The proposal shall be reviewed by DOE and responded to within 45 days of receipt, stating the basis for any disagreements or objections.

c. If DOE agrees to the addition of the properties, the properties shall be included within the scope of this Agreement and an addendum shall be attached and incorporated herein.

d. If DOE does not agree to the addition of the properties, U.S. EPA shall make a written determination about whether the properties shall be included. DOE may initiate the Dispute Resolution procedures of Part XIV and shall provide to U.S. EPA a written statement of position with respect the dispute within 30 days. After the 30-day period or, if invoked, after the termination of the Dispute Resolution procedures, an addendum shall be attached and incorporated herein specifying the addition of any new properties.

XVIII. PERMITS

A. The Parties recognize that under Sections 121(d) and 121(e)(1) of CERCLA, 42 U.S.C. §§ 9621(d) and 9621(e)(1), and the NCP, portions of the response actions called for by this Agreement and conducted entirely onsite as that definition is used in the NCP are exempted from the procedural requirement to obtain a federal, state, or local permit but must satisfy all the applicable or relevant and appropriate federal and state

standards, requirements, criteria, or limitations which would have been included in any such permit. When DOE proposes a response action to be conducted entirely onsite, which in the absence of Section 121(e)(1) of CERCLA and the NCP would require a federal or state permit, and for which DOE does not seek a permit, DOE shall include in the Submittal to the Parties:

(1) Identification of each permit which would otherwise be required;

(2) Identification of the standards, requirements, criteria, or limitations which would have had to have been met to obtain each such permit;

(3) Explanation of how the response action proposed will meet the standards, requirements, criteria or limitations identified in (2) immediately above.

Upon written request of DOE, U.S. EPA will provide its position with respect to (2) and (3) above in a timely manner.

B. Subpart A above is not intended to relieve DOE from the requirement(s) of obtaining a permit whenever it proposes a response action involving the shipment or movement from the Site of a hazardous substance.

C. DOE shall be responsible for obtaining all federal, state or local permits which are necessary for the performance of any work under this Agreement. DOE shall notify U.S. EPA in writing of any permits required for off-Site activities as soon as it becomes aware of the requirement. Upon request, DOE shall provide U.S. EPA copies of all such permit applications and other documents related to the permit process.

D. If a permit which is necessary for implementation of this Agreement is not issued, or is issued or renewed in a manner which is materially inconsistent with the requirements of this Agreement, DOE agrees it shall notify U.S. EPA of its intention to propose modifications to this Agreement to conform to the permit (or lack thereof). Notification by DOE of its intention to propose such modifications shall be submitted within fifteen (15) days of receipt by DOE of notification that: (1) a permit will not be issued; (2) a permit has been issued or reissued; or (3) a final determination with respect to any appeal related to the issuance of a permit has been entered. Within forty-five (45) days from the date it submits its notice of intention to propose modifications, DOE shall submit to U.S. EPA its proposed modifications to this Agreement with an explanation of its reasons in support thereof.

E. U.S. EPA shall review and comment upon proposed modifications to this Agreement in accordance with Part XIV of this Agreement. If DOE submits proposed modifications prior to a final

determination of any appeal taken related to a permit needed to implement this Agreement, U.S. EPA may elect to delay review of the proposed modifications until after such final determination is entered. If U.S. EPA elects to delay such review, DOE shall continue implementation of this Agreement as provided in Subpart F of this Part.

F. During any appeal related to any permit required to implement this Agreement or during review of any of DOE's proposed modifications as provided in Subpart D above, DOE shall continue to implement those portions of this Agreement which can be reasonably implemented pending final resolution of the permit issue(s).

XIX. CREATION OF DANGER

In the event U.S. EPA determines that activities conducted pursuant to this Agreement, or any other circumstances or activities, are creating a danger to the health or welfare of the people on the Site or in the surrounding area or to the environment, and so notifies DOE, DOE will take immediate action to notify all affected parties, including state and local health officials, and in the case of contamination originating on the Site or which is the result of activities in connection with the Site, will expeditiously take appropriate measures to protect the public health or welfare or the environment affected. If directed by U.S. EPA to undertake such action, DOE shall immediately comply without regard to the invocation of Dispute Resolution hereunder. U.S. EPA may direct DOE to stop further implementation of this Agreement for such period of time as needed to abate the danger.

Notwithstanding any authority that U.S. EPA may have, DOE reserves its rights and authorities under the AEA to order cessation of any activities or elements of work that it determines poses a potentially hazardous condition to the health or welfare of the people on the Site or in the surrounding area or to the environment. Upon the issuance of such an order, DOE will notify all affected Parties including state and local health officials, and in the case of contamination originating on the Site or which is the result of activities in connection with the Site, will expeditiously take measures to protect the public health or welfare or the environment, consistent with other parts of this Agreement, including those of Section X, Removal Actions.

XX. REPORTING

A. Quarterly Reports: DOE agrees it shall submit to U.S. EPA quarterly written progress reports which shall include, at a minimum, the following:

(1) The actions which DOE has taken during the previous quarter to implement the requirements and time schedules of this Agreement;

(2) A description of all actions scheduled for completion during the quarter that were not completed along with a statement indicating why such actions were not completed and an anticipated completion date;

(3) Identification of any anticipated delays in meeting time schedules, the reasons for the delay and actions taken to prevent or mitigate the delay;

(4) Copies of all quality-assured data and sampling and test results and all other laboratory deliverables received by DOE during the quarter;

(5) A description of the actions which are scheduled for the following quarter.

Progress reports shall be submitted by the thirtieth (30) day following the end of the quarter.

During periods of extended field activity (e.g., two [2] quarters or more), DOE shall provide monthly progress reports which will include the data identified above. These monthly reports shall be submitted by the twentieth (20) day of each month following initial mobilization and revert to quarterly reporting in the next quarter following demobilization.

B. Annual Reports: DOE agrees it shall report to the Parties annually on the progress of the RI/FS, Remedial Action program and Remedial Design. The quarterly report for the fourth calendar quarter will serve as the annual report and in addition to the data identified above, each such report shall summarize all work accomplished for the year, and provide updated maps and illustrations, and an updated schedule of sampling and analysis for each monitoring location.

XXI. NOTIFICATION

A. As specified in Attachment 2, copies of any report, document or submittal provided pursuant to a schedule or Deadline identified in, developed or incorporated under this Agreement shall be sent by certified mail or overnight mail, return receipt requested. Documents sent to EPA shall be addressed or hand delivered to:

Name
CERCLA Regional Project Manager for
Maywood Interim Storage Site
Emergency and Remedial Response Division
U.S. EPA
26 Federal Plaza, Room ____
New York, New York 10278

Documents sent to DOE shall be addressed as follows unless DOE specifies otherwise by written notice:

Robert G. Atkin
Site Manager
Technical Services Division
U.S. Department of Energy
Oak Ridge Operations
P.O. Box 2001
Oak Ridge, Tennessee 37831-8723

Unless otherwise requested, all routine correspondences may be sent via regular mail to the above-named persons.

B. U.S. EPA shall provide the Secretary of Energy with a forty-five (45) day advance notice of the U.S. EPA Administrator's intention to delegate the authority to select appropriate Remedial Actions pursuant to this Agreement, including the listing of the Site on the Remedy Delegation Report.

XXII. PROJECT MANAGERS

A. The Parties shall each designate a Project Manager and Alternate (hereinafter jointly referred to as Project Manager) for the purpose of overseeing the implementation of this Agreement. Within fifteen (15) days of the effective date of this Agreement, each Party shall notify all the other Parties of the name and address of its Project Manager. Any Party may change its designated Project Manager by notifying the other Parties, in writing, within ten (10) days of the change.

B. To the maximum extent possible, communications between the Parties concerning the terms and conditions of this Agreement shall be directed through the Project Managers as set forth in Part XXI of this Agreement. Each Project Manager shall be responsible for assuring that all communications from the other Project Managers are appropriately disseminated and processed by the entities which the Project Managers represent.

C. Subject to the limitations set forth in Part XXV (Site Access), Subpart A, and the U.S. EPA Project Manager shall have the authority, which includes but is not limited to, to:

(1) Take samples, request split samples of DOE samples and ensure that work is performed properly and pursuant to U.S. EPA protocols as well as pursuant to the Attachments and plans incorporated into this Agreement;

(2) Observe all activities performed pursuant to this Agreement, take photographs and make such other reports on the progress of the work as the Project Manager deems appropriate;

(3) Review records, files and documents relevant to this Agreement; and

(4) Recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design utilized in carrying out this Agreement, which are necessary to the completion of the project.

D. The DOE Project Manager may also recommend and request minor field modifications to the work to be performed pursuant to this Agreement, or in techniques, procedures or design utilized in carrying out this Agreement, which are necessary to the completion of the project.

E. Any field modifications proposed under this Part by any Party must be approved orally by Project Managers for DOE and U.S. EPA to be effective. If agreement cannot be reached between U.S. EPA and DOE on any proposed additional work or modification to work, the dispute resolution procedures set forth in Part XV may be used in addition to this Part.

F. Within ten (10) days following a modification made pursuant to this Part, the Project Manager who requested the modification shall prepare a memorandum detailing the modification and the reasons therefore and shall provide or mail a copy of the memorandum to the other Project Manager.

G. The Project Manager for DOE, his/her designated representative or appropriate contractor, shall be physically present on the Site or reasonably available to supervise work performed at the Site during implementation of the work performed pursuant to this Agreement and shall make himself/herself available to the U.S. EPA Project Manager for the pendency of this Agreement. The absence of the U.S. EPA Project Manager from the Site shall not be cause for work stoppage.

XXIII. SAMPLING AND DATA/DOCUMENT AVAILABILITY

A. DOE shall use Quality Assurance, Quality Control (hereinafter "QA/QC") and chain-of-custody procedures during all field investigation, sample collection and laboratory analysis

activities in accordance with U.S. EPA guidance referenced in the U.S. EPA approved QAPP plan.

B. The Parties shall make available to each other quality assured results of sampling, tests or other data generated by any Party, or on their behalf, with respect to the implementation of this Agreement within ninety (90) days of performance of such sampling or tests. If quality assurance is not completed within ninety (90) days, the Parties shall provide notification ten (10) days prior to the end of the 90-day period that the data will not be available and that Quality Assured Data or results shall be submitted as soon as they become available.

C. At the request of the U.S. EPA Project Manager, DOE shall allow split or duplicate samples to be taken by U.S. EPA during sample collection conducted during the implementation of this Agreement. The DOE's Project Manager shall endeavor to notify the U.S. EPA Project Manager not less than thirty (30) business days in advance of any sample collection. If it is not possible to provide thirty (30) business days prior notification, DOE shall notify the U.S. EPA Project Manager as soon as possible after becoming aware that samples will be collected.

D. DOE shall submit to U.S. EPA copies of records and other documents, including draft sampling and monitoring data, as requested by U.S. EPA.

XXIV. RETENTION OF RECORDS

Each Party to this Agreement shall preserve for a minimum of ten (10) years after termination and satisfaction of this Agreement all of its records and documents, except drafts of finalized documents which relate to the implementation of this Agreement, including but not limited to, the complete Administrative Record, post-Record of Decision primary and secondary documents and quarterly/monthly reports, despite any document retention policy to the contrary. After this ten (10) year period, DOE shall notify U.S. EPA at least ninety (90) days prior to destruction or disposal of any such documents or records. Upon request by U.S. EPA, DOE shall make available such records or documents to U.S. EPA.

XXV. SITE ACCESS

A. Without limitation on any authority conferred on U.S. EPA by statute or regulation, the U.S. EPA and/or its Authorized Representatives, shall have authority to enter the Site at all reasonable times for the purposes of, among other things:

(1) inspecting records, files, photographs, operating logs, contracts and other documents relevant to implementation of this Agreement;

(2) reviewing the progress of DOE, its response action contractors or lessees in implementing this Agreement;

(3) conducting such tests as the U.S. EPA Project Manager deems necessary;

(4) verifying the data submitted to U.S. EPA by DOE; and

(5) using sound, optical or other types of recording equipment to record activities which have been or are being conducted pursuant to this Agreement.

U.S. EPA agrees that its Project Manager shall be required to notify DOE of an impending site visit to allow time for DOE to arrange escort. U.S. EPA further agrees that it and/or its Authorized Representative shall comply with all applicable OSHA standards and FUSRAP Health and Safety Plan requirements. These standards and/or requirements shall include, but are not limited to:

1. Be respirator trained, fit-tested and/or medically approved as appropriate prior to entering restricted site areas;

2. Be briefed on safety and site-specific hazards; and

3. Have an escort familiar with the site and its hazards.

Notwithstanding the foregoing, in emergency situations, DOE agrees that site access by U.S. EPA and/or the Authorized Representatives shall be honored conditioned only upon presentation of proper credentials.

B. To the extent that access is required to areas of the Site presently owned by or leased to parties other than DOE, DOE agrees to exercise its authorities to obtain access pursuant to Section 104(e) of CERCLA from the present owners and/or lessees. DOE shall use its best efforts to obtain access agreements to these areas in time to avoid delay in the completion of any activity performed under this Agreement. All such access agreements shall provide reasonable access to U.S. EPA and/or its Authorized Representatives.

With respect to non-DOE property upon which monitoring wells, pumping wells, treatment facilities or other response actions are to be located, such access agreements shall also provide that no conveyance of title, easement, or other interest in the property

shall be consummated without provisions for the continued operation of such wells, treatment facilities, or other response actions on the property. The access agreements shall also provide that the owners of the Site or of any property where monitoring wells, pumping wells, treatment facilities or other response actions are located shall notify DOE and U.S. EPA by certified mail at least thirty (30) days prior to any conveyance, of the property owner's intent to convey any interest in the property and of the provisions made for the continued operation of the monitoring wells, treatment facilities, or other response actions installed pursuant to this Agreement.

C. If, after using its best efforts as provided above, DOE shall have failed to obtain voluntary access, DOE shall utilize its authority to issue an Administrative Order providing for such access as may be required or shall refer the access issue to the Department of Justice. Such referral shall request a judicial order providing for such access as may be required. U.S. EPA shall assist in obtaining access by providing testimony or documents or in other ways, as appropriate.

D. If DOE is unable to secure access to said property within thirty (30) days prior to the commencement of the scheduled activity, it shall immediately notify U.S. EPA. Within fifteen (15) days of any such notice, DOE shall propose appropriate modification(s) required by its such inability to obtain access.

XXVI. FIVE YEAR REVIEW

If a remedy is selected for the Site which results in any hazardous substances, pollutants or contaminants remaining on the Site, DOE agrees that U.S. EPA shall, consistent with Section 121(c) of CERCLA, and in accordance with this Agreement, review the Remedial Action no less often than each five years after the initiation of such Remedial Action to assure that human health and the environment are being protected by the Remedial Action implemented. If upon such review it is the judgement of U.S. EPA that additional action or modification of the Remedial Action relative to FUSRAP Waste is appropriate in accordance with Section 104 or 106 of CERCLA, U.S. EPA shall require, subject to dispute resolution, DOE to implement such additional or modified action.

XXVII. OTHER CLAIMS

A. Nothing in this Agreement shall constitute or be construed as a bar or release by either U.S. EPA or DOE from any claim, cause of action or demand in law or equity by or against any person, firm, partnership or corporation not a signatory to this Agreement for any liability it may have arising out of or

relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, pollutants, or contaminants found at, taken to, or taken from the Site.

B. This Agreement does not constitute any decision or preauthorization by U.S. EPA of funds under Section 111(a)(2) of CERCLA for any person, agent, contractors or consultant acting for DOE.

C. U.S. EPA shall not be held as a party to any contract entered into by DOE to implement the requirements of this Agreement.

D. This Agreement shall not restrict U.S. EPA from taking any legal or response action for any matter not specifically part of the work covered by this Agreement.

E. None of the facts related herein shall be considered admissions by any Party with respect to any unrelated claims by a Party or by persons not a Party to this Agreement.

F. U.S. EPA and DOE shall provide a copy of this Agreement to appropriate contractors, subcontractors, laboratories, and consultants retained to conduct any portion of the work performed pursuant to this Agreement prior to beginning work to be conducted under this Agreement.

XXVIII. OTHER APPLICABLE LAWS

A. All actions required to be taken pursuant to this Agreement shall be undertaken in accordance with the requirements of all applicable state and federal laws and regulations to the extent required by CERCLA.

B. All reports, documents, plans, specifications, and schedules submitted pursuant to this Agreement are, upon approval by U.S. EPA, incorporated into this Agreement. Any non-compliance with such U.S. EPA-approved reports, plans, specifications or schedules shall be considered a failure to achieve compliance with the requirements of this Agreement, subject to dispute resolution.

C. Studies and/or tests will be conducted on the storage pile to demonstrate compliance with the radon emission standards of the Clean Air Act. The results of these studies and/or tests, as well as any additional monitoring or reporting conducted to demonstrate continued compliance, will be included as part of the periodic reporting required hereunder.

XXIX. CONFIDENTIAL INFORMATION

In accordance with 40 CFR Part 2, DOE may assert a confidentiality claim covering all or part of the information requested by this Agreement except that analytical data shall not be claimed as confidential by DOE. Information, records, or other documents produced by DOE which are classified within the meaning of and in conformance with the Atomic Energy Act of 1954, as amended, shall not be available to the public. In addition, if so designated, data, documents, records, or files which could otherwise be withheld pursuant to the Freedom of Information Act (FOIA), 5 U.S.C., Subsection 552, or the Privacy Act of 1974 (5 U.S.C. Subsection 552a), unless expressly authorized for release by the originating party, shall be handled in accordance with those regulations.

Information determined to be confidential by U.S. EPA pursuant to 40 CFR Part 2 shall be afforded the protection specified therein. Should U.S. EPA determine that any information claimed by DOE to be confidential is not entitled to confidential treatment, DOE shall be afforded the rights and opportunities set forth in 40 CFR Part 2 to contest such determination. If no claim of confidentiality accompanies the information when it is submitted to U.S. EPA, the information may be made available to the public without further notice to DOE.

Other affected parties (e.g. Remedial Action contractors, Potentially Responsible Parties (PRPs), etc.) may assert a confidentiality claim covering all or part of any information requested under this Agreement. Such claims will be afforded the same protection pursuant to 40 CFR Part 2 as provided DOE.

No document marked draft may be made available to the public without prior agreement of the generating party.

XXX. AMENDMENT OF AGREEMENT AND ATTACHMENTS

A. This Agreement may be amended by a written agreement between DOE and U.S. EPA. Such amendments shall be in writing and shall have as the effective date that date on which such amendments are signed by all Parties, with U.S. EPA signing last, provided, except for changes in the schedules to be submitted hereunder, that, where applicable, public participation as specified in §117 of CERCLA shall be satisfied prior to signing by U.S. EPA.

B. No written or oral informal advice, guidance, suggestions or comments by U.S. EPA regarding reports, documents, plans, specifications, schedules, and any other writing submitted by DOE will be construed as modifying this Agreement or as relieving DOE of its obligation to obtain approvals as may be required by this Agreement.

C. The Attachments to this Agreement may be revised, subject to dispute resolution, by written agreement. Such revisions shall be in writing and shall be effective as of the date on which such revisions are signed by both Parties. The DOE Project Manager shall sign any revision of any Attachment to this Agreement for DOE. The Chief of the Program Support Branch, Emergency and Remedial Response Division, shall sign any revision of any Attachment to this Agreement for U.S. EPA.

D. If any provision of this Agreement is determined to be invalid, illegal or unconstitutional, the remainder of the Agreement shall not be affected by such determination.

XXXI. COVENANT NOT TO SUE AND RESERVATION OF RIGHTS

A. In consideration of DOE's compliance with this Agreement, and based on the information known to the Parties on the effective date of this Agreement, the Parties agree that compliance with this Agreement shall stand in lieu of any administrative, legal and equitable remedies against DOE available to them regarding the currently known release or threatened release of FUSRAP Waste at the Site which are the subject of the RI/FS and which will be addressed by the Remedial Action provided for under this Agreement; except that nothing in this Agreement shall preclude U.S. EPA from exercising any administrative, legal and equitable remedies available to it to require additional response actions by DOE in the event that: (1) conditions previously unknown or undetected by U.S. EPA arise or are discovered at the Site; or (2) U.S. EPA receives additional information not previously available concerning the premises which it employed in reaching this Agreement, and (3) the implementation of the requirements of this Agreement is no longer protective of public health or welfare or the environment.

B. This Covenant Not To Sue does not affect any claims for natural resource damage assessments or for damages to natural resources.

XXXII. STIPULATED PENALTIES

A. In the event that DOE fails to submit a primary document as identified in Part XIV to U.S. EPA pursuant to the appropriate Timetable or Deadline in accordance with the requirements of this Agreement, or any extension granted pursuant to this Agreement, or fails to comply with a term or condition of this Agreement which relates to Operable Units or final Remedial Action, U.S. EPA may assess a stipulated penalty against DOE. A stipulated penalty may be assessed in an amount not to exceed $5,000 for the first week (or part thereof), and $10,000 for each additional

week (or part thereof) for which a failure set forth in this Paragraph occurs.

B. Upon determining that DOE has failed in a manner set forth in Paragraph A, U.S. EPA shall so notify DOE in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, DOE shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question of whether the failure did in fact occur. DOE shall not be liable for the stipulated penalty assessed by U.S. EPA if the failure is determined, through the dispute resolution process, not to have occurred. No assessment of a stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the stipulated penalty.

C. The DOE annual reports to Congress required by Section 120(e)(5) of CERCLA shall include, with respect to each final assessment of a stipulated penalty against DOE under this Agreement, each of the following:

1. The facility responsible for the failure;

2. A statement of the facts and circumstances giving rise to the failure;

3. A statement of any administrative or other corrective action taken at the relevant facility, or a statement of why such measures were determined to be inappropriate;

4. A statement of any additional action taken by or at the facility to prevent recurrence of the same type of failure; and

5. The total dollar amount of the stipulated penalty assessed for the particular failure.

D. Stipulated penalties assessed pursuant to this Part shall be payable to the Hazardous Substances Response Trust Fund from funds authorized and appropriated for that specific purpose.

E. In no event shall this Part give rise to a stipulated penalty in excess of the amount set forth in Section 109 of CERCLA, 42 U.S.C. §9609.

F. This Part shall not affect DOE's ability to obtain an extension of a Timetable, Deadline or schedule pursuant to Part XXXIII (Extensions) of this Agreement.

G. Nothing in this Agreement shall be construed to render any officer or employee of DOE personally liable for the payment of any stipulated penalty assessed pursuant to this Part.

XXXIII. EXTENSIONS

A. Either a Timetable and Deadline or a schedule shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by DOE shall be submitted at least ten (10) days prior to the Deadline or scheduled deliverable or review date in writing to U.S. EPA and shall specify:

1. The Timetable and Deadline or the schedule that is sought to be extended;

2. The length of the extension sought;

3. The good cause(s) for the extension; and

4. Any related Timetable and Deadline or schedule that would be affected if the extension were granted.

B. Good cause exists for an extension when sought in regard to:

1. An event of force majeure;

2. A delay caused by another Party's failure to meet any requirement of this Agreement;

3. A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;

4. A delay caused, or which is likely to be caused, by the grant of an extension in regard to another Timetable and Deadline or schedule; and

5. Any other event or series of events mutually agreed to by the Parties as constituting good cause.

C. Absent agreement of the Parties with respect to the existence of good cause, DOE may seek and obtain a determination through the dispute resolution process that good cause exists.

D. Within seven (7) days of receipt of a request for an extension of a Timetable and Deadline or a schedule, U.S. EPA shall advise all the Parties in writing of its respective position on the request. Any failure by U.S. EPA to respond within the 7-day period shall be deemed to constitute concurrence in the request for extension. If U.S. EPA does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

E. If DOE and U.S. EPA agree that the requested extension is warranted, DOE shall extend the affected Timetable and Deadline or schedule accordingly. If DOE and U.S. EPA do not agree as to

whether all or part of the requested extension is warranted, the Timetable and Deadline or schedule shall not be extended except in accordance with determination resulting from the dispute resolution process.

F. Within seven (7) days of receipt of a statement of nonconcurrence with the requested extension, DOE may invoke dispute resolution. If DOE does not invoke dispute resolution within seven (7) days of receipt of a statement of nonconcurrence, then the existing schedule remains in force.

G. A timely and good faith request for an extension shall toll any assessment of stipulated penalties or application for judicial enforcement of the affected Timetable and Deadline or schedule until a decision is reached on whether the requested extension will be approved. If dispute resolution is invoked and the requested extension is denied, stipulated penalties may be assessed and may accrue from the date of the original Timetable, Deadline or schedule. Following the grant of an extension, an assessment of stipulated penalties or an application for judicial enforcement may be sought only to compel compliance with the Timetable and Deadline or schedule as most recently extended.

H. For extension requests by U.S. EPA, if no Party invokes dispute resolution within fourteen days after notice of the requested extension, the extension shall be deemed approved.

XXXIV. TRANSFER OF PROPERTY

In the event DOE enters into any contract for the sale or transfer of any of the Site, DOE will comply with the requirements of CERCLA §120(h), 42 U.S.C. §9620(h), in effectuating that sale or transfer, including all notice requirements. In addition, DOE shall include notice of this Agreement in any document transferring ownership or operation of the Site to any subsequent owner and/or operator of any portion of the Site and shall notify U.S. EPA of any such sale or transfer at least ninety (90) days prior to such transfer. No change in ownership of the Site or any portion thereof, or notice pursuant to Section 120(h)(3)(B) of CERCLA, 42 U.S.C. §9620(h)(3)(B), shall relieve DOE of its obligation to perform pursuant to this Agreement. No change of ownership of the Site or any portion thereof shall be consummated by DOE without provision for continued maintenance of any containment system, treatment system, monitoring system, or other response action(s) installed or implemented pursuant to this Agreement.

XXXV. PUBLIC PARTICIPATION

A. The Parties agree that this Agreement and all work, including the proposed Remedial Action plan and any subsequent plan for Remedial Action at the Site arising out of this Agreement shall comply with the administrative record and public participation requirements of Sections 113 and 117 of CERCLA, the NCP, and U.S. EPA guidance with respect to public participation and administrative records, and all applicable state laws.

B. DOE shall develop and implement a Community Relations Plan (CRP) which responds to the need for an interactive relationship with all interested community elements, both on- and off-site, regarding activities and elements of work undertaken by DOE. DOE agrees to develop and implement the CRP in a manner consistent with Section 117 of CERCLA, the NCP, U.S. EPA guidelines set forth in U.S. EPA's Community Relations Handbook, and any modifications thereto. The CRP is subject to the review and comment process set forth in Part XIV of this Agreement.

C. Any Party issuing a formal press release to the media regarding any of the work required by this Agreement shall advise the other Parties of such press release and the contents thereof, at least two (2) business days before the issuance of such press release and shall advise the other Party of any changes prior to release.

D. Technical Assistance Grants (TAGs). The Parties agree to address this section at a later date to reflect policies and procedures developed by EPA pursuant to Section 117 of CERCLA.

E. Technical Review Committee (TRC). The Parties agree to address this section at a later date subsequent to an evaluation of existing institutional structures, political entities, and other state and public activities to determine the most appropriate public participation mechanism and to amend the section if appropriate.

F. Administrative Record. DOE agrees it shall establish and maintain an administrative record in accordance with Section 113(k) of CERCLA. The administrative record shall be established and maintained in accordance with current and future U.S. EPA policy and guidelines. The establishment and maintenance of the Administrative Record shall specifically include the following:

(1) The Administrative Record shall be available to the public at or near the Site. In addition, copies of the current index to the Administrative Record and selected documents from the Administrative Record shall be made available at the Maywood Public Library.

(2) The selection of each response action shall be based on the Administrative Record, in accordance with CERCLA §113(k), any regulations promulgated pursuant thereto and applicable guidance. A copy of the Administrative Record or a complete index of the Administrative Record shall be maintained at the U.S. EPA Region II Office, currently at 26 Federal Plaza, New York, New York.

(3) DOE shall provide U.S. EPA with copies of documents generated or possessed by DOE which are included in the Administrative Record. U.S. EPA will provide DOE with copies of documents generated by each Party which should be included in the Administrative Record.

(4) Upon establishment of an Administrative Record, DOE shall provide U.S. EPA with an index of the Administrative Record. The index shall identify the documents which will comprise the Administrative Record for each decision document for each particular response action.

(5) DOE shall provide U.S. EPA with a quarterly update of any documents added to the Administrative Record and the updated Administrative Record index when any changes or additions to the Record have been made.

(6) U.S. EPA will provide DOE with guidance on establishing and maintaining the Administrative Record as this guidance develops.

XXXVI. PUBLIC COMMENT

A. Within fifteen (15) days of the date of the execution of this Agreement, the Parties shall jointly announce the availability of this Agreement to the public for review and comment. U.S. EPA shall accept comments from the public for a period of forty-five (45) days after such announcement. At the end of the comment period, U.S. EPA shall review all such comments and shall either:

(1) Determine that the Agreement should be made effective in its present form, in which case all Parties shall be so notified in writing, and the Agreement shall become effective on the date DOE receives such notice; or

(2) Determine that modification of the Agreement is necessary, in which case the Parties shall meet to discuss and agree upon any proposed changes. Upon agreement on any proposed changes, U.S. EPA shall notify all Parties in writing.

B. In the event of significant revision or public comment, the notice procedures of Section 117 of CERCLA shall be followed and a responsiveness summary shall be published by U.S. EPA.

XXXVII. ENFORCEABILITY

A. The Parties agree that:

(1) Upon the effective date of this Agreement, any standard, regulation, condition, requirement or order which has become effective under CERCLA and is incorporated into this Agreement is enforceable by any person pursuant to Section 310 of CERCLA, and any violation of such standard, regulation, condition, requirement or order will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and

(2) All Timetables or Deadlines associated with the development, implementation and completion of the RI/FS shall be enforceable by any person pursuant to Section 310 of CERCLA, and any violation of such Timetables or Deadlines will be subject to civil penalties under Sections 310(c) and 109 of CERCLA;

(3) All terms and conditions of this Agreement which relate to Operable Units or final Remedial Actions, including corresponding Timetables, Deadlines or schedules, and all work associated with the Operable Units or final Remedial Actions, shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such terms or conditions will be subject to civil penalties under Sections 310(c) and 109 of CERCLA; and

(4) Any final resolution of a dispute pursuant to Part XV of this Agreement which establishes a term, condition, Timetable, Deadline or schedule shall be enforceable by any person pursuant to Section 310(c) of CERCLA, and any violation of such term, condition, Timetable, Deadline or schedule will be subject to civil penalties under Sections 310(c) and 109 of CERCLA.

B. Nothing in this Agreement shall be construed as authorizing any person to seek judicial review of any action or work where review is barred by any provision of CERCLA, including Section 113(h) of CERCLA.

C. Each Party shall have the right to enforce the terms of this Agreement.

XXXIII. TERMINATION

Except as provided in Part XXVI hereof (Five Year Review), this Agreement shall terminate upon the issuance by U.S. EPA of a Certification of Completion. U.S. EPA shall issue a Certification of Completion within ninety (90) days of the written request by DOE, which request shall be accompanied by information and data sufficient for U.S. EPA to prepare a Close Out Report demonstrating that all Remedial Actions have been completed and that any hazardous substances remaining at the Site

do not pose a substantial risk to public health, welfare or the environment, in accordance with OSWER Directive 9320.2-03A, "Procedures for Completion and Deletion of NPL Sites" and any subsequent revisions thereof. The Certificate shall state that, in the opinion of U.S. EPA, DOE has satisfied all of the terms of this Agreement in accordance with the requirements of CERCLA, the NCP and all related regulations and guidance, and applicable state laws, and that the work performed by DOE was consistent with the agreed upon Remedial Actions.

XXXIX. EFFECTIVE DATE

This Agreement is effective upon issuance of a notice to the Parties by U.S. EPA in accordance with Part XXXVI (Public Comment).

XL. FUNDING

It is the expectation of the Parties to this Agreement that all obligations of DOE arising under this Agreement will be fully funded. DOE shall take all necessary steps and make efforts to obtain timely funding to meet its obligations under this Agreement.

DOE is preparing an Environmental Restoration and Waste Management Five Year Plan (the "Five Year Plan") to identify, integrate and prioritize DOE's compliance and cleanup activities at all DOE nuclear facilities and sites. The Five Year Plan will assist in addressing environmental requirements at its facilities and sites and in developing and supporting its budget requests. DOE will update its Five Year Plan on an annual basis.

The terms of the Five Year Plan shall be consistent with the provisions of this Agreement, including all requirements and schedules contained herein; it is the intent of the Parties that DOE's Five Year Plan be drafted and updated in a manner that ensures that the provisions of this Agreement are incorporated into the DOE planning and budget process. Nothing in the Five Year Plan shall be construed to affect the provisions of this Agreement.

DOE is developing a national prioritization system for inclusion in its Five Year Plan. DOE's application of its national prioritization system may indicate to DOE that amendment or modification of the provisions and/or milestones established by this Agreement is appropriate. In that event, DOE may request, in writing, amendment or modification of this Agreement, including deadlines established herein. Where the Parties are unable to reach agreement on a requested amendment or modification, DOE may invoke the dispute resolution provisions of

this Agreement. Pending resolution of any such dispute, the provisions and deadlines in effect pursuant to this Agreement shall remain in effect and enforceable in accordance with the terms of this Agreement. Any amendment or modification of this Agreement will be incorporated, as appropriate, in the annual update to DOE's Five Year Plan.

In accordance with Section 120(e)(5)(B) of CERCLA, 42 U.S.C. §9620(e)(5)(B), DOE shall include in its annual report to Congress the specific cost estimates and budgetary proposal associated with the implementation of this Agreement.

Any requirement for the payment or obligation of funds, including stipulated penalties, by DOE established by the terms of this Agreement shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U.S.C. §1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

If appropriated funds are not available to fulfill DOE's obligations under this Agreement, U.S. EPA reserves the right to initiate any other action which would be appropriate absent this Agreement.

Nothing herein shall affect DOE's authority over its budget and funding level submissions.

The Parties recognize that EPA must possess adequate resources to meet its commitments established by this Agreement. So that activities to be performed pursuant to this Agreement may proceed, U.S. EPA agrees to reprogram existing FY90 resources to fulfill its FY90 commitments established by this Agreement. The Parties agree that during FY90, the Parties will explore any possible alternatives which may be available to ensure that adequate resources are available to EPA to fulfill its commitments established by this Agreement.

Notwithstanding any other provision of this Agreement, in the event that EPA determines that adequate resources are not available to meet any post-FY90 commitments established by this Agreement, EPA may terminate this Agreement by written notice to DOE.

EPA reserves any rights it may have to seek or obtain reimbursement of any funds expended by EPA at the Site to the extent authorized by CERCLA; nothing herein shall prejudice EPA's ability to exercise any right to reimbursement provided for by CERCLA.

XLI. FORCE MAJEURE

A Force Majeure shall mean any event arising from causes beyond the control of a Party that causes a delay in or prevents the performance of any obligation under this Agreement, including, but not limited to, acts of God; fire; war; insurrection; civil disturbance; explosion; unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance; adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation; restraint by court order or order of public authority; inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits or licenses due to action or inaction of any governmental agency or authority other than DOE; delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and insufficient availability of appropriated funds, if DOE shall have made timely request for such funds as part of the budgetary process as set forth in Part XL (Funding) of this Agreement. A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the Parties affected thereby. Force Majeure shall not include increased costs or expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

XLII. INTERFACING WITH OTHER MAYWOOD RI/FS PROJECTS

A. The Parties agree that the RI/FS activities shall be fully coordinated with the other independent RI/FS projects currently being conducted in the Maywood area. The coordination will include, but not be limited to:

(1) RI activities, e.g. characterization of contamination, ground water flow and contaminant migration;

(2) Removal Actions on areas covered by multiple RI/FS actions; and

(3) RD/RA activities or work elements for overlapping areas.

B. U.S. EPA agrees that it shall keep DOE, and any other person undertaking RI/FS activities, informed of all planned activities which may require coordination and shall facilitate the exchange of all relevant information among U.S. EPA, DOE and such other persons. U.S. EPA shall serve as the official arbiter of any conflicts which may arise in connection with planned field activities and may propose modifications to schedules in order to minimize conflicts and maximize benefits. Within ten (10) days of receipt of notice of a proposed change in a scheduled activity from any other party, U.S. EPA will advise all other persons of

such proposed change and identify any anticipated impacts on other RI/FS activities.

C. DOE agrees that it shall provide any and all appropriate information requested through the U.S. EPA to support any other RI/FS in the Maywood area and that they will notify the U.S. EPA when the possibility arises that a planned activity or work element may impact another Maywood area RI/FS project.

XLIII. EXECUTION OF DOCUMENT

Each undersigned representative of a Party certifies that he or she is fully authorized to enter into the terms and conditions of this Agreement and to legally bind such a Party to this Agreement.

IT IS SO AGREED:

July 23, 1990
Date

FOR THE U.S. DEPARTMENT OF ENERGY
Joe LaGrone
Manager
Oak Ridge Operations
U.S. Department of Energy

9/17/90
Date

FOR THE U.S. ENVIRONMENTAL PROTECTION AGENCY
Constantine Sidamon-Eristoff
Regional Administrator, Region II
U.S. Environmental Protection Agency

ATTACHMENT 1

DESCRIPTION OF PROPERTY

Beginning at the point of intersection of the southerly line of the New York Susquehanna and Western Railroad and the easterly line of the New Jersey State Highway Rt. 17 and running thence;

1. Southeasterly on a curve to the right having a radius of 2814.93' along the southerly line of the New York Susquehanna and Western Railroad an arc distance of 1187.50' to a point, thence;

2. S 41° 18' 03" W 248.75' to a point, thence;

3. N 48° 33' 57" W 579.16' to a point, thence;

4. S 45° 17' 45" W 244.92' to a point located on the easterly line of a 30' sanitary sewer easement running parallel to the Borough line between the Borough of Maywood and the Township of Rochelle Park as described in a deed recorded in the Bergen County Clerk's Office, book 4198, page 198, thence;

5. S 12° 49' 28" W 400.86' along said easement line to a point, thence;

6. S 79° 21' 00" W 209.85' to a point on the northeasterly line of the New Jersey State Highway Rt. 17, thence;

7. N 10° 39' 00" W 49.34' along said northeasterly line of Rt. 17 to a point of curvature, thence;

8. Still along said line of the New Jersey State Highway Rt. 17 northwesterly and then northeasterly on a curve to the right having a radius of 1870.08' an arc distance of 949.12' to a point of tangency, thence;

9. N 18° 25' 45" E 52.51' to the point or place of beginning.

Said parcel containing 11.71 acres.

ATTACHMENT 2

DELIVERABLES

The deliverables and number of copies of each deliverable to be furnished by DOE pursuant to this Agreement are as follows:

1. RI/FS WORKPLAN (10 copies): The Remedial Investigation/Feasibility Study (RI/FS) Workplan will describe the organization of the project, identify the appropriate administrative guidance, and outline the elements of work planned to complete the Remedial Investigation and Feasibility Study in accordance with CERCLA. The document will be consistent with CERCLA, the NCP, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA, Interim Final, October, 1988, any subsequent revisions thereof (where such revisions are provided to DOE prior to submittal of the subject deliverable), and any other applicable or relevant EPA guidance. The RI/FS workplan will include the Sampling and Analysis Plan.

2. QUALITY ASSURANCE PROJECT PLAN (10 copies): The Quality Assurance Project Plan (QAPP) will meet CERCLA guidance by defining data objectives, establishing sampling criteria, and incorporating a set of Standard Operational Procedures (SOPs) to meet those goals. The QAPP will be developed in accordance with the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA, Interim Final, October, 1988, any subsequent revisions thereof, (where such revisions are provided to DOE prior to submittal of the subject deliverable), the Compendium of Superfund Field Operations Methods, EPA, December, 1987, the Region II: CERCLA Quality Assurance Manual, EPA, March, 1988, and any other applicable or relevant EPA guidance.

3. COMMUNITY RELATIONS PLAN (10 copies): Following CERCLA guidance, the Community Relations Plan (CRP) provides a framework for presenting understandable and consistent information to interested parties during the RI, the FS, and Remedial Actions at the Site. The CRP documents the history of community involvement and community concerns regarding the Site, and provides an explanation of the Community Relations Program. It is meant to assist DOE in determining the concerns of the community while informing the community about all aspects of DOE's environmental restoration activities at the Site. Implementation of the CRP ensures that all concerned parties are involved in the CERCLA process in a meaningful manner. The CRP will be consistent with CERCLA, the NCP, the Community Relations in Superfund: A Handbook, Interim Version, EPA, June, 1988, any revisions thereof, (where such revisions are provided to DOE prior to

submittal of the subject deliverable), and any other applicable or relevant EPA guidance.

4. BASELINE PUBLIC HEALTH RISK ASSESSMENT (10 copies): Through the identification of potential pathways, appropriate solute transport modeling, and the use of available toxicological data, the Baseline Public Health Risk Assessment analyzes the potential risks to the public for the "no action" alternative. The document will be consistent with the Risk Assessment Guidance for Superfund, Interim Final, December, 1989, and any other applicable or relevant EPA guidance.

5. REMEDIAL INVESTIGATION (10 copies): This report will be consistent with CERCLA, the NCP, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA, Interim Final, October, 1988, any subsequent revisions thereof, (where such revisions are provided to DOE prior to submittal of the subject deliverable), the Compendium of Superfund Field Operations Methods, EPA, December, 1987, and any other applicable or relevant EPA guidance.

6. FEASIBILITY STUDY (10 copies): This report will be consistent with CERCLA, the NCP, the Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA, Interim Final, October, 1988, any subsequent revisions thereof (where such revisions are provided to DOE prior to submittal of the subject deliverable), and any other applicable or relevant EPA guidance.

7. FINAL RI/FS (10 copies): This document comprises the separate RI and FS reports after incorporation of all comments pursuant to Part XIV (Consultation) or resolution of disputes pursuant to Part XV (Dispute Resolution).

8. PROPOSED REMEDIAL ACTION PLAN (10 copies): This document draws from the information in the RI/FS and is designed to identify the preferred alternative and the rationale for its choice, for the purpose of public participation. The document is equivalent to the Proposed Plan as that term is used in CERCLA §117 and as such is subject to a formal public review period and subsequent public hearing. The document shall be consistent with CERCLA, the NCP, the draft Guidance on Preparing Superfund Decision Documents: The Proposed Plan and Record of Decision, EPA, Draft, March, 1988, any subsequent revisions thereof (where such revisions are provided to DOE prior to submittal of the subject deliverable), and any applicable or relevant EPA guidance.

9. RECORD OF DECISION (10 copies): The Record of Decision (ROD) will document the final remedy(ies) selected for the Site. The ROD must be based on the material contained within the Administrative Record. It will include a responsiveness summary

which addresses major comments, concerns, criticisms, or new data raised during the comment period on the Proposed Remedial Action Plan, including those that may have led to significant changes from the proposal(s) contained in the Proposed Remedial Action Plan. The ROD shall be consistent with CERCLA, the NCP, the draft Guidance on Preparing Superfund Decision Documents: The Proposed Plan and Record of Decision, EPA, Draft, March, 1988, any subsequent revisions thereof (where such revisions are provided to DOE prior to submittal of the subject deliverable), and any applicable or relevant EPA guidance, and shall describe, as stated in §121 of CERCLA, a remedy(ies) that:

A. Is protective of human health or welfare or the environment,

B. Attains all ARARs or provides the grounds for invoking one of the waivers CERCLA provides,

C. Is cost-effective, and

D. Utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practical.

10. REMEDIAL DESIGN (5 copies): The Remedial Design (RD) will provide detailed engineering design and specifications which will allow the Parties an opportunity to review and comprehend all aspects of the selected remedy(ies).

11. REMEDIAL ACTION IMPLEMENTATION PLAN (5 copies): This plan will establish a schedule of planned actions to implement the ROD. To the degree feasible it will document engineering decisions or the decision process, including the nature of on-going investigations, studies or tests. The plan will provide a detailed list of deliverables and Timetables and schedules with sufficient detail to enable comprehensive understanding of the upcoming implementation of the selected remedy(ies).

ATTACHMENT 3

SITE SCHEDULE

This Attachment will provide the official schedule agreed to by all Parties for the activities and deliverables governed by this Agreement. This schedule will be developed and attached to this Agreement within forty-five (45) days of the effective date of this Agreement as described in Part XVI (Project Schedules).

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278

Received ORO
22 APR 1991

APR 18 1991

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Lester K. Price, Director
Technical Services Division
Oak Ridge Operations Office
Department of Energy
P.O. Box B
Oak Ridge, Tennessee 37831

Re: Wayne and Maywood Superfund Sites
Interagency Agreements/Federal Facilities Agreements

Dear Mr. Price:

This is to advise you that, in accordance with Section XXXVI of each of the above Interagency Agreements, the Environmental Protection Agency (EPA) has reviewed all public comments received with respect to the agreements and has determined that such comments do not necessitate any change to these agreements. Accordingly, EPA is declaring the agreements to be effective in the form signed by the parties. In accordance with Section(s) XXXVI, these agreements will become effective upon your receipt of this notice.

Please note that, as required by the agreements, within forty five (45) days of said effective date, the Department of Energy (DOE) is to propose schedules for the submittal of the deliverables which are specified in Section XVI of the agreements. As you know, EPA has voiced its concern with the protracted schedules which DOE has proposed in the past, e.g. in the Wayne and Maywood draft workplans. However, EPA understands certain efficiencies to the internal DOE review process are under consideration, and we anticipate that the schedules which DOE will formally propose under the agreements will be greatly improved.

Enclosed is a copy of the Responsiveness Summary (to public comments) which has been developed jointly by DOE and EPA staff. We appreciate the cooperation of your office and anticipate that the Responsiveness Summary will be issued by EPA to the public shortly. We ask that DOE place copies of this letter declaring

the agreements effective, together with the agreements themselves and the Responsiveness Summary, on file at the information repositories which DOE is maintaining for these sites.

Sincerely yours,

for Kathleen C. Callahan, Director
Emergency & Remedial Response Division

Enclosure

cc: W. Seay, DOE
J. Wagoner, DOE
L. Miller, NJDEP

Interagency Agreements
between
United States Environmental Protection Agency
and
United States Department of Energy
relating to CERCLA response actions at the
Wayne and Maywood Interim Storage Sites

RESPONSIVENESS SUMMARY

The United States Environmental Protection Agency (EPA) and the United States Department of Energy (DOE) have reviewed the comments received from members of the public concerning the Interagency Agreements dated September 17, 1990 (the Agreements). This Responsiveness Summary has been prepared by EPA and DOE to address certain comments which, EPA and DOE agree, raise issues which should be clarified. In a number of cases, where an issue was raised by several comments, individual questions were combined and a collective response is presented. Among the comments received was a "cancer cluster" study which is currently being reviewed by the Agency for Toxic Substances and Disease Registry.

In accordance with the terms of the Agreements, EPA has determined that the comments do not require a modification of the Agreements and that the Agreements should be declared effective.

1. Compliance with CERCLA requirements.

Several comments questioned whether the Agreements complied with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended by the Superfund Amendments and Reauthorization Act (SARA). Section 120 of CERCLA defines the responsibility of Federal Agencies for Superfund cleanups. The statute provides that for any site on the National Priorities List (NPL) which is either owned, operated, or within the jurisdiction of a Federal Agency, EPA is to evaluate the agency's proposed remedial action. The statute requires EPA and the Federal Agency to enter into an Interagency Agreement following the completion of the Remedial Investigation/Feasibility Study (RI/FS). Such an agreement must provide for the selection and implementation of the Remedial Action and is required to include a schedule for remedial activities. However, since the remedial action must be selected on the basis of an RI/FS which is to comply with EPA's regulations, policies and guidance, it was determined that a more effective approach would be to involve EPA at an earlier point in the process and to utilize the agreement, as a mechanism for EPA to oversee the planning and implementation of the RI/FS as well.

Because these Agreements were negotiated at an earlier phase of the process, a schedule for the Remedial Action could not be

incorporated into the Agreements. Instead, a method for establishing the schedule was specified. Compliance with the schedule, once agreed to by EPA and DOE, becomes enforceable with financial penalties under the Agreements. DOE will submit a project schedule for EPA to review. If, following an exchange of comments, agreement cannot be reached, the matter will be settled through the Dispute Resolution process outlined in the Agreement. The Agreements provide for three levels of dispute resolution with the ultimate decision to be made by the EPA Administrator. Therefore, EPA retains the final authority to establish the project schedule. The Agreements commit DOE to seek Congressional appropriation for the tasks scheduled under the Agreements and only if Congress fails to provide the needed funding are schedules to be revised.

The Agreements include all of the other provisions mandated by Section 120 of CERCLA e.g. evaluation of alternatives, public involvement, selection of remedial action, implementation of action, including a commitment for all required operation and maintenance associated with the selected remedial action.

Under Section 120, RI/FS activities at Wayne and Maywood were to have been initiated by October 17, 1987. Because site characterization activities under DOE's Formerly Utilized Sites Remedial Action Program (FUSRAP) began at both Wayne and Maywood in 1984, DOE has satisfied that requirement. DOE notified EPA that this requirement of CERCLA was met prior to October 17, 1987.

2. Relationship of DOE's Five Year Plan to the Agreements.

The Agreements recognize that DOE has established a Five Year Plan for coordination of its environmental response obligations, but the Agreements specify that, subject to Congressional appropriations, the schedules established under the Agreement, and not the Five Year Plan are controlling. It should be clearly understood that assumptions used for planning and budgeting purposes in the development of the Five Year Plan are not adopted by the Agreements.

3. Utah Proposal

A number of comments asserted that DOE should promptly remove the contaminated soil to a facility in Utah. The Agreements establish a mechanism for joint decision making; they do not prejudge remedial alternatives. There are still outstanding questions concerning the scope of the Utah facility's permit to accept certain materials which need to be resolved. The parties recognize that the identification of a properly permitted off-site disposal facility is essential to implementation of a remedy and have agreed in Section XIII of the Agreements to explore disposal options during the pendency of the RI/FS.

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However, while the selection of a remedial action is covered by the Agreements, the siting or selection of a specific disposal facility is not typically covered in these or most other IAGs. As noted by one commentor, the siting of a permanent disposal facility involves considerations which extend beyond EPA's jurisdiction. Accordingly the matter is not addressed in the Agreement.

4. DOE's role and other responsible parties at the Sites

The cleanup of the Maywood and Wayne sites was assigned to DOE by Congress in late 1983 via the fiscal year (FY) 84 Energy and Water Appropriations Act. Under this Act, DOE was authorized to undertake a decontamination research and development project at both sites. The intent of this project was clarified in subsequent exchanges between DOE and Congress. On the basis of these discussions, DOE understood that Congress had specifically charged DOE with the cleanup of these sites because of its existing Formerly Utilized Sites Remedial Action Program (FUSRAP) which had been operational since 1974. Under this program, DOE had amassed considerable expertise related to the cleanup of radioactively contaminated soils. Congress used "research and development project" funding for the effort to provide DOE with the authority needed to address the sites.

When Congress assigned the Wayne and Maywood sites to DOE in late 1983, it indicated that remedial action on the privately owned properties should begin as soon as possible. This desire for prompt action, in conjunction with the fact that DOE had an operating clean up program, was the primary reason that DOE was tasked with site cleanup. DOE recognized the inherent problems with siting long term disposal facilities to deal with these wastes. Therefore, to meet the congressional imperative for prompt action, DOE started cleanup in 1984 and stored the collected radioactively contaminated soils in interim storage cells located on the properties where the waste originated. To facilitate this approach, DOE acquired the W. R. Grace property in Wayne, and a portion of the Maywood Chemical Works property in Maywood. This course of action has been supported via continued congressional appropriations. The acquisition of the two pieces of property by DOE does not relieve either former owner of their responsibilities under current environmental laws. DOE'S agreements with the private parties reflect its efforts to undertake a prompt response to contamination on residential and commercial properties where exposure was greatest. In the absence of a disposal facility, the interim storage option provided the best available approach. The Agreements acknowledge the function of interim storage, while recognizing its limitations. The Agreements with DOE do not preclude EPA enforcement action against other responsible parties.

5. Comparison with Montclair/West Orange/Glen Ridge

Several comments questioned why the excavation and off-site disposal of soil from the Montclair/West Orange/Glen Ridge sites (MWG) is progressing ahead of the Maywood cleanup when Maywood is ranked higher on the NPL than MWG. Comparing progress at the MWG sites with Maywood (or Wayne) is somewhat beyond the scope of the Agreements; however it should be noted that Maywood's higher ranking on the NPL was based on an evaluation of data available at the time of the sites' proposal and reflects risks which were known to be present prior to any action being undertaken. Substantial initial response action has been conducted, both at Wayne and Maywood to address contamination of a number of vicinity properties in order to significantly reduce exposure.

In comparing the status of cleanup activities at these sites, one of the most important differences between MWG and Maywood (or Wayne) is the nature of the radiological contamination. Unlike the radium contamination in MWG, the radiological contamination in Maywood (or Wayne) originated with thorium processing and the disposal is therefore potentially subject to regulation by the Nuclear Regulatory Commission. The ability of the facility in Utah, which is currently accepting the MWG soil, to accept the Maywood (or Wayne) material depends on the legal classification of the material. When the data from the Remedial Investigation are available, DOE, EPA, and NJDEP will complete the classification of the material and will subsequently evaluate all facilities authorized to accept the waste under their licenses.

6. DOE Cost Recovery

It was suggested that the recovery of DOE's cleanup costs from private parties who had operated the facility was mandated by a document which was produced by DOE's Oak Ridge Operations Office in September, 1980 (ORO 777). In addition to describing the status of FUSRAP, ORO 777, which was prepared prior to CERCLA, also outlined the process by which sites were considered for inclusion in the program, how the sites progressed through characterization and remedial action, and how they were released for use with no radiological restriction once they were cleaned up. Although the document discussed several issues pertinent to the continuation of FUSRAP circa 1980; it did not set policy for the program. This document is now considered by DOE to be dated, but has value as a reference since it contains historical descriptions of many of the current FUSRAP sites. The language in ORO-777 concerning DOE's ability to recover costs from viable former property owners remains accurate. However, to date, DOE has not exercised this authority.

7. Chemical Contamination

Questions were raised concerning the presence of chemical as well as radiological contamination at the sites which suggested that attention had focused on radiological contamination while ignoring issues related to chemical contamination. Although the sites were listed on the NPL on the basis of radiological contamination, there is no reason to believe that the Congressional decision to involve DOE at the sites was based on the absence of chemical contamination. Much of the effort to date has focused on radiological contamination; however the planned remedial investigation will include an evaluation of the nature and extent of chemical contamination as well. Both radiological and chemical contamination will be considered in selecting a remedial action for the sites although responsibility for some chemical contamination may rest with parties other than DOE.

8. RI Field Work

A number of comments questioned why RI field activities had begun prior to receipt of public comments on the Workplan. In effort to keep the RI/FS process moving, DOE elected to proceed with RI field work prior to the public review of the work plans. Prior to commencing field work, DOE committed to EPA and NJDEP to perform additional field work if, as a result of the public review, additional site investigation was determined to be necessary. EPA and NJDEP approved DOE's approach based on that commitment prior to the actual start of DOE's field work.

9. Stepan Company RI/FS

Questions were raised concerning the progress of the RI/FS to evaluate chemical contamination being undertaken by the Stepan Company. Issues relating to the work plan are being resolved and it expected that field work will begin in the Spring/Summer of 1991.