APPENDIX A

NOTICE OF INTENT, ENVIRONMENTAL SYNOPSIS, AND PUBLIC ISSUES

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Appendix A contains a copy of the Notice of Intent to prepare this Environmental Impact Statement, a copy of the Environmental Impact Statement, a copy of the Environmental Synopsis which was prepared as part of the selection process for Foster Wheeler and the preferred alternative of low-temperature drying proposed by Foster Wheeler, and a summary of issues raised during the public scoping process for this Environmental Impact Statement.

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APPENDIX A.1

NOTICE OF INTENT

format (*e.g.*, Braille, large print, audiotape, or computer diskette) on request to the contact person listed in the preceding paragraph.

Individuals with disabilities may obtain a copy of the application package in an alternate format, also, by contacting that person. However, the Department is not able to reproduce in an alternate format the standard forms included in the application package.

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Dated: January 22, 1999.

Gerald N. Tirozzi,

Assistant Secretary for Elementary and Secondary Education.

[FR Doc. 99–1866 Filed 1–26–99; 8:45 am]

BILLING CODE 4000–01–M

DEPARTMENT OF ENERGY

Notice of Intent To Prepare an Environmental Impact Statement for a Transuranic Waste Treatment Facility at Oak Ridge, TN

AGENCY: Department of Energy.

ACTION: Notice of Intent.

SUMMARY: The U. S. Department of Energy (DOE) intends to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) and its implementing regulations on the proposed construction, operation, and decontamination/decommissioning of a Transuranic (TRU) Waste Treatment Facility at Oak Ridge, Tennessee. The four types of TRU waste that would be treated at the facility are remote-handled (RH)–TRU waste sludge, low-level radioactive waste supernatant associated with the sludge, contact-handled (CH)–TRU/alpha low-level radioactive waste solids, and RH–TRU/alpha low-level radioactive waste solids. Because much of the waste displays Resource Conservation and Recovery Act (RCRA) characteristics, the proposed facility would be permitted under RCRA. All the waste DOE proposes to treat currently is stored at Oak Ridge National Laboratory (ORNL) in Oak Ridge, Tennessee. The proposed site for the treatment facility is adjacent to the Melton Valley Storage Tanks, where the waste sludge and supernatant are being stored.

DOE invites the public, organizations, and agencies to present oral or written comments concerning the scope of the EIS, including the issues the EIS should address and the alternatives it would analyze.

DATES: The public scoping period begins on the date of this publication and continues until February 26, 1999. Written comments submitted by mail should be postmarked by the closing date to ensure consideration. Comments mailed after that date will be considered to the extent practicable.

DOE will conduct public scoping meetings to assist in defining the appropriate scope of the EIS and to identify significant environmental issues to be addressed. These meetings will be held at the following time(s) and location:

February 11, 1999, American Museum of Science and Energy, 300 South Tulane Avenue, Oak Ridge, Tennessee 37830; Time: 6:30–9:30 p.m.

February 16, 1999, American Museum of Science and Energy, 300 South Tulane Avenue, Oak Ridge, Tennessee 37830; Time: 6:30–9:30 p.m.

ADDRESSES: Please direct comments or suggestions on the scope of the EIS, requests to speak at the public scoping meetings, requests for special accommodations to enable participation at scoping meetings (e.g., interpreter for the hearing-impaired), and questions concerning the project to: Gary L. Riner, U.S. Department of Energy, Oak Ridge Operations Office, P.O. Box 2001, Oak Ridge, Tennessee 37831, telephone: (423) 241–3498, facsimile: (423) 576–5333, or e-mail rinerg@oro.doe.gov.

For general information on the DOE NEPA process, please contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Assistance, EH–42, U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, D.C. 20585–0119, telephone: (202) 586–4600 or leave a message at (800) 472–2756.

SUPPLEMENTARY INFORMATION:

Background

Research and development activities supporting national defense and energy initiatives have been performed at ORNL since its construction in eastern Tennessee in 1943, generating radioactive and hazardous waste legacies that now pose environmental concerns. Meeting the cleanup challenges associated with legacy TRU waste is a high priority for the DOE, Tennessee Department of Environment and Conservation (TDEC), and stakeholders. The TRU waste treatment project at the ORNL will be an important component of DOE cleanup efforts at the site.

TRU waste is radioactive waste that is not classified as high-level radioactive waste and that contains more than 100 nanocuries per gram of alpha-emitting transuranic (atomic numbers greater than 92) isotopes with half-lives greater than 20 years. Alpha low-level radioactive waste contains alpha-emitting transuranic isotopes with half-lives greater than 20 years at concentrations less than 100 nanocuries per gram.

The TRU waste to be treated also contains beta- and gamma-emitting isotopes in addition to alpha-emitting isotopes, which result in its classification as either CH (surface dose rate of 200 mrem/hr or less) or RH (surface dose rate of greater than 200 mrem/hr).

Solid waste at ORNL is a heterogeneous mixture consisting of paper, glass, rubber, cloth, plastic, and metal from glove boxes, fuel processing, hot cells, and reactors. Solid waste is currently packaged in metal boxes, drums and concrete overpacks, and stored in RCRA permitted facilities. Most of the solid waste containers do not meet current Department of Transportation regulations and would require repackaging prior to shipment.

Based on generator records, the solid waste has been classified as either TRU or alpha low-level radioactive waste. However, because the nature of the solid waste can only be confirmed after retrieval and characterization, solid wastes addressed in this Notice of Intent are characterized as ''TRU/alpha low-level radioactive waste'' to note the current uncertainty. The solid waste may contain RCRA characteristic metals, but generator records do not indicate the presence of any RCRA listed constituents. The supernatant, the liquid layer covering the sludge in the tanks, is considered a low-level waste but is not considered hazardous under the RCRA definitions.

Approximately 62 percent of the legacy TRU wastes are currently stored in 50 year-old tanks. The remaining 38 percent of the legacy TRU wastes are currently stored in subsurface trenches, vaults, and metal buildings.

Approximate quantities of the four primary waste streams needing

treatment are: 900 m^3 of RH–TRU sludge, located in the tanks; 1600 m^3 of low-level supernatant, located in tanks; 550 m^3 of RH–TRU waste/alpha low-level radioactive waste solids in vaults and trenches; and 1,000 m^3 of CH–TRU waste/alpha low-level radioactive waste solids in metal buildings.

Purpose and Need for Agency Action

The DOE needs to ensure the safe and efficient retrieval, processing, certification, and disposition of legacy TRU waste at ORNL. There are legal mandates for DOE to address TRU waste management needs. DOE has been directed by the TDEC and the U. S. Environmental Protection Agency (EPA) to address environmental issues including disposal of its legacy TRU waste. DOE is under a Commissioner's Order issued by the State of Tennessee (September 1995) to implement the Site Treatment Plan, under the Federal Facility Compliance Act, that mandates specific requirements for the processing and disposal of ORNL's TRU waste. The primary milestone in the Commissioner's Order is that DOE begin processing TRU sludge in order to make the first shipment to the Waste Isolation Pilot Plant (WIPP) (a DOE transuranic waste disposal facility) in New Mexico by January 2003. In addition, two Records of Decision issued in connection with the Federal Facility Agreement among EPA, TDEC, and DOE, under the Comprehensive Environmental Response, Compensation, and Liability Act, mandate that the waste from the Gunite and Associated Tanks Project (in Bethel Valley) and the Old Hydrofracture Facility Tanks Project (in Melton Valley) be processed and disposed of along with the TRU waste from the Melton Valley Storage Tanks.

Waste retrieval operations are currently underway to prepare ORNL TRU waste storage tanks for closure, and the waste removed from the Bethel Valley tanks will be consolidated in the Melton Valley Storage Tanks before processing. After processing, TRU waste must be certified for shipment to and disposal at WIPP, and any low-level radioactive waste resulting from TRU waste processing must be certified for shipment to and disposal at the DOE site(s) to be selected in a Record of Decision for the Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste (WM PEIS) (DOE/EIS–0200–F, May 1997). No facilities for processing TRU/alpha low level radioactive waste exist at the Oak Ridge Reservation.

Proposed Action and Alternatives

Proposed Action

Under the proposed action, a waste treatment facility for the ORNL legacy TRU waste would be constructed, operated, and decontaminated/decommissioned under a contract awarded to the Foster Wheeler Environmental Corporation. Under the contract, the action would be carried out in four phases: Phase I, Licensing and Permitting (currently in process, includes DOE's NEPA analysis and contractor design activities); Phase II, Construction and Pre-Operational Testing; Phase III, Treatment and Packaging; Phase IV, Decontamination and Decommissioning. If the current NEPA review results in the selection of an alternative other than the proposed action, Phase II (Construction and Pre-Operational Testing) of the contract would not be executed. Waste volume reduction would be a major component of the processing in order to minimize waste generation and costs and to conserve resources. After processing, the waste would be certified for disposal as either low-level radioactive, alpha low-level radioactive, or TRU waste, as discussed above.

All activities associated with the proposed action must be performed safely and in compliance with applicable Federal and state regulatory requirements. Foster Wheeler Environmental Corporation would be responsible for achieving compliance with all applicable environmental, safety and health laws and regulations, and regulatory agencies would be responsible for monitoring the Corporation's compliance. The State of Tennessee and EPA would regulate the Corporation according to permits under their purview. DOE would regulate occupational safety and health and nuclear safety according to specific environment, safety and health requirements.

DOE would lease the Melton Valley Storage Tanks, subject to notification of EPA and the State of Tennessee, and an adjacent land area totaling approximately 10 acres to Foster Wheeler Environmental Corporation for construction of the facility. The Melton Valley Storage Tanks are separate from ORNL's main plant area. The proposed treatment facility would be fenced, with controlled access to Tennessee State Highway 95.

Foster Wheeler Environmental Corporation has proposed a process of evaporating and drying the sludges and supernatant that is flexible enough to address a wide range of waste properties. The low temperature treatment would reduce waste volume, generate additional waste as a result of treatment, and meet specified waste acceptance criteria. To ensure that the waste would meet RCRA Land Disposal Restrictions (LDR) standards, additives that reduce the solubility of the RCRA metals in the waste would be added to form stable compounds. The dried stabilized sludge would pass the Toxic Characteristic Leaching Procedures and no longer exhibit a RCRA characteristic. The relatively inexpensive stabilization process could be easily performed during the overall treatment process and would result in waste that meets the LDR treatments standards and could be stored on site, if necessary, pending disposal. The supernatant would be dried for final disposal at an approved DOE low-level radioactive waste disposal site consistent with a WM PEIS Record of Decision yet to be issued for low-level radioactive waste. Segregation of the supernatant from the sludge would result in significant life-cycle cost avoidance when compared to disposal at WIPP.

The proposed action includes no treatment for the bulk of the solid waste that is not regulated under RCRA other than repackaging with some compaction to meet the 50% volume reduction required by the contract. The solid waste would be better characterized during the repackaging effort to achieve final waste form certification before disposal. RCRA characteristic items would be isolated for macroencapsulation or other processing techniques to comply with applicable RCRA LDRs. This would ensure that alpha low-level radioactive waste would meet non-RCRA low-level waste disposal requirements and comply with RCRA LDRs if interim storage is required on site.

Alternatives

DOE will consider alternatives to the proposed action, such as shipment of TRU wastes to other DOE sites for processing, alternative technologies for sludge waste, and no action. Under a shipment alternative, DOE would ship CH-TRU/alpha low-level and RH–TRU/alpha low-level radioactive waste solids to other DOE site(s) for processing. Most of the solid waste containers do not meet current Department of Transportation regulations and would require repackaging prior to shipment. After processing, the waste would be certified for disposal as either low-level radioactive, alpha low-level radioactive, or TRU waste and transported to appropriate disposal facilities. Under a treatment alternative, DOE would process RH–TRU sludge waste and the

low-level radioactive waste supernatant associated with the sludge by using vitrification or grouting technology. This alternative would include no treatment for the bulk of the solid waste that is not regulated under RCRA other than repackaging with some compaction. The solid waste would be better characterized during the repackaging effort to achieve final waste form certification before disposal. RCRA characteristic items would be isolated for macroencapsulation or other processing techniques to comply with applicable RCRA LDRs. This would ensure that alpha low-level radioactive waste would meet non-RCRA low-level waste disposal requirements and comply with RCRA LDRs if interim storage is required on site.

As required by the Council on Environmental Quality's (CEQ's) Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500–1508), a no action alternative will be evaluated. Under this alternative, DOE would continue to store the TRU waste in tanks, subsurface trenches, vaults, and metal buildings, as discussed in the Background section, above.

Preliminary Environmental Analysis

DOE incorporated environmental information very early in the project planning. Prior to selection of the contractor, DOE held two public meetings with stakeholders, had ongoing discussions with regulators, prepared a characterization report for the site of the proposed action, and sponsored an independent study of treatment technologies and contracting alternatives known as the Parallax study (ORNL/M–4693, Feasibility Study for Processing ORNL TRU Waste in Existing and Modified Facilities, September 15, 1995) (available in the public reading rooms listed below). Bidders were required to submit environmental data, and DOE prepared an environmental critique (under 10 CFR 1021.216) for consideration in the procurement process. A synopsis of this critique has been filed with the EPA and made available to the public.

NEPA Process

The EIS for the proposed project will be prepared according to the National Environmental Policy Act of 1969, the CEQ NEPA regulations, and DOE's NEPA Implementing Procedures (10 CFR Part 1021).

Through the NEPA process begun with this Notice of Intent, DOE will continue to analyze environmental impacts and evaluate alternative actions while Phase I of the awarded contract is underway. The EIS for the proposed TRU waste treatment will incorporate pertinent analyses performed as part of the DOE's WIPP Disposal Phase Supplemental Environmental Impact Statement (DOE/EIS–0026–S–2, September, 1997) and the WM PEIS. Processing the ORNL TRU waste in Oak Ridge is consistent with the Records of Decision issued for management of the transuranic waste for the aforementioned Environmental Impact Statements (63 FR 3624 and 3629, respectively, January 23, 1998). The disposal of low-level radioactive waste included in this contract will be consistent with the WM PEIS ROD for low-level waste that is yet to be issued.

The contract allows DOE and Foster Wheeler Environmental Corporation to identify during Phase I other potential waste streams for processing at this facility. Any such waste streams would be considered in this EIS and subject to further NEPA review, as appropriate.

Preliminary Identification of EIS Issues

DOE intends to address the following issues when assessing the potential environmental impacts of the alternatives in this EIS. DOE invites comment on these and any other issues that should be addressed in the EIS.

—Potential effects on air, soil, and water quality from normal operations and reasonably foreseeable accidents.
—Potential effects on the public, including minority and low-income populations, and workers from exposure to radiological and hazardous materials from normal operations and reasonably foreseeable accidents.
—Compliance with applicable Federal, state, and local requirements and agreements.
—Pollution prevention, waste minimization, and energy and water use reduction technologies to eliminate or reduce use of energy, water, and hazardous substances and to minimize environmental impacts.
—Potential socioeconomic impacts, including potential impacts associated with the workforce needed for operations.
—Potential cumulative environmental impacts of past, present, and reasonably foreseeable future operations, including impacts from using the proposed facility for potential waste streams other than those currently being proposed.
—Potential irreversible and irretrievable commitment or resources.

Related NEPA Reviews

Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste (DOE/EIS–0200–F, May 1997); Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement (DOE/EIS–0026–S–2, September 1997); and Advanced Mixed Waste Treatment Project at the Idaho National Engineering and Environmental Laboratory Environmental Impact Statement (DOE/EIS–0290–F, to be issued January 1999).

Scoping Meetings

The purpose of this NOI is to encourage early public involvement in the EIS process and to solicit public comments on the proposed scope of the EIS, including the issues and alternatives it would analyze. DOE plans to hold public scoping meetings in Oak Ridge to solicit both oral and written comments from interested parties. See **DATES** and **ADDRESSES**, above, for the times and locations of these meetings.

DOE will designate a presiding officer for the scoping meetings. The scoping meetings will not be conducted as evidentiary hearings, and there will be no questioning of the commentors.

However, DOE personnel may ask for clarification of statements to ensure that they fully understand the comments and suggestions. The presiding officer will establish the order of speakers. At the opening of each meeting, the presiding officer will announce any additional procedures necessary for the conduct of the meetings. If necessary to ensure that all persons wishing to make a presentation are given the opportunity, a five-minute limit may be applied for each speaker, except for public officials and representatives of groups who would be allotted ten minutes each. Comment cards will also be available for those who would prefer to submit written comments.

DOE will make transcripts of the scoping meetings and other environmental and project-related materials available for public review in the following reading rooms:

U.S. Department of Energy, Freedom of Information Public Reading Room, Forrestal Building, Room 1 E–190, 1000 Independence Avenue, SW, Washington, DC 20585, Telephone: (202) 586–3142

U.S. Department of Energy, Oak Ridge Operations Office, 200 Administration Road, Room G–217, Oak Ridge, Tennessee 37831, Telephone: (423) 241–4780.

EIS Schedule

The draft EIS is scheduled to be published by August 1999. A 45-day comment period on the draft EIS is planned, and public hearings to receive comments will be held approximately one month after issuance. Availability of the draft EIS, the dates of the public comment period, and information about the public hearings will be announced in the **Federal Register** and in the local news media.

The final EIS, which will incorporate public comments received on the draft EIS, is scheduled for January 2000. A Record of Decision would be issued no sooner than 30 days after a notice of availability of the final EIS is published in the **Federal Register**.

Signed in Washington, DC, this 21st day of January 1999.

Peter N. Brush,

Principal Deputy Assistant Secretary Environment, Safety and Health.

[FR Doc. 99–1856 Filed 1–26–99; 8:45 am]

BILLING CODE 6450–01–P

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP99–156–000]

Columbia Gas Transmission Corporation; Notice of Request Under Blanket Authorization

January 21, 1999.

Take notice that on January 14, 1999, Columbia Gas Transmission Corporation (Columbia), 12801 Fair Lakes Parkway, Fairfax, Virginia 22030–1046, filed in Docket No. CP99–156–000 a request pursuant to Sections 157.205 and 157.216, of the Commission's Regulations under the Natural Gas Act (18 CFR 157.205, 157.216) for authorization to abandon approximately 0.05 miles of 4- and 8-inch pipeline and a point of delivery under Columbia's blanket certificate issued in Docket No. CP83–76–000 pursuant to Section 7 of the Natural Gas Act, all as more fully set forth in the request that is on file with the Commission and open to public inspection.

Columbia requests authorization to abandon approximately 0.05 miles of 4- and 8-inch pipeline and a point of delivery to Columbia Gas of Pennsylvania, Inc. (CPA), all located in Elk County, Pennsylvania. Columbia states that the pipeline will be abandoned in place and all above ground facilities will be removed. CPA states that it no longer requires service from this point of delivery.

Any person or the Commission's staff may, within 45 days after issuance of the instant notice by the Commission, file pursuant to Rule 214 of the Commission's Procedural Rules (18 CFR 385.214) a motion to intervene or notice of intervention and pursuant to Section 157.205 of the Regulations under the Natural Gas Act (18 CFR 157.205) a protest to the request. If no protest is filed within the time allowed therefor, the proposed activity shall be deemed to be authorized effective the day after the time allowed for filing a protest. If a protest is filed and not withdrawn within 30 days after the time allowed for filing a protest, the instant request shall be treated as an application for authorization pursuant to Section 7 of the Natural Gas Act.

David P. Boergers,

Secretary.

[FR Doc. 99–1819 Filed 1–26–99; 8:45 am]

BILLING CODE 6717–01–M

DEPARTMENT OF ENERGY

Federal Energy Regulatory Commission

[Docket No. CP99–155–00]

Columbia Gas Transmission Corporation; Notice of Application

January 21, 1999.

Take notice that on January 13, 1999, Columbia Gas Transmission Corporation (Columbia), filed in Docket No. CP99–155–000 an application pursuant to Section 7(b) of the Natural Gas Act for permission and approval to abandon natural gas service currently provided by Columbia to Orange and Rockland Utilities, Inc. (O&R) and UGI Corporation (UGI) under its Rate Schedule X–124, and to abandon the operation of two segments of pipeline owned by O&R and UGI, all as more fully set forth in the application on file with the Commission and open to public inspection.

Specifically, Columbia proposes to abandon: (i) the transportation service currently provided under its Rate Schedule X–124 and, (ii) the certificate authority to operate the facilities located in Steuben and Allegany Counties, New York, that were constructed to provide the service proposed to be abandoned. Columbia states that its Rate Schedule X–124 provided for firm transportation service by Columbia to O&R for 4,600 Dth/d and to UGI Utilities, Inc., the successor in interest to UGI, for 22,400 Dth/d. Columbia states that the service, facilities and Columbia's authorization to lease and operate the facilities were approved by the Commission on June 28, 1984 in Docket No. CP83–478. Columbia also states that as it does not own the subject facilities, no facilities will be physically abandoned or removed by Columbia as a result of the proposed abandonment.

Any person desiring to be heard or to make any protest with reference to said application should on or before February 11, 1999, file with the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426, a motion to intervene or a protest in accordance with the requirements of the Commission's Rules of Practice and Procedure (18 CFR 385.214 or 385.211) and the Regulations under the Natural Gas Act (18 CFR 157.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a motion to intervene in accordance with the Commission's Rules.

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by Sections 7 and 15 of the Natural Gas Act and the Commission's Rules of Practice and Procedure, a hearing will be held without further notice before the Commission or its designee on this application if no motion to intervene is filed within the time required herein, if the Commission on its own review of the matter finds that permission and approval for the proposed abandonment are required by the public convenience and necessity. If a motion for leave to intervene is timely filed, or if the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for Columbia to appear or be represented at the hearing.

David P. Boergers,

Secretary.

[FR Doc. 99–1820 Filed 1–26–99; 8:45 am]

BILLING CODE 6717–01–M

APPENDIX A.2

DOE ENVIRONMENTAL SYNOPSIS
FOR THE
TRANSURANIC WASTE TREATMENT PROJECT
JANUARY 1999

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U.S. Department of Energy
Oak Ridge Operations
Environmental Management Division

ENVIRONMENTAL SYNOPSIS FOR THE TRANSURANIC WASTE TREATMENT PROJECT AT THE OAK RIDGE RESERVATION

January 1999

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Abbreviations and Acronyms

CAA	Clean Air Act
CFR	Code of Federal Regulations
CH	Contact Handled
DOE	Department of Energy
DOT	Department of Transportation
EIS	Environmental Impact Statement
FR	Federal Register
gpm	gallons per minute
kVA	thousand volt amps
m^3	cubic meters
MVST	Melton Valley Storage Tanks
NEPA	National Environmental Policy Act
NPDES	National Pollution Discharge Elimination System
NTS	Nevada Test Site
ORNL	Oak Ridge National Laboratory
ORO	Oak Ridge Operations
ORR	Oak Ridge Reservation
RCRA	Resource Conservation and Recovery Act
RFP	Request for Proposal
RH	Remote Handled
ROD	Record of Decision
SEIS	Supplemental Environmental Impact Statement
SWTF	Solid Waste Treatment Facility
TRU	Transuranic
TWTF	Tank Waste Treatment Facility
WAC	Waste Acceptance Criteria
WIPP	Waste Isolation Pilot Plant
WM PEIS	Waste Management Programmatic Environmental Impact Statement

U.S. Department of Energy - Oak Ridge Operations Office

ENVIRONMENTAL SYNOPSIS FOR THE TRANSURANIC WASTE TREATMENT PROJECT AT THE OAK RIDGE RESERVATION

1. INTRODUCTION

The U.S. Department of Energy (DOE), as a Federal agency, must comply with the National Environmental Policy Act of 1969 (NEPA) by considering potential environmental issues associated with its actions prior to undertaking the actions. DOE regulations for NEPA implementation provide directions specific to procurement actions that DOE may undertake or fund [10 *Code of Federal Regulation* (CFR) Section 1021.216] before completing the NEPA process. Per these regulations, an environmental critique shall be prepared to support the procurement selection process. A synopsis of the environmental critique shall then be published to inform the public of the findings of the critique while protecting confidential information regarding proposals from offerors.

This document is a synopsis of the environmental critique prepared to identify and evaluate potential environmental impacts associated with the submitted proposals to treat and package transuranic (TRU) mixed wastes at Oak Ridge National Laboratory (ORNL) and ship the treated waste to an approved disposal site. These wastes would be processed as part of the TRU Waste Treatment Project, which would be located in Melton Valley at ORNL in eastern Tennessee. A contract was awarded by the DOE Oak Ridge Operations (ORO) in August of 1998 for construction and operation of a facility to treat the TRU waste.

TRU waste is radioactive waste that is not classified as high-level radioactive waste and that contains more than 100 nanocuries per gram of alpha-emitting transuranic (atomic numbers greater than 92) isotopes with half-lives greater than 20 years. Alpha low-level radioactive waste contains alpha-emitting transuranic isotopes with half-lives greater than 20 years at concentrations less than 100 nanocuries per gram.

The TRU waste to be treated also contains beta- and gamma- emitting isotopes in addition to alpha-emitting isotopes, which result in its classification as either contact-handled (CH) (surface dose rate of 200 mrem/hr or less) or remote-handled (RH) (surface dose rate of greater than 200 mrem/hr).

Solid waste at ORNL is a heterogeneous mixture consisting of paper, glass, rubber, cloth, plastic, and metal from glove boxes, fuel processing, hot cells, and reactors. Solid waste is currently packaged in metal boxes, drums and concrete overpacks, and stored in Resource Conservation and Recovery Act (RCRA) permitted facilities. Most of the solid waste containers do not meet current Department of Transportation regulations and would require repackaging prior to shipment.

Based on generator records, the solid waste has been classified as either TRU or alpha low-level radioactive waste. However, because the nature of the solid waste can only be confirmed after retrieval and characterization, solid wastes addressed in this synopsis are characterized as "TRU/alpha low-level radioactive waste" to note the current uncertainty. The solid waste may contain RCRA characteristic metals, but generator records do not indicate the presence of any RCRA listed constituents. The supernatant, the liquid layer covering the sludge in the tanks, is considered a low-level waste but is not considered hazardous under the RCRA definitions.

Approximately 62 percent of the legacy TRU wastes are currently stored in 50 year-old tanks. The remaining 38 percent of the legacy TRU wastes are currently stored in subsurface trenches, vaults, and metal buildings.

Approximate quantities of the four primary waste streams needing treatment are: 900 m^3 of RH-TRU sludge, located in the tanks; 1600 m^3 of low-level supernatant, located in tanks; 550 m^3 of RH-TRU waste/alpha low-level radioactive waste solids in vaults and trenches; and 1,000 m^3 of CH-TRU waste/alpha low-level radioactive waste solids in metal buildings.

For the near term, the waste is safely contained and stored. However, it is essential to accurately characterize, process and repackage the waste so that it can be transported off the Oak Ridge Reservation (ORR) to a final disposal site. The processed waste must meet the applicable disposal site waste acceptance criteria (WAC) for the disposal facility and the Department of Transportation (DOT) requirements.

DOE ORO is currently operating under a Site Treatment Plan with set goals and milestones for processing legacy mixed waste that was mandated by the State of Tennessee in 1995. There are no TRU mixed waste disposal facilities currently operating in the United States. The Department decided to dispose of TRU waste at the Waste Isolation Pilot Plant (WIPP) (a DOE transuranic waste disposal facility located in southeastern New Mexico), in the Record of Decision (ROD) for the WIPP Supplemental Environmental Impact Statement (SEIS) (63 *Federal Register* (FR) 3624, January 23, 1998).

An independent preliminary study, known as the Parallax study (ORNL/M-4693, Feasibility Study for Processing ORNL TRU Waste in Existing and Modified Facilities, September 15, 1995) was conducted to look at viable alternatives for the safe and cost-effective processing of TRU waste. This study determined that waste processing by the private sector was a viable option that could provide significant savings compared to traditional cost plus contracting approach. The TRU Waste Treatment Project procurement at Oak Ridge will secure TRU waste processing by a private sector contractor.

Construction and operation of a TRU waste treatment facility constitutes a "major federal action" and appears to fall within those classes of actions normally requiring an Environment Impact Statement (EIS). Therefore, DOE will prepare an EIS for the project. Two DOE NEPA documents will be used for information on baseline data for the project-specific EIS, the *Final Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste* (DOE/EIS-0200-F, May 1997) and the *Waste Isolation Pilot Plant Disposal Phase Supplemental Environmental Impact Statement* (DOE/EIS-0026-S-2, September 1997).

2. ASSESSMENT METHODS

In accordance with DOE's NEPA regulations, the request for proposal (RFP) required that each offeror provide environmental data and analyses, as available, for each proposal submitted. The RFP listed the type of necessary environmental data, as well as the level of detail that was required for the preparation of a critique (Section L.f. of the RFP). The RFP also required each offeror to clearly identify all site, process, or system information that was not specified at that time of the proposal. This information was submitted as a separate package.

Much of the information submitted and presented by the offerors was preliminary as it was based on anticipated events, such as approval of a permit or planned activities, and successful completion of process setup. Following contract award, DOE will monitor project progress and address any deviation from the proposal information.

Only the environmental data and analyses submitted by the two offerors determined to be in the competitive range were used to prepare the critique. The information in the critique provides the basis for this synopsis. The offerors evaluated in this synopsis are designated as Offeror #1 and Offeror #2 to protect business confidential information. Evaluations for this procurement considered the reasonably foreseeable environmental impacts that could arise from each offeror's proposed approach to waste treatment, repackaging, and shipment to a designated waste disposal site (see Section 4). The evaluations also identified aspects of each offeror's proposed activities that were not adequately described for purposes of analyzing possible environmental impacts at the time. The evaluations identified differences between the offerors' proposed approaches and impacts, and where the offerors provided insufficient data.

Additional information for the evaluation included the data submitted in the proposals and the revised "Best and Final" offers. Various documents written by DOE and ORNL that describe the overall environment in the Melton Valley were also used. The environmental impacts of TRU waste at ORR will be further analyzed in an EIS as discussed in Section 1.

3. DESCRIPTION OF THE PROPOSALS

The proposals submitted by the offerors are not available for review by the public as they contain confidential business information. The descriptions of each proposal in this synopsis does not contain business, confidential, trade secrets, or other information that can not be disclosed pursuant to the competitive procure process.

The proposals include information on the personnel, facilities, equipment, materials, supplies, vehicles, other services required for the treatment, packaging of the TRU wastes at ORNL, and the shipment of the wastes from ORNL to a designated disposal site.

Each offeror proposed to use treatment processes that include:

- physical processes for solid waste volume reduction,
- low-temperature drying and chemical immobilization of sludge and supernate, and
- stabilization and encapsulation techniques for RCRA material.

These processes would produce a treated waste (TRU, TRU mixed, and LLW) that complies with DOT requirements and, for purposes of submitting a proposal, would meet the WAC for TRU and LLW necessary for disposal at WIPP and NTS, respectively.

Each offeror proposed using low-temperature thermal treatment for the tank wastes with minor variations. Offeror #1 would treat the tank waste as a single waste stream, use sulfide additives to immobilize RCRA metals in the tank wastes, and use macroencapsulation for the solid wastes. Offeror #2 would use separate treatment lines for the tank supernate and sludge, and use sulfide additives only on the sludge portion of the tank wastes to immobilize RCRA metals. A wider array of potential technologies may be used for the solid wastes.

Each offeror suggested they would use the RCRA "Debris Rule" to minimize waste volumes triggering waste-specific treatment requirements under RCRA. In short, the rule allows some waste materials that are contaminated with more than one hazardous constituent to be categorized as "debris" thereby not triggering some treatment requirements under the RCRA land disposal restrictions at 40 CFR Part 268. Offeror #1 would use the rule to facilitate streamlining treatment of solids, using only macroencapsulation. Offeror #2 was less clear how the rule would influence the proposed treatment process.

The MVST consist of eight 50,000 gallon tanks located in a concrete underground vault. Since their construction, these tanks have received filtrate from the ORNL liquid low-level waste

system. Each offeror proposed constructing the waste treatment facility west and adjacent to the MVST in Melton Valley, thus the environmental baseline for the analyses of possible significant environmental impacts due to the proposed site location was identical for each offeror. However, the location of the proposed waste treatment facility varied slightly in relation to its environmental impacts associated with facility construction and the acreage (3 acres versus 3.5 acres) each offeror expected to affect. Offeror #1 did not propose to alter the topography of the site. Offeror #2 proposed to cut into the hillside to construct a two-lane ramp to the upper floor of its facility.

3.1 Offeror #1 Proposal

Offeror #1 proposed to construct and operate a 10,400 ft^2 waste processing building that would contain the Tank Waste Treatment Facility (TWTF) and the Solid Waste Treatment Facility (SWTF), a 150 ft long shielded transfer line to the MVST, and ancillary buildings. Two treatment trains would be developed with separate hot cell facilities. The TWTF would process sludge and supernate currently stored in the MVST. The SWTF would first process CH-TRU wastes and then RH-TRU solid wastes. The TWTF and the SWTF would share infrastructure and support operations. There would be a single Clean Air Act (CAA) permitted ventilation stack and a single National Pollution Discharge Elimination System (NPDES) permitted outfall for process water discharges and storm water. The facility would operate under a Part B RCRA permit.

3.2 Offeror #2 Proposal

Offeror #2 would construct and operate a 37,000 ft^2 waste processing facility, a 120 ft long shielded transfer line from the MVST, and ancillary buildings. Four treatment trains would be developed to separately process the wastes. The sludge and the supernate currently stored in the MVST, and the CH-TRU and RH-TRU solid wastes would each have a separate treatment train. The facilities would be co-located in a multi-level building and share many infrastructure and support operations. There would be a CAA permitted ventilation stack, but no process water discharges, therefore a Clean Water Act permit for storm water discharges would be required. The facility would operate under a Part B RCRA permit.

4. EVALUATION OF POTENTIAL ENVIRONMENTAL IMPACTS

The ORR occupies about 34,500 acres of federal land within the corporate limits of the city of Oak Ridge, and within Roane and Anderson counties in eastern Tennessee. In 1989, the three main plant complexes, including ORNL, the East Tennessee Technology Park, and the Y-12 Plant encompassed a fenced area of 24,400 acres, with the remaining acreage designated as a National Environmental Research Park. The region is relatively hilly and averages 54 inches of precipitation annually. Although there are both perennial and intermittent streams near the proposed treatment site, the site does not contain any surface water bodies or wetlands. Mixed hardwoods and pines dominate the area. No state listed, federally listed, or candidate species

have been observed at the proposed site. A locked gate at the junction of the access road to the proposed site and the State Highway 95 restricts public access to the area. The proposed site is approximately 1.25 miles from this junction. Other important nearby highways include I-40, I-75 and State Highways 62 and 162. Nearby local communities range from urban to rural.

4.1 Land Use

The specific facility location (within a 32 acre parcel identified by DOE in the Request for Proposal) selected by both offerors does not appear to have been previously disturbed. The proximity of the location to the MVST lessens the amount of impact associated with utility construction and minimizes handling and transport of the liquid wastes. Potential adverse land use effects include the loss of habitat for wildlife and loss of the area for other potential uses while the facility is in operation. The facility could have a visual impact outside the fenced boundary due to its height. The potential impacts to visual resources by this action is not expected to be significant due to the hillside to the north, abundant vegetation, and restrictions to public access. Both proposals minimize some of the possible land use effects, particularly infrastructure, by locating their facilities within the current ORNL boundary. Both offerors proposed adding a driveway that loops around the facility, and planned to take advantage of the local topography to gravity feed the tank wastes to the treatment building. There were no significant differences between the two offerors with respect to proposed land use.

4.2 Cultural and Historic Resources

Potential effects to cultural and historic resources were tied to the location of the facility and are, therefore, the same. Both offerors proposed to limit impacts to cultural resources by training workers to avoid a nearby homestead, which would be outside the facility fence line. DOE has a programmatic agreement with the State Historic Preservation Officer for ORR and ORNL that would include a Phase I survey prior to disturbing the proposed treatment site. The impacts analysis for the EIS would be based on findings of this survey.

4.3 Habitat and Wildlife

One impact of the proposed treatment facility would be the loss of land and associated habitat that could be used by plants and animals. This would lead to displacement and disturbance of some individual animals. This loss of land and habitat alone would not be likely to have a significant environmental effect on local wildlife or plant populations. There could be adverse impacts on breeding potential due to stress from construction or interference in the reproductive cycles of local fauna. The impacts are not expected to be significant to the area because the habitat is not unique, nor does it create a new barrier to free ranging animals. The proposed treatment facility would contribute incrementally to potential indirect cumulative effects to habitat and wildlife including a loss of biodiversity on the ORR.

Both offerors would limit environmental impacts by using a site adjacent to other disturbed areas, minimizing the footprint of the buildings, and eliminating the need to transfer tank contents using trucks. The site would be revegetated after the facility is decommissioned.

4.4 Floodplain and Wetlands

Offeror #2 identified the proposed site as being just above the United States Geological Service 100-year maximum floodplain [10 CFR 1022.4(b)]. This means that there is minimal danger of flooding the facility. Both offerors indicated that the dangers of flooding would be reduced due to existing flood capacity at White Oak Lake. The same assumptions can be made for Offeror #1's facility since it would be constructed in the same location, however this was not stated in the proposal. Both proposals indicated that the proposed facility location would be within the 500-year maximum floodplain [10 CFR 1022.4(I)]. The presence of the facility would have a minimal effect on the local capacity for floodwater attenuation, dispersion, or control. There would be no impact to wetlands because there are no wetlands in the immediate area.

4.5 Geology and Seismicity

The proposed site has underlying layers of shale, limestone, and siltstone lithologies of the Cambrian Conasauga Group. The White Oak Creek fault is in the middle of Melton Valley. The earthquake design for the 50-year facility life, with a 100-year seismic event return period, is 0.06g-peak ground acceleration. Because both offerors need to build the proposed facility to code to withstand seismic events, there is no significant difference in this regard between the proposals. The source terms, both hazardous and radioactive, associated with this waste do not change and the potential release pathways would remain the same.

4.6 Water and Water Quality

The only process identified that could impact water quality during normal operation of the facility would be the discharge of treated process waters to White Oak Creek proposed by Offeror #1. Offeror #1 stated that 1 part per billion of mercury would meet permit release criteria, however, the basis for this statement was not referenced. This level is above the State of Tennessee ambient water quality criteria of 12 parts per trillion of mercury, which would apply to White Oak Creek. Offeror #2 did not address the possibility that condensate water from drying the tank contents might have quantities of mercury but also did not indicate any discharges to local waters. Offeror #2 stated the waste treatment facility would have no liquid effluent discharges.

Storm water management could impact water quality and both offerors would have storm water pollution prevention plans to meet their regulatory requirements. Offeror #2 proposed extensive diversion ditches and a retention basin to capture and sample any overland flow of storm water before it reaches White Oak Creek.

Both proposals contained data relating to water use, however, it was not evident how the data compared. Offeror #1 expected to require less than 900 gallons per minute (gpm) flow rate based on the design assumptions that they would process enough TRU waste to fill three WIPP TRU waste containers and an unspecified amount of solids each week. Offeror #2 expected to require approximately 1000 gpm flow rate based on the design assumption that they would process enough TRU waste to fill four WIPP TRU waste containers and an unspecified amount of solids each week. The expected water requirements for both offerors included fire protection water. The water requirement data were not certain or detailed and did not indicate why Offeror #1 would have half the production rate for a similar amount of water. Because the processes proposed by both offerors were similar, the explanation may be that Offeror #2 planned to run four treatment lines simultaneously, while Offeror #1 would run only two at a time. Cooling was not a major component of water usage because high temperature thermal treatment was not proposed.

Offeror #2 proposed a closed water system that would minimize the opportunity of groundwater or surface water contamination. The storm water pollution prevention measures proposed by Offeror #2 were more extensive than those proposed by Offeror #1, but may be more than what is required for worst case storm or accident scenarios. Offeror #1 requires a permit for the discharge of treated process water to White Oak Creek. Both offerors would recycle process water within their treatment trains for the MVST.

4.7 Air Quality

Both offerors proposed using low-temperature treatment processes on the same total volume of waste. The primary means of mitigating process related air emissions is an effective off-gas system, which was identified in both proposals. In addition, both offerors would conduct most of the retrieval and process operation in an enclosed building. Continuous air monitoring was a component of both proposals. Offeror #1's proposal contained a table of anticipated total emissions, but did not include information as to the rate of emissions. Offeror #2 provided little specific information on anticipated emissions, however, because the treatment processes are similar, the emissions are likely be similar to Offeror #1. Neither offeror mentioned how their off-gas systems would function in case of emergency, nor was there any contingency plan for this event. Air emissions would be regulated through air quality standards and permits which both offerors planned to obtain.

Dust would be generated during the construction phase of the project. The potential for fugitive emissions would be more extensive for Offeror #2 because it proposes cutting into the hillside and would have more extensive ground disturbance during the construction phase. The operation of equipment and trucks would generate hydrocarbon related emissions that could incrementally increase cumulative air impacts. Construction and traffic related air emissions could be controlled and minimized with wetting techniques to prevent dust, and by properly maintaining equipment and vehicles.

4.8 Transportation

Because of increased use of the roads near the proposed site, there would be increased fuel usage and a need for additional road maintenance. Transportation from the proposed site could present some hazards for public exposure to radiation due to accidents, as discussed in section 4.13. The estimated number of trips to the final disposal sites was not clear in the proposals, so no comparison could be made. Both proposals discuss optimizing waste shipments.

Offeror #2 proposed employing more workers and constructing a larger facility that would result in greater, but not significant, transportation impacts than Offeror #1's proposal. The effect of commuter transportation should not be significant because the number of workers is relatively small in both proposals. Transportation activities, transport of materials during waste processing, and traffic control measures were not adequately addressed in either proposal. The delivery of solid waste from ORNL to the waste treatment facility would be the same for both offerors.

4.9 Energy Requirements

The proposals did not contain enough specific information to draw a conclusion on energy consumption. Offeror #1 would require 1,000 thousand-volt amps (kVA) of power, and Offeror #2 would require 2,600 kVA of power. This was a potentially significant difference in energy requirements and efficiency between the two offerors, but a definitive comparison could not be made. The proposals did not contain adequate information on the total system or individual system power requirements, nor did they discuss the energy required to support transportation. DOE has proposed providing 500 kVA of power to the site, so both offerors would need to obtain a supplemental power supply. Neither offeror discussed power or minimizing energy consumption. Potential adverse effects resulting from the use of energy to operate the waste treatment facility have not yet been considered.

4.10 Health Effects

Both offerors proposed to meet industry standards and adopt acceptable administrative controls for exposure to radioactive and hazardous waste. However, neither proposal contained any details on specific administration controls. There should not be a significant difference between the two offerors with respect to effects on health, since both offerors must satisfy regulations regarding worker safety and radiation exposure for employees and the public. In theory, Offeror #2 might place more workers at risk because they proposed involving 50 more people than Offeror #1. Offeror #2's proposal also described more treatment and processing units, which could increase the potential for an accident or break in the system. Alternatively, the multiple units offer processing flexibility in the event of breakdowns so that processing might be more quickly restored. The proposals did not contain specific information regarding radiation or hazardous chemical exposure, so a comparison could not be made of long-term, low-dose

exposure for increased cancer or birth defect risks. Both offerors would be required to integrate "As Low As Reasonably Achievable" considerations into the radiological safety program, and provide detailed plans of access control, facility design, safety analysis, inspection and surveillance prior to facility start up. For purposes of comparison, there was no quantifiable difference between the proposals.

4.11 Noise

The proposals contained no information on occupational noise levels, so a comparison could not be made between the offerors. Both offerors stated they did not anticipate noise impacts to the environment, but their statements were not substantiated and the potential impacts to the environment could not be evaluated.

4.12 Socioeconomics

An overall decline in employment at the ORR region of influence is anticipated. The employment levels proposed by both offerors were not significantly different, and the impact on total employment levels for the region would not be great. Offeror #2 would have a slightly greater positive effect by employing an average of 90 people compared to Offeror #1's plan to employ an average of 40 people. The project would have some economic benefit during the construction phase of the project.

4.13 Accidents

Due to the radioactive and hazardous substances involved with this project, there is a potential for adverse environmental effects if an accident were to occur. The general nature of the information provided precluded detailed calculations on the probability of accidents taking place. However, the humid environment, the close proximity to surface water bodies, and shallow groundwater provides greater than average opportunities for contamination migration should a release escape the building containment.

Operations in Offeror #1's proposal were based on the ground floor, and vertical range would occur within, but not between, processes. Treatment trains were developed for two basic waste streams, so the facility required fewer liquid holding/mixing tanks. Because liquids migrate more rapidly than solids, this reduces the inventory of mobile contaminants should an accident occur.

Offeror #2's proposal included more treatment steps and associated process units, and a greater number of treatment trains operating concurrently. The ramped roadway leading to the upper deck of the waste treatment facility loading area for solid waste could be more susceptible to an accident than a level driveway. The vertical staging area of the treatment trains could provide greater potential for cross contamination if an accidental release occurred. The ramped

roadway and vertical equipment arrangement do reduce the number and frequency of waste container lifts and movements, a significant offsetting benefit of both features.

Facility-specific accidents, such as nuclear criticality or an explosion, were considered while reviewing the proposed approaches. Processes and equipment have an individual probability for failure or accident and the greater the number of process units and equipment lines, the greater the probability of some failure or accident occurrence. Differences between the two proposals might lead to differences in accident probability, however, the likelihood of a significant release of hazardous and radioactive substances due to an accident seemed quite low under both proposals.

5. SUMMARY

Based on the information provided by each offeror, there were a number of resource areas where there was no discernible difference. Such areas included: socioeconomic, geology and seismicity, wildlife and habitat, and wetlands and floodplains. The proposals did not provide enough information to define or analyze differences for other resource areas such as noise, water usage and quality, transportation, utility requirements, safety precautions, and waste minimizations.

Despite the uncertainties and insufficient information for a full analysis of some topics, some distinctions between the proposals regarding differences in environmental impacts could be made. One such distinction relates to energy usage. Offeror #2 appeared to use approximately 2.6 times the energy as Offeror #1 (2,600 vs. 1,000 kVA, respectively). Facility size also differed. The facility that was proposed by Offeror #2 was more than 3 times as large than the facility proposed by Offeror #1 (37,000 vs. 10,400 ft^2, respectively). The facility proposed by Offeror #2 also had more extensive construction related to a ramp roadway, surface water controls, and a retention basin. However, the footprint of the two proposed facilities did not vary significantly. Offeror #1 had a greater potential to affect water quality with planned discharges of treated water to White Oak Creek, requiring an NPDES permit, and the more limited degree of controls for storm water.

Both offerors would be required to obtain a CAA permit. Because the treatment processes are similar, however, there were no expected differences between the proposed processes regarding air emissions. Both offerors would use vacuum dryers and planned to utilize closed systems with multiple filters and a single emission stack.

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APPENDIX A.3

PUBLIC ISSUES AND COMMENTS

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Public Scoping Meetings Issues for the Oak Ridge Operations Transuranic Waste Treatment Project

No.	Comments by	Issue	Answer
1	Herman Weeren	Terminology – saying that this project is processing all of the TRU waste, when in actuality, all waste will be processed with the exception of the TRU waste mixed with grout and injected approximately 1000 ft underground by hydrofracture.	Issue acknowledged by Gary Riner.
2	Barbara Walton	Where will time-certified TRU waste from REDC be processed, and is it from a DOD mission?	WIPP – will accept TRU waste regardless of the type of project it came from. The proposed waste treatment facility will be used to treat legacy waste; newly generated waste will be time certified and shipped directly to WIPP and will not require processing at the proposed facility.
3	Craig Turnbow	Is the Bethel Valley Evaporator Service Tanks waste removal complete?	Three tanks are completed , the other two are in process; waste was successfully retrieved from tanks similar in construction to the Melton Valley Storage Tanks (MVSTs) – Riner, Monk.
4	Herman Weeren	Clarification - OHF is only the surface facility?	Referring to the OHF tanks and their contained wastes which are now empty following successful waste retrieval – Riner.
5	Herman Weeren	Should comments on the EIS be written or spoken?	Either send in written comments, or leave a message at the listed telephone number, and the message will be transcribed – Wayne Tolbert. Comments from tonight's meeting will go on record also – in the transcript – Riner.
6	Barbara Walton	▪ Does construction of the facility wait until the Record of Decision? ▪ Are there terms to deal with inflation? ▪ Is the contract Fixed Price?	▪ Yes – Riner. ▪ Yes, the contract was set up so that phase 1 (a 2 ½-year period) allowed for permitting the facility and the completion of the EIS. Yes – so long as we stay within the timeframe for phase 1, we're okay.

No.	Comments by	Issue	Answer
7	Marilyn Green	Federal Register note says scoping ends February 26th.	Committing tonight to extend period until March 18th – Riner.
8	Barbara Walton	Concern over obtaining a copy.	Hard copies will be available – Riner.
9	Herman Weeren	What is the temperature for drying the tank waste?	180 to 190 degrees Fahrenheit – Bryan Roy.
10	Herman Weeren	What happens to the sodium nitrate?	It's a predominate compound that becomes part of the waste and goes to the repository.
11	Herman Weeren	Is the stuff hydroscopic ?	Yes, it will absorb water – Riner.
12	Herman Weeren	Is there any possibility for explosion in the processing of the waste – referring to an incident in Texas City with ammonium nitrate, and that nitrates are not the most stable compounds in the world.	After review of the process, it was not thought a hazard – Riner.
13	Mildred Sears	Expressed that ammonium had not been analyzed, and even though there might not be a lot there, she felt some additional tests were needed.	
14	Unidentified Speaker	Does Alternative 2 presuppose that shipments will be made to WIPP?	Shipments will be made to both WIPP and a low-level waste repository, which will be finally decided as part of the ROD.
15	Barbara Walton	Have they moved forward with the RH-TRU waste containers? Last she'd heard they weren't approved yet.	The 72B canister has been approved – Riner.
16	Barbara Walton	Is the canister approved for CH-TRU?	No – it's different; you're talking about the 72B cast – Riner.
17	Barbara Walton	The approval comes from whom – are you not involved with the approval?	The NRC to the DOE and, no, it's up to the NRC.
18	Herman Weeren	What is the cost advantage of drying the waste over cementation of the waste?	Drying the waste is the ultimate waste minimization and reduces the amount of waste shipped to WIPP from 1500 m^3 to 200 m^3 – cost for disposal at WIPP is $20,000 per cubic meter - Riner, Roy.
19	Herman Weeren	If you use cement and dilute the waste until it is no longer TRU, what is the advantage – you no longer have to ship to WIPP – what does this do?	Low-level waste could be shipped to NTS or possibly Hanford. Cost at the NTS is approximately $1000 per cubic meter, and there would be a lot more shipments.
20	Barbara Walton	It's in our budget rather than the WIPP budget.	Good point – Riner.
21	Herman Weeren	Is a comparison of this type going to be part of the EIS?	These kinds of comparisons will be analyzed – Riner.

No.	Comments by	Issue	Answer
22	Unidentified Speaker	Are these all the alternatives?	Yes – if there are other things you think we should look at, then that's why we're here tonight – Riner.
23	Herman Weeren	You will look at what you would do if you don't send it to WIPP?	Alternative 1 deals with that – Riner.
24	Herman Weeren	I was referring to alternative 4 – grouting the tank waste.	Yes, it will look at the type of final waste form we have and it still may be TRU after it's grouted – I don't know that, but if it comes out as LLW after the analysis, we will make a comparison – Riner.
25	Herman Weeren	Are you looking at that analysis?	Yes – Riner.
26	Barbara Walton	Questions about alternative 3 (Vitrification) – the waste is also diluted to some extent – is it diluted as much as with grout?	You get higher waste loafing with vitrification than you do with grout.
27	Barbara Walton	It could be diluted out of being TRU under alternative 3?	We would have to analyze it – Riner.
28	Barbara Walton	Was this process bid on by one of the bidders?	Yes – Riner.
29	Barbara Walton	Were they in the competitive range?	No – Riner.
30	Mildred Sears	▪ What are we going to do about the smaller, inactive tanks that contain TRU waste residuals – taking into account that waste retrievals for those tank sludges were cancelled – two tanks in my analysis contained TRU waste (WC-5 and WC-10). C-20 has never been analyzed but received waste from the REDC, and also tanks T-1 and T-2. ▪ What about TRU waste generated during D&D of contaminated buildings 10 years down the road?	What two tanks are those? – Riner. There is TRU waste in those tanks, at a much higher activity than had ever been measured before. The FFA tanks program still has funding, and we are in dispute with the State of Tennessee over cleanup of those tanks and possibly other tanks. Tank WC-14 recently had all of the TRU waste and PCBs removed. Tanks that contain PBCs will not be commingled with other tank waste. Any waste that meets the WAC for the LLLW system will be transferred to the MVST – Riner, Monk.
31	Herman Weeren	If you go through the procedure and go ahead with the preferred alternative based on the assumption that WIPP will open, and then it doesn't, where does this lead you?	We have a commitment from the State of Tennessee to process this waste under a site treatment plan, and if it's processed to meet RCRA Land Disposal Requirements (LDRs), it falls out from under RCRA and can be stored on the site for eternity – Riner. WIPP is not the driver; our driver is the RCRA site treatment plan and complying with RCRA requirements whether WIPP opens or not – Riner.

No.	Comments by	Issue	Answer
32	Herman Weeren	Are you going to look at the risks from the hydrofracture wells?	No – Riner. We propose building the facility next to the MVSTs so that we don't have the environmental impact of having a long run of pipeline if we build the facility elsewhere on the reservation – Riner. There are no hydrofracture or other wells that we are aware of within the proposed building area for the facility – Roy.
33	Herman Weeren	What about damage to the wells from vehicles, and there is a well located up the hill; contamination can easily migrate.	You would have a hard time getting a truck into the area – Riner. Only about 25ft would be excavated from the knoll – Roy. The people preparing the Melton Valley ROD are looking at the hydrofracture wells, as of now there is no effect either way – Riner. We will look into effects in terms of the construction of the facility, but there should be no effects since they're are hundreds of feet away. The wells would be undamaged, during and after construction of the facility, and will still be there after D&D of the processing facility.
34	Herman Weeren	What about the roads in? There are 4 wells by the existing road.	AVISCO was awarded the contract for upgrading the road, and they have a tentative layout for the road, which does not impact any hydrofracture wells – Riner. The upgraded road will be south of the existing gravel road. The road was surveyed along the route and verified with existing drawings from the Environmental Sciences Division at ORNL – we have stayed away from all wells – Monk.
35	Herman Weeren	Which way is south?	Up the hill? – Monk.

No.	Comments by	Issue	Answer
36	Lorene Sigal	Is the existing road within the floodplain of the embankment and the creek, and are you covering up contaminated soils or sediments?	No, and it is not within the 500-year floodplain – Riner, Roy. The road also serves as an emergency exit for HFIR and is documented under several operational safety reviews – we are moving forward on the road under a NEPA category exclusion, CX. The contract has been let and the road will not be analyzed as part of this EIS – we want to get the road done before construction begins.
37	Lorene Sigal	You're justifying the exclusion on the basis that the road serves other purposes?	Yes – and the fact that there is a road already there – Riner.
38	Lorene Sigal	How much wider is the new road?	About twice as wide – so that 2 vehicles or 2 tractor trailers can pass – Riner.
39	Lorene Sigal	Does the existing road provide roadbed for the new road?	No – Monk.
40	Lorene Sigal	So you're really building a brand new road – not just upgrading the existing road?	The elevation of the new road is higher than the existing road, so they are going up higher and taking the excavated dirt, moving it down, and raising the whole elevation rather than having to haul a lot of dirt away – Riner. Also, the existing road had washouts earlier this year – and rendered the emergency route from HIFR impassible. Also, we didn't want heavy trucks on a road directly adjacent to the lake for obvious reasons – Monk.
41	Barbara Walton	How much more does it cost to do 4 alternatives instead of 2 (referring to the EIS analysis)?	About $100,000 an alternative – Riner.
42	Barbara Walton	The other alternative would cost a lot more than the contract we have?	I don't think that's a considering factor.
43	Herman Weeren	Are you talking about adding alternatives – I would strongly oppose omitting alternative 4.	No – I think she was talking about doing away with alternatives 3 & 4 and, therefore, the need to have them analyzed.
44	Josh Johnson	Do you know how many curies we're getting rid of by going through all of this?	The tank waste is roughly 135,000 curies. On the solid waste it's hard to quantify curies – Riner. Its on the order of 50,000 to 60,000 curies for the solid waste – but it's a skewed distribution – Monk.

No.	Comments by	Issue	Answer
45	Josh Johnson	You have about a million gallons of water a day for processing; what is all the water used for? Is this recycled? You won't be bringing that in and discharging it.	That's the consumption for all uses, fire protection and so forth. The water won't be discharged.
46	Lorene Sigal	I recommend you get rid of alternative 3 – why are you going to assess something that doesn't make very much sense?	It could be looked at as a raised and dismissed alternative - Riner.
47	Unidentified speaker	Can you provide the information from the bid package?	No – it's proprietary information.
48	Barbara Walton	Have you considered the location of your MEI (Most Exposed Individuals)?	They would be ORNL workers across the fence for short-term exposure. Long-term exposure would be workers across the ridge in downtown ORNL – Riner. The highest exposure is in the woods to the southeast of the facility, but no one is there – Roy. We are going to bound this EIS to real-world conditions.
49	Barbara Walton	Where, what your credible accident scenarios might be? – Do you have accident scenarios on the other alternatives? Is the worst hazard a pipe rupturing? And the time it takes to shut down?	We could think of liquid release due to earthquakes, pressure breaking the transfer line, tornadoes, and internal fire – Roy.
50	Herman Weeren	How about floods?	The facility is designed with a lot of drainage between the MVSTs and the facility – we will examine floods that are reasonable. Herman, what are you requesting? – We will examine floods and the potential impact for them.
51	Lorene Sigal	Have you done anything to protect from a break in the pipeline?	Yes – Roy. Secondary containment is seismically designed – Riner.
52	Lorene Sigal	You talk about the general public – the general public doesn't read these documents – and most of the comments you get are from people who have an understanding of the reservation.	That's right – most of the people who come to these meetings are the ones who read them and comment – Riner.
53	Lorene Sigal	I agree that the EIS should be reader friendly, but don't make it so simplified that you miss the technical issues.	We will address the technical issues – Riner.
54	Dr. Gawarecki	You talk about geology and seismicity and the White Oak Creek fault – but this is not an active fault?	Right – Riner.

No.	Comments by	Issue	Answer
55	Mr. Mulvenon	Have details on the amount of energy to be used been worked out?	We don't have a full-blown analysis – but vitrification will take more energy, cementation will take less, and somewhere in the middle will be the drying alternative.
56	Mr. Mulvenon	In the synopsis it mentions 2.6 megawatts and 80% of that going to water evaporation – that energy is not being parted on the waste as much as the water, but it is in the waste?	Right?
57	Mr. Mulvenon	Have we got the utilities to do that?	We have 500 kW near the HFIR reactor, which is where we are going to get the power for the facility – Foster Wheeler has to get the power to the facility.
58	Mr. Mulvenon	Is there any waste water associated with this drying process?	100% No water effluent – Riner.
59	Dr. Gawarecki	Is there any tritium in the water vapor?	There was no analysis for tritium – Riner. We assumed all the tritium would be released, but it is a very small amount as it is a fairly small contributor to the waste – Roy.

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