

SUPPLEMENTARY INFORMATION:

A. Purpose

To protect the Government's interest and to ensure timely delivery of items of the requisite quality, contracting officers, prior to award, must make an affirmative determination that the prospective contractor is responsible, *i.e.*, capable of performing the contract. Before making such a determination, the contracting officer must have in his possession or must obtain information sufficient to satisfy himself that the prospective contractor (i) has adequate financial resources, or the ability to obtain such resources, (ii) is able to comply with required delivery schedule, (iii) has a satisfactory record of performance, (iv) has a satisfactory record of integrity, and (v) is otherwise qualified and eligible to receive an award under appropriate laws and regulations. If such information is not in the contracting officer's possession, it is obtained through a preaward survey conducted by the contract administration office responsible for the plant and/or the geographic area in which the plant is located. The necessary data is collected by contract administration personnel from available data or through plant visits, phone calls, and correspondence and entered on Standard Forms 1403, 1404, 1405, 1406, 1407, and 1408 in detail commensurate with the dollar value and complexity of the procurement. The information is used by Federal contracting officers to determine whether a prospective contractor is responsible.

B. Annual Reporting Burden

Respondents: 12,000.

Responses Per Respondent: 5.

Total Responses: 6,000.

Hours Per Response: 24.

Total Burden Hours: 144,000.

Obtaining Copies of Proposals

Requester may obtain a copy of the proposal from the General Services Administration, FAR Secretariat (MVRs), 1800 F Street, NW, Room 4035, Washington, DC 20405, telephone (202) 208-7312. Please cite OMB Control No. 9000-0011, Preaward Survey Forms, in all correspondence.

Dated: August 4, 2000.

Edward C. Loeb,

Director, Federal Acquisition Policy Division.
[FR Doc. 00-20180 Filed 8-8-00; 8:45 am]

BILLING CODE 6820-34-P

DEPARTMENT OF ENERGY

Record of Decision on Treating Transuranic (TRU)/Alpha Low-Level Waste at the Oak Ridge National Laboratory

AGENCY: U.S. Department of Energy.

ACTION: Record of Decision.

SUMMARY: The U.S. Department of Energy (DOE) is issuing this Record of Decision (ROD) for the treatment of transuranic (TRU)/alpha low-level waste at the Oak Ridge National Laboratory (ORNL), located on the Oak Ridge Reservation in Oak Ridge, Tennessee. DOE has selected the Low-Temperature Drying Alternative [the Preferred Alternative in the Final Environmental Impact Statement for Treating Transuranic (TRU)/Alpha Low-Level Waste at the Oak Ridge National Laboratory, Oak Ridge, Tennessee (DOE/EIS-0305-F, June 2000)] and will proceed with a contract with the Foster Wheeler Environmental Corporation (Foster Wheeler) to construct, operate, and decontaminate and decommission a TRU Waste Treatment Facility. The facility will use low-temperature drying to treat TRU mixed waste sludge and associated low-level waste supernate, and will treat TRU solid waste by sorting and compacting. Any solid waste containing hazardous constituents regulated under the Resource Conservation and Recovery Act (RCRA) will be macroencapsulated.

The waste to be treated is legacy waste, *i.e.*, waste generated from past isotope production and research and development that supported national defense and energy initiatives. The legacy tank waste is currently being stored or consolidated in the Melton Valley Storage Tanks (MVSTs), and legacy solid waste is stored in bunkers, subsurface trenches, and metal storage buildings. Waste that would be generated from ongoing operations at ORNL during the operation of the TRU Waste Treatment Facility (expected to operate for about 5 years) will also be treated in the facility. DOE will dispose of the treated TRU waste at DOE's Waste Isolation Pilot Plant (WIPP), located near Carlsbad, New Mexico, and treated low-level waste at DOE's Nevada Test Site (NTS).

In making its decision, DOE considered the analysis in the Final EIS and public comments on it. In addition, DOE considered consistency with previous Departmental programmatic decisions and agreements and the costs associated with the treatment technologies.

FOR FURTHER INFORMATION CONTACT: For further information on the TRU Waste Treatment Project or the Final EIS, or to receive a copy of the Final EIS, contact: John O. Moore, Waste Operations Integration Team Leader, U.S. Department of Energy, Oak Ridge Operations, 55 Jefferson Avenue, P.O. Box 2001, Oak Ridge, Tennessee 37831; Telephone: (865) 576-3536. Facsimile: (865) 576-5333. E-mail: moorejo@oro.doe.gov. For further information on the DOE National Environmental Policy Act (NEPA) process, contact: Carol M. Borgstrom, Director, Office of NEPA Policy and Compliance (EH-42), U.S. Department of Energy, 1000 Independence Avenue, SW, Washington, D.C. 20585; Telephone: (202) 586-4600, or leave a message at (800) 472-2756.

SUPPLEMENTARY INFORMATION:

I. Background

Since the mid-1940s, DOE and its predecessor agencies have generated TRU waste,¹ alpha low-level waste,² mixed waste,³ and low-level waste⁴ at ORNL during isotope production and research and development activities. ORNL currently manages the largest inventory of remote-handled TRU/alpha low-level waste⁵ in the DOE complex, and also manages a smaller portion of the contact-handled TRU/alpha low-level waste.⁶ DOE is storing legacy waste at ORNL, which consists of about 550 cubic meters of solid remote-handled TRU/alpha low-level waste stored in concrete bunkers and subsurface trenches and 1,000 cubic meters of contact-handled TRU/alpha low-level waste stored in metal buildings. Some of the solid TRU/alpha low-level waste containers may also contain mixed waste. DOE also is consolidating 900 cubic meters of TRU mixed waste sludge and 1,600 cubic meters of associated remote-handled

¹ TRU waste is waste containing alpha-emitting radionuclides with an atomic number greater than 92 and half-lives greater than 20 years, at concentrations greater than 100 nanocuries per gram of waste.

² Alpha low-level waste is low-level waste that contains alpha-emitting isotopes.

³ Mixed waste contains radioactive waste regulated under the Atomic Energy Act of 1954, as amended, and a hazardous component subject to RCRA regulation.

⁴ Low-level waste is any radioactive waste that is not classified as high-level waste, spent nuclear fuel, TRU waste, byproduct material, or mixed waste.

⁵ Remote-handled TRU/alpha low-level waste contains alpha-, beta-, and gamma-emitting isotopes with a surface dose rate greater than 200 millirem per hour.

⁶ Contact-handled TRU/alpha low-level waste contains alpha-, beta-, and gamma-emitting isotopes with surface dose rates of 200 millirem per hour or less.

low-level waste supernate in the MVSTs at ORNL.

In September 1995, the Tennessee Department of Environment and Conservation (TDEC) Commissioner issued an order to implement the ORNL Site Treatment Plan (under the Federal Facility Compliance Act) that mandates specific requirements for the treatment and disposal of ORNL TRU/alpha low-level waste and sets out specific milestones. Two primary milestones are: (1) The submittal of a Project Management Plan by September 30, 2001, which includes schedules for treatment and shipment off-site of the ORNL legacy TRU waste; and (2) the completion of the first shipment of treated TRU waste sludge to WIPP by January 2003.

Accordingly, DOE needs to treat a total of about 4,050 cubic meters of legacy TRU/alpha low-level wastes in preparation for disposal of TRU waste at the WIPP and of low-level waste at NTS. These disposal sites were designated in RODs for TRU waste, for the WIPP Supplemental EIS and the Waste Management Programmatic Environmental Impact Statement (WM PEIS) (DOE-EIS-0200-F) (63 FR 3624, January 23, 1998 and 63 FR 3629, January 23, 1998, respectively), and the ROD for low-level and low-level mixed waste for the WM PEIS and the amended ROD for the NTS Site-wide EIS (65 FR 10061, February 25, 2000).

In accordance with the provisions of Section 216 of DOE's NEPA regulations (10 CFR part 1021), the Department awarded a contingent contract to Foster Wheeler in August of 1998 for the construction, operation, and decontamination and decommissioning of a TRU Waste Treatment Facility. Proceeding with construction, operation, and decontamination and decommissioning of the treatment facility under the contract was contingent upon DOE's completion of the NEPA review process and issuance of a ROD that selected the low-temperature drying waste treatment process proposed by Foster Wheeler. Based on the provisions of the contingent contract, construction of the TRU Waste Treatment Facility would begin in December 2000 and be completed by December 2002, with operation of the facility by January 2003. After DOE certification that the waste has been treated to meet the waste acceptance criteria (WAC), shipments would begin to the appropriate disposal facility before the end of January 2003.

II. Alternatives Analyzed in the EIS

DOE analyzed five alternatives in the EIS, which are summarized below: the

No Action Alternative; the Low-Temperature Drying Alternative (Preferred Alternative); the Vitrification Alternative; the Cementation Alternative; and the Treatment and Waste Storage at ORNL Alternative. For all the action alternatives, TRU sludge and liquid alpha low-level waste would be transported through an above-ground pipeline from the MVSTs to an onsite treatment facility. DOE would deliver the solid waste (casks of solid remote-handled TRU/alpha low-level waste and drums and boxes of solid contact-handled TRU/alpha low-level waste) to the treatment facility by truck. The treatment facility would be constructed, operated, and decontaminated and decommissioned by a contractor. Any waste not conforming to the treatment facility's WAC would be returned to DOE for management. TRU waste from ongoing operations at ORNL, generated during the operation of the TRU Waste Treatment Facility, would also be treated at the facility.

DOE would require that all activities associated with the proposed action be performed safely and in compliance with applicable Federal and State regulatory requirements. The selected contractor would be responsible for achieving compliance with all applicable environmental, safety, and health laws and regulations. Regulatory agencies would be responsible for monitoring compliance by the contractor. The State of Tennessee would regulate the selected contractor according to permits under the State's purview (the RCRA Part B permit and the Aquatic Resource Alteration Permit to be issued by the State of Tennessee). DOE would regulate occupational safety and health and nuclear safety according to specific environment, safety and health requirements.

The No Action Alternative

No treatment facility would be constructed under the No Action Alternative. DOE would continue to store legacy solid remote-handled and contract-handled TRU/alpha low-level in concrete bunkers, subsurface trenches, and metal buildings, and would continue to store legacy TRU mixed waste sludge and the associated low-level waste supernate in the MVSTs. For purposes of analysis, institutional control was assumed for 100 years, after which DOE assumed there would be a loss of institutional control.

The No Action Alternative would violate RCRA regulations that prohibit indefinite storage of hazardous waste without treatment, milestones contained in the ORNL Site Treatment Plan under

the Federal Facility Compliance Act, and the Order issued by the State of Tennessee regarding the treatment and shipment of TRU waste. The No Action Alternative would also result in the continued release of contaminants to the soil, ground water, and surface waters from the solid TRU/alpha low-level waste stored in subsurface trenches in the Solid Waste Storage Area (SWSA) 5 North.

The Low-Temperature Drying Alternative (Preferred Alternative in the Final EIS)

Under the Low-Temperature Drying Alternative, a waste treatment facility would be constructed on about 5 acres of land adjoining the MVSTs. Supernate would be pumped from the MVSTs through an above-ground pipeline to tanks in the facility. A low-temperature dryer would receive the supernate from the facility tanks for concentration and drying. TRU mixed waste sludge would be retrieved from the MVSTs by sluicing and transferred through an above-ground pipeline to tanks in the facility. Gravity settling would concentrate the sludge, which would be transferred to the low-temperature dryer for treatment.

All solid waste would be characterized by nondestructive examination and assay methods. Containers of only alpha low-level waste would be compacted for a 50% volume reduction. Solid TRU/alpha low-level waste would be remotely sorted to segregate any RCRA waste. Once segregated, solid TRU waste would be compacted. All waste containing RCRA constituents would be treated by macroencapsulation to meet RCRA land disposal restrictions (LDR) standards.

The duration of the Low-Temperature Drying Alternative would be about 11.5 years: with 2.5 years for licensing, permitting and design reviews; 2 years for facility construction; less than 5 years for waste treatment, during which treated waste would be transported to the appropriate disposal facility; and less than 2 years for decontamination and decommissioning of the treatment facility. The licensing, permitting, and preliminary design review process is currently underway. As a result of waste treatment and decontamination and decommissioning of the facility, about 600 cubic meters of TRU waste would be shipped to WIPP, and about 2,800 cubic meters of low-level waste would be shipped to NTS.

Vitrification Alternative

Under the Vitrification Alternative, a waste treatment facility would be constructed on 5 to 7 acres of land

adjoining the MVSTs. The waste in the MVSTs would be retrieved by pulsed jet mixing and transported through an above-ground pipeline to the treatment facility, where the waste would be mixed with additives and heated to form a stable glass product (vitrified). Contact-handled solid waste would be treated before any remote-handled solid waste was received at the treatment facility. All solid waste would be characterized by nondestructive examination and assay methods and then sorted in a hotcell. All RCRA wastes would be segregated and macroencapsulated to meet RCRA LDR standards. Special waste material, such as batteries, aerosols, and gas bottles, would be segregated for treatment or sent to some other applicable treatment facility, as directed by DOE. The remaining contact-handled or remote-handled solid waste would be compacted. Compacted solid waste would be placed in 55-gallon drums, and the drums would be filled with grout.

The total duration of the Vitrification Alternative would be about 10 years: with 2.5 years for licensing, permitting, and design reviews; 2 years for facility construction; 3.5 years for waste treatment, during which treated waste would be transported to the appropriate disposal facility; and 2 years for decontamination and decommissioning of the treatment facility. As a result of waste treatment and decontamination and decommissioning of the facility, about 1,100 cubic meters of TRU waste would be shipped to WIPP, and about 5,000 cubic meters of low-level waste would be shipped to NTS.

Cementation Alternative

Under the Cementation Alternative, a waste treatment facility would be constructed on about 5 acres of land adjoining the MVSTs. Waste would be retrieved from the MVSTs by sluicing and transported through an above-ground pipeline to the treatment facility. The TRU waste sludge and low-level liquid waste would be separated with a hydrocyclone followed in series with a centrifuge. Supernate would be recycled back to the MVSTs for sluicing operations. Additives would be mixed with the separated sludge and liquid waste streams to form a stable grout mixture. A grout pump would transfer the waste and grout mixture into 50-gallon drum liners, and the mixture would be allowed to harden. The liners would be placed inside 55-gallon carbon steel overpack drums before for shipment. All contact-handled and remote-handled TRU/alpha low-level solid waste would be characterized by

nondestructive examination and assay methods, sorted and compacted (as appropriate), and grouted before packaging for shipment similar to the methods described for the Vitrification Alternative.

The total duration of the Cementation Alternative would be about 12.5 years: with 2.5 years for licensing, permitting, and design reviews; 2 years for construction of the treatment facility; 6 years for waste treatment operations during which waste would be transported to the appropriate disposal facility; and 2 years for the decontamination and decommissioning of the treatment facility. As a result of waste treatment and decontamination and decommissioning of the facility, about 1,800 cubic meters of TRU waste would be shipped to WIPP, and about 5,400 cubic meters of low-level waste, including remote-handled low-level waste, would be shipped to NTS.

Treatment and Waste Storage at ORNL Alternative

Under the Treatment and Waste Storage at ORNL Alternative, a waste treatment facility would be constructed using any one of the treatment processes described previously. About 5 to 7 acres of land would be used for the treatment facility, depending on the treatment technology used (described above). In addition, 0.75 to 2 acres of land (depending the treatment technology used) would be required for the construction of waste storage facilities at ORNL. DOE plans to ship treated waste offsite for disposal as soon as it is treated, but if off-site waste disposal facilities were not available, treated waste would require storage at ORNL. For purposes of analysis, institutional control of the treated waste in storage was assumed for 100 years, after which DOE assumed there would be a loss of institutional control. This alternative, if implemented, would not meet the milestones set in the ORNL Site Treatment Plan regarding the treatment and shipment of regulated TRU waste and would violate the TDEC Commissioner's order that requires implementation of the ORNL Site Treatment Plan.

The schedule for waste treatment under this alternative and the volume of waste resulting from treatment and decontamination and decommissioning of the treatment facility depend on the treatment process used, as described above.

III. Potential Environmental and Human Health Impacts

In the Final EIS, DOE analyzed the potential environmental impacts

associated with each alternative. The potential environmental impacts for all the alternatives would be small and are summarized below.

None of the alternatives analyzed would result in a change in land use classification (currently industrial) or scenic resources. The action alternatives would result in further development of 5 to 7 acres of land for the treatment facility, and the Treatment and Waste Storage at ORNL Alternative would require an additional 0.75 to 2 acres of land for buildings to store the treated waste. For both the No Action and the Treatment and Waste Storage at ORNL Alternatives, the Final EIS analysis assumed loss of institutional control after 100 years. Assuming loss of institutional control, the land where the waste was stored would be permanently committed to waste storage, which, if implemented, would result in an irreversible and irretrievable commitment of land.

All of the action alternatives would result in a temporary loss of a small amount of forested habitat (5 to 7 acres) for the treatment facility. The No Action Alternative would not result in loss of the forested habitat.

All action alternatives would reduce soil and water contamination because a source of contaminants in SWSA 5 North would be removed. Under the No Action Alternative, contaminants from the SWSA 5 North waste trenches would continue to be released to the soils, groundwater, and surface water, resulting in a small impact to aquatic biota. Under the No Action Alternative, assuming loss of institutional control after 100 years, the TRU waste in the MVSTs, bunkers, and buildings also would eventually be released into the soils and groundwater. Under the Treatment and Waste Storage at ORNL Alternative, assuming loss of institutional control after 100 years, the treated waste eventually would be released from storage buildings. However, because the wastes would have been treated under the Treatment and Waste Storage at ORNL Alternative, the impacts would be less than under No Action.

Implementation of any of the action alternatives would result in the elimination of a small wetland (0.03 acres) when the treatment facility was constructed. The No Action Alternative would have no impact on the wetland as long as institutional control is maintained.

Under the action alternatives, construction of the proposed treatment facility, although not located in a floodplain, and therefore not subject to the provisions of 10 CFR part 1022

regarding floodplains, would have a small impact in the 100- and 500-year floodplain of White Oak Creek due to increased surface runoff. The increased sediment in the White Oak Creek floodplain would provide additional shielding from existing radioactive contamination (a small beneficial impact). Under the No Action Alternative the contaminants in SWSA 5 North trenches would continue to be released to the soil and groundwater, which would subsequently enter surface water and the White Oak Creek floodplain.

Under the action alternatives, all legacy TRU-alpha low-level waste would be treated and some secondary waste would be produced. The total volume of waste that would be produced under the different treatment alternatives were estimated to be about 10,500 cubic meters for Low-Temperature Drying, 34,000 cubic meters for Vitrification, and 29,000 cubic meters for Cementation. The volume of contact- and remote-handled TRU waste⁷ that would be produced ranges from about 600 cubic meters for the Low-Temperature Drying Alternative, to about 1,000 and 1,800 cubic meters for the Vitrification and Cementation Alternatives, respectively. The volume of low-level waste⁸ that would be produced ranges from about 2,800 cubic meters for both the Low-Temperature Drying and Cementation Alternatives, to about 5,000 cubic meters for the Vitrification Alternative. Only the Cementation Alternative would produce remote-handled low-level waste (about 2,500 cubic meters). All the treatment alternatives would produce small quantities, i.e., less than 25 cubic meters, of mixed low-level waste.⁹ The volume of sanitary wastewater¹⁰ that would be produced ranges from about 1,600 cubic meters for the Low-Temperature Drying Alternative, about 7,000 cubic meters for the Vitrification Alternative, and about 7,500 cubic meters for the Cementation Alternative. The volume of non-radioactive construction debris that would be produced ranges from about 5,500 cubic meters for the Low-Temperature Drying Alternative to about 20,800 cubic meters for the Vitrification Alternative and 14,000 cubic meters for the Cementation

Alternative. Under the No Action Alternative the legacy TRU/alpha low-level waste would continue to be stored, along with the 60 cubic meter of liquid low-level waste and 20 cubic meters of TRU waste that would be produced annually from research and environmental remediation activities at ORNL.

The action alternatives would result in minor emissions of air pollutants during normal operations. The Low-Temperature Drying Alternative would result in slightly higher volatile organic emissions than the other treatment technologies. The Vitrification Alternative would result in slightly higher nitrogen dioxide emissions than the other treatment technologies. The Cementation Alternative would result in slightly higher particulate emissions than the other treatment technologies. The No Action Alternative would not result in air emissions. All alternatives would comply with applicable air quality regulations.

The probability of a cancer fatality from radiological releases to involved workers, non-involved workers and the offsite maximally exposed individual (MEI) were estimated to be small for the Low-Temperature Drying, Vitrification, and Cementation Alternatives. The highest collective offsite dose to the public, estimated to be 6.8E-01 person-rem and would potentially result in 3.0E-04 latent cancer fatalities (LCFs), was from the Vitrification Alternative. Under both the No Action and Treatment and Waste Storage at ORNL Alternatives, an estimated 2.2E-02 LCFs would occur in the involved worker population, and impacts to non-involved workers and the public would be small.

The accident scenario estimated to have the greatest impact would occur under the No Action Alternative if the MVSTs were breached during an earthquake, releasing 50,000-gallons of TRU waste into the environment. (This accident was not evaluated for the action alternatives since waste treatment would occur in less than 10 years and the probability of this type of earthquake occurring during so brief a time would be small.) The consequence of this accident, were it to happen, was estimated to be 108 LCFs for the affected population. The frequency for this kind of accident happening was estimated to be 1E-04 per year. The calculated risk for this accident (evaluated by multiplying the accident consequence, frequency, and time period) would be 1.1 LCFs to the population during a 100 year time period and proportionately higher for longer periods. The MEI and non-involved worker were estimated to

have a 1.1E-05 and 9.2E-04 probability of a cancer fatality, respectively.

Under the action alternatives, the accidental breach of the waste transfer line during a transfer between the MVSTs and the proposed facility was the accident with the greatest impact. The consequence of this accident, were it to happen, was estimated to be 52 LCFs for the population (for all action alternatives). The frequency of this kind of accident happening ranged from 1E-02 to 1E-04 per year. The EIS estimated the risks from this accident scenario as ranges from 0.16 LCFs for Low-Temperature Drying Alternative to 0.31 LCFs for the Cementation Alternative. The probability of a cancer fatality for the MEI was estimated to range from 3.2 E-06 for the Low-Temperature Drying and Vitrification Alternatives, to 6.3E-06 for the Cementation Alternative. The probability of a cancer fatality for the non-involved worker was estimated to range from 2.8E-04 for Low-Temperature Drying and Vitrification Alternatives, to 5.5E-04 for the Cementation Alternative.

Routine exposures from waste retrieval activities were estimated to result in 8.0E-03 LCFs in the involved worker population under all action alternatives. Radiological emissions from waste retrieval accidents were estimated to result in 6.3E-05 LCFs to the public. Industrial-type accidents from retrieval activities were estimated to result in 7.5E-04 fatalities in the involved worker population.

All the action alternatives would result in 300 truck shipments of remote-handled solid waste and 245 shipments of contact-handled solid waste from the ORNL storage locations to the treatment facility. Radiological emissions from onsite transportation accidents between the current storage locations and the treatment facility were estimated to result in 2.9 E-05 LCFs to the public. The probability of a cancer fatality for a non-involved worker and public MEI were estimated to be 5.3E-07 and 6.2E-09, respectively, from waste retrieval and transportation accidents. In addition, 3.3E-05 non-radiological fatalities from onsite transportation accidents were estimated for the worker population.

The Treatment and Storage at ORNL Alternative would involve about 3,340 shipments of treated waste from the treatment facility to storage buildings at ORNL, using the waste volumes produced by the Cementation Alternative as the bounding case. These shipments are estimated to result in 2.3E-04 transportation related fatalities to involved workers. In addition, construction of the onsite storage

⁷ TRU waste would be disposed of at WIPP.

⁸ Low-level and remote-handled low-level waste would be disposed of at NTS.

⁹ Mixed low-level waste would be disposed of at a DOE site or at an off-site commercial disposal facility.

¹⁰ Sanitary wastewater and non-radioactive construction debris would be disposed of at offsite commercial disposal facilities.

facilities and the loading and unloading of the treated waste were estimated to result in 3.4E-04 and 2.5E-03 non-radiological accident fatalities, respectively, to the involved worker population.

The No Action and Treatment and Storage at ORNL Alternatives would not result in off-site shipments of treated waste. The number of off-site truck shipments of treated TRU waste were estimated for the Low-Temperature Drying Alternative (400), the Vitrification Alternative (1,000), and the Cementation Alternative (2,400). The estimated number of non-radiological LCFs related to routine transportation of contact-handled TRU waste ranged from 5.3E-03 for both the Vitrification and Cementation Alternatives, to 8.7E-03 for the Low-Temperature Drying Alternative. LCFs from routine transportation of remote-handled TRU waste ranged from 3.1E-02 for the Low Temperature Drying Alternative to 2.7E-01 for the Cementation Alternative. The number of fatalities estimated from transportation accidents ranged from 4.4E-02 for the Low-Temperature Drying Alternative to 3.0E-01 for the Cementation Alternative.

The number of offsite shipments of treated low-level waste were estimated to be about 300 for the Low-Temperature Drying and Vitrification Alternatives, and more than 900 for the Cementation Alternative. The LCFs related to routine offsite transportation of treated low-level waste were estimated to be small for all the action alternatives, with the largest being 7.5E-09 for the Cementation Alternative. The number of transportation accident fatalities was estimated to range from 3.6E-02 for both the Low-Temperature Drying and Vitrification Alternatives, to 1.2E-01 for the Cementation Alternative.

The estimated electricity requirements ranged from 2,200 megawatts (MW) (No Action Alternative) to 47,200 MW (Treatment and Waste Storage at ORNL, using vitrification as the treatment technology). The Cementation Alternative would have the lowest electricity requirements (11,250 MW) of the action alternatives. Because adequate electricity is available from utility lines in the vicinity of the proposed TRU Waste Treatment Facility, impacts would be minimal.

The estimated total water usage varied from 5 million gallons (No Action and Low-Temperature Drying) to 20 million gallons (Treatment and Waste Storage at ORNL, using cementation as the treatment technology). Water for the

TRU Waste Treatment Facility would be supplied from a City of Oak Ridge Water Treatment Facility via a local main. The impacts on the Water Treatment Facility would be small because the daily water usage under any of the alternatives would be small and the Oak Ridge Water Treatment Facility is currently operating at only 50% capacity (28 million gallons per day).

There are no special circumstances that would result in any greater impacts on minority or low-income populations than on the population as a whole, and no disproportionately high and adverse impacts on minority or low-income populations would be expected.

Environmentally Preferred Alternative

As described above, all impacts from the proposed action would be small, and the greatest potential human health and environmental impacts would occur under the No Action Alternative. Under the No Action Alternative, waste contaminants would continue to be released to the environment from the unlined, subsurface trenches in SWSA 5 North and the potential impacts from a breach of the MVSTs would be high should institutional control be lost. In addition, although the long-term impacts of the Treatment and Waste Storage at ORNL Alternative would be less than No Action because the waste would have been treated, the Treatment and Waste Storage at ORNL Alternative would not provide a permanent solution for controlling the waste contaminants.

The Low-Temperature Drying Alternative, and the other action alternatives involving off-site shipment of treated waste, would result in small, short-term potential impacts to public and worker health, air quality, utility usage, and transportation; however, treatment would prepare the waste for disposal at WIPP or NTS, as appropriate. The Low-Temperature Drying Alternative would result in lower impacts than the other action alternatives because it would generate the least amount of treated and other waste, would require the lowest water usage (but not electricity) of the action alternatives, and would require the least number of offsite shipments for disposal.

In conclusion, while the potential impacts for all of the action alternatives are small, the Low-Temperature Drying Alternative results in the lowest potential impacts of any of the action alternatives. DOE therefore believes that the Low-Temperature Drying Alternative is environmentally preferable.

IV. Public Comments on the Final EIS

DOE distributed approximately 80 copies of the Final EIS to appropriate Congressional members and committees; the States of Kentucky, Nevada, New Mexico, and Tennessee; various American Indian Tribal governments and organizations; local governments; other Federal agencies; and other interested stakeholders. DOE received comments on the Final EIS from the U.S. Department of Interior's Fish and Wildlife Service and the U.S. Environmental Protection Agency (EPA), which are addressed below.

In a letter dated July 13, 2000, the Fish and Wildlife Service stated that the Biological Assessment contained in the Final EIS was "adequate and supports the conclusion of not likely to adversely affect." The Service concurred with this conclusion, and that the requirements of Section 7 of the Endangered Species Act had been fulfilled. As the Fish and Wildlife letter indicates, DOE will reconsider its obligations under the Endangered Species Act if new information reveals that the TRU Waste Treatment Facility may affect listed species in a manner or to an extent not considered, the proposed action is modified to include activities not addressed in the Biological Assessment, or new species are listed or critical habitat is designated that might be affected by the proposed action.

The Fish and Wildlife Service also indicated that DOE's response to Fish and Wildlife Service comments on the Draft EIS (Volume 2 of the Final EIS) is not consistent with the Biological Assessment (Appendix E of the Final EIS), with regard to the presence of habitat for the gray bat. In DOE's response to comments from the Fish and Wildlife Service on the Draft EIS, DOE indicated that "[Q]ualified biologists did a site walkover * * * and [n]o habitat for the gray bat was identified. * * *" In this statement, DOE was referring to the 5-7 acre "site" for the proposed treatment facility (not the Oak Ridge Reservation). The discussion of gray bat habitat in the Biological Assessment (and in section 4.3 of the Final EIS) indicates that the nearest potential habitat for the gray bat is at least 1 mile away from the proposed TRU Waste Treatment Facility boundary and activities at the proposed site are not expected to impact the gray bat habitat. While DOE's response to comments made by the Fish and Wildlife Service on the Draft EIS could have been clearer, the wording in the comment response document does not conflict with the Biological Assessment

or other sections of the Final EIS addressing ecological resources.

The Fish and Wildlife Service also stated in its comments on the Final EIS that the Migratory Bird Treaty Act (Title 16 United States Code, Chapter 701) should have been included in Chapter 8 (Applicable Laws and Regulations) of the Final EIS. DOE did consider the requirements of Migratory Bird Treaty Act, but because the proposed site for the TRU Waste Treatment Facility will be small (5–7 acres) in comparison to other nearby suitable habitat, and there were no known unique or special features associated with the proposed site that would be important to migratory bird species, DOE did not provide a reference to or a discussion of the Migratory Bird Treaty Act in Chapter 8 of the Final EIS.

In a letter to DOE dated July 20, 2000, regarding the Final EIS, EPA acknowledged that, in general, its comments on the Draft EIS were addressed satisfactorily. However, EPA indicated continuing concern about potential process releases and project impacts. DOE notes, however, that the estimated impact EPA is addressing—3E–04 LCFs from the project's releases—is small, and the EIS shows that the releases would not contribute significantly to cumulative impacts in the exposed population. Moreover, the methods used to estimate these releases and their impact are conservative—i.e., likely to overstate the impacts. Finally, the alternative DOE has decided to implement (see below) is the environmentally preferred alternative.

V. Consistency With DOE Programmatic Decisions and Agreements

The selection of any of the action alternatives, except Treatment and Waste Storage at ORNL, would be consistent with DOE's programmatic decisions for the treatment, storage, and disposal of TRU and low-level wastes. As stated in the Record of Decision for the Department of Energy's Waste Management Program: Treatment and Storage of Transuranic Waste, DOE decided to "develop and operate mobile and fixed facilities to characterize and prepare TRU waste for disposal at WIPP" and "[E]ach of the DOE's sites that has, or will generate, TRU waste will, as needed, prepare and store its TRU waste on-site * * * prior to disposal." In the Record of Decision for the Department of Energy's Waste Management Program: Treatment and Disposal of Low-Level Waste and Mixed Low-Level Waste; Amendment of the Record of Decision for the Nevada Test Site, DOE decided to establish regional low-level waste disposal capabilities at

DOE's Hanford Site and NTS, which are to receive low-level waste from other DOE sites when the waste meets the WAC for the site.

The Low-Temperature Drying, Vitrification, and Cementation Alternatives would all be consistent with previous negotiated agreements and commitments, and allow DOE to comply with the primary milestones of the ORNL Site Treatment Plan. The No Action and Treatment and Waste Storage at ORNL Alternatives would not be consistent with previous agreements and commitments. The No Action Alternative would not comply with the two primary milestones identified in the ORNL Site Treatment Plan. The Treatment and Waste Storage at ORNL Alternative would not comply with the ORNL Site Treatment Plan milestone requiring shipment of treated TRU waste sludge to the WIPP to be initiated by January 2003.

VI. Costs Associated With the Technologies

Analyses of the Low-Temperature Drying Alternative showed that it is cost effective based on previous cost studies conducted by DOE and comparison of the submitted private sector proposals for the treatment of TRU/alpha low-level waste at ORNL. The cost for implementing the Low-Temperature Drying Alternative was estimated to be about \$193 million, compared with about \$700 million estimated for both the Vitrification and Cementation Alternatives. Implementing the Treatment and Waste Storage at ORNL Alternative would entail costs of constructing and maintaining onsite waste storage facilities in addition to the costs associated with the each action alternative without storage on site.

VII. Decision

DOE has selected the Low-Temperature Drying Alternative (Preferred Alternative) in the Final EIS for treating TRU/alpha low-level waste at ORNL. DOE will proceed with the Foster Wheeler contract to construct, operate, and decontaminate and decommission a TRU Waste Treatment Facility to treat a total of about 4,050 cubic meters of legacy waste¹¹ in preparation for offsite disposal at the WIPP and the NTS. This decision is based on the following factors: the

¹¹ In the future, DOE may treat small quantities of TRU waste from other DOE sites at the TRU Waste Treatment Facility (e.g., 15 cubic meters of TRU waste from the Paducah Gaseous Diffusion Plant). DOE would need to conduct further NEPA review, as appropriate, for any proposal to ship TRU waste to ORNL for treatment from the Paducah Site or any other site in the DOE complex.

analysis in the Final EIS indicates the impacts of all action alternatives would be small; the choice of the Low-Temperature Drying Alternative is consistent with previous DOE programmatic decisions and agreements on the treatment, storage and disposal of TRU, low-level, and mixed low-level wastes; and costs associated with the Low-Temperature Drying Alternative are the lowest of the action alternatives and the other action alternatives do not have compensating advantages for higher cost.

VIII. Mitigation of Impacts

The DOE is committed to operating a TRU Waste Treatment Facility in compliance with all applicable laws, regulations, executive orders, DOE orders, permits, and compliance agreements. DOE is consulting with the State of Tennessee on State mitigation measures related to wetlands (an Aquatic Resource Alteration Permit has been filed with TDEC), and a Mitigation Action Plan required by 10 CFR 1021.331 will be prepared. Volume 1, Chapter 6, of the Final EIS described the mitigation measures that will be taken to minimize the potential impacts associated with the construction, operation, and decontamination and decommissioning of the proposed TRU Waste Treatment Facility (e.g., use of dust control measures during facility construction; use of efficient emission controls and erosion control measures; and protocol to be followed in the event that cultural resources are found).

IX. Conclusion

DOE has selected the Low-Temperature Drying Alternative (Preferred Alternative) in the Final EIS for treating TRU/alpha low-level waste at ORNL. DOE will proceed with the Foster Wheeler contract to construct, operate, and decontaminate and decommission a TRU Waste Treatment Facility to treat a total of about 4,050 cubic meters of legacy waste in preparation for offsite disposal at the WIPP and the NTS.

Issued in Washington, D.C. this 3rd day of August 2000.

Carolyn L. Huntoon,

Assistant Secretary for Environmental Management.

[FR Doc. 00–20093 Filed 8–8–00; 8:45 am]

BILLING CODE 6450–01–P