

## Transuranic (TRU) Waste

---

---

### Comments

L-0055/060

Does Figure S.6 include the potential impacts of “long-term” storage of RH-TRU wastes? Could the TRU in this figure be higher if these are taken into account? TRU waste was not considered a separate waste type until 1970. After 1970, it was stored in Low Level Burial Grounds and in trenches or caissons. This is classified as “suspect TRU” since at least part of it is TRU waste. Is this waste then not included in the TRU waste inventory? These waste types are inseparable from the impacts of the wastes analyzed in this HSW EIS

### Response

TRU waste inventories evaluated in the HSW EIS include waste from offsite generators and suspect TRU wastes in the LLBGs. The HSW EIS assumes that 50% of the “suspect” TRU waste upon analysis would meet the definition of TRU waste. TRU waste, including waste received from offsite generators, would be shipped to WIPP.

---

---

### Comments

E-0047/025

The impacts of treating non-standard TRU and RH TRU are not assessed.

### Response

Capabilities needed for remote-handled (RH) TRU wastes and non-standard containers of TRU waste would be similar to those already provided in WRAP. These include nondestructive examination, nondestructive assay, headspace gas sampling, repackaging, and visual examination of waste packages. Part of the proposed action in this EIS is to provide this additional capability. These are described in various text boxes in Volume I Section 2.2.2.

---

---

### Comments

L-0055/041

TRU waste is being reduced as DOE is now sending or preparing to send TRU waste to the Waste Isolation Pilot Plant in New Mexico. Actually, DOE can currently only send their Contact Handled (CH) waste to the WIPP in NM. It can not yet accept the Remotely Handled (RH) waste. Since Hanford will be classifying RH-TRU waste from Ohio and California, the ability of WIPP to accept this RH waste will be a limiting factor in how quickly the RH can be shipped from Hanford. It could be in a long-term storage mode at Hanford. DOE is planning on shipping all legacy CH-TRU waste to WIPP by September 2015. WIPP is not certified to accept RH-TRU waste yet. This waste will have to be stored at Hanford for an indefinite period of time.

### Response

Capabilities needed for remote-handled (RH) TRU wastes and non-standard containers of TRU waste would be similar to those already provided in WRAP. These include nondestructive examination, nondestructive assay, headspace gas sampling, repackaging, and visual examination of waste packages. Part of the proposed action in this EIS is to provide this additional capability. These are described in various text boxes in Volume I Section 2.2.2.

Retrieval of TRU waste from the LLBGs has already started. Shipments of TRU waste from Hanford to WIPP have also started. As indicated in the Hanford Performance Management Plan ( HPMP, DOE-RL 2002), approximately one-third of the containers (fifteen thousand containers) of suspect TRU waste from the LLBGs are scheduled to be retrieved by 2006 . No substantial releases are expected to occur before the waste is retrieved.

EPA authorization to dispose of RH-TRU waste at WIPP is pending. Approval of the permit by New Mexico

## Transuranic (TRU) Waste

Environment Department is expected in the FY 2006 timeframe.

EPA has granted WIPP authorization to dispose of polychlorinated biphenyls (PCBs). In March 2002, WIPP applied for changes to its permit to allow it to dispose of waste containing PCBs. Approval of the permit revision by the New Mexico Environment Department is pending. Based on the assumption that the changes will be accepted, PCB treatment would not be required. See Volume I, Section 2.1.3.

---

---

### Comments

E-0055/025

The EIS does not include analysis of necessary facilities for characterization, processing, treating and storing TRU waste and TRU mixed with hazardous waste (TRUM). It is highly likely that TRU waste exhumed at Hanford will be TRUM and will require processing or treatment prior to storage and shipping. The HSW EIS impact analysis for TRU waste is inadequate and does not meet DOE's previous commitments.

### Response

Capabilities needed for remote-handled (RH) TRU wastes and non-standard containers of TRU waste would be similar to those already provided in WRAP. These include nondestructive examination, nondestructive assay, headspace gas sampling, repackaging, and visual examination of waste packages. Part of the proposed action in this EIS is to provide this additional capability. These are described in various text boxes in Volume I Section 2.2.2.

Most of the TRU waste will be contact handled, which can be certified through existing facilities (such as WRAP).

---

---

### Comments

L-0044/077

Summary, pp. S.1-2 The introductory material ignores mixed TRU waste. It also asserts that "Hanford has long received TRU waste from off-site sources," which is contrary to information provided to the state and the public in the past.

### Response

Capabilities needed for remote-handled (RH) TRU wastes and non-standard containers of TRU waste would be similar to those already provided in WRAP. These include nondestructive examination, nondestructive assay, headspace gas sampling, repackaging, and visual examination of waste packages. Part of the proposed action in this EIS is to provide this additional capability. These are described in various text boxes in Volume I Section 2.2.2.

Most of the TRU waste will be contact handled, which can be certified through existing facilities (such as WRAP).

The "long received" statement was intended to summarize shipments of several different waste types that have been made to Hanford. Hanford has long received LLW and MLLW from other sites. TRU waste has been received from BCL and ETEC. The text has been revised to help clarify.

## Transuranic (TRU) Waste

---

---

### Comments

L-0052/015

The ERWM is aware there is currently no way at Hanford to deal with RH-TRU other than to store it. This includes K-basin sludge, likely some of the contents of 618-10/11 burial grounds, and whatever Hanford receives from off-site. Much of this EIS is relying on the premise that TRU waste and High Level Waste will be shipped to repository sites in New Mexico and Nevada. The ERWM staff recently toured both of those sites and after hearing the various presentations we are under the impression that there is still a large degree of uncertainty associated with licensing and whether or not these sites will be accepted for their intended purposes. It would be prudent to inform people about this situation in the EIS. This document continues to assume that TRU wastes will be exported. As a result, the document contains no analysis for risk to groundwater and other resources from TRU. The ERWM finds this unacceptable. In addition, as there are no guarantees that all TRU will leave the site, and as Hanford currently is not prepared to [dispose] of TRU on-site, the ERWM does not support bringing in additional TRU from other sites.

### Response

Capabilities needed for remote-handled (RH) TRU wastes and non-standard containers of TRU waste would be similar to those already provided in WRAP. These include nondestructive examination, nondestructive assay, headspace gas sampling, repackaging, and visual examination of waste packages. Part of the proposed action in this EIS is to provide this additional capability. These are described in various text boxes in Volume I Section 2.2.2.

EPA authorization to dispose of RH-TRU waste at WIPP is pending. Approval of the permit by New Mexico Environment Department is expected in the FY 2006 timeframe.

EPA has granted WIPP authorization to dispose of polychlorinated biphenyls (PCBs). In March 2002, WIPP applied for changes to its permit to allow it to dispose of waste containing PCBs. Approval of the permit revision by the New Mexico Environment Department is pending. Based on the assumption that the changes will be accepted, PCB treatment would not be required. See Volume I, Section 2.1.3.

The Hanford Only waste volume has been evaluated in all action alternatives and the No Action Alternative to provide a better comparison with the impacts of adding offsite waste. The incremental impacts of offsite waste are the differences between the Lower and Upper Bound Volumes and the Hanford Only impacts for a given alternative.

---

---

### Comments

L-0052/014

TRU Waste. We remain very uncomfortable with the plans (or lack of them) for retrieving or mitigating impacts from pre-1970s TRU. DOE indicates the associated dangers have fed into the risk modeling process. However, the level of uncertainty in inventory of those wastes alone brings those model results into question.

### Response

Retrieval of TRU waste from the LLBGs has already started. Shipments of TRU waste from Hanford to WIPP have also started. As indicated in the Hanford Performance Management Plan (HPMP, DOE-RL 2002), approximately one-third of the containers (fifteen thousand containers) of suspect TRU waste from the LLBGs are scheduled to be retrieved by 2006. No substantial releases are expected to occur before the waste is retrieved.

Offsite TRU waste would not be sent to Hanford for disposal. It will have been shipped to WIPP before closure. Notwithstanding the above, as encouraged by various commenters, the HSW EIS includes an evaluation that assumes only Hanford wastes are managed at Hanford in the future.

## Transuranic (TRU) Waste

An expanded discussion of uncertainties associated with the HSW EIS impact analyses is included in Volume I Section 3.5.

---

---

### Comments

L-0039/009

Transuranic wastes in burial grounds [are not adequately analyzed in this EIS.]

### Response

Retrieval of TRU waste from the LLBGs has already started. Shipments of TRU waste from Hanford to WIPP have also started. As indicated in the Hanford Performance Management Plan ( HPMP, DOE-RL 2002), approximately one-third of the containers (fifteen thousand containers) of suspect TRU waste from the LLBGs are scheduled to be retrieved by 2006 . No substantial releases are expected to occur before the waste is retrieved.

Waste streams resulting from Hanford cleanup actions are factored into the HSW EIS cumulative impact analysis. In some cases, waste streams are directly considered as part of the alternatives evaluation. For example, processing and certification of TRU waste from cleanup of the 618-10 and 618-11 Burial Grounds is part of the projected TRU waste volumes analyzed in all alternative groups.

TPA Milestone M-15-00C requires all 200 Area, non-tank farm, pre-record of decision site investigation activities to be completed by December 31, 2008. Site characterization information generated from TPA remedial investigation and LLBG RCRA permitting activities has been used in development of the HSW EIS.

---

---

### Comments

L-0055/058

All TRU [will] eventually [be] shipped to WIPP. When and what assurances? TRU waste buried in 618-10 and 11 burial grounds eventually [will be] shipped to WIPP. DOE has put off the cleanup of this site. DOE claimed they did not have the technology available to clean up these "hot" sites. What is the time-table for this? This delay has resulted in new ground water contamination spreading towards the Columbia River.

### Response

Retrieval of TRU waste from the LLBGs has already started. Shipments of TRU waste from Hanford to WIPP have also started. As indicated in the Hanford Performance Management Plan ( HPMP, DOE-RL 2002), approximately one-third of the containers (fifteen thousand containers) of suspect TRU waste from the LLBGs are scheduled to be retrieved by 2006 . No substantial releases are expected to occur before the waste is retrieved.

Per the Tri-Party Agreement, TRU waste in the 618-10 and 618-11 burial grounds will be retrieved by 2018.

---

---

### Comments

E-0051/003

Any waste "temporarily" held here that is brought from elsewhere would probably stay a long time and probably leak as well (it will be in unlined ditches!).

F-0010/002

I still have concerns regarding the use of unlined, soil trenches for unspecified periods of time. Despite ongoing public concern, DOE's preferred alternative still recommends storing TRU waste in the Low Level Burial Grounds for an undetermined time period. I again call on DOE to fully examine this issue, and to demonstrate that its treatment and disposal proposals are safe beyond a doubt.

## Transuranic (TRU) Waste

F-0015/006, TSE-0014/006

...waste containers will degrade while "stored" at Hanford for 20 or more years

L-0044/128

Further, storage of TRU waste in unlined trenches is unacceptable.

L-0055/051

Local, State, tribal and federal governments and carriers all have the responsibility for preparing for and responding to transportation emergencies. It is good to see the tribes acknowledge as being able to respond. However, when it comes to a radioactive spill, only the federal agencies would have the skills and equipment necessary to contain it. This is further exacerbated by an aging highway system including many bridge issues in Oregon and the State of Oregon's budget constraints. DOE amended the ROD for TRU waste to allow for "temporary storage", characterization and certification from "small generator" sites at Hanford and at Savannah River sites. Again, what is the definition of "temporary storage"?

L-0055/065

According to the discussion Remote Handled TRU waste will be stored at Hanford until processing and certification capabilities are developed. DOE anticipates that WIPP will have its remote-handled acceptance criteria and infrastructure in place to begin receiving such waste in approximately the 2005 timeframe. This is an uncertainty. Is there a chance that this could be delayed? Or could this be extended if WIPP could not accept RH TRU waste?

### Response

These TRU wastes are not expected to be stored onsite for an extended period of time. However, they are expected to be stored above ground at the Central Waste Complex and T Plant and (in the case of remote handled, non-mixed TRU waste) underground in concrete boxes so that they will have no contact with the soil. The storage of these wastes will be monitored in compliance with applicable RCRA, State of Washington dangerous waste regulations, and/or DOE requirements.

---

---

### Comments

L-0028/004

We urge you to re-consider the current plan and act to move these materials to the New Mexico site as the state of Washington is demanding.

### Response

Current plans are to ship transuranic waste from Hanford and other DOE sites to WIPP. Hanford has already shipped more than 1,292 drums of transuranic waste to WIPP to date (August 2003) and is accelerating its shipment schedule.

---

---

### Comments

L-0059/001

I generally agree with the section "DOE Preferred Alternative" on page S.41. The methods for storage, treatment, and disposal appear to be reasonable and provide protection for the public, workers, and environment. However, I am anxious to hear that more frequent shipments of TRU waste are being made to the WIPP site, and that a long overdue treatment process for MLLW is operating and reducing the backlog of MLLW from the Hanford site. The problems with and orders from the State of Washington must be addressed and settled promptly. DOE must take appropriate actions in accordance with the Tri-Party Agreement to reach written agreements with the State to promptly permit shipment of TRU waste and MLLW in and out of Hanford.

## Transuranic (TRU) Waste

### Response

Current plans are to ship transuranic waste from Hanford and other DOE sites to WIPP. Hanford has already shipped more than 1,292 drums of transuranic waste to WIPP to date (August 2003) and is accelerating its shipment schedule.

DOE is committed to cleaning up the Hanford Site in accordance with the Tri-Party Agreement (TPA) and applicable environmental requirements under federal and state laws and regulations. As of February 1, 2003, DOE had met 99% of its TPA milestones on or ahead of schedule. A lot in the way of cleanup has happened at Hanford over the last decade. Portions of the site have already been cleaned up, removed from the National Priority List (NPL), and released for other uses (e.g., the 1100 Operable Unit). As part of the river corridor cleanup, DOE is remediating contaminated soil sites, decommissioning the plutonium production reactors and associated facilities, removing production reactor fuel from the K Basins to interim storage in the 200 Area, and treating groundwater contaminated by past operations. Groundwater contamination beneath the Hanford Site is being studied and remediated by the ongoing CERCLA program in accordance with the Tri-Party Agreement. See Volume II Appendix N, Section N.2.4. See Volume III Section 2.0, Item 6 of the CRD for more examples of cleanup at Hanford.

DOE is responsible for the cleanup of dozens of sites around the country. DOE's approach is to consolidate and dispose of radioactive waste from all its cleanup efforts in the safest and most cost-effective manner possible. Hanford and other sites would be available for the disposal of low-level waste and mixed low-level waste; WIPP is used for the disposal of TRU waste; Yucca Mountain is expected to be used for the disposal of high-level waste and spent nuclear fuel. Many more curies of waste will be sent offsite from Hanford than will be received from offsite. Analysis indicates that these wastes could be handled without complicating future remediations, or diverting resources or disposal capacity from other Hanford cleanup activities.

The Hanford clean-up effort is expected to be completed in 2035, followed by a long-term stewardship program that ensures waste remaining onsite is appropriately managed.

---

---

### Comments

F-0015/004, TSE-0014/004

Hanford lacks any facility to analyze the waste as required to meet hazardous waste laws and to ensure safe storage.

TSE-0017/003

...much of the TRU waste is not certifiable to be moved to WIPP[.]

TSE-0017/004

...much of it [the TRU waste] cannot be currently treated at Hanford, which means it will be there for some time[.]

### Response

Current plans are to ship transuranic waste from Hanford and other DOE sites to WIPP. Hanford has already shipped more than 1,292 drums of transuranic waste to WIPP to date (August 2003) and is accelerating its shipment schedule.

Most of the TRU waste will be contact handled, which can be certified through existing facilities (such as WRAP).

## Transuranic (TRU) Waste

---

---

### Comments

E-0031/001, L-0031/001

This purpose of this letter is to express concern that the preferred alternative for the subject EIS does not specifically address the alternative of thermally treating transuranic (TRU) waste on-site at Hanford, and to recommend that thermal treatment for TRU waste be added to the preferred alternative as a means of removing all prohibited items that prevent the shipment and disposal of TRU waste.

In order to be disposed of at the Waste Isolation Pilot Plant (WIPP) in Carlsbad, New Mexico, TRU waste must meet the shipping requirements specified by the U.S. Nuclear Regulatory Commission (NRC) and the disposal requirements specified in the Waste Analysis Plan (WAP) of the WIPP RCRA Permit. Hanford TRU waste, in many instances, does not meet these requirements for shipping and disposal, as the waste contains items that are prohibited by both the NRC and the WIPP RCRA Permit. Such prohibited items include liquids, aerosol cans, sealed containers, volatile organic compounds, PCBs, corrosives, reactives, ignitables, waste incompatible with the backfill used at WIPP, and waste that generates flammable gas, etc.

The preferred alternative for TRU waste operations in the EIS includes processing capability "such as size-reduction and repackaging technologies." Size-reduction and repackaging technologies will not solve the problem of having prohibited items in TRU waste. Although opening drums and sorting the waste on a table will successfully remove some prohibited items, such as liquids, aerosol cans, and sealed containers, these processes do not remove all prohibited items, and these processes unduly increase the potential for worker exposure to radiation. This TRU waste would still contain many items that would prohibit its shipment and disposal. Hence, without the capability to remove all prohibited items from the TRU waste, a large portion of Hanford's TRU waste would remain on-site in storage indefinitely, posing additional risk to workers, the public, and the environment.

Thermal treatment of TRU waste is recommended for inclusion in the preferred alternative because it is a means of removing all (not just some) prohibited items from TRU waste using a process that does not require sorting. There are commercially available thermal treatment processes that have no liquid effluent, and emit only water vapor and carbon dioxide into the air, thus minimizing long-term impacts to the environment by their use at the Hanford Site. Unlike low-level mixed waste (LLMW), TRU waste cannot be transported and treated off-site because of restrictions in the TRU waste Record of Decision; therefore, on-site treatment of TRU waste is the only alternative for this waste stream.

One commercially available thermal treatment process for TRU waste consists of two treatment stages, an in-drum pyrolysis process followed by a steam reforming process. In the first stage, TRU waste is heated in an inert environment to temperatures between 650°C and 750°C. Drums of waste are placed in an electrically heated pyrolysis chamber where water is evaporated, organics are volatilized and pyrolyzed, and corrosives and reactive materials are converted into non-hazardous oxides or carbonate compounds. The pyrolyzed residue in the drums will be an inert, inorganic, carbon char containing radioactive metals.

A distinguishing characteristic of this process is that the system greatly minimizes criticality and contamination control issues during the processing of TRU waste. Moderate processing temperatures mitigate radioactive metal volatility, and very low off-gas flows essentially eliminate particulate carryover from the drummed wastes. Back-up protection to prevent radionuclides from becoming airborne is provided by replacing the existing drum lid with a lid that has a ceramic filter and an inorganic drum-to-lid sealing mechanism. The ceramic filter allows gas interchange, but prevents release of radioactive particles.

Stage two of this process is used to treat the off-gases from the pyrolysis process, and consists of a steam reformer and a downstream scrubber for neutralization of acid gases. The off-gas produced by pyrolysis consists of water vapor, volatilized organics, and acid gases from the decomposition of cellulosic materials (i.e., paper, wipes, anti-contamination clothing, etc.), plastics, and other organics in the drums. The off-gas

## Transuranic (TRU) Waste

from the pyrolysis chamber is pulled by vacuum into the bottom of a steam reformer. The steam reforming process destroys residual organics in the off-gas, including RCRA and TSCA organic constituents. These organics are converted to carbon dioxide and water vapor in the steam reformer by a combination of steam reforming and oxidizing reactions.

Downstream of the steam reformer, wet scrubber technology is used to neutralize corrosive acid gases and particulates that are carried out of the reforming vessel with the off-gas. Scrubber liquids are concentrated, emptied into a 55-gallon drum, and then dried in the pyrolyzer; thus, the process produces no secondary liquid waste. Downstream of the scrubber, the off-gases are passed through a HEPA filter so that the emissions released to the atmosphere are carbon dioxide and water vapor. The system does not generate dioxins or furans, and is considered a non-incineration process by the U.S. Environmental Protection Agency (EPA). Pyrolysis and steam reforming processes are both recommended by the Secretary of Energy's Advisory Panel on Alternatives to Incineration (Blue Ribbon Panel).

The same system could be used for the treatment of both TRU waste and LLMW. The treated TRU waste would meet all NRC requirements for shipping and WIPP RCRA Permit requirements for disposal. Treatment of LLMW would remove all organics, including RCRA organics and TSCA PCBs. If the LLMW contained heavy metals, the treated residue would undergo secondary treatment (e.g., macroencapsulation or microencapsulation). The treated waste would then meet Land Disposal Restrictions. This one treatment process can accelerate the disposal of both LLMW and TRU waste. Having one process, instead of separate processes for LLMW and TRU waste, would minimize the short-term environmental impacts due to construction.

Thermal treatment of TRU and LLMW on-site waste would also reduce transportation risks. After treatment, TRU waste will not contain any untreated hazardous constituents, and the volume of the waste will have been reduced by thermal treatment (depending on the contents of the debris in the waste, documented volume reduction ranges from 20–90%). After pyrolysis, drums of debris waste will be compacted as part of the thermal treatment process, yielding a significant reduction in the number of TRU waste shipments from Hanford to WIPP in New Mexico. If the same thermal treatment system is used for LLMW, the transportation risks associated with the treatment of this waste stream are also reduced because LLMW would not have to be shipped off-site for treatment.

### Response

The 1996 amendments to the WIPP Land Withdrawal Act exempted TRU mixed waste designated for disposal at WIPP from specific treatment standards and land disposal prohibitions of hazardous waste laws. Based on experience with TRU waste now being sent to WIPP (contact handled, mixed and non-mixed), it is anticipated that most TRU and TRU mixed waste would meet WIPP waste acceptance criteria without the need for substantial additional processing. Permitting of TRU waste disposal at WIPP is discussed in Volume I Section 2.1.3. Processing and certification of TRU to meet WIPP waste acceptance criteria is discussed in Volume I Section 2.2.2.

---

---

### Comments

F-0017/003

No dumping of Plutonium Wastes in unlined trenches[!]

L-0014/007, L-0022/007

The importation of TRU wastes from other DOE sites for repackaging, certification, and storage prior to shipment offsite for disposal is acceptable. Permanent disposal of these wastes at Hanford is not acceptable.

### Response

The TRU waste will not be disposed of at Hanford. It will be processed as necessary and shipped to WIPP.

## Transuranic (TRU) Waste

These TRU wastes are not expected to be stored onsite for an extended period of time. However, they are expected to be stored above ground at the Central Waste Complex and T Plant and (in the case of remote handled, non-mixed TRU waste) underground in concrete boxes so that they will have no contact with the soil. The storage of these wastes will be monitored in compliance with applicable RCRA, State of Washington dangerous waste regulations, and/or DOE requirements.

---

---

### Comments

L-0044/098

Sec. 1.3.2.3, p.1.10; Sec. 2.1.3, pp. 2.8-2.11; Appendix C. Sec. C.4, p. 11 Bullet 3 states that Hanford will manage transuranic (TRU) waste from "some other DOE sites that do not have capacity" to manage them. Sec. 2.1.3 does not classify the form or quantify the volume of offsite TRU waste that will be managed at Hanford. Sec. 3.3.3 states only that an added 1500 cu. m. [cubic meters] of TRU waste would be received for temporary storage and shipment to WIPP; separate volumes of CH and RH TRU should be specified. Appendix C, section C.4 Transuranic Waste asserts that the volume of TRU waste from offsite could be added to the Hanford Lower Bound without significant environmental impact. A reader cannot readily ascertain how the USDOE determined the negligible impact; therefore, its validity is questionable.

### Response

The specific offsite TRU waste volumes can be calculated from the flowcharts in Volume II Appendix B. About 1,473 cubic meters would be CH-TRU waste and 84 cubic meters would be RH-TRU waste.

The Hanford Only waste volume has been evaluated in all action alternatives and the No Action Alternative to provide a better comparison with the impacts of adding offsite waste. The incremental impacts of offsite waste are the differences between the Lower and Upper Bound Volumes and the Hanford Only impacts for a given alternative.

---

---

### Comments

L-0055/064

DOE would need additional capabilities to treat MLLW, RH-MLLW, RH-TRU, and non-standard items since they cannot be accepted by commercial facilities. When would these facilities be built? It appears that waste of many different kinds would be stored at Hanford in unstable forms before they could be processed. This increases the hazard to the environment.

### Response

The HSW EIS assumes these treatment capabilities will be available by 2012. Waste is stored at Hanford consistent with applicable RCRA, state, and DOE requirements.

---

---

### Comments

E-0047/014

[The HSW EIS fails to assess:] The condition of TRU containers in the LLBG.

### Response

Retrieval of stored TRU waste from the LLBGs was evaluated in the HDW EIS (DOE 1987), and a subsequent evaluation was prepared for retrieval of about 15,000 drum equivalents of the waste for processing, certification and shipment to WIPP (DOE 2002b). Based on experience gained during retrieval of that waste, DOE would evaluate the condition of remaining waste to be retrieved and prepare additional environmental reviews as necessary. The previous analyses for retrieval of TRU waste are summarized in Volume I Section 1.5.2.

## Transuranic (TRU) Waste

---

---

### Comments

TPO-0019/003

Despite ongoing public concern, DOE's preferred alternative still recommends storing TRU waste in the low-level burial grounds for an undetermined time period. I again call on DOE to fully examine this issue and to demonstrate that its treatment and disposal proposals are safe beyond a doubt[.]

### Response

Per the Tri-Party Agreement, TRU waste in the 618-10 and 618-11 burial grounds will be retrieved by 2018.

Retrieval of TRU waste from the LLBGs has already started. Shipments of TRU waste from Hanford to WIPP have also started. As indicated in the Hanford Performance Management Plan ( HPMP, DOE-RL 2002), approximately one-third of the containers (fifteen thousand containers) of suspect TRU waste from the LLBGs are scheduled to be retrieved by 2006 . No substantial releases are expected to occur before the waste is retrieved.

---

---

### Comments

E-0047/036

An alternative that assumes all TRU waste will be shipped from the generator site directly to WIPP for treatment and disposal and not Hanford.

E-0050/008

Many of these transportation risks are unnecessary, particularly those involving shipment of transuranic waste (TRU). The EIS discusses plans for shipping TRU for temporary storage, repackaging, and certification prior to sending the TRU to the Waste Isolation Pilot Plant (WIPP) for permanent disposal/storage. The EIS speaks of using both Hanford facilities and mobile processing units to ready this waste for reshipment to WIPP. It would make more sense to send the mobile processing units to the point of origin of the TRU, process the waste into the TRUPACT, HalfPACT, or RH-72B containers there, and then send it directly from the point of origin to WIPP. The TRUPACT containers are designed to minimize risks due to radiation exposures or traffic accidents during shipment of TRU waste. Therefore, it makes no sense to ship these wastes to Hanford before they have been packaged so as to minimize risks of an accident or exposure. Only wastes generated at Hanford should be packaged at Hanford for shipment to WIPP.

E-0055/003

The revised draft HSWEIS is totally inadequate to fulfill the requirements of NEPA, which USDOE had previously failed to meet before attempting to ship TRU from ETEC and Battelle to Hanford. Not only does it fail to address the impacts from not treating the TRU, and from not operating in a manner that assures that all TRU is stored as if it is Mixed Waste unless fully characterized and proven not to have hazardous wastes present, the revised draft fails to meet numerous commitments made in the USDOE's 1997 Waste Management Programmatic EIS and subsequent TRU Record of Decision for site wide and project specific NEPA reviews of the impacts of transporting TRU to Hanford and storing or treating the TRU at Hanford. Most obviously, the USDOE fails to consider the alternative of transporting the wastes only once – to the WIPP disposal facility for TRU, in New Mexico – and treating and processing the TRU there before disposal, instead of first transporting untreated and uncertified TRU to Hanford for prolonged storage.

F-0015/003, TSE-0014/003

The U.S. Department of Energy does not even know what is in the highly radioactive remote handled transuranic waste that it wants to ship to Hanford. It has designated them "non-verifiable."

F-0017/004

No transportation of Plutonium wastes through my city! You haven't even bothered to do an EIS on that madness.

## Transuranic (TRU) Waste

L-0047/001

I think it is very dangerous for the DOE to bring in any more plutonium waste to Hanford. Other sites should be surveyed and evaluated before a decision is made. There are better locations where pits are lined with concrete to prevent waste from leaching into the ground. There is too much danger of leakage into the Columbia River at Hanford. I hereby register my opposition to any more waste going to Hanford.

P-0065/001

I would like to register my resistance to DOE plans to ship transuranic waste to Hanford for storage. Hanford is already the nation's most contaminated site -- it hardly needs more.

TSE-0010/005

Should the Department of Energy truck in more transuranic waste? Not if we want to clean it up or continue to move forward. So, I say, with this comment, effectively Hanford cannot be a destination for more transuranic waste.

### Response

Most of DOE's TRU waste is being sent directly from the generators to WIPP.

The Hanford Only waste volume has been evaluated in all action alternatives and the No Action Alternative to provide a better comparison with the impacts of adding offsite waste. The incremental impacts of offsite waste are the differences between the Lower and Upper Bound Volumes and the Hanford Only impacts for a given alternative.

This HSW EIS analyzes the storage and processing for shipment to WIPP of all TRU waste expected to be received from offsite DOE generators.

In response to public comments, DOE has conducted a route- and generator-specific offsite transportation analysis using updated highway routing and 2000 census data. See Volume I Section 5.8 and Volume II Appendix H. The potential impacts identified in the updated evaluation are similar to those presented in the WM PEIS (DOE 1997b) and the WIPP SEIS-II (DOE 1997c), and would not change conclusions or DOE-wide waste management decisions based on those studies.