

Attachment 2: PREVIOUS BOARD COMMENTS

TOPIC ONE: Actions, alternatives and impacts for all Hanford waste sites.

1. Scope should include a comprehensive, integrated, and publicly vetted strategy for all nuclear materials disposition for the complex to support the Waste Management Programmatic Environmental Impact Statement (PEIS). (Advice #133)
2. Scope should include the cumulative impacts of all Hanford waste decisions, related major actions, onsite and complex-wide. (Advice #133)
3. Scope should define the quantities and nature of waste in all forms proposed to be stored, treated or disposed at Hanford (applicable to WRAP facility, low level burial grounds and the Central Waste Complex). (Advice #133)
4. Scope should include an inventory of how much waste will be exported. (Advice #133)
5. Scope should include an estimate of how much new waste will be accepted. (Advice #133)
6. Scope should include the impacts from contact-handled TRU waste retrieval. (Advice #133)
7. Scope should include the impacts of not retrieving or shipping to WIPP all of the post-1970 TRU waste. (Advice #133)
8. Scope should include a roadmap to locate actions, alternatives and impacts of burial of environmental restoration waste which was excluded from HSW-EIS. (Advice #133)
9. Scope should include the impacts of hazardous waste (e.g. lead shielding) buried with various forms of radioactive waste. (Advice #133)
10. Scope should include low level waste burial grounds for disposal of hazardous or dangerous wastes including liquids, flammables and solvents. (Advice #133)
11. Scope should include releases of hazardous substances. (Advice #133)

12. Scope should include a discussion of how DOE's **intent to change waste classifications** would change how the wastes are treated and disposed. (Advice #140)
13. Scope should include the analysis of Pre-treatment Plant and WTP secondary waste streams that arise in the retrieval, treatment, and disposal of Tank Waste. (Advice #140)
14. Scope should include the vadose zone and options for remediating the vadose zone for all tanks/pipelines/underground equipment, and all disposal sites (planned and unplanned) within the vadose zone. (Advice #140)
15. Scope should include reasonable alternatives including the long-term full life cycle costs of different melter technologies and different glass formulations. (Advice #140)
16. Scope should include retrieval from, closure and disposition of all tanks not just SSTs and MUSTs. (Advice #140)
17. Scope should include long term effects of Yucca Mtn not receiving Hanford immobilized HLW, e.g. building new glass waste storage buildings. (Advice #140)
18. Scope should include analyses carried out in sufficient depth and detail to provide objective and quantitative comparisons of alternatives over the full time span over which the hazards may persist, e.g. 100 yrs, 1000 yrs, 10,000 yrs etc. (Advice #140)
19. Scope should include decisions about Hanford-only waste:
 - o Whether to use an existing facility or build a new facility to treat waste.
 - o Whether to dispose of Hanford low-level waste (LLW), mixed low-level waste (MLLW), and ILAW in a common facility or continue to use separate disposal operations.
 - o Where such disposal facilities should be located. (Advice #148)
20. Scope should include more detail to support selection of Hanford as a repository for DOE complex-wide disposal of LLW and MLLW. (Advice #148)
21. Scope should include the disposal of both the vitrified waste and the melters in which the vitrified waste were processed. (Advice #148)

TOPIC TWO: Infrastructure

(No previous comments.)

TOPIC THREE: Compliance with TPA, EPA requirements and State requirements.

1. Scope should adjust the No Action alternative to comply with legal and regulatory requirements. (Advice #133)
2. Scope should incorporate EPA and State regulatory limits in analyses including all actions and alternatives. (Advice #148)
3. Scope should include the use of legally controlling standards from EPA and the State of Washington for cleanup decisions or for permitting of mixed waste facilities. DOE uses as its benchmark in the HSW EIS the DOE 25 millirem all sources limit. This dose is not the legally controlling standard for cleanup decisions or for permitting of mixed waste facilities. This dose is greater than the EPA's and State's required regulatory risk ranges. (Advice #148)
4. Scope should include the application of either the specific EPA or MTCA carcinogen-risk standards for radionuclides, or the State and Federal anti-degradation standards, which are applicable to this analysis. (Advice #148)
5. Scope should include a discussion of whether the results of the modeling indicate whether proposed actions or cumulative impacts will exceed relevant standards or be in compliance with Federal and State laws and regulations. (Advice #162)
6. Scope should include at least one alternative that complies with the TPA requirements for treatment and removal of tank wastes by 2028. (Advice #164)

TOPIC FOUR: Quality Assurance.

1. Scope should include explanation of modeling and inventory assumptions. (Advice #133)
2. Scope should include those modeling and inventory assumptions to be consistent with known data on the movement of radioactive and hazardous waste at Hanford, and to be consistent with site actions. (Advice #133)

3. Scope should include a true "No Action" alternative that does not import and bury offsite-generated LLW and MLLW from DOE sites and other generators. (Advice #133)
4. Scope should include malevolent events in the accident analysis. (Advice #133)
5. Scope should provide consistency between SW and PEIS. (Advice #133)
6. Scope should include analyses for import of TRU waste. (Advice #133)
7. Scope should include an adequate analysis of cap performance. (Advice #133)
8. Scope should include more than an analysis of a single cap, assuming it meets RCRA requirements. (Advice #133)
9. Scope should include analyses to support the assertion that use of deep lined megatrenches is bounded by the analysis performed for shallow trenches. (Advice #133)
10. Scope should include analysis of long term stewardship over thousands of years. (Advice #133)
11. Scope should include a discussion of costing methods to apply to offsite generators of waste to be buried at Hanford. (Advice #133)
12. Scope should include the use of the most recent budget and cost comparison data. (Advice #133)
13. Scope should include an explanation of how DOE will handle the statement in the 1997 Tank Waste Remediation System EIS (and its ROD) that there were inadequate data and characterization of tank waste and soil and groundwater contamination from leaks to consider closure in an EIS at that time. Explain why such inadequacies have changed enough to prepare and EIS at this time. (Advice #140)
14. Scope should include environmental impacts for the time frame necessary to achieve peak values, e.g. 100 yrs, 1000 yrs, 10,000 yrs. (Advice #140)
15. Scope should include a life cycle cost to site closure for each of the alternatives considered. (Advice #140)

16. Scope should include an analysis of the cumulative impacts from all Hanford wastes on Hanford soil, groundwater, the Columbia River, its ecosystem, interconnected ecosystems and the people living downstream from Hanford. (Advice #148)
17. Scope should include performance assessments for alternatives using supplemental technologies for treatment of tank wastes resulting in performance "as good as glass". The summed contributions of all components of the LAW supplemental treatment disposal package and secondary wastes should be as good as glass produced from the WTP LAW vitrification facility. (Advice #148)
18. Scope should include the use of legally controlling standards from EPA and the State of Washington for cleanup decisions or for permitting of mixed waste facilities. DOE uses as its benchmark in the HSW EIS the DOE 25 millirem all sources limit. This dose, however, is not the legally controlling standard for cleanup decisions or for permitting of mixed waste facilities. This dose is greater than the EPA's and State's required regulatory risk ranges. (Advice #148)
19. Scope should include a life-cycle cost analysis for each alternative. This analysis is needed in order to make a reasonable selection of the appropriate supplemental process(es) to be included in the EIS. By performing these analyses outside of and in front of the EIS, the number of alternatives and variables in the EIS could be significantly reduced. (Advice #140)
20. Scope should include a definition of analytical models used in the EIS. Scope should include a discussion if these analytical models are consistent with the professional standards or best industry practices. (Advice #162)
21. Scope should include a definition of what assumptions are made in the documents and in the analytical models. For example:
 - o Are these assumptions reasonable and consistent with relevant cleanup standards and requirements?
 - o Are the assumptions consistent with reasonable maximum exposure scenarios? (Advice #162)

TOPIC FIVE: All known and reasonably foreseeable impacts to groundwater.

1. Scope should include impacts to groundwater and human health at the point of compliance for waste management units. (Advice #148)

2. Scope should address non-degradation to ground water beyond the edge of the waste management unit. (Advice #148)
3. Scope should show area of ground water where irreversible impact will occur. The draft HSW-EIS improperly asserts a claim for irretrievable and irreversible impact to an unidentified area of ground water (which may encompass the entire Hanford site) forever, with no analysis or disclosure of how large an area this may be, how bad the conditions may become, or how long this may persist. (Advice #148)
4. Scope should include groundwater monitoring around burial grounds and in vadose zone to be able to substantiate assumptions of future movement, or lack thereof. (Advice #148)
5. Scope should include the potential impacts at the edge of, and under, the disposal sites in the vadose zone and groundwater. (The HSW EIS analyzed the potential impacts to groundwater at a line one kilometer away from the proposed disposal sites. This is inadequate.) Additionally, DOE should analyze the potential worst case impacts from overlapping releases. Future releases from these disposals, which exceed regulatory limits, will trigger additional cleanup requirements under the Resource Conservation and Recovery Act (RCRA) and/or the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). (Advice #148)
6. Scope should include existing plumes of contamination in the groundwater. Groundwater is a State resource, not a Federal resource. DOE lacks authority to decide to all contamination of groundwater to levels that prevent future use-- --and "irreversible and irretrievable commitment." This claim should be deleted. Both State and Federal law for environmental cleanup require the protection of groundwater. The scope should contain a clarification that no irreversible and irretrievable commitment of groundwater has already been assumed or will be made as a consequence of any action addressed in the EIS. Further, ongoing cleanup programs should continue to address historic releases with the goal of groundwater restoration. (Advice #148)

TOPIC SIX: A clear and comprehensive public review and comment process

1. Scope should include a primer for the reader that identifies the various types of waste, their treatment methods, and disposal requirements for each waste classification. This EIS should contain, in language understandable to the

public, a listing of the specific decisions supported by this EIS and how this EIS will be used in making those decisions. If this primer is placed on the ORP website, the site should have clear directions for finding it. (Advice #144)

2. Scope should include a clear statement of the relationships between this EIS, the previous Tank Waste Remediation System (TWRS) EIS and the DOE Programmatic EIS (WMPEIS). (Advice #133 and #144)