

RESPONSE TO USEPA AND OHIO EPA COMMENTS  
ON THE DRAFT FIRST LOADOUT WORK PLAN  
FOR THE WASTE PITS REMEDIAL ACTION PROJECT

1982

Commenting Organization: U.S. EPA  
Section #: 3.3.2 Page #: 18  
Original Specific Comment #: 1

Commentor: Saric  
Line #: NA

Comment: This section discusses alternatives if Envirocare of Utah, Inc. (Envirocare) rejects the contents of a railcar because it exceeds Envirocare's waste acceptance criteria (WAC). The text states that one alternative for rendering the material WAC-compliant is "admixing (it) with onsite materials to assure (sic) compliance" at Envirocare. However, the October 1998 permit for Envirocare practically eliminates Envirocare's ability to blend waste onsite to meet WAC. The text should be revised to reflect current operational practices and procedures at Envirocare.

Response: Agree. The FEMP recognizes that Envirocare's October 1998 Radioactive License Renewal limits the ability of the facility to blend a customer's waste on arrival to meet facility acceptance criteria, and that this would not be a standard operating practice. However, as a contingency measure only, Envirocare's operating conditions allow them to blend down a customer's waste as a preference over sending the material back to its place of origin. Again, this is a contingency only; customers are expected to send in all cases only those materials that are acceptable for disposal. The intent is to minimize the number of instances for which any particular customer would need to invoke this contingency; excessive use would be viewed poorly by both Envirocare and the State of Utah. It should not be a normal practice. The option exists only to minimize the additional short-term risks that are brought into play by sending a customer's non-compliant waste back down the rail lines for rework at the generator's location. The FEMP recognizes this is a contingency arrangement only and in no case is planning on utilizing this option for any active purpose.

Action: No change necessary. The text on page 18 continues to reflect Envirocare's current operating conditions, even under the October 1998 License Renewal.

Commenting Organization: U.S. EPA  
Section #: 6.2 Page #: 34  
Original Specific Comment #: 2

Commentor: Saric  
Line #: 14

Comment: The text refers to the U.S. Department of Transportation (DOT) definition of low-specific activity, group I (LSA-I), material, which cites the limits for radioactivity. However, DOT LSA-I definition also includes the words "material in which the Class 7 (radioactive) material is essentially uniformly distributed." The text should be revised to include this part of the DOT definition and discuss how the issue of uniformity relates to the material in Soil Piles 6 and 7. This issue will probably gain importance during later phases of the remedial action involving the waste pits, but it should be addressed in this work plan as well.

**Response:** Comment acknowledged. The U.S. Department of Transportation (DOT) and the U.S. Nuclear Regulatory Commission jointly developed guidance to assist shippers in preparing low specific activity materials and surface contaminated objects in compliance with Federal regulations. The guidance specifically states that, "The terms, essentially uniformly distributed and distributed throughout, are both intended to disallow categorization of material as LSA in a situation during which a small volume of very high radioactivity is placed within a large quantity of nonradioactive or slightly radioactive material, thereby reducing the average concentration to within specified limits". In essence, the requirement for 'essentially uniformly distributed' prevents shippers from diluting highly radioactive materials, such as fuel cores, in relatively inert material, such as soil, to avoid more stringent packaging requirements.

The material in Soil Piles 6 and 7 originated from areas of generalized contamination with radioactivity distributed relatively evenly throughout the soil. Thus, Soil Piles 6 and 7 meet the definition of LSA-1, including the requirement for essentially uniform distribution of radionuclides.

**Action:** The text will be revised to include a discussion on the definition of "essentially uniformly distributed" and its application to Soil Piles 6 and 7.

Commenting Organization: U.S. EPA  
Section #: 6.2 Page #:34  
Original Specific Comment #: 3

Commentor: Saric  
Line #: 20

**Comment:** The text defines variables in the equation for LSA-I limits as "activities of radionuclides." These variables actually represent the intensive unit of measurement "activity per gram" rather than the extensive unit of measurement "activity". The text should be revised accordingly.

**Response:** Agree. The text will be revised to define the subject variable in terms of "activity per gram".

**Action:** The discussion following the LSA-I equation in item 2 of Section 6.2 has been revised as follows: "Where  $a_i$  is the activity per gram of the  $i$  isotope and  $A_{2i}$  is the DOT  $A_2$  value of the  $i$  isotope."



reference to the use of end loaders for transport or to provide additional detail on the controls which will be used to address these concerns.

**Response:** DOE agrees that there is a higher potential for spillage when using a front end loader (rather than a truck) for transferring materials from SP7 to the hopper. However, concerns regarding this spillage need to be assessed against planned controls and issues associated with alternative transport modes. As stated in Section 3.1, transport will take place along a dedicated haul route, which is only expected to be about 500 feet long. The use of such a dedicated haul route enables OU1 to put controls in place, such as limiting access, limiting speeds, etc., to help minimize spillage and to control the spread of contamination should there be any spillage. Section 4.1.2 goes on to state that the front end loader will not be overfilled, so as to minimize spillage, and that the haul route will be periodically scraped/cleaned, as necessary, to clean up possible spillage. In addition, Section 4.1.2 provides that the haul route will be graded to facilitate erosion control (i.e., to direct any stormwater which contacts this spilled material to the defined collection point). If necessary, silt fences will be used along the haul route to facilitate erosion control. Although there would be less spillage along the haul route using a truck, there is a tradeoff associated with the need for multiple handling of the material. Not only would there be activities associated with the loading of the trucks, and the hauling of the material, but trucking also brings with it the need to dump the material near the hopper and then feed it into the hopper using a front end loader. Transfer from SP7 to the hopper using the front end loader, however, allows for direct placement into the hopper.

Relative to fugitive dust, regardless of the vehicle used for transport, Section 4.2.1 provides that water sprays will be applied to the soils before and/or during loading, as necessary, to minimize fugitive dust generation. In addition, for the haul route from SP7 to the hopper, vehicle traffic will be limited to only those vehicles necessary, vehicle speeds will be limited, and water trucks will be used, as necessary, to control fugitive dust.

DOE feels that flexibility is needed to allow for both the use of trucks and front end loaders to transport materials from SP7 to the hopper, and therefore is not planning removing the option of using the front end loader from the Plan. In addition, based on the above discussion, DOE also feels that adequate controls have been put in place to minimize the spillage of materials and the generation of fugitive dust, during transport, and to manage any spillage of material, should spillage occur. If, during implementation, it is found that contamination originating from the use of front end loaders cannot be effectively controlled, DOE will discontinue use of front end loaders for the transport of materials from SP7 to the hopper.

**Action:** The following sentence has been added to the end of Section 4.2.1 to address potential additional erosion control measures along the haul route: "If necessary, silt fences will be used along the haul route to facilitate erosion control."

Commenting Organization: OEPA

Commentor: OFFO

Section #: 3.1

Page #: 13

Line #: 45

Code: C

Original Specific Comment #: 3

Comment: The document discusses the screening of items larger than 3" but does not address management of the reject material. The document should include detail on management of this waste. Ohio EPA recommends incorporation of a strategy for transfer of the material to railcars at a rate not to exceed Envirocare's debris criteria during first loadout.

Response: The management of these materials is detailed in Section 7.1 of the Work Plan. Specifically, any material which falls off the grizzly screen will be size reduced if possible, and fed again into the hopper (if it can be size reduced). This section goes on to say that any material which cannot be fed through the hopper following these steps will be set aside for eventual transfer to the remediation facility. Section 7.1 states that at the remediation facility, these materials will be "managed and loaded into railcars consistent with similar materials found through the waste pit excavations (as discussed in the RD and RA Documents Packages)." The discussion in this section, and in Section 7.2, will be revised, however, to further clarify plans to load up to 10% debris (by volume) into the railcars.

Action: The following sentence has been added to the second paragraph of Section 7.1, after the discussion cited above: "Specifically, this material will be loaded into railcars in layers, along with the soils, consistent with the Envirocare WAC (i.e., with no more than 10% debris by volume placed into each railcar)." In addition, Section 7.2 has been revised as follows, beginning with the third sentence: "If this off-spec material can eventually be processed through the remediation facility, it will be placed in an area of the MHB away from the general working area, until such time as the material can be processed, at which time it will be transported to the RLB for loadout. During loadout, this material will be placed into the railcars in layers, along with the soils, consistent with the Envirocare WAC (i.e., with no more than 10% debris by volume per railcar)."

Commenting Organization: OEPA

Commentor: OFFO

Section #: 4.1.1

Page #: 21

Line #: 32-36

Code: C

Original Specific Comment #: 4

Comment: The document references seeding of disturbed areas. Ohio EPA recommends DOE incorporate specific language from the Soils project specification 02900. The existing language must be revised regarding the timing of stabilization (i.e., within 7 days of knowing the pile/area will be idle for 45 days stabilization must occur). Additionally, the seed mixture is dependent upon the duration before additional disturbance (e.g., temporary seeding vs. permanent).

Response: Agree. The text in Section 4.1.1 will be revised to make it consistent with the Soils project specifications, as discussed above, regarding the timing of stabilization and the use of appropriate seed mixtures.

Action: Section 4.1.1 has been revised as recommended in the comment.

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Commenting Organization: OEPA Commentor: OFFO  
 Section #: 4.1.2 Page #: 22 Line #: 33-35 Code: C

Original Specific Comment #: 5

Comment: See previous comment regarding requirements for stabilization of disturbed soils.

Response: Agree. The text in Section 4.1.2 will be revised to make it consistent with the Soils project specifications, as discussed above, regarding the timing of stabilization and the use of appropriate seed mixtures.

Action: Section 4.1.2 has been revised as recommended in the comment.

Commenting Organization: OEPA Commentor: OFFO  
 Section #: 4.1.3 Page #: 23 Line #: 18-20 Code: C

Original Specific Comment #: 6

Comment: Once construction is complete and vegetative cover established the silt fence could be removed.

Response: Agree. The text in Section 4.1.3 will be modified to reflect the potential removal of silt fencing following construction completion and establishment of a vegetative cover.

Action: The following sentence has been added to the end of Section 4.1.3: "In fact, silt fencing may be removed at this point in time."

Commenting Organization: OEPA Commentor: OFFO  
 Section #: 4.2.1 Page #: 24 Line #: 10 Code: C

Original Specific Comment #: 7

Comment: Asphaltic based crusting agents should be added to the "do not use" list.

Response: Agree. The text in Section 4.2.1 will be revised to be consistent with the requirements outlined in the Sitewide Excavation Plan (i.e., Appendix F), relative to the use of crusting agents.

Action: The last sentence of the second paragraph of Section 4.2.1 has been revised as follows: "If necessary, surfactants/crusting agents may be used for dust control in lieu of water spray (e.g., due to ambient conditions). The surfactant/crusting agent (e.g., pine sap emulsion) must be 100 percent organic, non-leachable, non-corrosive, non-flammable and have no offensive odor."