

## 2. SUMMARY OF COMMENTS AND RESPONSES

This section contains an overview of comments and responses on the Draft EIS. This section discusses those areas for which DOE received multiple comments. This section does not capture all the specific comments, but is intended to provide the reader with a sense of public concerns on the Draft EIS.

### 2.1 ALTERNATIVES

Many commentors supported DOE's proposed action, although some were concerned that the processes for treating the wastes in the Melton Valley Storage Tanks (MVSTs) may not have been done before at this scale or by the selected contractor. Some commentors were concerned about the uncertainty of using the various treatment processes (e.g., technical implementability), especially Vitrification. While DOE acknowledges that there is some uncertainty in treating TRU waste in using any of the technologies, there are successful examples of these specific technologies being used in similar situations. Examples of drying technology include the Hanford 200 Area evaporator, the Palo Verde Nuclear Generating Station, and Three-Mile Island-2 Evaporation Project. Examples of solidification are solidification of Melton Valley Storage Tank Waste at ORNL, and DOE's Hanford, Rocky Flats, and Savannah sites using hydraulic cement. Examples of DOE use of vitrification include Savannah River M-Area, the Fernald Minimum Additive Waste Unit and the West Valley Vitrification Plant.

Some commentors took issue with the Treatment and Waste Storage at ORNL Alternative (Alternative 5), maintaining that 100 years of institutional control was an insufficient timeframe for analysis of impacts, and that the alternative was contrary to a Tennessee Department of Environment and Conservation (TDEC) Commissioner's Order to ship treated waste offsite, thus the alternative was not reasonable under NEPA. DOE is required to evaluate all reasonable alternatives for a proposed action, and because DOE believes it is reasonable to consider storage, the Treatment and Waste Storage at ORNL Alternative has been kept in this evaluation. Other commentors noted that the alternative should not be for 100 years, but that 30 years was the maximum DOE should consider for interim storage. Some commentors indicated that the impacts associated

with the No Action Alternative were also understated because the impact analysis period was limited to 100 years. DOE believes it is reasonable, in accordance with the Council on Environmental Quality's NEPA regulations [40 *Code of Federal Regulations (CFR)* 1502.14], to analyze the impacts of potential storage of treated waste, e.g., in the event disposal capacity is unavailable. DOE has provided additional analysis in the Final EIS for the No Action Alternative that examined potential impacts from loss of institutional control, assumed to occur for analysis purposes, after 100 years. A 30-year timeframe as compared to a 100-year timeframe would show lower impacts for both utilities and involved worker exposure; other impacts would be similar.

### 2.2 TRANSPORTATION

Several commentors stated that DOE unduly restricted the impact analysis by omitting analysis of on-site transport of the wastes to the treatment facility. DOE agrees and has added several subsections in Section 4.8 to the transportation analysis in Chapter 4 of the Final EIS. These sections address the impacts of routine operations on involved workers and the impacts of accidents on involved workers, non-involved workers, and the public from the (1) exhumation or removal of wastes from trenches, buildings, and bunkers, and (2) transport of wastes to the proposed treatment facility.

### 2.3 THREATENED AND ENDANGERED SPECIES

The U.S. Department of the Interior (DOI) asked for additional information on protected species, including the Indiana Bat. DOE has submitted to DOI a draft Biological Assessment (BA) based on information in the Draft EIS and from site walkovers and will continue informal consultation under the Endangered Species Act. A copy of the draft BA is included in Appendix E of the Final EIS.

## 2.4 ACCIDENTS

One commentor questioned the adequacy of the accident analysis for the Low-Temperature Drying Alternative, pointing out that for high-level waste, explosions and criticality are typically evaluated. DOE considered a wide range of accident scenarios and selected for detailed analysis those that were determined to be credible.

Because low-temperature drying is a low-energy process and is conducted in small, 1 m<sup>3</sup> batches, an explosion would be unlikely. Further, this waste treatment process would be performed in an area with 2-ft-thick walls for radiological protection. Workers are not allowed in the area when treatment is occurring. As a result, there is little risk to involved and non-involved workers.

With regard to criticality accidents, DOE has no process knowledge suggesting that any enriched materials would be part of the waste stream. In addition, administrative and process controls would be followed that avoid criticality.