

5.3 Facility Disposition Impacts

Section 5.3 presents a discussion of potential impacts associated with the disposition of existing HLW *management* facilities at INEEL and disposition of new facilities that would be built in support of the proposed waste processing alternatives. The discussion includes (1) the potential impacts of short-term actions in dispositioning new and existing HLW *management* facilities, (2) the potential long-term impacts from the disposal of the grouted low-level waste fraction in either a new disposal facility at INTEC or in the Tank Farm and bin sets, and (3) the potential long-term impacts of residual contamination in closed HLW *management* facilities. The six facility disposition alternatives are discussed in detail in Section 3.2.

Two kinds of facility disposition are discussed in Section 5.3. The first involves disposition of new facilities required under the *six* waste processing alternatives. These new facilities are shown in Table 3-3 of Section 3.2. Impacts from disposition of these new facilities are discussed by waste processing alternative rather than by facility disposition alternative. This presentation approach stems from the fact that (1) certain new facilities are required by certain waste processing alternatives and (2) any new facilities would be designed to facilitate a high degree of decontamination once processing ceases. As a result, the analysis assumes that DOE would select the Clean Closure Alternative for all of these new facilities.

The second kind of facility disposition involves disposition of existing HLW *management* facilities. Impacts for disposition of existing facilities are presented by facility or facility group and facility disposition alternative rather than by waste processing alternative. Table 3-3 lists existing HLW *management* facilities and alternatives DOE is considering for their disposition. DOE chose this method of presentation because disposition of existing facilities is independent of the waste processing alternatives evaluated in this EIS and is expected to occur regardless of which waste processing alternative is implemented.

Facility disposition encompasses a number of activities that would be carried out after HLW *management* facilities are no longer operational. Once waste processing operations are completed, treatment and storage facilities at INTEC would be deactivated. DOE (1997) discusses the changing mission of INTEC and the planned disposition of surplus facilities. It notes that DOE's goal is to place surplus INEEL facilities in a safe, stable shutdown condition and monitor them while awaiting decommissioning. HLW *management* facilities will be decontaminated to the extent practicable; then, depending on the facility disposition alternative selected and the facility in question, they would be entombed and left standing, partially removed, completely removed, or returned to (restricted) industrial use.

The EIS considers six facility disposition alternatives:

- No Action
- Clean Closure
- Performance-Based Closure
- Closure to Landfill Standards
- Performance-Based Closure with Class A Grout Disposal
- Performance-Based Closure with Class C Grout Disposal

Section 3.2.1 contains detailed descriptions of the various facility disposition alternatives.

The No Action Alternative for facility disposition is substantially the same as No Action for waste processing. Therefore Section 5.3 does not present environmental consequences for the facility disposition No Action Alternative over the period 2000 to 2035. Under No Action, there would be no decontamination and decommissioning of HLW *management* facilities, and no activities that would produce incremental effluents or emissions. Surveillance and maintenance necessary to protect the environment and the safety and health of workers would be performed in the normal course of INTEC operation.

The No Action Alternative could, however, produce impacts in the years beyond 2035 because calcine would remain in the bin sets and mixed transuranic waste (SBW and newly generated liquid waste) would remain in the Tank Farm. To capture these impacts, DOE analyzed the continued storage of calcine and the mixed transuranic waste/SBW. The analysis is presented in Appendix C.9, Facility Closure Modeling. Potential impacts of continued storage of calcine and mixed transuranic waste/SBW beyond the year 2035, an assumption of the No Action Alternative, are reported in Sections 5.3.5.2 (Water Resources), 5.3.6.2 (Ecological Resources), and 5.3.8.2 (Health and Safety).

The Preferred Alternative for the disposition of existing HLW management facilities at INTEC is to use performance-based closure methods. These methods encompass three of the six facility disposition alternatives analyzed in this EIS: Clean Closure, Performance-Based Closure, and Closure to Landfill Standards. Performance-based closure would be implemented in accordance with applicable regulations and DOE Orders. However, any of the disposition alternatives analyzed in this EIS could be implemented under performance-based closure criteria. Table 3-3 identifies the facility disposition alternatives analyzed in this EIS for existing facilities. The potential impacts associated with the disposition of existing HLW management facilities are presented in Section 5.3.

Consistent with the objectives and requirements of DOE Order 430.1A, Life Cycle Management, and DOE Manual 435.1-1, Radioactive Waste Management Manual, all newly constructed facilities necessary to implement the waste processing alternatives would be designed and constructed consistent with measures that facilitate clean closure. Therefore, the Preferred Alternative for disposition of new facilities is Clean Closure. Table 3-1 identifies the major facilities that may be constructed to implement the waste processing alternatives. This section presents the potential impacts of short-term actions to disposition the new HLW management facilities.

5.3.1 LAND USE

Potential impacts to land use from facility disposition activities were evaluated by reviewing closure plans and project data sheets for RCRA-regulated facilities (Tank Farm, bin sets, Liquid Effluent Treatment and Disposal Facility, and Process Equipment Waste Evaporator) and project data sheets for other HLW *management* facilities.

Regardless of the facility disposition alternative chosen, DOE would be required to maintain adequate institutional controls (e.g., fences or warning signs) to limit access to areas that pose a significant health or safety risk to workers until at least the year 2095, when DOE, for purposes of the analysis in this EIS, is assumed to relinquish institutional control.

After closure, most areas within INTEC formerly occupied by waste processing facilities could be designated restricted-use industrial areas. This is consistent with DOE's long-term planning strategy, outlined in DOE (1997), which encourages development in established facility areas (such as INTEC) and discourages new construction in previously-undisturbed or undeveloped areas. These areas could, in theory, be used for new industrial facilities or for warehouses or laydown areas. However, INTEC lies outside of INEEL's "preferred development area" (DOE 1997). Areas formerly occupied by waste processing facilities would not, as long as DOE maintains institutional control, be open to the public for recreational uses or added to the acreage leased to local ranchers for grazing.

In summary, these facility disposition alternatives could affect short- and intermediate-term land use within the secure confines of INTEC but would not affect land use outside of INTEC. None of the facility disposition alternatives would require development of new facilities outside of the secure perimeter fence, and no land currently committed to non-industrial uses (such as ecological research or permitted grazing) would be converted to industrial use. Land use outside of the INEEL would not be affected. Facility disposition activities would be consistent with current and planned uses of INTEC

outlined in the *INEEL Comprehensive Facility and Land Use Plan* (DOE 1997). Activities would also be consistent with DOE guidance on facility and land use planning (DOE 1996). During the period of facility disposition, most existing INEEL waste disposal sites will likely be closed. New site(s) to provide capacity for INEEL wastes may be required and could be developed inside or outside the fenced INTEC boundary based on site suitability factors. Future disposal capacity and potential siting issues are outside the scope of this EIS and would be reviewed as part of appropriate environmental and permitting activities when a need for additional capacity is identified.

5.3.2 SOCIOECONOMICS

Activities associated with the ultimate disposition of HLW *management* facilities could result in potential impacts to the socioeconomics of the INEEL region. Two categories of disposition are considered. The first involves the disposition of the various proposed new facilities that are required to support the waste processing alternatives. The second category covers the disposition of existing facilities. For each facility or group of facilities, DOE has characterized impacts in terms of total employment (direct and indirect) and income or wages (total regional earnings) that would be generated from the disposition of each facility.

The methods used to estimate employment and income levels are consistent with those used to estimate construction and operational employment and income levels described in Section 5.2.2. However, while employment and income levels for construction and operations are reported for the peak year, the employment and income levels for disposition activities are reported as either totals for the life of the activity, or as maximum annual employment and total income. For the proposed facilities that are grouped by a given alternative, employment and income levels are reported as totals. In the case of existing facilities, estimated annual employment and income levels are reported. During disposition activities, the durations of discrete project elements are relatively short, and activities do not always occur sequentially. Thus, peak year employment and income levels are not as meaningful as they would be for longer-term

operations. However, employment associated with disposition is included in Appendix C.1.

Since the publication of the Draft EIS, Census 2000 and related data have been incorporated into the socioeconomic analyses. Population figures, housing characteristics, labor information, and economic multipliers (such as employment and earnings multipliers) have been updated to reflect the most current socioeconomic environment in the region of influence.

5.3.2.1 Proposed New Facilities Associated with Waste Processing Alternatives

DOE has estimated the employment and income levels that would result from the disposition of the proposed new facilities needed to support waste processing alternatives. Table 5.3-1 presents these estimates by alternative and by proposed projects (which would be performed in yet-to-be-designed facilities). In general, employment and income levels required for facility disposition would be similar to the levels estimated for construction. Potential impacts would occur over shorter periods of time and would neither occur continuously nor simultaneously. The potential impacts to population and housing, community services, and public finance would be the same as described in Section 5.2.2 for construction.

5.3.2.2 Existing Facilities Associated with High-Level Waste Management

The facilities in this group are those that have been used at the INTEC to generate, treat, and store HLW. Because of the number of facilities involved, DOE has organized them in functional groups for purposes of analysis. DOE has analyzed the potential socioeconomic impacts of decontaminating and decommissioning these facilities. Table 5.3-2 estimates the total employment and regional income for the Tank Farm and bin sets for all five disposition alternatives. Table 5.3-3 summarizes annual employment and income by facility group for the facility disposition alternatives in Table 3-3.