

5.0 CUMULATIVE EFFECTS

Cumulative effects are caused by the aggregate of past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes them. These effects can result from individually minor, but collectively significant, actions taking place over a period of time (40 CFR 1500-1508).

The Two-Mile Mesa Complex consolidation was not specifically considered as a proposed project in the SWEIS (DOE 1999a). The cumulative effect analysis in the SWEIS, however, documents the regional effect of the expanded operations alternative and provides context for this EA. This section considers the Proposed Action and the possible effects on resources in context to any ongoing or reasonably foreseeable future actions. Resources dismissed from further cumulative effects consideration include land use, transportation, infrastructure, visual, noise, health effects, water, air, geology, and PRSs for reasons discussed in the following paragraphs. Cultural resources and waste volumes are discussed further in this section. This analysis concludes that there would not be cumulative effects on cultural resources, waste management, or other aspects of the environment.

Other projects in the vicinity of the Two-Mile Mesa Complex include the TA-16 engineering complex consolidation and the construction and operation of the new TA-69 Emergency Operations Center (EOC). Moreover, use of the forest areas west and south of LANL and Los Alamos County for recreation, habitat management purposes, and timber production (only with the Santa Fe National Forest) would likely remain unchanged. Land between the DX, EOC, and TA-16 is DOE controlled and, therefore, precludes the prospect of urban development anywhere near the Two-Mile Mesa Complex in the foreseeable future. There are no tracts of land near the proposed project area identified for land transfer. Consequently there would be no other future construction or operational activities that would contribute to cumulative effects on land use, infrastructure, visual, noise, health effects, water, air geology, and PRSs at DX technical areas or adjacent areas. Noise and visual effects resulting from consolidation of the TA-16 engineering complex would be temporary and minor but would likely occur at the same time as construction activities at the Two-Mile Mesa Complex.

The TA-16 engineering complex consolidation would involve about 80 construction workers during peak periods. Therefore, traffic on SR 501 is not expected to increase substantially due to this construction or other proposed development. There would be no additional sources of air or water emissions and no need to increase the capacity of utility systems. The consolidation of TA-16 would produce about 35,270 yd³ (26,805 m³) of nonhazardous construction and demolition waste. Waste generation at LANL during the next 10 years, both from decontamination and demolition of buildings and through environmental restoration efforts, could be large. Construction and demolition wastes would be recycled and reused to the extent practicable. Existing waste treatment and disposal facilities would be used according to specific waste types. Solid wastes would be disposed of at the Los Alamos County Landfill or other appropriate permitted solid waste landfills. Demolition wastes would similarly be disposed of at the appropriate permitted facilities. No aspect of the Proposed Action or other planned actions would result in NNSA establishing a new disposal facility or expanding an existing one. Tables 9 and 10 identify total waste types for the TA-16 and DX consolidation projects generated by construction and demolition activities respectively.

Table 9. Combined TA-16 and DX Estimated Waste Quantity, Traffic Effect, and Disposal Location: Construction Phase

Quantity yd ³ (m ³)	Traffic truck(s) per year	Potential Disposal Location
20,517 (15,593)	142	Los Alamos County Landfill or other offsite facility

Table 10. Combined TA-16 and DX Estimated Waste Quantity, Traffic Effect, and Disposal Location: Demolition

Type/Source	Quantity yd ³ (m ³)	Traffic truck(s) per year	Potential Disposal Location
Uncontaminated building debris	51,001 (38,761)	143	Los Alamos County Landfill or other offsite facility
Asbestos building debris	730 (555)	3	Mountainair, NM, or Phoenix, AZ
Lead-based paint	3 (2.3)	<1	Albuquerque, NM
Photochemicals (silver)	10 (7.6)	<1	Fernley, NV
HE contaminated material	305 (232)	16	Lake Charles, LA
LLW	30 (22.8)	<1	LANL, Area G, TA-54

The Proposed Action would result in the demolition of several structures including some buildings that are eligible for the NRHP. There are a number of actions taking place at LANL that affect historic structures and it is likely that over the next several years, many of the historical buildings at LANL would be demolished. Many of the buildings at LANL are Manhattan Project and early Cold War Era structures that are important aspects of the Los Alamos story. Examples of the buildings that are under consideration for demolition activities include the Manhattan Project detonator buildings at TA-6, office buildings at TA-41, several structures at TA-21 related to early thermonuclear weapons, the Hollow at TA-15 where the Rex accelerator was located, several buildings at TA-33 associated with early weapon development, and the Van de Graff accelerator (TA-3). Hundreds of buildings are on the LANL excess property list or may be proposed for demolition over the next several years, including most of the permanent buildings that date to the early Cold War Era (1947–1963). A few of these buildings may be suitable for preservation and reuse for other functions; this potential must be considered as part of NNSA’s management of historic properties. In response to these factors, NNSA and UC are preparing a Cultural Resource Management Plan in accordance with the mitigation action plan set forth in the SWEIS ROD. This management plan, which is due to be completed by the end of 2004, will address the rapid attrition of historic buildings and will establish a framework for identifying historic properties with exceptional importance in LANL’s history. Since the Proposed Action would occur over several years, mitigation measures in the form of documentation would be considered in light of the Cultural Resource Management Plan. Therefore, the Proposed Action is not expected to result in a cumulative adverse effect on historic resources at LANL.