

concentrations at the time of the most recent investigation.

The licensee submitted the DP in July 2000. A revised August 2002 DP was transmitted by cover letter dated November 19, 2002, with the final site-specific derived concentration guideline levels (DCGLs) submitted on October 2, 2002. In accordance with 10 CFR 40.42, the DP describes the site conditions, the planned decommissioning activities, radiation safety program, planned final radiation survey, and the cost estimate for decommissioning. Decommissioning would occur for approximately 1½ years, tentatively from January 2003, and is expected to continue throughout 2003. Submittal of the final status survey report to the NRC is planned for early 2004.

The radioactive contaminated soil would be removed in accordance with the DP and the licensee's standard operating procedures. The licensee has committed to excavating contaminated soil, vegetation, and debris and transferring them directly to intermodal containers, sampling and analyzing the excavated materials, manifesting the waste, and transporting the waste containers to a licensed disposal facility. The radioactive material would be packaged, handled and stored according to the appropriate health and safety procedures. Packaging contaminated soil would conform to the Department of Transportation (DOT) regulations and the disposal site requirements. The USAF would transfer the contaminated soil in intermodal containers by truck to West Control Specialist (WCS) in Andrews County, Texas, or in intermodal containers by rail or truck to Envirocare of Utah.

### 1.2 Purpose and Need for Proposed Action

The purpose of the proposed action is to reduce residual contamination at the site for unrestricted use and removal of the OT-10 training site from the license. NRC is fulfilling its responsibilities under the Atomic Energy Act to make a decision on a proposed license amendment for decommissioning that ensures protection of the public health and safety and environment.

### 2.0 Alternatives, Including the Proposed Action

#### 2.1 Proposed Action

The proposed action is to decontaminate and remediate the OT-10 training sites to release for unrestricted use as delineated in 10 CFR part 20, subpart E, that being 25 mrem/year total effective dose equivalent (TEDE) to the critical group (*i.e.*, resident farmer scenario).

The ultimate goal of the decommissioning is to release the OT-10 training sites from the USAF Master Materials License. The general decommissioning would result in the excavation of the source material from the OT-10 training sites to meet the unrestricted use criteria. The excavated material would be transported to a licensed low-level radioactive waste (LLRW) facility (*e.g.*, Envirocare of Utah) for disposal. The unimportant quantities of source material, as defined in 10 CFR 40.13, would be shipped to a burial facility (*e.g.*, West Control Specialist (WCS) facility in Andrews, TX). Following any necessary remediation, the licensee would perform final status surveys in the area in accordance with the NRC approved DP.

#### 2.2 Alternatives to the Proposed Action

There are no alternatives to the proposed actions besides taking no action.

##### 2.2.1 No Action

NRC considered the no-action alternative relative to USAF's request for approval of the DP. The no-action alternative would mean that NRC would not approve the DP and, therefore, would not be able to amend the license. The no-action alternative is not acceptable because it would conflict with NRC's requirement in 10 CFR 40.42, "Expiration and termination of Licenses and Decommissioning of Sites and Separate Buildings or Outdoor Areas," of timely remediation at facilities or outdoor areas that have ceased NRC licensed operations. Therefore, the no-action alternative is not considered to be reasonable and is not analyzed further in this EA.

#### 3.0 Affected Environment

Eight training sites were established in November 1961 in the north-central part of Kirtland AFB, which is located in Albuquerque, New Mexico (USAF, 2001b). Training activities were discontinued at four of the training sites in 1990. These four training sites, designated as OT-10 under the USAF's Installation and Restoration Program, are located south of Pennsylvania Avenue, on Kirtland AFB. TS8 was also used as a storage site and has two storage bunkers located within its fenced area. In addition, TS6 contains solid waste management unit (SWMU) SS-69, a 50-ft by 50-ft fenced area previously used to store drums of thorium oxide sludge, contaminated soil and waste fuels. SWMU SS-69 is managed as a separate corrective action unit under Kirtland AFB's Resource

Conservation and Recovery Act (RCRA) part B permit.

The following sections provide detailed information on the specific environmental resources and subject areas relevant to the nature of the proposed action.

#### 3.1 Physiography, Geology and Soils

Kirtland AFB is located on a high, semiarid piedmont alluvial plain and adjacent foothills, about 5 miles east of the Rio Grande. The alluvial plain is cut by the east-west trending Tijeras Arroyo, which drains into the Rio Grande. The western portion of Kirtland AFB lies within the Albuquerque-Belen Basin. The Albuquerque-Belen structural basin contains the through-flowing Rio Grande and lies within a series of grabens and structural basins called the Rio Grande Rift. The deposits consist of interbedded gravel, sand silt, and clay, the bulk of which are referred to as the Santa Fe Group. The soils types consist of Tame very fine sandy loam, Gila fine sandy loam, Bluepoint-Kokan association, Wink fine sandy loam and Tijeras gravelly fine sandy loam.

The Santa Fe Group contains sediments which were deposited as an alluvial fan, playa and fluvial deposits that filled the subsiding basin. The thicknesses of most basin-fill deposits are greater than 3,000 feet, although the thickness varies considerably because of faulting in the basin. The Santa Fe Group contains beds of unconsolidated to loosely consolidated sediment and interbedded volcanic rock. The materials range in size from boulders to clay.

#### 3.2 Meteorology, Climatology, and Air Quality

The climate at Kirtland AFB is typical of a high-desert plateau, with low precipitation, wide temperature extremes and typically, clear sunny days. The mean annual precipitation is about 8.4 inches and the mean annual snowfall is 1.25 inches. Summer rains typically account for nearly half of the annual moisture, in the form of brief but heavy local thunderstorms. The prevailing wind direction from May through October is south to southeast, and the mean wind speed is about 8 knots. From November through April, the prevailing wind direction is north to northwest, and the mean wind speed is 7 knots.

#### 3.3 Water Resources

The four training sites are located in the Hydrogeologic Region of Kirtland AFB. The estimated hydrologic