

**TABLE 5.4.1.12-1.—Tri-Cities Airport
Operations for 1994**

AIRCRAFT TYPE	NUMBER OF OPERATIONS
Air Carrier	2,645
Air Taxi	21,807
Military	2,597
General Aviation	54,818
Total Airfield Operations	81,867

Source: (PC 1996j)

42 kilometers (26 miles) southwest, has one runway used only by general aviation aircraft. Sunnyside Airport is located 48 kilometers (30 miles) west-southwest and has one runway used by general aviation aircraft only. There is an unnamed landing strip near Horse Heaven Hills, approximately 32 kilometers (20 miles) south-southwest, which has one runway used only by general aviation aircraft.

All four general aviation airports and the landing strip are outside the probability density function boundary for general aviation aircraft and were therefore not included in the aircraft crash analysis. Only small military aircraft in the landing mode at the Tri-Cities Airport and non-airport (in-flight) aircraft were included in the analysis as required by the Draft DOE Standard (DOE 1996g). Further details on these six facilities are contained in volume II, appendix E.

FMEF was modeled conservatively as a facility with a length of 98 meters (320 feet), a width of 47 meters (155 feet), and a height of 21 meters (70 feet). (DOE 1994bb). Using the Draft DOE Standard for determining the probability of aircraft crashes and 1994 data from the FAA, the frequency of hitting FMEF was calculated as 1.2×10^{-6} for all types of aircraft (DOE 1996g). It should be noted that the frequency calculation represents a conservative upper bound. Since this frequency is greater than 10^{-7} , in accordance with the Draft DOE Standard,

further analysis was required. A local response structural analysis was performed according to the Draft DOE Standard for the facility with a wall thickness of 122 centimeters (48 inches).

The analysis was performed for the maximum penetrator missile for each of the aircraft categories mentioned in section 4.15.2, except for helicopters. None of the eight aircraft missiles was capable of penetrating the facility. Therefore, since this frequency is 0, in accordance with the Draft DOE Standard, no further analysis was required. Further details of the frequency of hitting FMEF and the frequency of releasing material are contained in volume II, appendix E.

5.4.2 Resources Discussed in Detail

5.4.2.1 Human Health

The basic approach used in assessing human health impacts is first to identify the affected environment and establish a baseline representing the risk from current operations. Changes in this baseline risk resulting from potential pit storage activities are then examined. Impacts from both normal operations and potential accidents are estimated.

Assessing the human health risk impact from potential accidents resulting from the storage of pits in FMEF at the Hanford Site involves a risk screening process. The first step in this process is to identify a broad spectrum of potential accident scenarios. The second step in the process uses screening techniques to identify the specific scenarios that dominate risk (i.e., scenarios that contribute an appreciable fraction of the total risk), where risk is calculated as the product of frequency and consequence. Rigorous consequence evaluations are only performed for the identified risk-dominant scenarios.