- Transferring pits from the transporter to their storage location inside the facility.
- Storage itself (i.e., potential impacts resulting from having the pits reside inside the facility).

Each time pits are transferred from the transporter to their storage location inside the facility, there is a small probability that an accidental release could occur due to a handling accident. In addition, the transfer of pits from the transporter to their storage location would result in radiological exposures to involved workers.

Affected Environment

The release of radioactivity and toxic chemicals to the environment from a DOE facility is an important issue for onsite workers and the public. Since the human environment contains many sources of radioactivity and toxic chemicals, it is essential to understand the sources of these substances and how effectively they are controlled.

Table 5.5.2.1–1 summarizes the major sources of radiation exposure in the vicinity of the Manzano WSA. The average annual probability of contracting a fatal cancer in the State of New Mexico is 1.4×10^{-3}. Using a nominal fatal cancer risk factor of 5×10^{-4} cancer fatalities per person rem and the environmental

TABLE 5.5.2.1–1.—*Major Sources of Radiation Exposure in the Vicinity of the Manzano Weapon Storage Area at Kirtland Air Force Base*

SOURCE OF EXPOSURE	DOSE TO AVERAGE INDIVIDUAL (mrem/year)	PERCENTAGE OF TOTAL EXPOSURE
NATURAL BACKGROUND RADIATION		
Cosmic and external terrestrial	119	
Internal terrestrial	39	
Radon in home	200	
Total natural	358	84.8
MEDICAL RADIATION		
Diagnostic x-rays	39	
Nuclear medicine	14	
Total medical	53	12.6
OTHER SOURCES		
Weapons test fallout	<1	
Consumer and industrial products	10	
Air travel	1	
Nuclear facilities (other than transportation of radioactive materials)	<1	
Manzano/Sandia—environmental radioactivity	4×10^{-8}	
Total other	11	2.6
Total—all sources	422	100

[1]Effective dose equivalent.
Source: NCRP 1987:53