

4.4.5 Potential for Deposition or Migration of Waste Constituents

Most of the information described above is intended to support a discussion of the potential for migration of wastes into the subsurface soil and ground water and subsequent migration into the rooting zones of food crops and other vegetation. The ecological portion of the risk assessment should discuss individually the reasons there is high or low potential

for release to the subsurface soil or ground water and the extent of the potential for migration to and uptake by food-chain crops or other vegetation. The discussion should bring information about the environmental setting together with the engineering information in the permit and synthesize the two types of information into a coherent examination of the potential for deposition or migration of waste constituents.

In cases in which the permit writer does not find the discussion persuasive, the permit writer may respond with a NOD in any of several areas. The permit writer may determine that:

- The overall discussion in the risk assessment is inadequate and more data or additional results of modeling are needed to defend the conclusions drawn
- The conclusion of the risk assessment that there is a high risk for release and migration of contaminants is sufficient reason to require additional engineering or operational controls on the unit

4.4.6 Potential for Occurrence of Health Risks Caused by Human Exposure to Waste Constituents

The human health risk portion of the risk assessment should address directly the potential for the occurrence of health risks associated with direct or indirect exposure to wastes released from the unit. [Chapter 6.0](#) provides a discussion of requirements for risk assessment in Subpart X permit. The discussion should include all pathways identified to be of concern and provide a rationale to support the determination that a pathway would not pose unacceptable human health risks.

4.5 Prevention of Releases to Surface Water or Wetlands or to Soil

The issues associated with prevention of releases to surface water, wetlands, or soil are similar to those related to releases to ground water or the subsurface