

## 6.0 RISK ASSESSMENT

Risk assessments can be extremely complex and encompass numerous variables and areas well outside the expertise of many permit writers. It is therefore recommended that the permit writer consult with risk assessment staff early and often in the permit process, so that the risk assessment may be focused towards solving the appropriate questions and conducted in the most expedient and efficient manner. The information provided in this chapter is intended as a primer for those permit writers who have little or no experience in this area and as a resource for those with more extensive knowledge.

Whenever possible, specific examples are provided of the kinds of requirements a permit writer might specify in an NOD to assist permit writers in identifying the types of requirements they may impose. Because a wide variety of issues are associated with the interpretation of risk assessments, the examples provided are not exhaustive.

For many types of Subpart X units, particularly mechanical units such as shredders, crushers and filter presses, a risk assessment may not be necessary. This is especially true in cases where the unit is fully enclosed in a containment structure such as a building, which could essentially prevent releases to environmental media. The applicant must be able to justify that an risk assessment is unnecessary. To do this, the applicant must provide all design and operating information necessary to support their claim that an risk assessment is not required. The permit writer must be able to assess whether adequate safeguards are engineered into the system. Additionally, the permit writer may specify design and operating conditions considered appropriate for the technology and site, to ensure that the unit will not impact any environmental media. Because a risk assessment is generally required in all cases for Subpart X combustion units, and there is ample risk assessment guidance for combustors, this chapter will primarily focus on risk assessment at Subpart X combustion units.