4.4.1.1 Open Burning Units

The wastes treated at OB units typically will have been well characterized and will be present in the unit itself for only a brief period before the burn is initiated. Residues from OB operations, such as ash and air emissions, are of the greatest concern in identifying the potential for release to ground water and the subsurface environment. Because the combustion process typically will destroy most of the waste, the volume of residue tends to be relatively small, compared with the original volume of the waste. The physical and chemical characteristics of the gaseous emissions cause them

to diffuse rapidly and to be transported away from the unit. However, particulates generated as part of the burn will fall immediately from the plume in close proximity to the unit. The permit writer may require the applicant to use dispersion modeling to determine where particulates are most likely to be deposited and where soil testing would be most appropriate.

Because it is difficult to determine the physical and chemical composition of waste products for each type of waste burned, the permit writer should require information from a trial burn or from the BangBox or a similar study be provided. The permit applicant also should provide the results of analysis of solid wastes generated from OB operations. Since most such units operate under interim status, the applicant should be able to develop site-specific data. The information should identify the chemical and physical characteristics of the particulates and provide an estimate of the amount of particulate matter that will dissolve and be transported into the subsurface and the ground water.