

Refer to Section 264.111(b) which sets forth a general performance standard for closure that is applicable to all TSDFs.

4.6.1 Requirements for Closure Plans

The general requirements of the closure plan are specified in §264.112(b). These requirements are applicable to all Subpart X units.

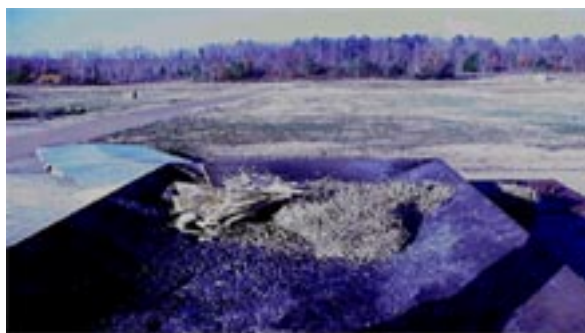
Clean closure of a Subpart X unit includes (1) decontamination or removal of all equipment and structures associated with the unit and (2) removal of all contaminated environmental media (i.e., soils and ground water) surrounding the unit.

Decontamination of a Subpart X unit, such as an OB unit that has a containment device, may be achieved by “flashing” the containment device. Flashing consists of using an appropriate fuel and oxidizer to heat the containment device to a temperature that exceeds the decomposition temperature of the explosive wastes that were treated in the unit. The Department of Defense Explosives Safety Board (DDESB) requires that materials that come in contact with explosives be flashed or burned.

(Refer to *DOD Ammunition and Explosives Safety Standards*, DOD 60055.9-STD, July 1999.) DDESB has various levels of certification of contamination free. The facility should have records established on where these wastes are coming from and show contact has actually occurred. If contact occurs the material may be considered a hazardous waste due to the mixture or residue rule. Otherwise the materials should be handled as a solid waste and not burned in the hazardous waste treatment area.

To achieve clean closure, the soils in the vicinity of the unit, which may be contaminated by the ash or wastes ejected from the unit, also may be removed and disposed of on site or off site. The permit writer should ensure that the closure plan provides for specific sampling and analysis to verify that all contaminated soils have been removed.

Descriptions of such sampling and analysis should specify analytical methods, depths of sampling, and sample collection methods. If it is not possible to remove all contaminated soils, the OB unit should be



The flashing issue has been a concern for scrap metal entering the recycling system. The permittee needs to address these materials in waste analysis and risk assessments.

closed as a landfill, which will be subject to post-closure monitoring requirements. An OD unit also may be closed as landfills, because it may be impossible to remove all contaminated soil in the vicinity of the unit.

OB/OD units located within the boundaries of impact ranges may present problems with regard to attribution of contamination and monitoring of releases. Such units can present complications during closure or corrective action, because it is often difficult to determine whether the source of contamination is the unit or the active impact range. Usually, there are problems in the installation of ground water monitoring equipment around such units, particularly ground water monitoring wells and devices that monitor the unsaturated zone, because such equipment may be damaged by ongoing activities at the range and because of the hazards from activities (e.g., drilling) associated with the installation of monitoring devices.

Existing OB/OD units located within active impact ranges may be allowed to continue to operate, but new units should not be located within the boundaries of an active impact range. The decision whether to allow such existing units to continue to operate should be based on several factors, including precipitation and runoff at the site, hydrogeologic and geologic factors, intensity of the training activities carried out at the range, and location of the OB/OD activities. Permit writers should decide whether it will be feasible to monitor the unit for releases of hazardous waste constituents as part of the environmental assessment; if monitoring is not feasible, the unit should be relocated.

4.6.2 Post-Closure Care Requirements

Requirements for post-closure care are specified in 40 CFR §§264.117 through 264.120. The requirements will apply if the Subpart X unit will leave wastes in place after closure (e.g., a geologic repository). The requirements also will apply to Subpart X units used for storage or treatment from which it is not possible to remove all contaminated