7.1.2 Waste Minimization

Waste minimization is one of the most important components of a Subpart X permit, especially for OB/OD units. Permit conditions should address how the facility will be working on new or existing demilitarization technologies, and working towards developing better methods of OB/OD or replacement technologies. The OB/OD permit application should have included a Waste Minimization Plan (WMP). The WMP should

identify measures to minimize the input waste stream to the OB/OD unit. The goal of the WMP should be to minimize annual OB/OD treatment quantities (i.e., both in terms of gross and net explosive weight [NEW]). This should involve an evaluation of potential offsite treatment options as well as alternative treatment technologies. Alternative technologies such as disassembly and separation should be considered to reduce the OB/OD gross weight treatment quantities (since the ratio of energetic to inert composition can be large for many waste munition items). The permit application also should include an accounting of waste treated by OB and OD (separately) for the most recent 5-year period for units with interim status. The information should include annual treatment quantities in terms of gross weight and the NEW. This accounting information and the WMP will be used to establish waste reduction procedures/requirements for each permit. It should be noted that certain munitions must be treated by OB/OD because there are no current technologies available to treat massive quantities of explosives. However, the intent is to reduce the generation of wastes while maintaining safe operational practices.

The permit should also require that the facility demonstrate how technological advances in the design of other miscellaneous units (e.g., mechanical units including shredders and compactors) will result in waste minimization and a reduction in air emissions. Waste minimization can differ between States and facilities. U.S. EPA has required the following items to be completed by a Permittee. The details are industry specific.

- Annual Certification Condition
- Hazardous Waste Reduction Plan
 - Updated every 2 years
- Waste Reduction Implementation Report
 - Yearly on specific date

Example conditions for waste minimization at a military base are given in Attachment 7-1 (from U.S. EPA Region 5 permit).