

contamination before discharging the contaminated air to the carbon filters. The ventilation rates used to achieve vapor containment are listed in Table I.

b. **No process liquid discharges.** All agent and spent decontamination solutions are incinerated. There are no liquid discharges except for boiler condensate and sanitary sewage. All scrubber brines are dried to a salt before placement in a permitted waste landfill. All process area sumps are double lined to prevent leakage into the ground.

c. **Continuous agent monitoring.** The work area and exhaust stacks are continuously monitored by real time alarms (response time 3-8 minutes). In addition, the work area, stack and installation perimeter are continuously monitored by historical/integral monitors. The agent standards for each area (work area, stack and perimeter (general population)) are listed in Table II. It should be noted that corrective actions are initiated when chemical agent is first detected, prior to reaching the exposure limits.

d. **Personnel interfaces minimized.** All disassembly operations are performed remotely. Only unpacking and feeding the chemical munitions is performed by operators. Maintenance requirements are minimized by designing the equipment to high reliability and maintainability standards and by using parallel process lines and in-line buffer storage areas. The entire process is remotely controlled via a graphical control system and monitored by Closed-Circuit Television (CCTV).

e. **Hazard Risk Analyses and Mitigation.** A variety of detailed hazard/risk analyses are performed throughout the design of the disposal process. Any accident which has a programmatic probability of 0.00000001 ( $1 \times 10^{-8}$ ) or greater of causing an off-post excursion is mitigated. Mitigation measures include reducing the size of the agent storage tanks in the Toxic Cubicle (TOX) and designing the TOX to more rigorous construction criteria.

### 3. Environmental Requirements

The destruction of chemical weapons is regulated by the following U.S. environmental regulations: National Environmental Policy Act (NEPA), Resource Conservation and Recovery Act (RCRA), Toxic Substance Control Act (TSCA), Clean Air Act (CAA), and State Air Quality Regulations, which is the States' implementation of the CAA. All of the environmental regulations actively solicit public comment and participation. Table III summarizes the chemical weapons incinerator emission standards which disposal facilities must satisfy.

a. The National Environmental Policy Act (NEPA) requires the preparation of an Environmental Impact Statement (EIS) for any Federal activity which may significantly affect the environment. The EIS must be performed before any decision is made on