Control System

While the four incinerators are the heart of the demilitarization system, the control system is the brain. With the exception of the munition input and residue removel steps, the demilitarization operation is totally automated and is run by operators in the control room utilizing the central control system (CON).

The CON is capable of controlling operations of sequential (material handling), continuous (pollution abatement system), or hybird (furnace system) processes. It furnishes operator interface to control operations through shared displays and animated graphics, as well as providing alarm and computer malfunction annunciation and recording. It will also provide a high availability through redundant I/O and data processors, including periodic management reports through the data acquisition computer. The CON temporarily holds all plant information (over 8,000 data points) for the previous 10 minutes, and has the ability to store up to 60 minutes of data permanently.

Monitors

All work areas, the control room, and the furnace and filter exhausts are continually monitored for agent during operations. The primary agent monitor used is the Automated Continuous Agent Monitoring System (ACAMS) developed for demilitarization operations. the ACAMS is an online automated gas chromatograph capable of specific identification of the chemical agents at concentrations less than the allowable work area limits established by the Department of the Army Surgeon General, concurred in by the Department of Health and Human Services. These values are shown in Table 3.

TABLE 3: Allowable Work Area Agent Concentrations*

GB .0001 mg/m

VX .00001 mg/m

H .003 mg/m

* Time Weighted Average