

Building Fumigation — Engineering and Planning

Washington DC Processing and Distribution Center Brentwood

This fact sheet is one in a series of fact sheets providing information on the anthrax decontamination activities at the Washington DC Processing and Distribution Center Brentwood.

What technical planning is being done?

Since November 2001, a team of professional engineers and scientists has been planning the fumigation of the USPS Brentwood Facility. This team includes civil, mechanical, and chemical engineers, chemists, building and environmental scientists, and specialty technicians. All key team members are experienced in environmental remediation.



The technical team has spent thousands of man-hours learning the details of the facility, both inside and outside the building. Detailed engineering drawings have been prepared. During

the system design, scientific models were used to simulate actual air currents in the building.

What systems will be used for fumigation?

During the fumigation process, the eight main systems that will be used for creating and emitting the chlorine dioxide (ClO_2) gas, and controlling and monitoring the entire operation include:

- **Temperature System** - Maintains a 75°F target temperature.
- **Humidification System** - Maintains a 75% relative humidity.
- **Chemical Plant and Gas Emission System** - Stores and delivers the liquid chemicals that create the fumigating ClO_2 gas.

- **Gas Transfer and Mixing Systems** -

Allows the gas to be emitted and mixed in the building.

- **Process Control System** -

Allows the engineers to control all aspects of the equipment and operations.

- **Negative Air Pressure System** -

Allows chlorine dioxide gas to be maintained.

- **Ambient Air Monitoring** -

Provides detailed information regarding the concentrations of chemicals and contaminants both inside and outside of the building.

- **Support System** -

Includes all of the technical, craft, and labor personnel necessary to run all systems safely.

