

# Building Fumigation – Engineering and Planning

## Trenton, NJ, Processing and Distribution Center

*This is one in a series of Fact Sheets providing information on the anthrax decontamination activities at the Trenton Processing and Distribution Center.*

### What technical planning is being done?

Since November 2001, a team of engineers and scientists has been planning the remediation of the USPS Trenton P&DC through a chlorine dioxide gas fumigation procedure. 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 and are modeling the fumigation after the process used to successfully fumigate the Hart Senate Office Building and the

Curseen-Morris P&DC in Washington, DC.

The technical team has designed the fumigation process to fit the scale of the Trenton P&DC and will control it remotely via a series of computers and television monitors.

### What systems will be used for fumigation?

To support the chlorine dioxide fumigation process, the following eight systems will be used:

- **Temperature System** - Maintains 75°F target temperature or higher.
- **Humidification System** - Maintains 75% relative humidity or higher.
- **Chemical Plant and Gas Emitting System** - Consists of the equipment and materials to store and deliver the liquid chemicals that when

combined become chlorine dioxide gas.

- **Gas Transfer and Mixing Systems** -

Allows chlorine dioxide gas to be emitted and distributed

throughout the building.

- **Process Control System** - Allows the engineers and operators to control all aspects of the equipment and operations.

- **Negative Air Scrubber System** - Allows the chlorine dioxide gas to be maintained and controlled inside the building.

- **Ambient Air Monitoring** - Provides information to assist the scientific team in monitoring the concentrations of gas both inside and outside of the building.

- **Support System** - Includes all of the technical, craft, and labor personnel necessary to run the systems in a safe and effective manner.

