

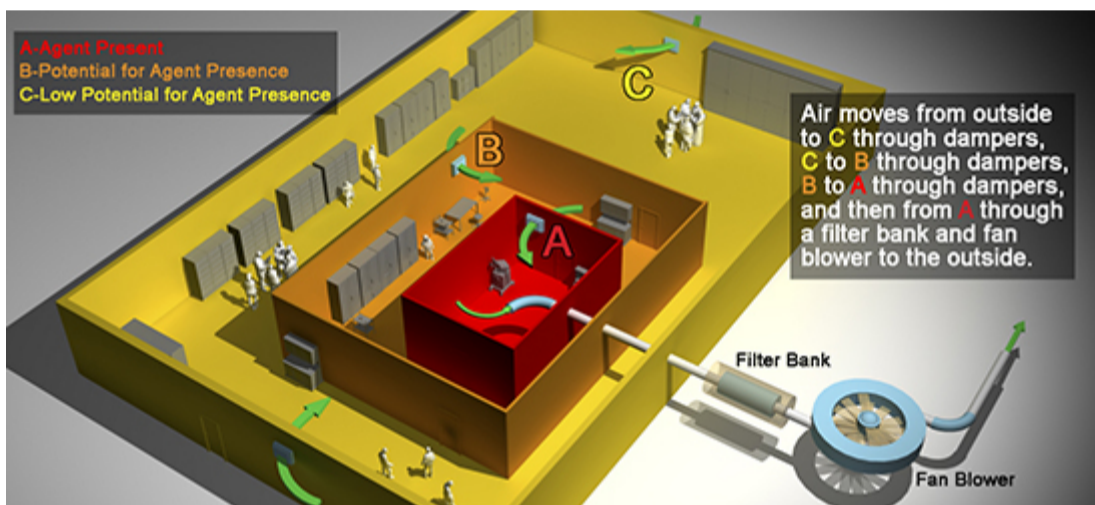


Chemical Weapons Elimination

Engineering Controls

Engineering controls are the first line of defense in protecting the public when a chemical agent is being destroyed at one of the Department of Defense's chemical weapons disposal facilities:

- Airborne chemical vapors are contained within the disposal facility by a strong airflow system that pulls air toward the main operations area and special exhaust outlets.
- Strong exhaust airflow means that air can only move in one direction – back into the facility. This keeps contaminated air from escaping from the facility.
- Air captured by the exhaust system goes through special carbon filters that effectively removes the chemical agent.
- Air is monitored throughout the process by sensitive equipment on back-up power supplies to ensure chemical agents do not escape into worker areas or the community.



CDC staff help ensure that engineering controls remain effective by

- Reviewing plans for the engineering controls and ventilation systems before the facility's construction to ensure that proper safeguards are included.
- Evaluating the systems before any chemical agent is introduced into the facility.
- Reviewing monitoring systems throughout the plant and in the exhaust to ensure they are working properly and are accurate.
- Conducting site visits and ongoing evaluations of the systems.

To learn more about the carbon filtration system, read National Research Council's [Carbon Filtration for Reducing Emissions from Chemical Agent Incineration, 1999](#) [↗](#)