



Agent Filtration Area

A series of 10 air filter units located in the Agent Filtration Area (AFA) eliminates the possibility of a release of mustard agent vapors during plant operations at the [Pueblo Chemical Agent-Destruction Pilot Plant](#), known as PCAPP.

What is the AFA?

The AFA collects air from the Enhanced Reconfiguration Building (ERB) and the Agent Processing Building (APB) during chemical weapons disassembly and agent neutralization. This sophisticated air filtration system removes any toxic agents and other organic vapors from air circulating within the processing buildings and equipment at PCAPP.

How the Filtration Process Works

A system called 'cascading ventilation' uses a vacuum effect to channel air from areas with potentially little or no mustard agent vapors into areas with a progressively higher possibility of contamination.

The cascading vacuum prevents any potentially toxic vapors from escaping into the environment. Air from inside the plant can only return to the outside after filtering through eight of the 10 carbon filter units running in parallel.

The filter units — each venting to a single exhaust stack — make up the AFA serving the APB and ERB. Eight of these units are in operation with one on standby and one in maintenance mode. Each unit consists of nine separate filter banks. The first bank contains particulate pre-filters followed by a bank of high-efficiency particulate air (HEPA) filters. Next are five banks of carbon filters, one bank of sulfur impregnated carbon filters and finally another bank of HEPA filters. Once exhaust air has filtered through all nine banks, it is released to the atmosphere through the continuously monitored exhaust stack. These eight filter units, operating in parallel, are designed to handle a total air flow of up to 128,000 cubic feet per minute. This is roughly 80-100 times more airflow than a typical home air conditioning system.



The Agent Filtration Area consists of eight, plus one standby, one in maintenance filter units (six shown above) that filters the air used in two buildings during the chemical weapons destruction process



Lifting devices, such as the one pictured here will aid operations should replacement of carbon filters inside the units in the Agent Filtration Area become necessary to maintain optimum performance during chemical demilitarization

Pueblo Chemical Stockpile Outreach Office
104 W. B St. Pueblo, Colorado 81003
(719) 546-0400 • pueblooutreach@jem.com

Pueblo Chemical Agent-Destruction Pilot Plant Public Affairs
(719) 549-4959

U.S. Army Pueblo Chemical Depot Public Affairs
(719) 549-4135

