Highlighting Outreach Activities for the Army's Chemical Demilitarization Program *Spring 2002*

REACH

Aberdeen Chemical Agent Disposal Facility, Edgewood Area, Aberdeen Proving Ground, Md.

PMCD
Program Manager for Chemical Demilitarization

Speeding up disposal

By re-ordering the disposal process with oversight from state and federal environmental agencies, stockpile risk could be eliminated years earlier

Photos by Nancy Hofmann

Ed Hammerberg and Butch Dye of Maryland Department of the Environment, at right, listen as Army Risk Manager Brian O'Donnell explains the accelerated chemical stockpile disposal process at a public meeting held Jan. 17 in Chestertown, Md. Maryland Citizens' Advisory Commission members John Nunn and Katharine Hutchinson, far left and third from left, look on.

After the Sept. 11, 2001 terrorist attacks, the U.S. Army immediately took specific measures to ensure the continued security of the chemical agent stockpile located here at Aberdeen Proving Ground. Although existing safety and security measures continue to be protective, the Army began evaluating additional methods to reduce the public risk associated with chemical stockpile storage, including methods to accelerate stockpile destruction. Realizing that complete destruction of the stockpile offered the best security and permanent protection to the public, the Army began working closely with officials and regulators from the Maryland Department of Environment and the U.S. Environmental Protection Agency's regional office to determine the most effective way to safely accelerate the destruction of the bulk mustard agent stockpile. The resulting plan is now pending

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"The accelerated process is the best way to go. We'll get rid of the agent a lot sooner and make our community a lot safer quickly."

— U.S. Rep.Wayne T. Gilchrest, Maryland 1st Congressional District

Army and community exchange ideas, plans

Earleville resident Ken Cowley, a retired engineer, discusses the accelerated project at a public meeting, as Army project manager Kevin Flamm listens, at right. Flamm is responsible for disposal of the Aberdeen Proving Ground and Newport, Ind. chemical stockpile disposal projects. Cowley suggested the Army track carefully how a commercial permitted facility would handle wastes.

Safety of accelerated plan priority at public meetings

More than 150 people recently turned out to learn more about the Army's plans to accelerate the disposal of the mustard agent stockpile stored at the Edgewood Area of Aberdeen Proving Ground, Md. The meetings, held Jan. 16 and 17 at the Edgewood Senior Center in Harford County and at Chestertown Middle School in Kent County, provided citizens with opportunities to speak one-on-one with Army and environmental oversight agencies that have been working to speed up the disposal process at the Edgewood facility.

"Accelerating the disposal of the stockpile will involve the same neutralization technology and much of the same equipment already on hand for the facility currently under construction," said Kevin J. Flamm, the Army's project manager for alternative technologies and approaches. "Our plan essentially simplifies the process and reorders its sequence."

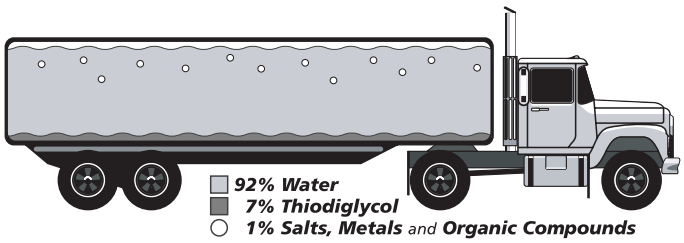
If supplemental funds are approved, the accelerated plan, which calls for neutralizing the mustard agent first, then cleaning and disposing of the empty steel containers later, could result in the mustard agent's destruction as much as three years ahead of schedule, previously set for 2006.

The secondary biotreatment phase of the disposal process will be relocated to an existing off-site commercial facility, which will further shorten the disposal time.

"Recent events make it more important than ever to expeditiously dispose of the mustard stockpile at APG," said Citizens' Advisory Commission Co-Chair John Nunn in a letter issued by the CAC and distributed to citizens at both meetings.

"The CAC believes this is a step in the right direction," Nunn said in remarks at the Edgewood meeting. "We will work with the Army to address any issues that arise, but the important thing is that we're eliminating the mustard agent first."

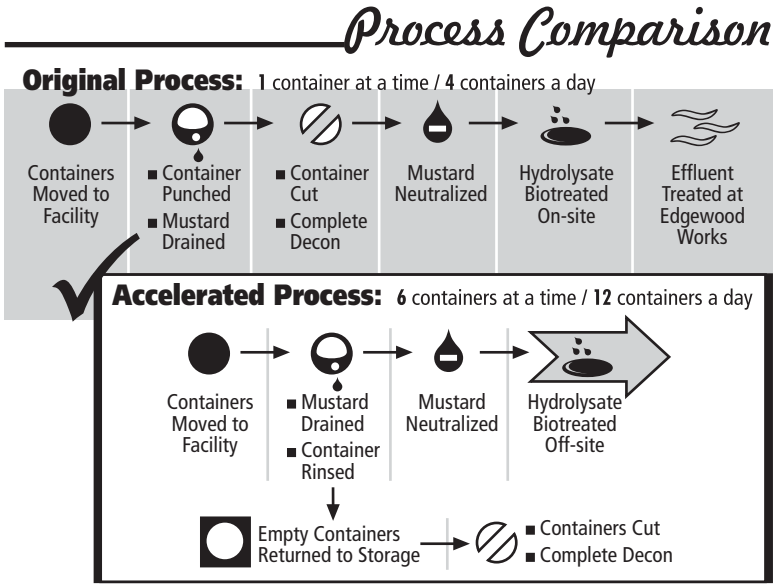
Arlen Crabb, a member of APG's Restoration Advisory Board and APG Superfund Citizens' Coalition, agreed. "It's important that we eliminate the mustard agent stockpile, but we need to make sure that safety is not compromised in the process. Safety for the public, the workers and the community is foremost in my mind. I'm confident that by working together this project will be a success."



Addressing questions concerning the potential for increased risk, Flamm said, "All of the safety features and all of the protective measures in the original plan are retained in the accelerated program. Our primary goal is to maximize safety and the protection of the workforce." He added that the Army will conduct a comprehensive risk analysis of the human and mechanical aspects of the accelerated plan in order to identify and mitigate any potential risks and to ensure that safety is not compromised.

As for transporting the hydrolysate to a permitted off-site facility for final biotreatment, representatives from Harford County Division of Emergency Operations expressed confidence in the plan.

"From the county's perspective, what travels the transportation corridor through Harford County, including I-95 and the railroads, is far more hazardous than the hydrolysate that will be shipped from the facility," said Doug Richmond. "We are comfortable with the Army's ability to safely transport the hydrolysate."



Plan proposes to destroy mustard stockpile sooner

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receipt of additional fiscal year 2002 funding. The proposal has been approved by environmental regulators and endorsed by the Maryland Citizens' Advisory Commission and federal, state and local elected officials.

"The State of Maryland and the Environmental Protection Agency have demonstrated an outstanding level of commitment to the community and cooperation with the Army in accelerating the destruction of the stockpile," said Dr. Mario Fiori, assistant secretary of the army for installations and environment, who leads the chemical demilitarization program at the Pentagon.

Accelerating the destruction of the stockpile involves the same neutralization technology and much of the same equipment approved for use in the original Aberdeen Chemical Agent Disposal Facility.

Four main differences. The accelerated process is different from the original in four main steps: container draining, container decontamination and disposal, agent destruction confirmation and disposal of the neutralization byproduct, called hydrolysate.

Container draining. First, rather than draining agent from the containers with a remotely-operated robotic system, the agent will be drained manually by removing the container plugs through a glove box system that has been used safely by the Army for agent handling for more than 10 years. By manually removing the plugs, it will not be necessary to complete construction of the original building complex designed for the automated system.

Container decontamination and disposal. Second, the original process would have cut, rinsed and decontaminated each container right after draining the agent. The accelerated process calls for draining and neutralizing the agent first, then decontaminating and recycling the empty containers later. This approach provides the most immediate protection to the public by destroying the mustard agent contents of the containers first, and then decontaminating all of the containers after the mustard agent is neutralized.

Agent destruction confirmation. Third, in the original process, each individual batch of hydrolysate would have been tested to ensure that all of the agent had been destroyed according to pre-determined standards. With the accelerated process, a larger batch made up of four well-mixed, small batches will be tested to confirm agent destruction, using the same precise test standards.

Hydrolysate disposal. Finally, the original process called for biotreatment of the hydrolysate on-site at the facility, followed by final treatment at the Edgewood Area Waste Water Treatment Works and ultimate discharge into the Bush River. In Spring 2001, studies began to investigate the possibility of transporting the hydrolysate to a permitted commercial facility for biotreatment as a way of reducing the original schedule and costs. The hydrolysate is a relatively benign liquid that is approximately 90 percent water with a mixture of salts, a chemical called *thiodiglycol*, organics, and possible minute traces of impurities such as copper and iron. Thiodiglycol, an organic chemical used in the paint and ink industry, is readily biodegradable.

The accelerated process will use an off-site, existing commercial facility that already has environmental permits and is well equipped to handle and treat these kinds of wastes. By transporting the hydrolysate to a commercial facility, the buildings and equipment designed for on-site hydrolysate biotreatment will not have to be built, nor will there be any discharge to the Bush River from this facility.

Many authorities with extensive knowledge of the chemical demilitarization program, hazardous waste disposal, worker safety regulations and environmental protection have reviewed these changes. These organizations include Maryland and EPA regulators, the National Research Council, the Department of Health and Human Services, the Federal Emergency Management Agency and local emergency response agencies. Their recommendations and observations have been incorporated into the accelerated process to ensure that worker and public safety and environmental protection continue to be the most important elements of this project.

The Army, our contract team, our partners at federal, state, local and independent agencies, and our community leaders are working together with a common goal to quickly and safely destroy the mustard agent stockpile and permanently remove this risk to the citizens of Maryland.

Photo by Nancy Hofmann

Harford County Councilwoman Cecelia Stepp, right, discusses the project with APG Garrison Commander Col. Mardi Mark and Maj. Bill Huber, Edgewood Chemical Activity commander, at the Jan. 16 public meeting in Edgewood.

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Photo by Kathy DeWeese

Bechtel Aberdeen Project Manager Lee Smith, left, points out the accelerated project specifics to Assistant Secretary of the Army for Installations and Environment, Dr. Mario Fiori, during a recent visit to the facility.

Class I Permit Modification Granted by EPA

APPROVED

On January 18, 2002, the U.S. Environmental Protection Agency, Region III, approved a request by Aberdeen Proving Ground to modify APG's existing Resource Conservation and Recovery Act permit (MD3210021355). This Class I modification reflects changes to the organic air emission control requirements based on the modified design of the Aberdeen Chemical Agent Disposal Facility. Some of these changes include removing requirements that are no longer applicable (e.g., 40 CFR Part 264, Subpart AA), deleting lists of equipment that are not in the current ABCDF design, and specifying requirements for submission of revised lists of equipment that will be subject to this EPA RCRA permit.

If you would like additional information about this permit modification, please call Mr. George Mercer at 410-278-1147 or 1-800-688-8705.

CONTACT THE ABCDF PUBLIC OUTREACH TEAM FOR MORE INFORMATION:

Army Public Outreach and Information - Kathy DeWeese at 410-436-5253; **Edgewood Chemical Stockpile Outreach Office -** Nancy Hofmann and Dennis Story at 410-676-6800; **Bechtel Aberdeen Public Outreach -** Miguel Monteverde at 410-436-9507.

Edgewood Chemical Stockpile Outreach Office
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Report Card

Keep an eye out for our new "Report Card" mailing that gives you a monthly report on our progress and a reply-mailer for your questions.