# State of Oregon Department of Environmental Quality

# Memorandum

**Date:** March 30, 2012

**To:** Environmental Quality Commission

**From:** Dick Pedersen, Director

**Subject:** Agenda Item H, Informational item: Umatilla Chemical Demilitarization Program

status update

April 25-27, 2012, EQC meeting

Purpose of item

This item will update the commission about the program, permitting activities, and project status at the Umatilla Chemical Agent Disposal Facility as of March 13, 2012.

Program news

# Agent processing at the Umatilla Chemical Agent Disposal Facility completed

The Umatilla facility destroyed the last agent-filled munition in the stockpile Oct. 25, 2011. The facility is now treating agent-contaminated secondary wastes and continues closure activities. DEQ is working with the facility, the Environmental Protection Agency, the Confederated Tribes of the Umatilla Indian Reservation and community stakeholders to address comments and concerns during the editing and eventual issuance of the modified closure plan.

With the completion of the mustard ton container processing, the facility has begun treating and disposing of secondary wastes from J-Block storage. It is also treating agent-contaminated secondary wastes generated during closure activities. The facility has treated 960 trays containing 334,415 pounds of secondary agent-contaminated wastes in the metal parts furnace, and 527,302 pounds of spent decontamination solution in the liquid incinerators. Due to the creation of secondary wastes during the closure process, there is not a projection of the total number of trays and total pounds of material that will be destroyed; however, the amount of material treated in February 2012 was more than any other time during the project.

Umatilla Chemical Agent Disposal Facility RCRA permitting activity Jan. 5, 2012, through March 13, 2012

Jan. 5, 2012, unrough March 15, 2012							
	Permit modifications received						
#	Title						
12-003	Revision of UM-PL-017, Laboratory Quality Control Plan						
12-001	Agent-Contaminated Carbon Trial Burn Plan for the Metal Parts Furnace						
12-005	Treatment of Spent Carbon in the Metal Parts Furnace		01/31/12				
Permit modification request withdrawals							
#	Title	Received	Withdrawn				
11-002	Shipment of Agent-Contaminated Secondary Waste to a Commercial	11/30/11	02/22/12				
	Treatment, Storage, and Disposal Facility						
Permit modification request approvals or acceptances by DEQ							
#	Title	Received	Decision				
11-022	Closure Analytical Methods	12/07/11	02/07/12				

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IN PROCESS  The following permit modification requests are under DEQ review						
#	Title	Received	Public Comment Period Close	Target Decision/ Review Date		
Requests						
09-006	Amend Closure Plan	09/25/09	11/24/09 <sup>1</sup> 05/16/11 <sup>2</sup> 01/19/12 <sup>3</sup>	08/20/12		
12-003	Revision of UM-PL-017, Laboratory Quality Control Plan	01/11/12	03/12/12 <sup>4</sup>	04/10/12		
12-001	Agent-Contaminated Carbon Trial Burn Plan for the Metal Parts Furnace	01/31/12	04/02/124	12/30/12		
12-005	Treatment of Spent Carbon in the Metal Parts Furnace	01/31/12	04/02/124	05/30/12		
Notices						
11-024	Administrative Update to the Contingency Plan	12/08/11	N/A	03/30/12		

Umatilla Chemical **Depot RCRA** permitting activity

Jan. 5, 2012, through March 13, 2012

IN PROCESS							
The following permit modification requests are under DEQ review							
44	Ti4lo	Dagaiyad	Public Comment Period	Target Decision/ Review			
#	Title	Received	Close	Date			
Requests							
	Incorporate Inclusion of Laboratory Analytical Procedures and Reporting Limit Refinement	12/08/11	02/13/12	04/04/12			

**Significant** events at other facilities

#### **Tooele Chemical Agent Disposal Facility, Utah**

The Tooele facility completed destruction of the chemical weapons stockpile at Deseret Chemical Depot in Utah Jan. 21, 2012. The Deseret Chemical Depot will be returned to the Tooele Army Depot in July 2013. The Army will decontaminate and dismantle the Tooele facility over the next two years.

# Anniston Chemical Agent Disposal Facility, Alabama

The Anniston facility completed treatment of its chemical weapons stockpile Sept. 22, 2011. It is currently in the process of closure activities.

<sup>&</sup>lt;sup>1</sup> Initial (permittee) public comment period.

<sup>2</sup> 2<sup>nd</sup> permittee public comment period due to significant changes

<sup>3</sup> DEQ (draft permit) public comment period.

<sup>&</sup>lt;sup>4</sup> Based on the permittees' public notice.

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### Pine Bluff Chemical Agent Disposal Facility, Arkansas

The Pine Bluff facility completed its chemical treatment operations Nov. 12, 2010. The Pine Bluff facility is in closure and destruction. Destruction of the Pine Bluff facility began March 28, 2011. Decontamination and dismantling of the facility and equipment is expected to last approximately two years.

#### Newport Chemical Agent Disposal Facility, Indiana

Newport was the third site to complete agent disposal operations, following Johnston Atoll Chemical Agent Disposal System in 2000 and Aberdeen Chemical Agent Disposal Facility in 2006. Closure has been completed. The Army Chemical Management Agency transferred the property to the Department of the Army Base Realignment and Closure July 18, 2010.

## Blue Grass Chemical Agent Destruction Pilot Plant, Kentucky

The Blue Grass facility will use neutralization followed by supercritical water oxidation to destroy its 524-ton stockpile of nerve and mustard agents. The facility has neutralized three sarin ton containers, known as Operation Swift Solution, representing 0.2 percent of the stockpile.

Construction continues on this facility, which is scheduled to begin chemical agent operations in 2018, and to be completed by 2023. The facility is testing to determine if installation of the igloo filtration system on the Blue Grass igloos will provide safe storage and working conditions for employees as well protect public health and the environment. Enhanced on-site containers are used by the Army for safe transport of chemical weapons from storage to the treatment facility. The Blue Grass facility obtained EONCs from the Pine Bluff and Anniston facility. Reuse of these EONCs saved many millions of dollars.

Based on the Army's commitment to treat all agent-contaminated secondary wastes onsite versus offsite shipment, as was done at Newport, the Army is processing all hydrolysates onsite. When treatment has been completed, the operational facilities will be shut down and the temporary structures and equipment will be shipped to Aberdeen Proving Grounds.

#### Pueblo Chemical Agent Destruction Pilot Plant, Colorado

The Pueblo facility will use neutralization followed by biotreatment to destroy its 2,611-ton mustard agent stockpile of artillery and mortar projectiles.

Nearly all the Pueblo facility buildings are up and enclosed and the medical and laboratory facilities are set and secured and are being readied for start up. Facility construction is scheduled to be completed by March 2012, with startup targeted early 2015. The Pueblo facility is in the process of preparing an application to the State of Colorado for renewal of its Resource Conservation and Recovery Act permit.

Based on the U.S. Army's commitment to treat all agent-contaminated secondary wastes onsite versus offsite shipment, as was done at Newport, all hydrolysates will be processed onsite. state