



State of Oregon
Department of
Environmental
Quality

Umatilla Chemical Demilitarization Program

Status Report

January 2005

Five Thousand Down.... Eighty-six Thousand To Go.....

HERMISTON- It was just a few minutes shy of 9:30 am., Wednesday, September 8, 2004 when the first M55 rocket filled with the nerve agent GB (sarin) was lifted onto the "A" processing line at the Umatilla Chemical Weapons Disposal Facility (UMCDF) near Hermiston, Oregon.

It was the first of 91,375 M55 rockets stored at the Umatilla Chemical Weapons Depot (UMCD) to go through the process of being drained of agent, chopped into pieces and then fed into the deactivation furnace, one of the four incinerators located at UMCDF.

But that first day also saw the first of several problems that would occur at the facility during its first months of operation. The first rocket's complete destruction was delayed for approximately four hours because a slide gate would not open, and the first portion of the rocket body, containing the fuse, was prevented from dropping into the furnace.

It was later discovered that an emergency shut off button had been inadvertently bumped, thereby preventing the gate from opening. The button was reset by workers who entered the area in protective suits and the destruction of the rocket was completed at approximately 2 pm.

Twice during the first three months of processing the plant has



Munitions handlers Paul Cook(left) and Cory Grabeel place the first M55 rocket on the "A" line at the Umatilla Chemical Demilitarization Facility on September 08, 2004.
Photo by Crindalyn Lyster

instituted an "operational stand down" to address safety issues. Both times the halts in production were in response to worker errors.

The first incident occurred on September 14, when two workers who were performing routine waste collection inappropriately entered the toxic cubicle. Chemical agent is stored in this area and therefore entry is restricted to personnel wearing the highest level of protective clothing.

Later readings from agent monitoring instruments confirmed that the level of protective gear the workers were wearing was sufficient to protect them against the level of agent to which they were exposed, but concern over the failure of the workers to follow the standard operating procedure triggered a five day stand down and

additional workforce training.

The second incident occurred at approximately 8:30 pm. on December 1, and again involved workers who were unclear on, or did not follow, operating procedures. Two employees of the site contractor, Washington Demilitarization Company (WDC), were preparing to perform a test on the carbon filter bank used for the plant's ventilation system when they unbolted a door that opened onto the first of the series of six filter banks instead of the door at the end of the filter system.

The move allowed the release of GB chemical agent into the adjacent room. At no time was the contamination outside of engineering controls and the workers have since had blood tests which confirmed they were not exposed to chemical agent.

DEQ was concerned regarding these incidents and closely monitored the facility's investigation, and development of immediate and short-term corrective measures to ensure improved performance by the site's workforce. On December 22, 2004 the Department gave its written approval for the resumption of chemical agent operations and has been observing site activities closely, including the additional site management oversight instituted by WDC and the Army.

During the first 4+ months of operation the incinerators have been performing well and as expected, but problems have occurred with some the facility's mechanical systems. Modifications made to the agent drain system in December appear to have corrected problems that had prevented sustained operations on one of the two rocket processing lines.

In the past few weeks, operations have progressed and UMCDF has been able to continue rocket processing across worker shift changes, enabling sustained runs at feed rates approaching the levels necessary for the performance of agent trial burns.

On January 17, the plant processed on both lines, destroying a total of 551 rockets during a nineteen hour period. At the end of January UMCDF had destroyed a total of 5,155 GB rockets and nearly 53,000 pounds of liquid GB.

The facility currently plans to perform chemical agent trial burns in all four of its incinerators in 2005, with the first chemical agent trial burns for drained rockets in the deactivation furnace system scheduled in March or April.

UMCD Storage Permit Approved

On January 31, 2005 the Department issued the Hazardous Waste Storage Permit (Storage Permit) establishing the conditions for storage and management of hazardous wastes generated and stored at the Umatilla Chemical Depot (UMCD). The UMCD Storage Permit addresses two distinct categories of hazardous wastes: those contaminated by chemical agents and other hazardous wastes that are not agent contaminated.

Prior to issuance of the UMCD Storage Permit, hazardous wastes from UMCD activities not associated with chemical agent operations have been regulated under the terms of the Site License issued jointly by the U.S. Environmental Protection Agency (EPA) and the State of Oregon in 1984. That license expired in 1988, but remained in effect because it was not revoked or replaced. The chemical agent weapons and bulk items stored at UMCD, and the agent-contaminated wastes generated from storage and maintenance of those items, had been regulated under the "interim status" RCRA regulations. Those requirements were applicable until the UMCD Storage Permit was issued.

In May, 2002 UMCD submitted a RCRA Part B Permit Application that described in detail the activities and facilities of UMCD and the hazardous wastes stored and generated at UMCD. When the Application had been reviewed and determined to be complete, DEQ then developed a Draft UMCD Storage Permit. The Draft UMCD Storage Permit was issued on July 14, 2003 for a public review and comment period that extended through October 15, 2003.

DEQ received four sets of written comments during the comment period, and one verbal comment was received during the Public Hearing held on August 28, 2003. These comments were considered during the subsequent DEQ staff review of the Draft UMCD Storage Permit and finalization of the UMCD Storage Permit, as issued.

Permit Modification Requests - Update

Class 2 PMR UMCDF-04-027-MON(2)

Revised HW Permit and Permit Application to implement new Airborne Exposure Limits (AEL) for GB, VX and HD issued by the CDC and effective in January 2005 (GB and VX) and July 2005 (HD). The revised AELs impacted agent monitoring requirements and emergency response procedures, but did not change the chemical agent emission limits for UMCDF. DEQ approved this PMR on December 10, 2004.

Class 2 PMR UMCDF-04-021-DFS(2)

Proposes the operating requirements and conditions for conducting the GB Rocket Agent Trial Burns (ATB) for the DFS (first for drainable rockets and later for potentially gelled rockets), and includes the DFS GB Rocket ATB Plan. DEQ approved this PMR on January 4, 2005, and UMCDF is currently scheduled to conduct the ATB for drainable GB rockets in March 2005.

Class 1 PMR UMCDF-04-045-MISC(1R)

Proposed revisions to the HW Permit and Permit Application to reflect the change in Army organization structure that occurred once chemical agent operations began, placing UMCDF under the authority of the Depot Commander. The revisions reflect the single Army permittee (Chemical Materials Agency), but still require signatures from both the Depot Commander and the Army's UMCDF Site Project Manager on all official submittals to the DEQ. WDC remains on the Permit as the co-operator of UMCDF. DEQ approved this PMR on January 19, 2005.

Class 2 PMR UMCDF-04-041-INSP(2)

Proposes revisions to the UMCDF Inspection Plan to reflect operational experience gained at both UMCDF and other chemical demilitarization facilities. The public comment period closed on November 22, 2004. DEQ is currently reviewing this PMR.

Class 2 PMR UMCDF-03-021-LIC(2)

Proposes the operating requirements and conditions for conducting the GB ATB for LIC 1, and includes the LIC 1 GB ATB Plan. Proposed operating requirements are based on the results of the LIC 1 surrogate trial burn completed in January 2003. UMCDF is currently scheduled to conduct the LIC 1 GB ATB in April 2005. DEQ is currently reviewing this PMR.

Class 2 PMR UMCDF-04-043-MPF (2)

Proposes the operating requirements and conditions for conducting the GB Bomb ATB for the MPF, and includes the MPF GB Bomb ATB Plan. Proposed operating requirements are based on the results of the MPF surrogate trial burn completed in January 2004. UMCDF is currently scheduled to conduct the MPF GB Bomb ATB in September 2005. This PMR was open for public comment until December 27, 2004. DEQ is currently reviewing this PMR.

Army Study of Moving Weapons Unpopular

A Department of Defense (DOD) memo issued on December 21, 2004 directed the Army to consider moving chemical weapons among storage sites and it has generated a flurry of opposition from local and national officials.

Presently, federal law prohibits moving chemical weapons across state lines. Oregon's administrative rules and the State's permits allowing the U.S. Army to store and destroy the weapons at the Umatilla Chemical Depot expressly prohibit the Army from bringing more chemical weapons into the state. Oregon's Gov. Ted Kulongoski has already expressed his strong opposition to the idea in a January 26, 2005 letter to the Secretary of the Army.

New federal legislation, proposed by U.S. Sens. Wayne Allard, R-Colo. and Ken Salazar, D-Colo. on January 26 (co-sponsored by U.S. Sen. Ron Wyden, D-Ore. and U. S. Senators from Kentucky, Alabama, Utah, Maryland, and Indiana) would stop the DOD from funding any study related to the transportation of chemical munitions across state boundaries.

On January 19, the Army's Chemical Materials Agency (CMA) announced that it would look into relocating the weapons to help meet a 2012 deadline for the destruction of the entire U.S. chemical weapons stockpile.

Three previous studies done in the past two decades have shown moving the weapons would be impractical and the 1988 Record of Decision by the Army in its Programmatic Environmental Impact Statement concluded that on-site processing at each of the eight chemical weapons storage locations in the U.S. posed the least environmental and health risks.

DEQ item number: 05-0186

Need more information?

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