

January 18, 2002

ACWA PROGRAM UPDATE

This is the 28th update, in a series of updates, provided by PMACWA to enable the Dialogue to stay abreast of the latest information regarding the many activities currently underway.

ENGINEERING DESIGN STUDY (EDS I)

EDS I Testing –

Parsons/Honeywell. The Projectile Washout System testing of the HT mortars has been postponed due to scheduling conflicts at the test site and is now scheduled for May.

General Atomics. Testing in coordination with the Program Manager for Alternative Technologies & Approaches (PMATA) was conducted using the ACWA supercritical water oxidation (SCWO) unit at Dugway Proving Ground to support the Newport demilitarization program. In addition, the 500-hour VX hydrolysate simulant supercritical water oxidation run for ACWA has been successfully completed. Unlike the previous liner materials used, the VX hydrolysate simulant runs used a Hastelloy liner. This liner material demonstrated a greater corrosion resistance for the VX hydrolysate simulant than the previously used titanium. Following the VX hydrolysate simulant runs, some limited carbon slurry runs were also conducted. EDS I testing for General Atomics has been completed and the test equipment is currently being dismantled.

ENGINEERING DESIGN STUDY (EDS II)

EDS II Testing -

AEA Technology. All the planned AEAT/CH2MHill EDS II testing has been successfully completed. This includes the following tests: 12kW Agent simulant and 12kW Energetic tests, Hydrocyclone, High Shear Mixer, Organic Transfer, Cell Membrane Life, Fluoride Removal, Fluoride Transport, Silver Recovery, and Evaporator Tests. Also completed are two paper studies, which include the Burster Washout and Water Jet Cutting report and the Energetic Slurry Concentration Safety Study report. Any remaining final reports are expected by the end of January 2002, except for the 12kW Agent simulant final test report, which is due in February. The performance of the 12kW plant during the energetic testing far exceeded the performance during Demonstration II testing. An additional short-term energetic test to destroy tetrytol was approved. This test will commence and finish in January 2002. This test was added to address the full elimination of energetic intermediates and solids handling within the plant, which was a concern during Demonstration II testing of this material.

Eco Logic. The Eco Logic EDS II testing has been successfully completed. This includes the following tests: Propellant Grinding and the Gas Phase Chemical Reduction

(GPCR) Analytical Methods Development, Explosivity, Elastomers, and Metallurgy Trade Studies. All final testing reports have been provided.

Foster Wheeler. The Foster Wheeler EDS II test program has encountered significant delays, mainly due to the need to upgrade the oxygen/nitrogen system. The oxygen and nitrogen system upgrade was completed in late November. The first 500-hour run, which consisted of the GB and energetics hydrolysates, was successfully completed on December 17, 2001. A Draft Test Report was provided on 3 January 2002. Preparations are underway for the second 500-hour run, which will consist of the VX and energetics hydrolysates. It is planned to begin in mid-January. A third 500-hour run, which will consist of the HD and energetics hydrolysates, is planned to begin in mid-February.

Engineering Design Packages (Blue Grass) -

- After submitting their Draft EDPs in late September, the Technology Providers presented their updated total solutions to the independent evaluators in October 2001.
- Design Reviews with PMACWA on the Technology Provider's Draft Engineering Design Packages (which included design, cost and schedule information) were held in November 2001.
- The Final EDPs were submitted to PMACWA in December 2001 and are currently under review.

ACQUISITION/PILOTING ACTIVITIES

Colorado –

- Representatives from PMACWA attended the November and December Citizens Advisory Commission (CAC) meetings which included discussions of economic impacts, National Research Council reviews of technologies, and the Defense Acquisition Board process.
- Work is ongoing to modify the Request for Proposals (RFP) for Pueblo from the A/B approach to a systems contractor approach and incorporate performance-based specifications.

Kentucky -

- A Kentucky Environmental WIPT meeting took place on October 23, 2001 via video teleconference from several sites. Items discussed included: updates of both the PMCD and PMACWA Environmental Impact Statement status, update of the Defense Acquisition Board process, and an update on the incineration and alternative technologies applicable to the Blue Grass stockpile. The next meeting is tentatively planned for February 2002 in Richmond, Kentucky with the topics of discussion

being the permit model developed for the Pueblo alternative technologies and an update on the EIS documents.

- The Kentucky Citizens Advisory Commission requested PMACWA to attend their meeting on December 10, 2001 in Berea, Kentucky to respond to questions and concerns relating to the safety of the alternative technology. A representative from PMACWA provided an update of all the safety evaluations performed on the alternative technologies developed by PMACWA and responded to the commission's questions. Some members of the commission will be visiting Aberdeen Proving Ground in February 2002 to witness a laboratory scale HD neutralization and to see the 12kW Silver II system and the Chemical Demilitarization Training Facility.

ENVIRONMENTAL ACTIVITIES

National Environmental Policy Act/Environmental Impact Statement –

- The last of the operational security comments have been incorporated into the ACWA Program EIS. The final EIS will be available for internal Army/DOD review on 8 February 2002. The projected date for the Notice of Availability is early April 2002 and the Record of Decision is expected in early May 2002.

Resource Conservation and Recovery Act and Clean Air Act Permits -

- Development of Resource Conservation and Recovery Act (RCRA) and Clean Air Act (CAA) permit applications for the Chemical Agent Pilot Plant in Pueblo is ongoing. PMACWA is awaiting final operational security comments on the documents before they are submitted to the State of Colorado. These documents will be released as preliminary final and will be for information purposes only. The Pueblo Chemical Depot (PCD) has hired Los Alamos Technical Associates to review the permit applications for agreement with the PCD storage permit and other PCD concerns.
- Mitretek Systems has completed the development of the input/output models representing the PMACWA technologies proposed for Pueblo. The models are for the projection of effluent and emission characterizations. The models incorporate all previous testing information and mass/material balances. The output predictions will be the common database to be used to support the RCRA and CAA permit applications and the Health Risk Assessments.

Agricultural Assessment Work Plan -

- Work is ongoing by PMACWA and PMCD to complete the Agricultural Assessment Work Plan (AAWP) to satisfy Pueblo County's Certificate of Designation requirements. The AAWP will include the protocol for sampling selected crops and farm animals for analytes of potential concern and data management for all sampling

activities. The draft AAWP will be released to the local public for comment in late January 2002.

DEFENSE ACQUISITION BOARD (DAB) REVIEW

- The first phase of the DAB Review was held on 6 September 2001. The cost, schedule, and Chemical Weapons Convention (CWC) compliance status of each Chemical Demilitarization program element were addressed. The second phase, which will occur in 2002, will address the technology selections for Pueblo and Blue Grass.

- Pueblo Technology Decision
 - The DAB Review, originally scheduled for 1 February, has been delayed until 14 March. As a result of the 11 September terrorist attacks, stringent operational security requirements have been placed on the publication of the EIS thus causing the DAB Review to be delayed.
 - The Working Integrated Product Teams (WIPTs) are currently reviewing/analyzing information, which will be presented to the Integrating IPT (IIPT).
 - An IIPT and an OIPT meeting will be held early March, to prepare for the DAB Review meeting. Mr. John Klomp, chairman of the CO CAC, and an additional CAC member have been invited to present the CAC position on a destruction technology at these two meetings. Mr. Klomp's presentation will be used as input to the final technology selection.
 - A DAB Review meeting will be held on 14 March 2002. During this meeting, Mr. Pete Aldridge, the Defense Acquisition Executive (DAE) will select an agency preferred alternative for the PMCD Site-Specific EIS.
 - In early April, the NOAs for the PMCD Site-Specific EIS and the ACWA Program EIS will be published in the Federal Register.
 - Thirty days later, in early May, the DAE will make the final technology decision for Pueblo. The official Record of Decision (ROD) will be published shortly thereafter.

- Blue Grass Technology Decision
 - The technology decision for Blue Grass is tentatively scheduled for August 2002.

NATIONAL RESEARCH COUNCIL

- The National Research Council (NRC) Assembled Chemical Weapons Committee (ACW II) held a review meeting on 14-15 November in Washington D.C. The committee reviewed ACWA's Engineering Design Studies (EDS II) test data and made plans for the preparation of the report on the demilitarization of assembled chemical weapons at Blue Grass, Kentucky.

- At the 6 December 2001 Colorado CAC meeting, Dr. Robert Beaudet, Chair of the NRC ACW II Committee, presented a synopsis of the report, *Analysis of Engineering Design Studies for Demilitarization of Assembled Chemical Weapons at Pueblo Chemical Depot*. At the same meeting, Dr. Peter Lederman, Chair of the NRC Chemical Stockpile Committee presented a synopsis of the report, *A Modified Baseline Incineration Process for Mustard Projectiles at Pueblo Chemical Depot*. Both reports were published in September 2001. The meeting was well attended by the public and U.S. Army representatives.
- The NRC ACW II Committee released the report, *Evaluation of Demonstration Test Results of Alternative Technologies for Demilitarization of Assembled Chemical Weapons - A Supplemental Review for Demonstration II*, in December 2001. This report is an in-depth review of the data, analyses, and results of the Demonstration II tests of the ACWA program. Copies of this report are available on the National Academies website at <http://www.national-academies.org>.
- The NRC ACW II Committee held a review meeting on 3-4 January 2002 in Irvine, CA. The committee reviewed ACWA's Engineering Design Studies (EDS II) test data in preparation for the report on the demilitarization of assembled chemical weapons at Blue Grass, Kentucky. The meeting was also attended by members of the ACWA Technical Team, Arthur D. Little, and technology providers Foster Wheeler, Eco Logic, and AEA Technology. This meeting was the final opportunity for the technology providers to present and provide their testing results to the Committee. The report is scheduled for publication in June 2002.
- The NRC ACWA II Committee will release a Letter Report on the demilitarization of assembled chemical weapons at Pueblo Chemical Depot in February 2002. The Letter Report will include a review of additional EDS test results, which were not available for the September report.