

## **1.0 Welcome and Introductions**

- 1.1 Mr. Jon Ware, PMACWA, opened the meeting with welcome and introductions. The core members reviewed and approved the last meeting summary.
- 1.2 PMCD was not represented at this meeting and will soon be off the PCAPP project. At the next WIPT meeting, the core members will appoint a Pueblo Chemical Depot (PCD) representative as a tri-chair to replace the PMCD representative. *(As reported by Jon Ware, PMACWA).*
- 1.3 Please contact the presenters directly for copies of their briefings and handouts.

## **2.0 NEPA – ROD**

The ACWA Program Environmental Impact Statement (EIS) Record of Decision (ROD) is in the Pentagon being reviewed and awaiting approval and signature. As soon as this ROD is signed, the WIPT will be notified. The ROD for the Pueblo Site Specific EIS, which was prepared by PMCD, was signed 21 August 2002. *(As reported by Jon Ware, PMACWA).*

## **3.0 Offsite Transportation Risk Assessment**

The objective of the Transportation Risk Assessment (TRA) was to evaluate the risk associated with off-site shipment of residual PCAPP waste streams using three proposed ACWA disposal options, which are based on all waste shipments being hazardous waste. This assessment also assumes that all shipments are to be made using commercially contracted hazardous waste shippers by truck and or rail; and all shipments will be in compliance with packaging, shipping, placard labeling, and shipping manifest regulatory requirements (CDPHE and federal) for shipping hazardous waste.

The residual waste disposal options include: Option A – Dunnage and metal parts shipment; Option B – Hydrolysate (from agent and energetics) plus the dunnage and metal parts; Option C – Energetics (explosive components plus the hydrolysate and dunnage and metal parts). The offsite hazardous waste treatment, storage, and disposal facilities (TSDF) analyzed (chart included in handout) were selected based on how well they can handle each option.

The decontamination level of the metal parts or other solids is 3x, which indicates that the item is surface decontaminated to Army-approved procedures. Appropriate tests and monitoring have verified that concentrations above 0.003 mg/m<sup>3</sup> for mustard agent do not exist.

Possible shipment vehicle types for liquid hydrolysate wastes include truck shipments or railcar shipments. For energetic and solid wastes, shipment vehicle types include van truck shipments and railcar shipments.

Cargo and non-cargo risks were evaluated. Non-cargo risks were associated with highway or railway accident crash impacts on the driver. Cargo risks were associated with accidents involving the cargo (fire/explosion).

For the agent hydrolysate, Army representatives stated that it will be tested to ensure agent concentration is less than 200 ppb HD/HT prior to shipment. Risks associated with shipment of HD hydrolysate and energetic hydrolysate through a community are expected to be less hazardous than gasoline shipments to local dealerships.

The study assumes transportation will follow routes mapped by the Department of Transportation and are selected based on availability, safety, two lanes, etc. The model used for this study looked at the worst-case scenarios and population centers, routes, etc. to determine the risks involved for a variety of destinations; for instance, NJ versus Colorado.

Most accidents occur due to the carrier, not the material being carried. The potential for accidents and the consequences of accidents are low, due to the small amount of shipments leaving the Depot.

The study took terrorist activity into account in the areas of sabotage and vandalism. The likelihood of a shipment being a target is extremely low. A terrorist/threat reduction study would be a separate study and would include a global examination of the entire project, which in turn would increase the likelihood of a terrorist threat simply due to the nature of the project.

A copy of this report will be distributed to the WIPT members when it is completed. For copies of this presentation, please contact Bobby Templin or Mike Lazarro, Argonne, National Laboratory (ANL). ***(As reported by Bobby Templin, ANL).***

*At this time, CDPHE does not concur with the presumption that the cargo risk of shipping untreated energetic components, generated from the enhanced reconfiguration of mustard munitions (Option C), is the same as shipping new or similar types of explosives. CDPHE is concerned that the age and condition of the explosive components may decrease the relative stability of the energetic materials during transport. CDPHE requests information to clarify the specific types and conditions of energetic components that may be shipped offsite. Action Item 79 has been added to reflect this information request. The TRA will not be finalized until this information has been reviewed and discussed with CDPHE.*

#### **4.0 Enhanced Onsite Container (EONC) vs. Modified Ammunition Van (MAV) – Onsite Transportation Study**

Options evaluated for the onsite transportation study include transportation to support baseline reconfiguration, enhanced reconfiguration, and disposal. Elements of the risk study include the accident rate, outcome of accident, and health impacts to the workers and public.

This study uses onsite transportation accident rates developed for the quantitative risk assessments (QRA) and assumes a conservative transport distance for all trips to be approximately 2 miles. The number of trips calculated is based on the transport vehicle capacity and total number of rounds.

An inventory comparison of the EONC and MAV reflects the number of trips required for each with a 30% difference in the total number of trips (see handout for specific numbers). Slightly more trips are required with the EONC, when boxed munitions are transported; however, the likelihood of an accident per trip is similar for the EONC and MAV.

According to the study, all accident scenarios with the EONC and MAV result in negligible public fatalities and negligible excess cancers. The low risk is due to the relatively lower toxicity of HD compared to other agents, daytime transportation (resulting in good atmospheric dispersion), sparse surrounding population, short travel distance, and low vehicle speeds during transport. The EONC provides somewhat better protection of the cargo than the MAV, but it is not designed to prevent an agent release in the event of an explosion. Since the most important accident scenarios involve munition explosions, usually accompanying a fire, the greater protection provided by the EONC does not significantly lower the risk. The analysis assumes that both the EONCs and MAVs would be tested for agent leakage prior to their opening and that masks are available for the drivers. Consequently, the risks associated with agent leakage during transport would be minimal.

Using the EONC results in more than twice as many handling steps during loading and unloading of munitions, which may result in increased risk for the workers involved in handling operations. However, any worker risk is likely to be very small since the MAVs and ONCs (the predecessor of the EONCs) have been utilized for years with no significant injuries.

This report will be completed mid-February 2003 and will be distributed to the WIPT members at that time. ***(As reported by Dave Bradley, SAIC).***

**5.0 Infrastructure Update**

<b>PCAPP Infrastructure Projects</b>			
<b>Project</b>	<b>Status</b>	<b>Issues/Comments</b>	<b>Scheduled Completion Date</b>
Communications System – Phase I (Fiber Optic Cable)	Complete	Phase I Contractor – Martinez International	December 2002
Communications System – Phase II (Telephone Utility Building)	Complete	Contractor – Faith Enterprises	April 2003
Water System – Phase I (Pipe, Tank and Pump House, Repair Wells, Controls)	67% complete	Contractor – Martinez International	April 2003
Access Road	67% complete (Route 3)	Need to verify that the road meets county standards.	April 2003
PSB/PSB Parking	67% complete	Assembly of the modular building is complete. The utilities connections are being installed.	April 2003
Gas		To avoid non-usage fee, gas line will not be turned on until later. Electric heat will be used until then.	To be determined
Substation/Transmission Line	Contract awarded to Aquila	Aquila initiating procurement of long lead equipment	June 2004
Upgrade to PCD Gate	On Hold	On hold pending decision on use of alternative access to PCD.	On Hold
Waste Water Lagoons	Contract was cancelled	Existing lagoons will be used.	Cancelled

## **6.0 Water Rights and Groundwater Supply Evaluation**

The purpose of the water rights and groundwater supply evaluation was to review existing decrees and the augmentation plan and to assess the adequacy of each. Additionally, the proposed PCAPP water supply well equipment was inventoried, the well condition reviewed and pumping tests were conducted on each of the supply wells (independently and collectively) to assess pumping capacity. The four northern wells, 14 – 17, are proposed for PCAPP use and are 900 – 1000 feet apart.

Layne-Western, a national company with an office in Denver, was hired to conduct the well inspection, pumping equipment inspection, and pumping tests. As part of the inspection, a downhole video survey was conducted of each PCAPP well for depth and sediment evaluation, as well as an assessment of its condition. As a result of this evaluation, Layne's recommendation was to include a pump shroud for better efficiency.

Eleven wells have been decreed for use at the Pueblo Chemical Depot (PCD), with an appropriation date of 1942. As a result, these wells are 'out of priority' much of the year. PCD well use is presently augmented by a Colorado Well Protective and Development Association (CWPDA) Rule 14 Augmentation Plan (for wells permitted or decreed prior to 1985).

The average annual pumping of all 11 PCD wells is 200 – 250 acre feet (AF). The average daily demand of PCAPP is estimated to be 81 AF/yr (50 gpm) if used continuously, excluding increased staff projections. The SC will have a better estimate of the water consumption once they are fully on board. Nearly all groundwater produced from the wells is consumed with very little being returned to the Arkansas River, which results in very few, if any, credits to the augmentation plan.

The average daily demand of PCD is currently being met with the seven southern wells, which are also backup for the PCAPP. Based on recent well evaluation, the PCAPP daily demand can be physically met with two of the designated wells and the four proposed PCAPP water supply wells are physically capable of meeting the demands at their decreed rates. However, use of the proposed supply wells may require a renegotiated CWPDA contract.

The current contract with the CWPDA is for present Depot use up to 300 AF/yr. If this is not enough for PCAPP, the plan will need to be renegotiated with the CWPDA, which may require additional costs and possibly the purchase of additional water rights.

The CWPDA's Rule 14 Augmentation Plan is reviewed and approved annually by the Colorado State Engineer's Office and prioritization of replacement is at their discretion. The existing decree is adequate for both existing and projected demands of the PCAPP if an adequate augmentation plan is in place.

When the evaluation is complete, Wright Water Engineers will provide recommendations to PMACWA in the form of a summary report regarding adequacy of the supply wells, water rights, and the augmentation plan to meet projected demands.

This report will be complete 14 March 2003 and provided to the WIPT at that time. *(As reported by Gary Witt, Wright Water Engineers)*

### **7.0 Domestic/Industrial Waste Water Issue**

Domestic wastewater will be treated using the existing PCD lagoons. A discharge line will be installed from the Personnel Support Building (PSB) to the lagoons. This issue will be evaluated as the project moves forward to determine if the existing lagoons need to be supplemented in order to handle the domestic waste water. For now, the construction of any new lagoons has been cancelled.

Once the agent is neutralized it will require biotreatment. Options are currently being explored by the Accelerated Options Working Group (AOWG) for the industrial wastewater products. The original plan was to conduct the biotreatment onsite and recycle the water with no discharge from the plant. One option for treatment being explored by the AOWG is offsite shipment (see ANL presentation).

Another option is to use a local treatment plant for the hydrolysate. Local facilities were explored to see if they could meet the requirements of the PCAPP. The option of building a new treatment facility was also explored, with the main source of waste coming from PCAPP and community waste. The AOWG recommended not pursuing this option due to the materials in the effluent such as selenium and sulfates, which exceed the limits allowed for discharge into the Arkansas River. The only other option is to send the waste to another facility, which can handle the estimated constituents and volume. The AOWG will continue to work these issues. *(As reported by Scott Susman, PMACWA).*

### **8.0 Presentation of ACWA Systems Contractor**

The SC will pursue an innovative phased permitting approach and implement a life-cycle approach to the permitting effort. PMACWA's success to date with the Pueblo community will continue as the SC works closely with the CAC and WIPT.

Bechtel Pueblo will begin dialogue with the State, EPA, and the County permitting staff as they explore permitting innovations, which allow the greatest project flexibility and ensure that the schedule is adhered to. In this effort, Bechtel Pueblo will integrate permitting engineers into the design team and also recommends integrating a CDPHE engineer into the design basis, design, and design review process.

The permitting efforts will be coordinated with the design package delivery schedule to facilitate permit application submittals. All phases of the project will be considered during the permitting process, right up to closure to ensure that the schedule is adhered to.

Weekly Process Action Team (PAT) meetings will be held and include representatives from PMACWA, Bechtel, and the Depot. Bechtel Pueblo also plans to establish

subgroups to the Environmental WIPT to coordinate the RCRA, County CD, air, and water issues.

Quarterly information sessions will be sponsored by Bechtel Pueblo to apprise the community of the developing design and permit evolution. With PMACWA concurrence, Bechtel Pueblo will present information briefings at the monthly CAC meetings. Additionally, Bechtel Pueblo will coordinate with the CAC to implement user-friendly methods for public review of draft permits and project-related documents such as maintaining a website and distributing CD-ROMs. ***(As reported by John McArthur, Bechtel)***

## 9.0 Actions

Item	Description	Responsible Person(s)	Suspense	Status
Item 30	Forward detailed environmental sub-schedule to Ms. Lisa Woodward, CDPHE.	Jon Ware, PMACWA	7 March 2001	HOLD
Item 34	Prepare point of contact listing for potential questions from the Pueblo community.	Jeannine Natterman, CDPHE	August 2002	Update as Needed
Item 66	Determine if the Depot is tied into the planned communication system for PCAPP and how this can be accomplished, if not. This item will also be added to the PCAPP Issue Area Groupings List.	Scott Susman, PMACWA and Steve Lewis, USCOE	Next WIPT Meeting	Ongoing
Item 67	Provide status reports/information on other sites using enhanced reconfiguration to CDPHE. Fact sheet on Anniston should be provided.	Jerry Starnes, PMACWA	Next WIPT Meeting	Open
Item 68	Provide permit modifications from other sites to CDPHE	Jerry Starnes, PMACWA	Next WIPT Meeting	Open
Item 70	Finalize Human Health Risk Assessment for Neutralization Biotreatment technology	Jon Ware, PMACWA	This item will be postponed until the facility design is complete	Open
Item 76	Resend letter on lagoon information to CDPHE	Jon Ware, PMACWA	This will be provided to the CDPHE with the substation drawings once the COE has the drawings complete.	Open
Item 77	Determine if a modification to the existing site application is sufficient, or if an additional application will be necessary for the pipe required to pipe waste from the PSB to the existing lagoons.	Brad Still, PCD and David Knope, CDPHE	CDPHE will provide comments on this issue once the design is complete.	Open
Item 78	Supply the ONC vs MAV report to the WIPT when it is available	Jerry Starnes, PMACWA	Next WIPT Meeting	Open
Item 79	Provide information to CDPHE on the stability of the chemical compounds in and the conditions of the energetic components for the transportation study. (See Item 80)	Jerry Starnes, PMACWA	Next WIPT Meeting	Open
Item 80	Provide a copy of the Offsite Transportation Risk Assessment Study report to the WIPT	Bobby Templin, ANL	Upon Completion – This item will not be completed	Open

Item	Description	Responsible Person(s)	Suspense	Status
	members.		until Item 79 has been completed and CDPHE concurs.	
Item 81	PMACWA will work with the SC to determine if the enhanced reconfiguration issue should be dropped or pursued.	Scott Susman, PMACWA	Next WIPT Meeting	Open
Item 82	Notify the WIPT members when the ACWA ROD is signed and available for distribution	Kimberly Collins, Horne Engineering	Next WIPT Meeting	Open
Item 83	Appoint new tri-chair to the CO Environmental WIPT	CO Environmental WIPT Core Members	Next WIPT Meeting	Open
Item 84	Provide a copy of the Water Rights and Ground Water Supply Evaluation report to the WIPT members	Gary Witt, Wright Water Engineers	Upon Completion	Open

**10.0 List of Attendees**

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