

**PUEBLO CHEMICAL DEPOT
RECORD OF ENVIRONMENTAL CONSIDERATION (REC)**

SUBMIT AT LEAST 45 BUSINESS DAYS PRIOR TO PROPOSED ACTION FOR REVIEW AND APPROVAL

Project Name:

Date and Duration of Proposed Action: START: END OR DURATION:

Proponent (unit/directorate, POC, phone #, email): Other Other:

POC: Phone #: Email:

Description of Proposed Action: (Include Location (**ATTACH MAP**), Level of Activity (i.e., number of personnel and equipment) Type of activity (i.e., POL operations, mess/laundry/bath, demolition, real property actions, grading, borrow pit, construction or renovation actions, excavation, fielding/testing actions, grading, borrow pit, construction or renovation actions, excavation, fielding/testing actions, etc.) **Continue on Page 2**

The proposed action is the construction and operation of a loading dock/shipment terminal for the shipment of mustard agent hydrolysate from the PCAPP, located on Pueblo Chemical Depot (PCD), to an off-site Treatment Storage and Disposal Facility (TSDF) for final treatment and disposal. The loading dock/shipment terminal will be constructed within the existing PCAPP footprint in the vicinity of the 30 Day Hydrolysate Storage Tanks/Biological Treatment Area (BTA)/Brine Reduction System (BRS). The facility will include, but not be limited to, approach and departure lanes, an approximately 60'x12'x10" concrete and steel containment pad and a 10'x10' concrete pad for rolling stair and loading arm support. Anticipated duration of use for this facility is through completion of the demilitarization operations at the PCAPP. The potential environmental impacts of constructing and operating the PCAPP for the destruction of the PCD inventory of mustard-filled munitions were (cont.)

Signature of this document is solely a determination of compliance with the provisions of the National Environmental Policy Act (NEPA). This does not preclude, nor constitute a determination of preclusion from, any additional requirements pursuant to submittals or permits ensuring compliance with other applicable federal, state, or local laws, regulations, requirements, and/or guidelines.

Signed:
431558 Digitally signed by LEVI.WALTON.WAYNE.1231431558
DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
c=US, email=LEVI.WALTON.WAYNE.1231431558
Date: 2017.03.27 12:56:35 -0600

Title:

ENVIRONMENTAL MANAGEMENT OFFICE USE ONLY

* It has been determined that the action:

- a. Is in accordance with 32 CFR 651.5(I), is not subject to NEPA analysis.
- b. Is adequately covered in existing EA or EIS

Entitled:

Date:

- c. Is categorically excluded under the provisions of 32 CFR 651, Appendix B, Section II () ()

Concurrence:

Final Approval by:

70307 Digitally signed by JONES.CLARK.DAVID.1502870307
DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI,
ou=OTHER, cn=JONES CLARK DAVID.1502870307
Date: 2017.03.27 13:21:52 -0600

JOHN.1136958727 Digitally signed by PULSKAMP.CHRISTOPHER JOHN 1136958727
DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
cn=PULSKAMP.CHRISTOPHER JOHN 1136958727
Date: 2017.03.27 13:31:17 -0600

Natural and Cultural Resource Manager

Environmental Management Office Chief

UCE.1203851037 Digitally signed by RICHARDSON.MICHAEL.BRUCE 1203851037
DN: cn=US, o=U.S. Government, ou=DoD, ou=PKI, ou=USA,
cn=RICHARDSON.MICHAEL.BRUCE.1203851037
Date: 2017.03.27 13:14:49 -0600

NEPA Manager

Received:

REC Number:

**PUEBLO CHEMICAL DEPOT
RECORD OF ENVIRONMENTAL CONSIDERATION (REC)**

Description of Proposed Action (continued):

evaluated in the 2002 Final Environmental Impact Statement (FEIS) (PMCD EIS 2002) including those impacts associated with land use, air quality, water resources, human health and safety, ecological resources, socioeconomic resources, environmental justice, noise, waste management, and resource consumption. This analysis anticipated the transportation of both hazardous materials and hazardous wastes from PCAPP, but did not specifically reference hydrolysate. The FEIS presents key findings for each of the environmental impact areas with no mitigation measures necessary.

While ACWA does not plan on shipping hydrolysate, it must be prepared for that event. To bound the analysis, a shipping distance of 2,000 miles was selected with a conservative estimate of 1800 shipments, this translates to approximately one shipment every day for the duration of operations. This means that two to three individuals will be working in this area for part of each day. In an evaluation of the risk of transporting treated hydrolysate from PCAPP to a treatment, storage, and disposal facility (TSDF) was conducted and documented in a report entitled : PCAPP Hydrolysate Transportation Risk Assessment (TRA) (Leidos 2016). The regulations for hazardous materials classification, handling, loading, and transport were reviewed for safe transport of the hydrolysate in tanker trucks. The TRA was conducted for the PCAPP hydrolysate using the Army approach by determining accident frequency and event consequences for (1) an accident/incident with a release/leak and (2) an accident with a release and a fuel fire. The results indicate that the transportation risk is Acceptable and that no mitigation measures are necessary.

The proposed action will also operate under all applicable Federal, State and local environmental regulations and permits. All construction will be done on previously disturbed land. All information leads to the conclusion that the construction and operation are within the bounds of the previous FEIS, other NEPA documents and other environmental documents and there have been no significant changes which would cause the Army to make a different determination.

It is ACWA's intention to discuss any actual transportation of hydrolysate with the CAC prior to initiating shipment; however, no further NEPA documentation is anticipated.

EMO Restrictions Pertaining to this REC:

**PUEBLO CHEMICAL DEPOT
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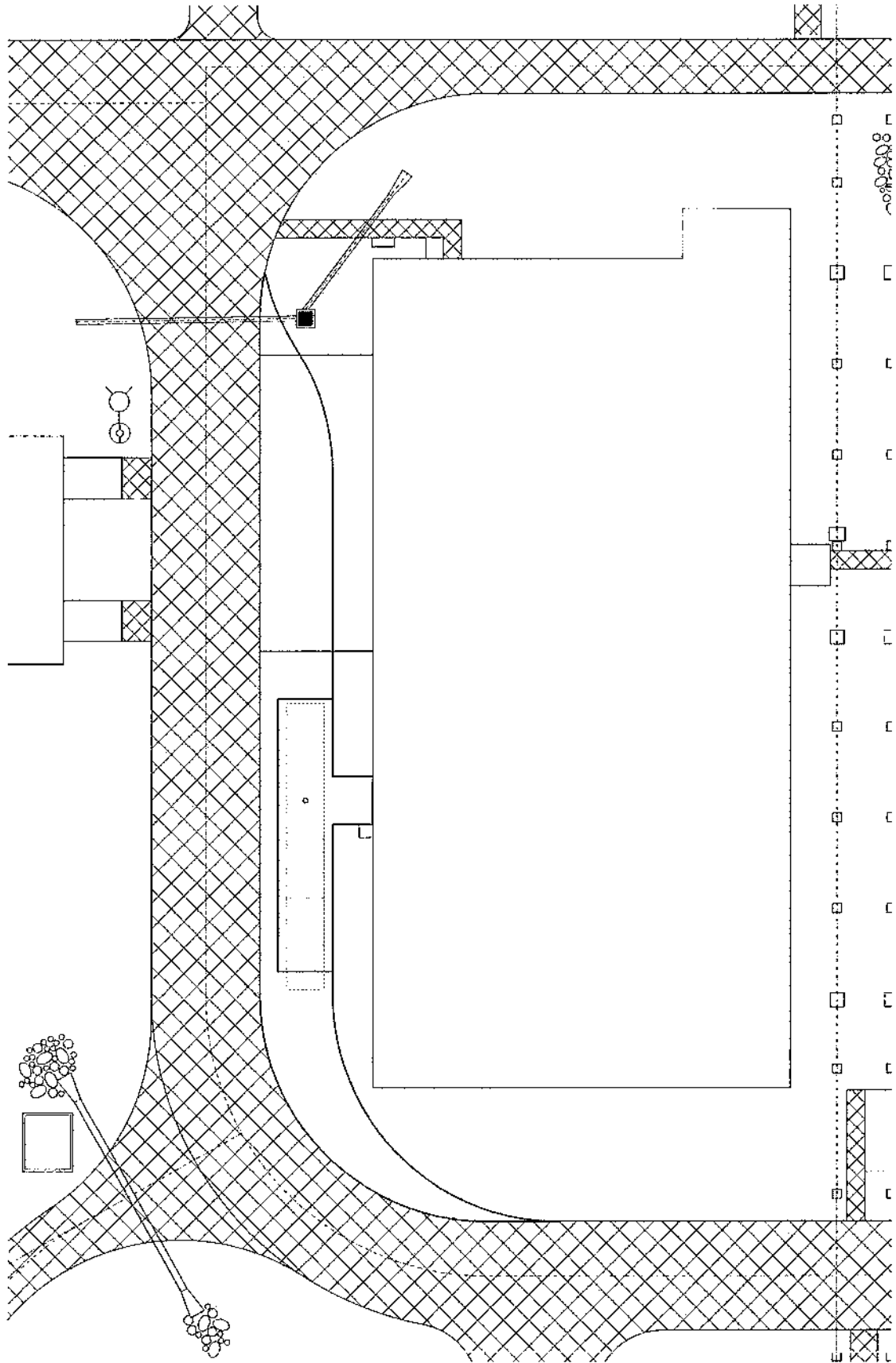
MAP OF GENERAL LOCATION OF PROPOSED ACTION

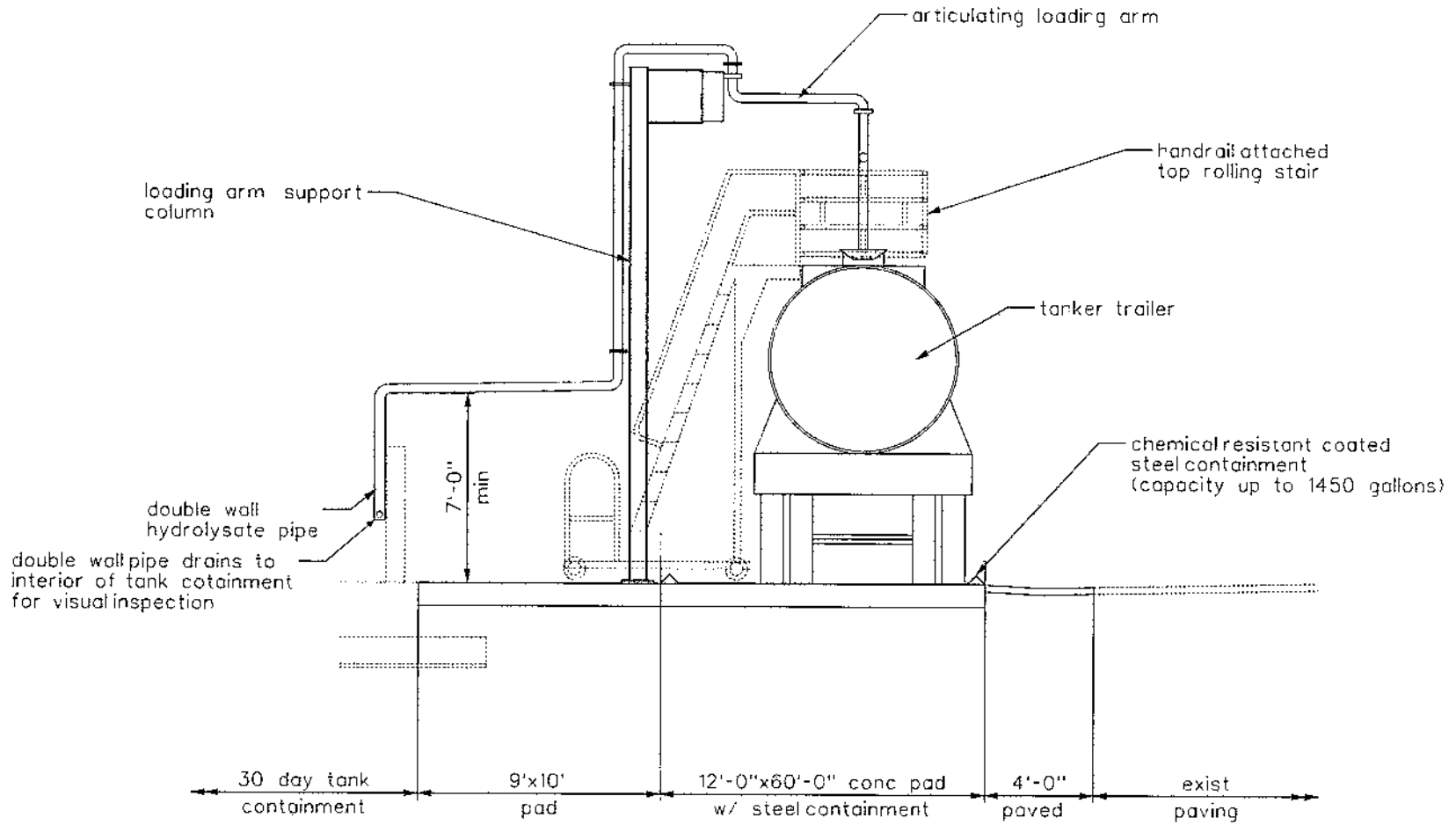
DIRECTIONS: Left Click inside field to show available files. A window will open, find image (.jpeg, .bmp, .gif, .tif, png), Select image, click "Open". Image will automatically fit to page.

**PUEBLO CHEMICAL DEPOT
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DETAILED MAP OF PROPOSED LOCATION

DIRECTIONS: Left Click inside field to show available files. A window will open, find image (.jpeg, .bmp, .gif, .tif, png), Select image, click "Open". Image will automatically fit to page.





**PUEBLO CHEMICAL DEPOT
RECORD OF ENVIRONMENTAL CONSIDERATION (REC)**

Directions for PCD Form 200-3 Record of Environmental Consideration

Project Name: Name that distinguishes project from similar projects.

Date and Duration of Proposed Action: This can be entered as a start to finish date or as a start date and how long it's going to last in days, months or years. The "Start Date" must be a later date than the REC approved date (the date the EMO Chief signs/approves the REC).

Proponent: Select Proponent from drop down menu that is submitting the REC. If "Other" was selected type the Proponent in the space provided.

Description of the Action: This should be a short paragraph that describes who, what, where, and how.

- Who will be doing the work?
- How many personnel will be involved?
- What equipment will be involved?
- What will the action involve?
- How much area is going to be impacted?
- Where will the action take place?

Figure of Location: As part of the submittal attach a map showing where the action will take place. The location can be drawn on an existing map.

Signature Block: This should be signed by the proponent of the action (this will be a government person within the division that the work is being done).

Map of General Location of Proposed Action: Left Click inside field to show available files. A window will open, find image (.jpeg, .bmp, .gif, .tif, png), Select image, click "Open". Image will automatically fit to page.

Detailed Map of Proposed Location: Left Click inside field to show available files. A window will open, find image (.jpeg, .bmp, .gif, .tif, png), Select image, click "Open". Image will automatically fit to page.



DEPARTMENT OF THE ARMY
PROGRAM EXECUTIVE OFFICE, ASSEMBLED CHEMICAL WEAPONS ALTERNATIVES
PUEBLO CHEMICAL AGENT-DESTRUCTION PILOT PLANT
45825 HIGHWAY 96, EAST
PUEBLO, COLORADO 81006-9330

SFAE-ACW-PC


ACW17-0063
24 Mar 2017

MEMORANDUM FOR RECORD

SUBJECT: Responses to comments on the February 2017 PCAPP Hydrolysate Loading Terminal Record of Environmental Consideration (REC)

1. The U.S. Army Pueblo Chemical Depot (PCD) submitted a Record of Environmental Consideration regarding contingency planning for off-site shipment of hydrolysate at PCD that was open for public comment from January 25 to March 1, 2017.
2. Attached to this memorandum are responses to a combination of verbal remarks made at the 22 Feb 2017 Colorado Chemical Demilitarization Citizens Advisory Commission (CAC) meeting and one comment received via e-mail prior to the 1 Mar 2017 deadline for public inputs. Additionally a letter signed by Chair and Vice Chair of the CAC as well as the Chair of the Bio-Utilization Group that was received prior to the deadline was answered separately by PEO ACWA in a letter dated 23 Mar 2017, and is also attached.

- 2 Encls
1. Responses to Public Comments
2. Correspondence between CAC
And PEO ACWA, dtd 23 Mar 2017


GREGORY B. MOHRMAN
Site Project Manager
Pueblo Chemical Agent-Destruction
Pilot Plant

**RESPONSES TO PUBLIC COMMENTS RECEIVED FOR THE RECORD OF
ENVIRONMENTAL CONSIDERATION REGARDING THE PCAPP LOADING AND
TRANSFER STATION**

Dock Construction

DCQ1: I frankly think that we should object very strongly to the dock being built because it gives that out because if it wasn't there, my assumption is you wouldn't have a mechanism for bleeding it off and that would mean you would have to shut the facility down. And I do understand the problems with that. My assumption is any kind of fine-tuned machine with people doing delicate things you've got to do a lot of things to get them fired back up again, and we were hoping that we would never have to shut it down once we got going, but we also accepted the fact that that could happen.

Response: The PEO ACWA has a long history of supporting the on-site treatment of mustard hydrolysate at the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP). Over the years PEO ACWA has commissioned several technical reviews, both internal and external, focusing on the design, systemization, and operational verification testing of the Bio-Treatment Area (BTA) and the Brine Reduction System (BRS). The purpose of these reviews was to ensure, to the extent technically practical, the BTA/BRS design and operation had a high probability of success for the on-site treatment of the PCAPP hydrolysate. An objective of these studies was to identify potential risks associated with the BTA/BRS system to allow for early mitigation. ACWA has used the information garnered from these various studies, reviews, and assessments to continually inform Department of Defense (DoD) leaders, the public, key project stakeholders, and the regulatory community of all issues (positive and negative) regarding the BTA. The PEO ACWA has been steadfast in the commitment to on-site treatment and has given direction to the PCAPP Site Project Manager (SPM) and PCAPP Systems Contractor to fulfill that commitment to the maximum extent possible. Based upon prudent management and supported by a National Research Council study, PEO ACWA will pursue this contingency development should the BTA/BRS ultimately need assistance in order to be successful. The execution of this contingency plan is necessary to ensure the safe and environmentally protective destruction of the chemical stockpile at the Pueblo Chemical Depot.

Transportation

TQ1: We have a history of being opposed to transportation, and what we've tried to be pretty consistent with over the years is to say we believe that transportation should only occur when there's absolutely no other options. ...But here's the difficulty, we are frustrated because we are now going to be transporting when we were hoping not to.

Response: The shipment of hydrolysate is envisioned as a contingency only. Through the ongoing dialogue with the Bio-Treatment Utilization Group (BUG) and the CAC, should the need for long-term shipment and deviation from the original on-site process

develop in the future, stakeholders will be fully cognizant of the criteria for the decision, cause and possible mitigation. The current situation is such that the shipment of a limited amount of hydrolysate may become necessary to provide ample operation and contingency storage volume in the 30-day tanks. These tanks are rapidly reaching capacity after problems encountered with the Brine Concentrator Feed Tank secondary enclosure, a condition that has been thoroughly briefed at BUG and CAC meetings.

Redundant Storage

RDQ1: I guess I would love to have us explore building redundant storage so that this doesn't happen again. That allows us to tinker with volumes coming through and if there are any kind of mechanical or any other kind of disruptions in the course of the system that we could accommodate that in some kind of storage basis. Obviously, you can't build enough storage to handle everything, but it seems to me like we can analyze what is the likely size and need of redundant storage and then get started on getting that done, so that we don't have to face this transportation question again.

Response: The use of additional storage is one option being evaluated for situations beyond the current shortage of storage capacity. It is important to realize that the use of isotainers, like those used previously at the Newport Chemical Destruction Facility, will require loading and off-loading terminals for the transfer of hydrolysate. The use of additional storage, by whatever system, will ultimately become insufficient should the BTA/BRS system experience a total failure.

Using Local Transport Firms

ULTFQ1: I am desperately hoping you folks can do everything you can to avoid it (*transportation*), if at all possible. And if not, a way to minimize it. And then my final question, that I thought of while you were talking was, you did say if we are being forced to do transportation, so we're going to get into contracting somebody to do the transportation, one of the other factors we've had is, is local economy, local jobs, those kinds of things. I am hoping that we can highly consider local transportation companies, and I am hoping that there will be somebody in the Pueblo area to handle that task. If that is not possible, at least within the region or the state is what my hope would be. So that, any money that's having to leave this facility for transportation purposes, at least it is doing a certain degree of economic benefit to the community, and that would, not totally, but would help mitigate some of the pain of knowing that we may very well have transportation.

Response: The PCAPP Systems Contractor (SC), under the terms and conditions of their contract with the Government, is responsible for the proper and compliant management and disposal of the majority of the secondary waste (not including leakers and rejects destined for the EDS) generated at the PCAPP. Because the contract is performance based, it is incumbent upon the SC to provide the best value to the Government for any sub-contracting effort. The SC's determination of best value will encompass an evaluation of factors to include: special certifications; permits and

licenses required; past performance; cost; and the firm's safety and environmental record.

CSEPP Benchmarks

CBQ1: As articulated by Commissioner Terry Hart during the CAC meeting, the Pueblo Community and the State of Colorado have long opposed off-site shipment of hydrolysate from the PCAPP facility. During the permitting process for construction of the PCAPP facility, a deliberate decision was made to treat the hydrolysate on site. That decision was made based on the consideration of safety, cost, schedule, and - certainly - public consideration. As a member of the Pueblo community, I believe consideration of shipment at this point is being made with cost and schedule predominant in the evaluative criteria. Although the published study deems the shipment risk acceptable, I do not believe the community is adequately postured even in the unlikely event of an incident. Since shipment was not a consideration at the time of construction, the community made decisions in preparedness, equipping and training that did not consider the need to respond to a transportation hazard associated with the hydrolysate. As such, a decision to ship could negatively impact the community profile associated with CSEPP benchmarks regarding ability to respond to a HazMat event. Construction of a transfer facility opens the opportunity for the facility to choose a path of least resistance to meet cost and schedule benchmarks with little or no consideration of other factors. Instead, the Army and DoD should demand acceptable performance of every portion of the demil process and the facility, rather than accommodation of the performance shortfalls.

Response: The ultimate risk reduction and safety enhancement for workers and the community is the destruction of the chemical agent. To that end, it is advantageous to ensure the destruction process proceeds swiftly, but safely. Prudent management calls for the PCAPP to identify and then execute, viable options that will mitigate or at least minimize impacts to the destruction of the chemical agent. The PCAPP hydrolysate transportation risk assessment was previously demonstrated and has been built upon the assessments performed for both the Newport and Aberdeen hydrolysate shipment campaigns. A tremendous amount of lessons learned has been incorporated into the assessment. PCAPP will work closely with the Pueblo County CSEPP community to better understand the changes that have occurred since the NRC consulted the county and received comments that concurred and endorsed off-site shipment of hydrolysate. Additionally, PCAPP will also continue to dialogue with first responders such as the Colorado State Patrol and the CSEPP to ensure a full understanding of the process, transportation routes, material safety information and timing of any proposed shipments. This will enhance the knowledge of these organizations thereby building confidence in any contingency response that may be necessary should a mishap occur. On 15 March 2017 PCAPP hosted a facility tour for members of the Colorado State Patrol Hazardous Materials Section, Team 2, part of a larger group operating statewide which, under Colorado law is the designated emergency response authority for hazardous substance incidents occurring on any federal, state, or county highways located outside of municipal city limits. The same information and interaction is available to all

interested responders and CSEPP leadership. Should hydrolysate shipment become necessary, all organizations are committed to ensuring the process is done in a safe, environmentally compliant, and responsible manner.

Colorado Chemical Demilitarization Citizens' Advisory Commission

February 22, 2017

Irene Kornally, Chair
1602 Cleason Drive
Colorado Springs, CO 80909
Cell 719-330-2359
Fax: 719-591-1305
Email: ikornally@pciays.net

Conrad Whyne
Program Executive Officer
Assembled Chemical Weapons Alternatives
5163 Blackhawk Road
ATTN: SFAE-ACW-RWE3331
Aberdeen Proving Ground, MD 21010-5424

Delivered by email on February 23, 2017

Members:

Jeff Chestner
Terry Hart, Vice Chair
Ken Griffin
Doug Knappe
John Norton
Jeff Riesler
Ross Vincent

RE: Record of Environmental Consideration for construction and operation of a loading dock/shipment terminal for the shipment of mustard agent hydrolysate from the Pueblo Chemical Agent-Destruction Pilot Plant

Dear Mr. Whyne:

Thank you for the opportunity to comment on the proposed action discussed in the Record of Environmental Consideration. The Colorado Citizens' Advisory Commission (CO CAC) is well aware that a public comment period for a REC is not a common occurrence.

Over the past 15 years, the CO CAC has consistently opposed the transportation of hydrolysate from PCAPP. This position is well documented in letters to you and your predecessors, as well as in minutes of the CAC meetings. As the CO CAC, we continue to support the treatment of hydrolysate on site and oppose the off-site shipment of hydrolysate.

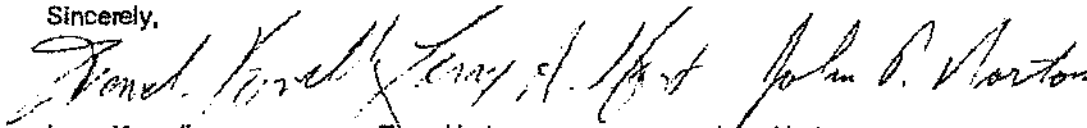
The Bio-Treatment System has been successfully tested and many lessons have been learned from these tests. We have great confidence that this system will be successful and that shipment will not be necessary.

The CO CAC has also considered the issue of cost. The costs at PCAPP are already on the rise. No money will be saved by not building the Bio-Treatment System. In fact, money will be wasted if the system is allowed to go unused. The cost of building the loading dock/shipment terminal, while probably not a huge cost, should be deferred until such a time as everyone is certain that shipment must occur. Waiting until the shipment is certain would also save dollars for other needs. Of course, if this loading dock has other uses, then these uses should be

disclosed and a decision made on the total needs, not just for the shipment of hydrolysate.

The CO CAC is pleased with the progress made at PCAPP in the destruction of the chemical weapons stored at the Depot and look forward to the beginning of full-scale operations including the treatment of the hydrolysate in the Bio-Treatment system.

Sincerely,



Irene Kornelly
Chair, CO CAC

Terry Hart
Vice-Chair CO CAC

John Norton
Chair, Bio-Utilization Group



DEPARTMENT OF THE ARMY
PROGRAM EXECUTIVE OFFICE
ASSEMBLED CHEMICAL WEAPONS ALTERNATIVES
5183 BLACKHAWK ROAD
ABERDEEN PROVING GROUND, MARYLAND 21010-5424

March 23, 2017

Colorado Chemical Demilitarization Citizens' Advisory Commission
1602 Clemson Drive
Colorado Springs, Colorado 80909

Dear Members of the Commission:

I wish to express my sincere appreciation to all members of the Colorado Chemical Demilitarization Citizens' Advisory Commission (CAC) for your steadfast support in working with the Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA) and the other federal, state and local partners involved in preparing the Pueblo Chemical Agent-Destruction Pilot Plant (PCAPP) for destruction operations. The dialogue with our stakeholders begun by ACWA many years ago continues to be a foundational principle that we continue to this day. I spent some time reading the Commission's letter dated February 22, 2017, and reviewing the transcript of the Commission's verbal comments from the February 22nd meeting. I am fully aware the Record of Environmental Consideration for the shipping terminal has reignited a longstanding concern of the community that we treat hydrolysate on-site as opposed to shipping to an off-site Treatment, Storage and Disposal Facility. The letter you sent clearly reiterates your position on this sensitive issue.

ACWA's commitment to on-site treatment has not wavered. Our plan is to construct shipping facilities that can be used for contingency purposes to prevent interruptions to munitions processing. Circumstances are such that we are now facing destruction limits because of a lack of hydrolysate storage space occasioned by the two unexpected challenges of last November 2016 - the hydrolysate leak from one 30-day storage tank and the failed containment liner for the Brine Concentrator Feed Tanks. As we have reported to you, the 30-day storage tank issue was resolved and that problem no longer poses a risk to the project. The modifications to the Brine Concentrator Feed Tank liner system are well underway and we have again invested significant resources to build a temporary enclosure around those tanks and to implement a liner solution that we expect will be acceptable to the Colorado Department of Public Health and the Environment when completed.

We are now confident of an April 2017 restart of the Biotreatment Area (BTA). However, it will take time to seed the bio-reactors and bring them up to a sustained level of operation using hydrolysate as the feed. There remains some risk associated with using hydrolysate as opposed to surrogate; therefore, the capability to ship hydrolysate as a contingency remains a project necessity. Again, our stated

intent is to ship only if needed and only enough to give our biotreatment system time to get acclimated and become fully functional without impacting plant processing.

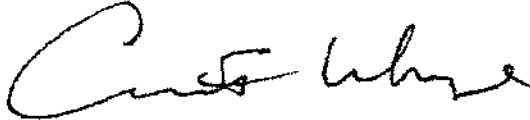
From the beginning, PCAPP's plant design included the on-site treatment of the hydrolysate. In those early years, operating under Congressional oversight, we examined and re-examined the costs and efficiencies of shipping these wastes offsite, discussing the issue back and forth until a decision was made to move forward and process on-site. From that point on, ACWA pursued a process of biotreatment followed by a sophisticated water recovery system designed to support the primary mission of destroying the chemical agent stockpile stored at the Pueblo Chemical Depot. Our commitment to treating hydrolysate on-site was further demonstrated when surrogate testing was conducted to help us identify potential operational problems with the BTA and the Brine Reduction System (BRS). We called this our risk reduction project because it would allow us to identify and mitigate issues prior to the start of actual hydrolysate treatment. This was a substantial investment of resources that ultimately, paid dividends in that we learned how to seed the bio-reactors, control supplemental nutrients, and the importance of micro-nutrients. We clearly demonstrated the ability of organisms to destroy thiodiglycol and identified the need to modify our equipment to better monitor the process. We also learned much from operation of the BRS that is valuable to future operations.

The very nature of a pilot plant brings with it uncertainties in its operation. We have consistently shared with the CAC the challenges faced since we started operations in September 2016. We have also shared the victories over many of those issues that brings us to the fact we have now destroyed over 19,000 projectiles to date. In fact, had PCAPP not experienced the two significant problems last November, we would have started processing hydrolysate through the BTA on November 28, 2016.

What we face today is a combination of technical problems that were not a part of our contingency plans. The liner problem with the Brine Concentrator Feed Tank containment prevents us from processing hydrolysate thereby forcing us to accumulate the wastewater and hydrolysate from our pilot testing activities. Out of necessity, we have had to judiciously plan and execute our testing to conserve precious 30-day tank storage space. In fact, we have slowed processing to preserve our storage space while we complete repairs on the liner system. Our objective is to continue data collection for pilot testing, keep our crews and equipment operating, and continue destruction of agent. Our preference is to avoid even the short-term shipment of a limited amount of hydrolysate, but due to the current status of our tank capacities and the uncertainties associated with the startup of the BTA processes, the temporary shipment option must remain available to us.

Again, I appreciate your comments and support to the PCAPP project.

Sincerely,

A handwritten signature in black ink, appearing to read "Conrad F. Whyne". The signature is fluid and cursive, with the first name "Conrad" being larger and more prominent than the last name "Whyne".

Conrad F. Whyne
Program Executive Officer