

March 11, 2011
Design Options Working Group (DOWG)
NEPA and EDS/EDT Questions for Scott Susman

Questions are based on the information presented to the Design Options Working Group on December 8, 2010 and January 26, 2011

- 1. Overarching NEPA question: Where in the FEIS for the ACWA program does it mention that an EDS/EDT may be used at Pueblo? The FEIS discusses a total destruction program that will deal with all parts of the munition, including the energetics. We have been unable to locate any reference to an EDS/EDT in the FEIS. It wasn't until the stop-work order was rescinded and the new Bechtel design was accepted by DOD that the program was no longer dealing with a complete solution and the EDS/EDT and potentially shipping energetics off-site was discussed.**

Answer: Neither the Assembled Chemical Weapons Alternatives (ACWA) programmatic Final Environmental Impact Statement (FEIS), nor the Site Specific EIS, entitled *Destruction of Chemical Munitions at Pueblo Chemical Depot, Colorado, March 2002*, provide a specific reference to using EDT for leakers and rejects for ACWA. Nevertheless the use of a Supplemental EA is the appropriate approach because EDT use has become part of the overall destruction program and is not anticipated to be a significant environmental impact. The NEPA documentation for this action is being undertaken now because it is part of a new proposed action. There were references in the site specific EIS as well as the response to comments concerning use of blast chamber for contaminated explosive compounds and energetics.

- 2. Please describe in greater detail the process that will be used to determine whether or not there are significant impacts from the planned diversion of rounds from PCAPP to an EDS/EDT. In the January presentation, Dr. Zimmerman indicated that ORNL would identify the worst impacts from each of the candidate technologies and use that worst impact to arrive at conclusions about significance. How these judgments would be made, what data would be used, where would the data come from, to what extent would modeling be employed? What criteria would be used to determine what is significant and what is not.**

Answer: We provided the vendors with our current estimate of overpacks/rejects for them to propose a system and provide their emissions and throughput. That emission rate will be used over the operating duration of the EDT. By using this full operating emission rate, based on the available throughput of the system, we can be assured that we have established the upper bounds for consideration of environmental impacts. The emissions for the anticipated number of munitions that would actually be treated in the EDT will therefore be well within those limits.

Using vendor data on facility requirements, emissions and wastes generated, each technology will be analyzed to determine the impacts on the various environmental media, such as soil, water, air, species, and historic artifacts. Modeling will be used to

analyze the health effects of any impacts on the society as a whole, the affected region, and affected interests such as local organic farming and economic issues. Where data are missing or incomplete for any of the EDT systems (for example, incomplete information about certain atmospheric emissions), a worst-case analysis may be necessary to determine whether there would be any significant impacts. Such worst-case analyses may include extrapolation of available information, computer modeling, and/or the use of professional judgment in order to make a determination of finding.

In regard to “significance,” we will adhere to guidance spelled out in 40 CFR 1508.27. Several criteria are used in determining whether an impact is significant. We will determine whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. To help ensure that the ACWA’s analysis of significance is not arbitrary and capricious, there will be a parallel review of the EA document development by State and Federal oversight agencies.

- 3. Will the emissions data provided by the vendors include data from the destruction of chemical weapons or be limited to conventional munitions? Will the data be comprehensive or address only selected pollutants? If the emission data is based on different processing rates than that which will be used in Pueblo, how will the emission data be scaled up or down to reflect those rates?**

Answer: A data call was sent to the vendors asking for a comprehensive list of emissions to establish air pollution impacts for use in analyzing impacts in this EA. Data from all sources included chemical warfare material testing except the Static Detonation Chamber (SDC) which provided data using simulants. All processing rates are represented in pounds per hour. A maximum processing time will be used to establish the cumulative and total amount of deposition projected by the Multi Pathway Health Risk Assessment (MPHRA) model.

- 4. Will the EA fully describe the composition and fate of liquid and solid waste streams?**

Answer: All wastes resulting from chemical agent processing including brine liquids, salts, and ash would be listed hazardous wastes by the State of Colorado. Secondary waste profiles will be projected from past agent or surrogate testing and modeling and will be included in the EA. In addition, construction of a chemical munitions destruction facility using any of the four technology alternatives addressed in this EA would generate both solid and liquid nonhazardous and hazardous wastes. Nonhazardous wastes would be collected and disposed of in accordance with, state, and federal regulations. Hazardous wastes that would be sent to a permitted Treatment, Storage and Disposal facility as prescribed by applicable federal, state and local regulations. The type of facility (permitted vs nonpermitted) is known, but the exact facility is not known.

- 5. The ORNL presentation seemed to suggest that the EA would not discuss in detail the potential sources of impacts from each of the technologies, but rather make judgment calls about which relevant data would be used to evaluate potential impacts. How does this meet the intent of the NEPA process?**

Answer: “...The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect,

restore, and enhance the environment...” 40 CFR1500.1 “Purpose”. The EA will discuss in detail the potential environmental consequences of constructing and operating an EDT facility at the Pueblo depot; however, the purpose of the EA is not to select a single, “best” EDT system from among the four EDT candidates. Therefore, a head-to-head comparison will not be attempted in the EA. Instead, a “bounding analysis” will be employed in the EA to establish an envelope within which any of the four EDT systems would be able to operate. The attributes of this envelope would include such data items as atmospheric emissions, water consumption and utility requirements, waste by-products and generation rates, etc. The objective of the analyses in the EA would be to determine whether any significant environmental impacts would be anticipated. If any significant impacts are identified, then the specific EDT system(s) that is associated with such impacts would be identified and excluded from further consideration.

6. During the January DOWG meeting speakers seemed to suggest that the purpose of this EA was to justify a FONSI. Isn't it pre-decisional to talk about a FONSI without completing the NEPA process?

Answer: The purpose of the EA is to evaluate the potential impacts of the proposed action. . An EA is used to determine the extent of environmental impacts of a project and decide whether or not those impacts are significant. An EA is developed when there is a possibility of no significant impact from the proposed action. An EA results in a Finding of No Significant Impact (FONSI) or a Notice of Intent (NOI) to prepare an Environmental Impact Statement. The FONSI and the NOI were discussed only in terms of the forward schedule for planning purposes.

7. During the January DOWG meeting it was suggested that even though this document will contain virtually all material that would be in a Supplemental EIS, internal procedures required for an approval of a SEIS would result in significant delays in moving this process forward. Please provide details on how the approval process differs for an EA and a SEIS.

Answer: -

Sample Time Line for an EIS:

<u>Milestone:</u>	<u>Calendar Days from Project Initiation</u>
Initiate Project	0
Hold kick off meeting	10
Complete Public Affairs Plan	25
Complete Description of Proposed Action and Alternatives	35
Notice of Intent Published	60
Public Scoping Period (including meetings)	90
Preparation and finalize Draft EIS (including Major Command, DA/DOD Review)	270
Publish NOA and Distribute DEIS	300
Public Comment Period	345
Incorporation of Comments	390

Prepare and finalize FEIS (including Major Command, DA/DOD Review)	490
Publish NOA and Distribute FEIS	520
30-Day Public Review Period	550
Publish ROD	580

Total Time: Approximately 580 Days (19 months)
 (Information taken from Figure 2, 32 CFR 651.14, augmented with Army standard practice)

NOTE: The EIS preparation time is dependent on the scope and scale of the document. Experience shows that the EIS process actually takes up to 24 months and sometimes longer to complete.

Sample Time Line for an EA:

<u>Milestone</u>	<u>Calendar Days from Project Initiation</u>
Initiate Project	0
Hold Kick off meeting	10
Complete Draft Description of Proposed Action and Alternatives	25
Complete initial Coordination/Consultation w/stakeholders	40
Prepare and finalize EA and Draft FONSI or NOI (including staffing)	115
Publish and distribute EA and Draft FONSI or NOI	145
30-Day Public Review Period	175
Comment consideration and Finalize FONSI or NOI	189
Total Time Approximately 189 days (6 months)	

NOTE: The EA preparation time is dependent on the scope and scale of the document. Although 40 CFR 651.43 states EAs should be 1 to 25 pages in length, the EDT EA presently under development is expected to be more that 150 pages due to its depth of analysis. The schedule for this document is now expected to take approximately 305 days (10 months) including: Content Coordination, Document Development, Government Review, Public Review, Consideration of Comments, Publish NOI or FONSI.

- 8. It was suggested during the discussion that the use of an EA to supplement a FEIS is provided for in DOD NEPA regulations. Please provide a copy or link to these regulations.**

Answer:

Army regulation (32 CFR 651.5(g)) requires that supplemental NEPA documentation is necessary when substantial changes in the proposed action are relevant to environmental concerns. Supplementing an EA or EIS is referred to as tiering. Potential environmental effects that could be associated with an action might not have been fully identified in the initial EA or EIS because the proposed action was not sufficiently developed to be clearly defined. Tiering is the process of preparing multiple levels of environmental review and is encouraged by the Council on Environmental Quality. Whether an existing NEPA

document is supplemented with an EA or an EIS is determined by what you anticipate the significance of your potential impacts to be. We anticipate a finding of no significant impact for our proposed action and therefore an EA is the appropriate NEPA document for this action. We accept the risk that if the assessment indicates significant impact we will be required to conduct an EIS on this proposed action prior to decision.

9. To what extent will worker health and safety be addressed in the EA?

Answer:

The information in section 4.9 (Human Health and Safety) of the FEIS will be updated in the supplemental EA to include the hazards presented by the construction and operation of the EDT facility. On-post workers will be specifically included in the analyses, and the occupational hazards that could result in injury will be addressed.

10. Chart #5, NEPA Process – Schedule, in the January presentation indicates that permitting will be done during the middle of 2014. Is this reasonable? Shouldn't permitting begin as soon as legally allowed? It is unreasonable to expect CDPHE to complete this complicated permit in just a few months. The diamond shape bullet in the schedule does not appear to reflect the time needed to get through the permitting process (i.e. permit application review and draft permit development), including the mandatory public comment periods and reviews.

Answer: - The milestone identified as the Permit Schedule for EDT represents the current requirement, under the existing permit, to have an operational EDT at the PCAPP 180 days prior to PCAPP operations. In contrast, given the NEPA process as well as the permitting, procurement, and construction (represented by the EDT implementation bar), we don't anticipate being able to get an EDT system in place before start of PCAPP operations. So yes, we anticipate the permitting process would take place in the 2012/2013 timeframe.

11. On the same chart as previously cited, no information is presented about the public involvement process. This is a cornerstone of the ACWA program and should be specifically referenced. Please describe the public involvement process that will be used for the EA and the HRA.

Answer: The planned public involvement process is outlined on slide #11, "NEPA Process – Public Involvement." It is our intention to maintain our dialogue with the CAC and the DOWG as we have in our meetings with you on Dec.8, Jan. 26, and Mar. 30. We will continue to respond to your questions, as we are here, and will be discussing with you in detail the "Purpose and Need" for this NEPA action. As you know, this new Environmental Assessment (EA) will address the comments received on the earlier (Feb. 2010) EA. In the fall, when the new EA and its Draft Finding of No Significant Impact or Notice of Intent to prepare an EIS is finished, we will notify key stakeholders directly by email. Additionally, we will publish a news release and a paid Chieftain advertisement, post both to our Web page and announce the information through our Facebook and Twitter sites, all of which will have electronic links to the EA itself. Hard copies of the EA will be available in the Pueblo Chemical Stockpile Outreach Office and in our three public information repositories. The news release and the other announcements will inform the community that there will be a 30-day public comment period to allow

stakeholders to review the EA and provide feedback on its findings. Early in the public comment period, we will hold a public meeting, the date, time and place we will coordinate with you in advance and announce in the news release. The purpose of this meeting will be to review the NEPA process with the community, respond to questions and gather feedback. When the public comment period is closed, comments studied and a final determination is made, the finding will be announced by a process similar to that described above, but without a public meeting. Again, we have only an approximate timeline for these events, but we anticipate completing the EA in the fall of this year. We will keep you posted on our progress so you will be advised of all significant dates as we begin to firm them up.

12. Chart #8, (Proposed Approach – continued) in the ORNL presentation reference is made to a scoping process. Is there going to be a formal scoping hearing or are you using the DOWG meetings as the scoping meetings? In either case, shouldn't the public be notified of the opportunity to participate in the scoping at meetings that are to be used either wholly or in part for that purpose?

Answer: While Army Regulations do not require a formal scoping for EAs, the CAC and DOWG meetings provide the opportunity for public input as well as the collaborative effort being used by involving the State of CO and EPA in developing this EA. The CAC and DOWG can continue to make available any NEPA topic discussed at these meetings in their normal manner of public notification. The ACWA program will continue to respond to requests for information to present at those meetings.

13. Chart #6, (NEPA Process – Basic Logistics) in the January presentation refers to “significant environmental effects.” Chart #7, as presented by ORNL, makes a similar reference to “significant impacts.” What are the criteria for determining “significant environmental effects?”

Answer: See answer to #2.

14. Chart #7 in the ORNL presentation makes the current EA approach sound like a complete update of the FEIS. Is this the case?

Answer: All items will be updated concerning new treatment units and waste generation sources and how it will affect the area near the proposed action. The initial EIS components will be updated, as appropriate, with any affected change and any cumulative change including the PCAPP process. However, the PCAPP emission sources will not be updated as analyzed in the original MPHRA report until after all engineering proposed changes have taken place. A snapshot of the original estimated emissions from PCAPP sources will be combined with emissions from the EDT units to estimate a cumulative impact. This is due to ongoing Engineering Change Proposals that may continue until construction is completed. Another MPHRA report will be generated when the PCAPP is operational.

15. Chart #10 (NEPA Process – ACWA Plan Forward) in the January presentation raises a number of questions:

- a. Please describe the parallel review process with EPA Region 8 and CDPHE. Is it appropriate for other agencies whose responsibilities include reviewing, commenting on the EA and ultimately permitting the facility to be a part of the drafting process?**

Answer:

1. The parallel review process is comprised of ACWA, EPA Region 8, CDPHE, CMA, and Oak Ridge National Laboratory. Representatives from each group meet by phone to discuss parameters to be developed with the oversight agencies giving recommendations for the proper approach to the analysis for each section and chapter of the EA. The main goal of this group is to address comments from the previous EA on EDT at PCD, and to ensure the EA is developed to the satisfaction of the EPA who is charged by Congress with oversight responsibilities for NEPA.
2. Not only is it appropriate, by Army regulation, 32 CFR 651.14(g), we are directed to “establish a continuing relationship with other agencies, including the staffs of adjacent local, state, regional and tribal governments and agencies.” While this action does not rise to the level requiring the establishment of a formal cooperating agency status under 32 CFR 651.45(b), using the established relationship is a prudent course of action.

- b. Specifically, how will the concerns raised through comments on the previous EA be addressed?**

Answer: Comments will be assigned categories, in the same manner as the FEIS, then addressed and referenced in the new EA. The comments from EPA Region 8 will be addressed specifically as the EA is developed.

- c. Will the supplemental EA be a stand alone document (ACWA Slide #10) or will there be referrals back to the FEIS or other EAs? If not, what does ORNL mean when it refers to this EA as a “tier from the 2002 Site-Specific EIS for the Pueblo stockpile/inventory?”**

Answer: By stand alone, we mean the impact analysis will need no reference for completion. However, the EA document will make reference to the original 2002 site specific EIS to establish any new changes or processes that have any effect on the environment and to establish the up-date of the FEIS.

- 16. Will a new Health Risk Assessment be developed for the EDS/EDT or will the current HRA merely be amended? If the HRA is an isolated document, i.e. addresses only the EDS/EDT, will the EDS/EDT HRA take into account the construction and operations of the PCAPP facility and that HRA? Will the HRA be completed prior to the selection of a preferred technology? If not, how will the potential accumulative health impacts of PCAPP operations, including the potential additional impact of an EDT be considered in the NEPA analysis with regard to protection of human health.**

Answer: See answer to #14.

17. In the presentations given to the DOWG in December 2010 and January 2011, no mention was made about the destruction of energetics in the EDS/EDT. Is this still under consideration and how will it be dealt with in the EA and HRA?

Answer: - Destruction of energetic components separate from the munitions themselves is under consideration. The first consideration is associated with contaminated energetics that cannot be sent off-site for further treatment. These components would be processed in an EDT system. The next consideration would be energetic components that would require additional processing in order to treat off-site. This would include the 4.2 inch mortar fuze/burster combination. The burster in the 4.2" mortar is attached to the fuze and comes out as one component at the nose closure removal station. In order to transport this item off-site for disposal, the burster needs to be separated from the fuze (for transportation safety considerations). While this capability is being incorporated into the plant, it is another step and source of ignition that could be eliminated if processed in an EDT. The other component being considered is the 155mm projectile burster. This item is too large to be processed in currently identified commercial destruction facilities and would need to be size reduced. This is a capability that does not exist within the PCAPP and would introduce additional risks that could be eliminated through processing in an EDT. The balance of the energetic material, while anticipated to be shipped offsite, may also be processed in the EDT (for reasons of risk or economics) and will be considered as part of the EA.