



## Department of Energy

Washington, DC 20585

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MEMORANDUM FOR JAMES AJELLO  
CHAIRMAN  
ENVIRONMENTAL MANAGEMENT ADVISORY BOARD

FROM: INÉS R. TRIAY *Inés Triay*  
ASSISTANT SECRETARY FOR  
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SUBJECT: Office of Environmental Management Response to the September 2010 Report Submitted by the Tank Waste Subcommittee of the Environmental Management Advisory Board on the Waste Treatment and Immobilization Plant

On September 15, 2010, the Tank Waste Subcommittee (TWS) of the Office of Environmental Management Advisory Board (EMAB) briefed both the full EMAB as well as EM management on the results of its review of several technical aspects of the Waste Treatment and Immobilization Plant (WTP). The EMAB accepted the results of the review and on September 30, 2010 you forwarded the full report, *Environmental Management Advisory Board EM Tank Waste Subcommittee Report for Waste Treatment Plant, Report Number EMAB EM-TWS WTP-001*, to me for evaluation and implementation of recommendations.

As I noted during the public EMAB meeting I am extremely impressed with the ability of the TWS to be able to complete this effort in the short amount of time available for this task, and for the insights the TWS has provided for the completion of this important project. The report provided observations, findings and recommendations regarding the three charges you provided to the Subcommittee. The actions EM and the WTP Federal Project Director (FPD) are taking to address the TWS recommendations are discussed below.

***Charge 1: Verification of closure of Waste Treatment and Immobilization Plant (WTP) External Flowsheet Review Team (EFRT) issues***

The Tank Waste Subcommittee concluded that “... *the current WTP Contractor, with DOE's concurrence, has met the WTP procedures and protocols that constitute issue closure and is continuing to pursue the resolution of remaining technology issues in parallel with engineering, procurement, and construction (EPC) activities.*”

The TWS had 10 recommendations related to this charge (**Recommendations 2010-02 through 2010-11**). Each recommendation dealt with a specific EFRT-identified issue. The contractor will review each of the recommendations and compare them to the residual risks identified through the EFRT resolution process to determine if actions are already in process to address the recommendation. For those items that represent new actions, the contractor will propose specific actions, as needed, to address the recommendations. The contractor will provide these actions to the FPD for his review and



concurrence to ensure that any remaining vulnerabilities from the EFRT resolution process are being adequately addressed. The majority of actions are germane to the Pretreatment Facility only.

***Charge 2: WTP Technical Design Review***

The TWS reported that the WTP project has reached the "pivot point," where the principal focus of management attention is shifting from Engineering Procurement (EPC) and Construction to Engineering Procurement Construction and Commissioning (EPCC). The technical risks associated with EPC have been sufficiently resolved (i.e., the remaining risk is sufficiently low), and the design has advanced to a sufficient level of maturity. On the basis of its review, the TWS has concluded that, independent of the EFRT issues: 1) no substantial risk to compliance with contract functional specifications was identified, and 2) the design appears to be sufficiently mature to proceed with completion of EPC activities.

The Tank Waste Subcommittee identified five recommendations related to this charge:

- The EPC process should proceed to completion (2010-12).
- Diligence should be maintained in conducting regular and redundant audits to identify and mitigate potential impacts of any potential project nonconformances (2010-13).
- The focus of attention should shift from EPC to EPCC, requiring a coordinated effort by a single owner/operator representative in marrying the WTP and Tank Farm activities (2010-14).
- DOE, as the project owner/operator, should take near-term action to create a resource base that is concerned with operability and the proper integration of operability concerns and commissioning activities with Tank Farm and WTP processes and activities (2010-15).
- In support of this new resource base, DOE should take action to obtain an integrated Tank Farm/WTP plant operator as soon as practicable (2010-16)

The mechanism to address these recommendations will be the actions recommended by the WTP FPD and acted upon by the Deputy Secretary. Of particular relevance is the transition of a DOE-WTP Project Office to a site office function that will allow DOE to implement its role as "owner" of the WTP. This organization includes a senior manager responsible for integrating tank farm activities with the construction and subsequent commissioning of the WTP.

***Charge 3: WTP Potential Improvements***

The Tank Waste Subcommittee determined at this point in time, the possibility of making changes to the WTP design that do not adversely affect the total project cost or project completion date is limited. The Tank Waste Subcommittee recommended that the project should complete the final design and proceed with construction, considering some areas of recommended focus.

The Subcommittee proposed five recommendations that focus on enhancing system safety, provide improved accountability, and strengthen project management oversight and execution, which it believes will promote early startup and testing, provide added design efficiency, reduce lifecycle cost, enhance plant reliability, reduce operating risk, and improve chemical and nuclear conduct of operations:

- Unify the mission with single-point authority and oversight (2010-17).
- Create a Strong Owner/Operator Group (2010-18).
- Alter current contractual startup plans to conform with chemical industry best practices (2010-19).
- Begin development of operator training plans and tools (2010-20).
- Evaluate options for improving availability (2010-21).

As for Charge 3, the mechanism to address these recommendations will primarily be the actions recommended by the WTP FPD and acted upon by the Deputy Secretary. As noted previously one of the recommendations regarding the transition of the DOE-WTP Project Office to a site office function will facilitate DOE implementing its role as "owner" of the WTP. Other recommendations by the FPD will also address the other related aspects, including development of a "one-system" model for delivery of WTP and elements of the tank farm operating contractor associated with waste feed delivery.

I appreciate the dedication of the TWS to complete their effort in an expeditious manner while maintaining a high degree of rigor in its review activities. We have begun discussions with the TWS for activities that we would like the subcommittee to perform during Fiscal Year 2011. As we progress in these activities, we will have an opportunity to apprise the TWS on the status of addressing its recommendations related to the WTP. If you have any questions, do not hesitate to contact me at (202) 586-7709.

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