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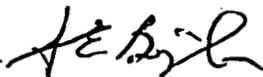
Report 8

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26 February 1999

On February 25, 1999, the CAT met with Karen Wintz, Silos 3 Project Manager and two of her project associates to review the Disposal Decision Analysis for Silo 3 waste. Attached is a copy of our report identifying concerns and recommendations.. A copy of the report is also being provided to Karen.

The progress being made on the Silo 3 Project is particularly gratifying. The CAT believes that demonstration of physical progress in treating and disposing of Fernald Site waste will positively influence the stakeholders' attitude and support.


G. E. Bingham


Todd Martin

cc: Karen Wintz

**Critical Analysis Team (CAT) Report on
Silo 3 Disposal Decision Analysis**

26 February 1999

Two members of the Critical Analysis Team (CAT) briefly reviewed the Disposal Decision Analysis for Silo 3 waste. The CAT was not given the final Decision Analysis report, but they were briefed on the process and provided with the draft results. While it was not clear that the Kepner Trego (KT) analysis was necessary, the process was comprehensive and appeared to yield reliable and defensible results.

The logic of the KT decision is well supported on many levels. Most importantly, the baseline is the least risky programmatic option and is also the cheapest. Options other than the baseline bring with them increased cost *and* increased programmatic risk and uncertainty. This logic alone provides justification for maintaining the baseline. Given this, the KT analysis was probably overkill, and made the process more complicated than necessary. The KT analysis also provides more opportunity for outside parties to question minor portions of the decision analysis. Given this FDF and DOE should rely on the strong logic behind the baseline to move forward expediently. They should be sufficiently familiar with the KT process to explain and defend both the process and the results.

The assumptions used in the decision analysis appeared sound and reasonable with one exception: waste disposal at Envirocare will be charged at the same rate as the current WPRAP. Rather, as was noted in the briefing, Envirocare waste disposal costs could be two to three times higher than the assumed cost. The CAT understands the logic of the Decision Analysis approach and the resulting assumption. However, it must be made very clear in presentations and in the final document that the Envirocare disposal costs were extremely optimistic. Essentially, the alternatives were not compared equitably because of this optimistic assumption. As a result, the final scores likely appeared closer than they actually were with Envirocare scores being skewed higher. Other than this, the scores appeared reasonable and supported the conclusions.

The process for selecting the options considered should be clear in the final document. Apparently, the only criteria for selecting disposal alternatives was sites that have previously accepted DOE 11(e)2 material. If this is the case, it should be explicitly stated and justified.

For those disposal options not considered further (e.g. Barnwell disposal), there should be clear language in the final report and in the project file justifying their exclusion. This would not require a great deal of extra effort, but it would result in a more comprehensive document, and could preclude future problems and challenges.

The assumed cost for sending a truck to NTS differs from the cost assumed for similar transportation in the data developed for Silos 1 and 2. The assumption for transportation costs should be based appropriately on current actual costs. Further, the rate should be used consistently throughout the Silos Project. The same recommendation applies to all Silos work: the same assumptions and baseline data should be applied to all projects within the Silos work

effort.

The baseline selected results in a DOE site (Fernald) working with another DOE site (Nevada Test Site). This would be a significant benefit, since it enhances communication, permits easier and quicker problem resolution and ultimately provides a common manager for resolution of high-level decisions.

The estimate of a \$220,000 increase in testing and analyses costs if the Envirocare option were pursued is troubling. There are programmatic risks associated with this estimate which could significantly affect life cycle costs. For example, the laboratory capabilities to perform such testing as well as the impacts of unsatisfactory test results could cause schedule delays and create programmatic impacts that are difficult to estimate.

FDF should investigate adding a trailer to the transport for the purpose of reducing shipping costs.

The project should maintain supporting data and documentation in the project's document control files. This should include information that supports all the decisions made in this process; who was chosen to develop scores and weights; why those individuals were chosen (e.g. skill mix of the group); and the process for weighting decisions. All project records should be identified, dated, and retrievable