

Critical Analysis Team Memo

To: John Sattler
Steve Beckman
From: Critical Analysis Team
Date: 24 May 2004
Re: State of Nevada challenge to Silo 3 disposal

The Critical Analysis Team (CAT) has taken a cursory look at whether the Silo 3 facility should be started on schedule or should be put on standby until the Nevada disposition path issue is resolved.

This issue is rife with both legal and political implications. "What happens if...?" questions can be asked, but answering those questions is, at best, speculation. Because of the uncertainty surrounding the legal/political ramifications of the issue, the CAT's findings are focused on the most sensible path forward for starting, operating and shutting down the Silo 3 facility.

The CAT also emphasizes that the following findings are based on very few data points and are, therefore, initial in nature.

CAT Findings and Recommendations:

- From a safety standpoint, there is little difference between the current storage configuration and storage in bags. If Fernald initiates operation of the facility, it should provide a concrete pad with an air building to protect the filled bags during storage.
- While the CAT has not observed start-up testing at the Silo 3 facility, the Silo 3 project is nearing completion of its startup activities. This includes completion of testing activities as well as development and training of staff.
- If operations are not started as planned, the following activities will have to be undertaken to start the facility at a future date: (1) activities to put the facility in standby; (2) preventative maintenance during the facilities down-time; (3) reconstitution and training of staff; (4) start-up activities to prepare the facility for operation; and (5) readiness review activities. These activities will likely be extensive and expensive.
- Start-up activities after a delay will likely be significant. This is primarily due to the potential for plugged lines, inoperable instruments, inoperable support systems (e.g. electrical, heating and ventilation, cameras, etc.).
- A lengthy delay in initiation of facility operations may result in a loss of significant "tribal knowledge." This knowledge of the facility's evolution from

design, procurement, construction, mockup, testing, procedures, and training is often critical in ensuring smooth operations and speedy resolution of problems.

- Fluor Fernald should ensure that future treatment, if determined necessary, is not precluded. Toward this goal, the CAT recommends that Fluor Fernald *not* add the lignosulfate during processing to prevent it from rendering the material sticky and difficult to retrieve from the bags, if necessary.

DOE has a poor record of starting facilities and an even worse record of restarting mothballed facilities. Because of this, and the findings outlined above, Fluor Fernald should begin operations of the Silo 3 facility on schedule.