

Report 5

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8 December 1998

Jon Smets
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Dear Jon:

Attached is a report of the CAT review of the Accelerated Waste Retrieval vendor selection process. In summary, the CAT is comfortable with the evaluation and selection process itself but is disappointed that the bids did not clearly demonstrate a greater prospect for success. Recognizing that this is a fixed-priced contract, the CAT recommends aggressively managing this contract to ensure vendor performance.

Sincerely,

Todd Martin
CAT Leader

cc: R.C. Roal
G.E. Bingham

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**CRITICAL ANALYSIS TEAM REVIEW
ACCELERATED WASTE RETRIEVAL
BID EVALUATION PROCESS**

8 December 1998

On December 7, 1998, the Critical Analysis Team (CAT) reviewed the Accelerated Waste Retrieval (AWR) bid evaluation process. The lack of strong technical proposals, combined with the integration challenges of what is essentially a consortium of contractors presents a significant risk of programmatic failure. This project demands strong, aggressive management to assure success. FDF and DOE must recognize the magnitude of the work ahead of them and plan, organize, and manage accordingly.

The Procurement Process

- The development of the Statement of Work and the RFP demonstrated a complete and comprehensive method for evaluating comments, developing adequate responses to comments and documenting those comment responses.
- The procurement process appears to have adequately evaluated the technical aspects of the bids.
- The use of safety as a pass/fail criterion was an effective method for incorporating safety evaluation in this procurement and assuring a minimal acceptable level of competence.
- Unfortunately, the quality of the bids raised significant questions as to the technical capability of bidders to successfully complete the project.
- The CAT is pleased that oral presentations were effectively used in this procurement and again produced useful input to the procurement process and reinforced the proposal evaluation .
- Even though the proposals proved acceptable, the CAT is disappointed that the proposals didn't reflect more originality and initiative. Because of this, the technical development of the project will have to be monitored closely by FDF for compliance with technical requirements.

"Kick-Off" Meeting Requirements

Weaknesses in the proposals submitted mandate that FDF conduct a thorough "kick off" meeting with the contractor immediately upon contract award. It is inefficient and costly for FDF to attempt to ensure a sound design through its reviews and evaluations of compliance with requirements. Still, this contracting mechanism has mandated this approach therefore FDF will have to be aggressive and vigilant to be successful. Following are important aspects of the kick-off meeting:

- Review the technical proposal with the vendor to discuss and resolve weaknesses in the technical proposal. In this review, FDF will need to make clear the quality of input expected from the contractor to improve the chances for program success.
- Given that this project will be performed by a consortium of contractors, FDF must know who will be in charge of the contracting team. The contractors must prepare a project charter that would include a responsibility matrix delineating each contractor's responsibilities and authorities. This charter should be provided to FDF as soon after award as possible.
- The proposals do not demonstrate a clear understanding and knowledge of ALARA principles and contamination control requirements. Early meetings between FDF and the contractors must communicate the importance of these issues in facility design, operation, and decontamination & decommissioning.
- FDF should insist on and the ability to have frequent "over the shoulder" reviews (e.g. weekly conference calls or frequent visits) with the contractor to ensure appropriate technical development of the design.

Contract Execution

- FDF must ensure that contamination control requirements, procedures, remote techniques and capabilities, operating and maintenance philosophies and personnel training/performance are proven during mock-up testing. Project uncertainty will remain high if these important and oftentimes difficult activities are not demonstrated.
- A single avenue of communication, response, and closure of design review comments must be established. Contractor submittals to FDF should be reviewed by FDF's internal team and forwarded to outside reviewers (US EPA, Stakeholders, Ohio EPA, DOE HQ, etc.) only

through the responsible DOE representative. Likewise, all comments from these reviewers should be routed back to FDF only through the DOE representative. Other communication pathways are unacceptable and must be eliminated. All comments and comment resolutions must be documented and filed in the project's permanent record.

The three readiness activities scheduled for this project will present a daunting challenge. Following are four readiness review concerns:

- The vendor's responsibilities during the ORR must be clearly communicated to the vendor very early in the project cycle. If the vendor implements effective configuration management and a centralized records system that will fully support readiness activities, the readiness reviews present potential for reducing both the schedule and cost of the project.
- DOE and FDF must be organized, staffed and prepared to support expeditious readiness review activities.
- DOE and FDF should attempt to coordinate and combine their readiness review efforts to achieve cost and schedule efficiencies. FDF should not underestimate the potential for delay, increased costs, corrective action, and potential claims as a result of findings identified during the readiness reviews. The scope of the readiness reviews must be clearly defined, agreed upon and carefully managed and enforced to control the cost and schedule of these effects. There is a tendency for readiness reviews to grow out of control with large impacts to project cost and schedule.
- The three successive readiness reviews -- full scale mock up, Radon Control System head space reduction, and full scale facility -- should be conducted in an iterative process. Each successive readiness review should build up on prior efforts and avoid "reinventing the wheel."

DOE and US EPA must foster and support a "team" concept to fully support the project by staying within a defined, reasonable scope of reviews. It is critical that close working relationships be developed between the important parties involved in the Silos Project including DOE Ohio, DOE HQ, FDF, EPA, Ohio EPA, and Stakeholders.

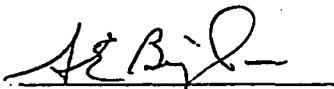
The budget for this project has annual limitations after FY 2000 that will

likely dictate the project schedule, resulting in program delays and increased cost. The CAT has a continuing concern about the "bow wave" effect which result in both escalated costs and extended schedules.

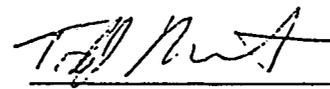
- The CAT remains concerned about the technologies proposed to retrieve waste from Silos 1 and 2. Given this concern, much attention should be given to technology capabilities, operator training, scale up, and decontamination and decommissioning capability.
- The tank system will store the waste for over three and a half years before the full-scale facility is scheduled to start operation. FDF should not underestimate maintenance and surveillance requirements during this period. In addition, FDF should hold-back a significant portion of the vendor's money until required paperwork (as built drawings, manuals, procedures, vendor data, etc.) is received and accepted.
- The TTA concept doesn't appear to incorporate contingencies in the event of a problem (e.g. a leaking tank or a poorly operating remediation facility). FDF should analyze several reasonable "what if" scenarios and develop contingencies for responding to problems.
- Decontamination and Decommissioning of the TTA does not appear to have been given enough thought. Since there is little incentive for the vendor to facilitate D&D, it is important for FDF to develop these needs and ensure they are included in the technical requirements for the vendor.
- FDF should be holistic in its considerations of the full-scale facility. Ideally the full-scale facility would be designed and constructed conjunction with the rest of the project's facilities. However, that is not the case here. Therefore, FDF should identify needs and incorporate design flexibility (e.g. adequate utilities, knock-outs, flanges) during project implementation.



R.C. Roal



G.E. Bingham



T.M. Martin