

# Department of Energy

Oak Ridge Office P.O. Box 2001 Oak Ridge, Tennessee 3783+7136

October 29, 2006

Mr. Lance Mezga, Chair Site Specific Advisory Board Post Office Box 2001 Oak Ridge, Tennessee 37831

Dear Mr. Mezga:

# RECOMMENDATION 150 ON THE PROPOSED METHOD OF ACCOMPLISHMENT FOR DECONTAMINATION AND DECOMMISSIONING OF BUILDINGS K-25 AND K-27 AT EAST TENNESSEE TECHNOLOGY PARK

Reference: SSAB letter dated October 12, 2006, entitled, "Recommendation 150 on the

Proposed Method of Accomplishment for Decontamination and Decommissioning of Buildings K-25 and K-27 at East Tennessee Technology Park," Lance Mezga to

Steve McCracken

The Department of Energy (DOE) appreciates the Oak Ridge Site Specific Advisory Board (SSAB) referenced recommendation, which concurs with DOE implementing the alternate Decontamination and Decommissioning (D&D) strategy on the East Tennessee Technology Park K-25/K-27 D&D Project.

DOE remains very aware of the worker safety issues with the take-down of any building on the site and in particular when the building is in as poor condition as the K-25 building. DOE will apply the necessary resources to address all safety concerns. DOE has established an independent review team to review the Bechtel Jacobs Company LLC Data Quality Objectives process for establishing "criticality incredible" and waste characterization for disposal. The team should complete their review by mid-December 2006. DOE is willing to schedule a briefing, provide copies of the associated documents, and discuss our path forward at the convenience of the SSAB Environmental Management (EM) Committee after December.

DOE will also provide project status update information to the SSAB EM Committee at the end of each quarter. Enclosed with this letter is the first update of this type concerning these two buildings through August 2006. If this update does not cover some of the areas that you would like to have updated, please let Pat Halsey know and DOE will try to accommodate your request in the next subsequent update. The January 2007 update will better reflect the implementation of the new strategy. If there are worker safety occurrences, beyond normal scrapes and bruises, these will be reported to you during the normal monthly SSAB meetings during the Deputy Designated Federal Official report.

If you have any questions, please contact me at (865) 576-0742 or Jack Howard at (865) 576-5982.

Singerely,

Assistant Manager for

Environmental Management

#### Enclosure

cc w/enclosure:

Dave Adler, EM-91, 2714 Complex
Karen Deacon, EM-93, K-1580, MS-7136
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Dan Sloan, BJC, K-252700D, MS-7325
Kelly Trice, BJC, K-252700K, MS-7313
Mike Farmer, Roane County Mayor
Rex Lynch, Anderson County Mayor
James O'Connor, Oak Ridge City Manager
LOC

## ETTP K-25/K-27 D&D Project Status as of August 2006

# **Ongoing Activities**

#### • K-25

- Vent, purge, drain, and visual inspection of internals of process piping and equipment
- Cell housing and pipe ductwork removal and disposal
- Process equipment and piping stabilization (foaming)
- Installation of nets and barriers below pipe gallery level
- Design, procurement, and construction of new criticality detection system
- Design, procurement, and construction of new Non Destructive Assay (NDA) and Segmentation Shops
- Submittal and review of revised Documented Safety Analysis (DSA)
   (Rev. 4) to incorporate new Radiation Criticality Accident Alarm System
   (RCAAS), new D&D strategy, updated Fire Hazard Analysis (FHA), and new segmentation shops
- Completion of low risk equipment (LRE) segmentation for proof of principle for high risk equipment (HRE) start-up in October 2006
- Continued RCAAS audibility assessment
- Asbestos abatement in K-25 North Building vaults

#### • K-27

- Asbestos abatement and disposal
- Building exterior wall transite removal and disposal
- Construction of support facilities (parking, trailers, electrical distribution system, and metal decking installation)

#### Progress to Date

- DSA Rev. 4 submitted for DOE review 08/18/2006
- K-27 Immediate Evacuation Zone (IEZ) Methodology approved by DOE 08/25/06
- DOE completed technical analysis of 1.2 vs. 1.4 NDA Conversion Factor by ORNL experts on 09/14/2006
- BJC started foundation installation for the new RCAAS system within K-25 "U" on 09/21/06

# Progress to Date (continued):

Items	Unit of Measure		Actual Progress to Date
Transite	SF	710,000	205,546
Vent/Pruge/Drainng (Cell Floor	Unit	63	23.2
Vent/Purge/Drain (Pipe Gallery)	Unit	63	5.3
Foaming (Cell Floor)	Unit	63	8.8
Foaming (Pipe Gallery)	Unit	63	0
Segmentation	# Items	916	0
Bulk	CF	1,668,946	2,387
K25/K27 Bldg Demo	CY	320,224	0
Waste Shipments	Each	54,000	2,400

## Technical challenges

- Criticality incredible justification
- Waste characterization
- Proposed Solutions/Status:
  - BJC to set up robust characterization program for assurance of crit incredibility and waste issues with appropriate quality and data
  - DOE independently validate BJC processes and concur on crit incredibility documents
  - BJC presented DQO process and status to DOE ORO team on 9/20/06
  - DOE identified DQO Review Technical Team
    - ORISE, ORNL, Los Alamos, ORO, and EM HQs comprise team
  - BJC plans to complete DQO plans and implementation by 12/06/06
  - DOE plans to bring DQO Review Team in for initial process review on 11/13/06
  - DOE Plans to have ORISE conduct quarterly independent reviews of BJC DQO process implementation through December 2007

- Regulator and public acceptance of K-25/K-27 strategy
  - DOE/BJC revised the Removal Action Work Plan to incorporate K-25/K-27 D&D replan and submitted to EPA/TDEC for comments on September 29, 2006
  - DOE issued letter and BJC analysis August 21, 2006 for TDEC/EPA to approve use of high density foam as replacement for use of concrete as filler and size reduction of pipe
    - TDEC/EPA approved on September 12, 2006 for K-25/K-27 D&D Project only

# **Project Safety Statistics**

	August 2006	CY
Total Project Work Hours	71,360	476,632
First Aid Cases	1	17
Recordable Injuries	1	8
LWD (Restricted)	1	2
LWD (Away)	0	1