

August 1, 2005

Mr. Bill Vinzant
Project Manager, KACC
Kaiser Aluminum & Chemical Corporation
9141 Interline Avenue, Suite 1A
Baton Rouge, LA 70809

SUBJECT: APPROVAL OF FLUX BUILDING FINAL STATUS SURVEY (FSS)

Dear Mr. Vinzant:

On July 5, 2005, Kaiser Aluminum & Chemical Corporation (Kaiser) submitted: (1) Technical Memorandum, "Response to a June 2005 NRC Inspection Follow-Up Item, Clearance Criteria for Concrete Disposed Locally"; (2) Technical Memorandum, "Response to NRC Inspection Report 040-02377/05-002, Inspection Follow-up Item (IFI) IFI 040-02377/00502-01, Discrepancy Between Horizontal and Vertical Surfaces"; and (3) Technical Report, "Interim Final Status Survey - Flux Building." Kaiser requested U.S. Nuclear Regulatory Commission (NRC) review and approval of the Interim Final Status Survey (FSS).

The staff has completed its review of Kaiser's submittals and concludes that:

1. The staff accepts, for information only, the clearance survey protocol as presented in the Technical Memorandum, "Response to a June 2005 NRC IFI, Clearance Criteria for Concrete Disposed Locally," dated July 5, 2005 (ADAMS Accession No. ML051890340). The criteria presented are consistent with the criteria approved by NRC on June 22, 2005 (ADAMS Accession No. ML051740165). If more stringent requirements are imposed on Kaiser by the State of Oklahoma for disposal of concrete in a State-Permitted Industrial Landfill, these requirements should be negotiated with the State.
2. The staff will respond to the Technical Memorandum, "Response to NRC Inspection Report 040-02377/05-002, IFI 040-02377/00502-01, Discrepancy Between Horizontal and Vertical Surfaces," in a future Inspection Report.
3. The staff approves the Technical Report, "Interim Final Status Survey - Flux Building," and agrees that the Flux Building walls and roof meet the release criteria for unrestricted release. The staff would like to remind Kaiser that NRC is not approving the floor for unrestricted release, since Kaiser has not presented FSS results for the floor surface in contact with the soil. In addition, NRC approval is not granted for release of the free standing concrete wall located on the north side of the Flux Building. Kaiser must present the results of a FSS prior to deconstruction and disposal of this wall. The staff's review is documented in the attached Technical Evaluation.

- 2 -

If you have questions concerning this letter, please contact me at (301) 415-6607.

Sincerely,

/RA/

John T. Buckley, Project Manager
Decommissioning Directorate
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Attachment: Technical Evaluation

Docket No.: 040-2377

License No.: STB-472 (Terminated)

cc Kaiser Aluminum Service List

If you have questions concerning this letter, please contact me at (301) 415-6607.

Sincerely,

/RA/

John T. Buckley, Project Manager
Decommissioning Directorate
Division of Waste Management
and Environmental Protection
Office of Nuclear Material Safety
and Safeguards

Attachment: Technical Evaluation

Docket No.: 040-2377

License No.: STB-472 (Terminated)

cc Kaiser Aluminum Service List

DISTRIBUTION:

DCD r/f BSpitzberg, RIV REvans, RIV BSchlapper, RIV

ML052130263

*See Previous Concurrence

OFFICE	DWMEP:PM*	DWMEP*	DWMEP:LA*	DWMEP:SC*
NAME	JBuckley	TYoungblood	CBurkhalter	CCraig
DATE	8/01/05	8/01/05	8/01/05	8/01/05

OFFICIAL RECORD COPY

Kaiser Aluminum Service List

cc:

Allyn M. Davis, Director
Hazardous Waste Management Division
U.S. Environmental Protection Agency
Region VI
1445 Ross Avenue
Dallas, TX 75202-2733

Michael Broderick
Environmental Program Administrator
Radiation Management
Land Protection Division
Oklahoma Department of Environmental
Quality
P.O. Box 1677
Oklahoma City, OK 73101-1677

Mr. Bill Vinzant
Project Manager, KACC
Kaiser Aluminum and Chemical
Corporation
9141 Interline Avenue, Suite 1A
Baton Rouge, LA 70809-1957

Mr. Stan Koop
Office of Attorney General
State of Oklahoma
2300 N. Lincoln Blvd., Suite 112
Oklahoma City, OK 73105-4894

Mr. Doug Wilson
Manager, Environmental Services
Office of Environmental Services
City of Tulsa
4818 South Elwood Avenue
Tulsa, OK 74107-8129

Mr. Tim Thompson
Creek Nation of Oklahoma
Creek Nation Tribal Complex
Hwy 75, Loop 56
P.O. Box 586
Okmulgee, OK 74447

Technical Evaluation
of
Technical Report
Interim Final Status Survey - Flux Building
Thorium Remediation project
Tulsa, Oklahoma Facility
Kaiser Aluminum & Chemical Corporation
June 5, 2005

Kaiser plans to deconstruct the Flux Building and remove it from the site in order to continue with soil remediation activities. As such, Kaiser performed Final Status Surveys (FSSs) on the flux building interior and exterior surfaces in order to demonstrate that the surfaces meet the release criteria of Policy and Guidance Directive FC 83-23, as approved in Decommissioning Plan (DP). For FSS, the Flux Building was divided into eight survey units, FB-001 through FB-008. Of the eight survey units, there were three Class 1, three Class 2, and two Class 3 survey units. FSS results indicate that all measurement locations on the Flux Building interior and exterior had residual radioactivity less than the approved criteria of 230 dpm/100 cm² (total) and 50 dpm/100 cm² (removable). However, Kaiser has not demonstrated that the concrete floor slab surface in contact with the ground meets this criteria, and must do FSS of this surface after the Flux Building is demolished. The NRC will review the FSS results for the bottom of the concrete slab when it is submitted.

In addition to reviewing the Flux Building FSS, NRC performed independent fixed static counts and smear surveys for most of the Flux Building survey units. Area that were not surveyed included the Flux Building upper walls, ceiling and roof which would have required a man-lift for access, and the east exterior wall which would have required access from a neighboring property. The static count surveys did not exceed 144.7 dpm/100 cm², and the smear samples did not exceed 1.49 dpm/100 cm². All NRC surveys indicated that surfaces meet the DCGL.