



January 27, 2009

United States Nuclear Regulatory Commission
Regional Administrator Bruce Mallett
611 Ryan Plaza Drive, Suite 400
Arlington, TX 76011

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FEB 03 2009

DNMS

RE: License SMB-911, Docket #40-7580 – Report of concentrations of radioactive material exceeding a license limit. 10 CFR20.2203(a)(3)(ii)

Dear Mr. Mallett:

Please find attached a report issued in accordance with the requirements of 10 CFR20.2203(a)(3)(ii) and with respect to NRC Source Material License SMB-911.

Should you have any questions or comments regarding this matter, please contact James Burgess or me at (918) 687-6303.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Jonathan Jackson'. The signature is fluid and cursive, written over a white background.

E. Jonathan Jackson
President/CEO

Attachment

Copy to: James Shepherd – NRC Project Manager
Bob Evans – NRC Inspector
Mike Broderick – ODEQ
James Burgess - FMRI, Inc.
File (NRC – 012709)

FMRI, Inc.

Muskogee, Oklahoma
U.S.NRC Materials License SMB-911

Report of concentrations of radioactive material exceeding a license limit
10CFR20.2203(a)(3)(ii)

(i) Estimate of each individual's dose;

No individual received any dose as a result of exceeding the groundwater monitoring limit described in NRC Materials License SMB-911 at Section 3.5.6 "Groundwater Monitoring", item 3.

(ii) The concentrations of radioactive material involved;

The concentrations of radioactive material in Monitoring Well 74 were:

Radionuclide	10 CFR 20 Appendix B Table 2 Effluent Concentration $\mu\text{Ci/ml}$	FMRI, Inc. MW-74 Sample Concentration $\mu\text{Ci/ml}$	Sample Date	Date Reported
U-238	3.00E-07	9.810-06	9/24/08	1/20/09
U-235	3.00E-07	1.220E-06	9/24/08	1/20/09
U-234	3.00E-07	9.200E-06	9/24/08	1/20/09

(iii) The cause of the concentrations;

FMRI, Inc. collects samples of groundwater from monitoring locations on site. The monitoring is performed in accordance with NPDES Permit OK0001643 and NRC Materials License SMB-911, Section 3.5.6. The source material license includes concentration limits for these samples above which specific actions are required by the licensee.

Construction activities began on June 8, 2005 for Phase I decommissioning activities to remove WIP from Ponds 2 and 3. FMRI performs radiological sampling of its groundwater wells and interceptor trench once a quarter. Trending analysis is reviewed by the Radiation Safety Committee once a quarter. The trending on this well has been increasing since September 2005. Currently, this is the only monitoring well that has been showing an upward trend from Phase I activities.

(iv) Corrective steps taken or planned;

Notification was made to Mr. Bob Evans (NRC Region IV, Inspector) and Mr. James Sheperd (NRC Headquarters, Project Manager) of the condition.

A CR was issued by the PRSO for this incident on 11/12/08 when gross alpha and gross beta results were received. The CR addresses the elevated gross alpha/beta results and requests isotopic uranium and isotopic thorium analysis to be performed. The CR also states that if the isotopic result is 10x the limit specified in 10 CFR Part 20 Appendix B, Table II then it will submit a report to the Administrator, NRC Region IV, and the ODEQ within 30 days.

Monitoring Well 74 is directly upgradient of the Site interceptor trench, and to the northeast of Pond 2. All of the groundwater at the Site including the groundwater in the vicinity of this well is collected in the Site interceptor trench and is pumped to the facility wastewater treatment plan for treatment. The treated wastewater then discharges through the facility NPDES permitted outfall 001.