



July 18, 2006

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

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 Keyton Payne 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, with the first name "E." being prominent.

E. Jonathan Jackson  
President/CEO

RECEIVED  
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DNMS

Attachment

Copy to: James Shepherd – NRC Project Manager  
Beth Schlapper – NRC Inspector  
Mike Broderick – ODEQ  
Keyton Payne - FMRI, Inc.  
File (NRC – 071806)

**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 $\mu\text{Ci/ml}$	Fansteel, Inc. Sump 2 Sample Concentration $\mu\text{Ci/ml}$	Sample Date
U-238	3.00E-07	5.46E-06	03/15/06
U-234	3.00E-07	4.74E-06	03/15/06

**(iii) The cause of the concentrations;**

FMRI 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 Ms. Beth Schlapper (NRC Region IV, Inspector) and Mr. James Sheperd (NRC Headquarters, Project Manager) of the condition.

A CR was issued by the PRSO on 04/24/06. 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.

Enhanced groundwater monitoring has been established to track and trend the monitoring wells around Pond 3. Samples are to be taken twice a month for two months and then go to a monthly review for three months. If no other wells are trending up then the facility will resume quarterly sampling according to facility requirements.

Monitoring Well 74 is directly upstream of the facility interceptor trench, and to the north east of Pond 2. This well discharges into the interceptor trench and is pumped to the facility wastewater treatment plant through Sump 1. The treated wastewater then discharges through the facility NPDES permitted outfall 001. A review was completed of the uranium results for Outfall 001 for the period June 2005 through June 2006; no exceedances were observed.