

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

February 24, 1999

DOCKET: 40-7580

LICENSEE: Fansteel, Inc. Muskogee, OK

SUBJECT: SAFETY EVALUATION REPORT: AMENDMENT TO REDUCE GROUNDWATER SAMPLING FREQUENCY IN LICENSE SMB-911

# BACKGROUND

In a letter dated February 3, 1999, Fansteel, Inc. (Fansteel) provided, as requested by NRC, a partial response to NRC's request for additional information (RAI) dated November 3, 1998. The purpose of the amendment is threefold: (1) to respond to NRC's RAI Questions 9, 15, 16, and 23 concerning groundwater monitoring; (2) to reduce the groundwater sampling frequency from monthly to quarterly; and (3) to update the groundwater monitoring section of the license.

Response to the other questions posed in the November 3, 1998, RAI were received under a separate cover by a letter dated December 22, 1998.

#### DISCUSSION

Fansteel's responses to RAI Questions 9, 15, 16, and 23 are adequate and sufficiently address staff's concerns.

Fansteel has also requested that the frequency with which they sample radioactive components in groundwater be reduced from monthly to quarterly. Specifically, groundwater monitoring wells identified in the application will be sampled quarterly for gross alpha and gross beta activity. The grounds for this change are that, historically, there has been little monthly variation in the gross alpha and beta activities and that quarterly sampling is sufficient and will provide enough information to detect changes. Fansteel's request appears reasonable since their 1997 Environmental Assessment identifies the results of their alpha and beta sampling on a quarterly basis. Another mitigating factor includes the construction of a groundwater trench and treatment facility which should further reduce the hydrostatic head for source contamination.

Chemical components, e.g., fluoride, pH, etc., will be sampled semi-annually, in accordance with Fansteel's current National Pollutant Discharge Elimination System (NPDES) permit.

Finally, Fansteel requested that Section 4.3, "Ground Water Monitoring," of the license be updated to incorporate the proposed sampling procedure. Fansteel's update is improved as it provides additional detail, not previously provided, on the specific wells monitored, the sampling technique, and the specific uranium and thorium isotopes sampled.

## ENVIRONMENTAL REVIEW

The staff has determined that the following conditions pertaining to changes in process operations have been met:

- 1. There is no significant change in the types or significant increase in the amounts of any effluents that may be released offsite.
- There is no significant increase in individual or cumulative occupational radiation exposure.
- 3. There is no significant construction impact, and,
- There is no significant increase in the potential for consequences from radiological accidents.

Accordingly, pursuant to 10 CFR 51.22 (c)(11), neither an environmental assessment nor an environmental impact statement is warranted for this action.

#### CONCLUSION/RECOMMENDATION

NRC staff has reviewed Fansteel's request to reduce the groundwater sampling frequency for radiological components and has determined that the frequency is still adequate to monitor changes in groundwater contaminant levels. Therefore, the staff has determined that the licensee's request will not adversely effect public health and safety or the environment.

Approval of the amendment application is recommended.

## PRINCIPAL CONTRIBUTORS:

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