

MEMORANDUM TO: Eric Leeds, Acting Chief  
Licensing and International  
Safeguards Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

THRU: Charles W. Emeigh, Section Chief  
Licensing Section  
Licensing and International  
Safeguards Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

FROM: Leslie Fields, Project Manager  
Licensing Team 1  
Licensing and International  
Safeguards Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

SUBJECT: FANSTEEL/NRC MEETING SUMMARY DATED FEBRUARY 15, 2000

On February 15, 2000, NRC staff met with representatives of Fansteel Inc. and their contractor Earth Sciences, Inc. to discuss the forthcoming Environmental Report (ER) and general issues associated with NRC's review of Fansteel's Decommissioning Plan dated August 1999. The meeting began with introductions, followed by discussion of the ER and the decommissioning plan, concluding with discussion of institutional controls.

The Division of Waste Management (DWM) Environmental Review Team provided informal observations and clarification regarding the draft ER outline. Specifically, the staff emphasized that this information exchange and others will continue to be available to Fansteel. Further, this effort is consistent with the current office initiative to make clarifying information exchanges available prior to submittal of the environmental report and better facilitate both the report development and review, with the overall goal of reducing the number of requests for additional information (RAI) to licensees.

In response to Fansteel's request, the staff clarified that, at present, the proposed decommissioning action at the Fansteel site and restricted release pursuant to 10 CFR Part 20 will involve the development of an Environmental Impact Statement (EIS). Additionally, since Fansteel is expecting its operations to continue for a prolonged period of time before termination of its license, the staff explained the potential for circumstances to develop which may necessitate development of supplemental environmental analyses. Further, Fansteel indicated that it intends to prepare an ER consistent with the development of an EIS, including completion of necessary consultations with Historic Preservation contacts and the Fish and Wildlife Service.

Subsequently, the staff clarified that (1) Fansteel will need to coordinate with NRC Headquarters staff prior to initiating such consultations and (2) the consultations can be documented in the ER. In response to Fansteel's questions, the staff also clarified that the ER should describe and discuss all reasonable alternatives and not be limited to presentation of only those preferred or considered the most feasible by Fansteel.

Initial DWM decommissioning staff observations were discussed regarding the containment cell decommissioning plan, consistent with the overall goal to minimize RAI's. During the discussion of the hydrology and flooding analysis, Fansteel agreed to provide more detailed information pertaining to probable maximum floods and sequential flood analyses. In response to staff observations regarding the Treatability Study Report, Fansteel indicated that the report was intended to be a feasibility study and that further chemical analyses will be provided. Additionally, Fansteel will revise the RESRAD modeling parameters to ensure consistency with site conditions.

OGC staff provided questions regarding institutional controls that should be addressed to facilitate the approval of a legal custodian. It was mentioned that regulatory guidance is currently being prepared to present an example of a decommissioning funding plan submittal. In response to questions as to whether or not a long term custodian has been selected, Fansteel mentioned that they have entered into serious talks with Cherokee Nation and are working on a formal proposal. It was suggested that another meeting be held with all parties involved to discuss issues concerning institutional controls.

Fansteel mentioned that they would like to have the containment cell approved by the time the first waste pond is emptied. Following the meeting, Mr. John Hunter of Fansteel told NRC staff that the ER will be submitted by the end of July and stated that he has no objection to the content of this document. OGC staff stated that the Cherokee Nation has requested a meeting to discuss issues concerning institutional controls. The arrangements for the forthcoming institutional control meeting have yet to be determined.

Docket 40-7580  
License SMB-911

Attachments: 1. List of Attendees  
2. Meeting Agenda

cc: Mr. John J. Hunter  
Corporate Manager of Process  
Engineering and  
Facilities Construction  
Fansteel, Inc.  
Number Ten Tantalum Place  
Muskogee, Oklahoma 74403-9297

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DATE	02/28 /00		02/28/00		03/01/00	03/02/00	03/06/00

Fansteel/NRC Meeting 2/15/00  
List of Attendees  
Fansteel 40-7580

NAME	ORGANIZATION
John Hunter	Fansteel
Elizabeth Ubinger	Earth Sciences
Leslie Fields	NRC/NMSS/FCSS
Susanne Woods	NRC/NMSS/DWM
Theodore Smith	NRC/NMSS/DWM
Michael Rafky	NRC/OGC
Charles Emeigh	NRC/NMSS/FCSS
Thomas Essig	NRC/NMSS/DWM
Ted Johnson	NRC/NMSS/DWM
Melanie Wong	NRC/NMSS/DWM
Matt Blevins	NRC/NMSS/DWM
John Bradbury	NRC/NMSS/DWM
Charlotte Abrams	NRC/NMSS/DWM
Michael J. Mocniak	Fansteel
John P. Englers	KirkPatrick & Lockhart
Alan Shuckrow	Earth Sciences
M.D. Tourdot	Earth Sciences
Jim Lieberman	NRC/OGC
Henry Morton	Morton Associates
Phyllis Sobel	NRC/NMSS/DWM
Jon Jackson	Fansteel
Joseph Scalamogna	Earth Sciences
Rick Orthen	Earth Sciences
Heather Astwood	NRC/NMSS/FCSS
Eric Leeds	NRC/NMSS/FCSS
Dan Martin	NRC/NMSS/FCSS

Mr. Michael Mocniak  
Vice-President, Secretary  
& General Counsel  
Fansteel, Inc.  
Number Ten Tantalum Place  
Muskogee, Oklahoma 74403-9297

SUBJECT: MEETING AGENDA

Dear Mr. Mocniak:

Enclosed is an agenda for the meeting planned between Fansteel and NRC staff on February 15, 2000. This meeting is being held at your request to discuss the content of Fansteel's future Environmental Report and general issues associated with NRC's review of Fansteel's Decommissioning Plan dated August 1999.

If you have any questions regarding this meeting, please contact me at (301) 415-5819.

Sincerely,

Heather Astwood, Project Manager  
Licensing and International  
Safeguards Branch  
Division of Fuel Cycle Safety  
and Safeguards, NMSS

Docket 40-7580  
License SMB-911

Enclosure: As stated

cc: John Hunter, Fansteel  
Al Shuckrow, Earth Sciences

Mr. Michael Mocniak  
 Vice-President, Secretary  
 & General Counsel  
 Fansteel, Inc.  
 Number Ten Tantalum Place  
 Muskogee, Oklahoma 74403-9297

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Heather Astwood, Project Manager  
 Licensing and International  
 Safeguards Branch  
 Division of Fuel Cycle Safety  
 and Safeguards, NMSS

cc: John Hunter, Fansteel  
 Al Shuckrow, Earth Sciences

Distribution: w/encl.

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 SHO SWoods, DWM JLieberman, OGC DMartin

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<b>NAME</b>	H Astwood		PShea			
<b>DATE</b>	2/ /00		2/ /00			

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**Fansteel/NRC meeting**  
**February 15, 2000**  
**1:00 - 4:30**

- |             |   |
|-------------|---|
| 1:00 - 1:15 | Introductions   |
| 1:15 - 2:00 | Environmental Report - To address any questions from the licensee concerning the content of an environmental report. Also discuss the general format of the Draft Environmental report outline submitted by Fansteel. |
| 2:00 - 3:00 | Decommissioning Plan - To discuss NRC's questions which have arisen during the review of the decommissioning plan. See general questions in Attachment A.   |
| 3:00 - 4:00 | Institutional control - To discuss NRC's questions with regard to the proposed Institutional control information. See general questions in Attachment B.  |
| 4:00 - 4:30 | Discuss schedules for submittals and reviews. Also any additional issues raised by either Fansteel or NRC staff. Note that financial assurance issues will not be addressed in this meeting.                          |

Enclosure

## **Attachment B**

### **General Institutional Control Issues**

#### 1) Maintenance

- Who will be responsible for maintenance of physical controls?
- What will be the scope of potential repairs and maintenance and what will the frequency for these actions over the long term?
- How will the maintenance and control obligations be documented and enforced?
- Who will have the enforcement authority?
- What will be monitored over the long term and who will do it?

#### 2) Site custodian

- When will Fansteel be in a position to determine which entity will become the custodian?
- For the custodian chosen, why will it be in a position to provide oversight for the long-term and why is it capable of carrying out these responsibilities?
- What will happen if the custodian does not carry out its responsibilities?

#### 3) Financing the institutional controls

- How does Fansteel plan to establish the financing?
- How would provisions be made to replace the trustee?
- What are the planned post closure corrective actions and emergency response actions?

# Attachment A

## General Decommissioning Plan Issues

### Design Review

Hydrology: Discussion of the peak Probable Maximum Flood (PMF) or dam failure analyses. Some questions include:

- an analyses of the Probable Maximum Flood and flood levels.
- an analyses of flood levels associated with single or multiple failures of upstream dams.
- the use of unsteady flow models and information related to the hydrologic design of the various dams upstream of the site.

Geochemistry: Discussion of the Treatability Study Report (TSR). Some questions include:

- the appendix C CoreLab analysis values for K-40 in Section 2.
- table 11 drinking water values for fluoride, cadmium, and lead which exceed drinking water standards.
- the variability of the fluoride concentration and the effectiveness of  $\text{CaCl}_2$  in restoring mechanical strength as described in Sections 2.6 and 2.7.
- the fluoride concentrations and how they relate to the mechanical strength of the S/S cylinder samples from mix No. 3.

Dose Modeling: Discussion of the RESRAD analysis. Some questions include:

- the use of a runoff coefficient of 0.99 in lieu of 0.95.
- the use of hydraulic and transport parameters for shale in lieu of those for sand to represent the saturated zone.
- the depth of intake wells and aquifer thickness used in the model.
- the timing for shutdown of the groundwater collection system.