

Michael J. Mocniak
Vice President, General Counsel
and Secretary

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Fansteel

February 27, 2001

Mr. Charles W. Emeigh
Section Chief, Licensing Section
Licensing and International Safeguards Branch
Division of Fuel Cycle Safety and Safeguards
NMSS
United States Nuclear Regulatory Commission
Washington, DC 20555-0001

Decommissioning Funding Plan Revision
Docket No. 40-7580
License SMB-911
Fansteel Inc.
Muskogee, Oklahoma

Dear Mr. Emeigh:

This submittal is in accordance with License No. SMB-911 Condition No. 21 requiring Fansteel Inc. (Fansteel) to review and update their Decommissioning Funding Plan (DFP) every 13 months. The estimate has been updated since the January 2000 submittal to reflect changes and up-to-date cost information. A copy of the revised DFP in the format specified in Regulatory Guide 3.66 is provided in Attachment 1 to this letter. As can be seen from the cost estimates provided, the amount has not increased by more than one percent, therefore no change in the financial instrument (Letter of Credit) is needed.

Sincerely yours,



Michael J. Mocniak

MJM/ecj

Enclosures

cc: Mohammed W. Haque, NRC

APPENDIX F
COST ESTIMATING TABLES

1. Planning and Preparation

Table 1

<u>Task</u>	<u>Supervisor</u>	<u>Work Days</u> Man-Hours			<u>Total</u>	<u>Total Cost</u>
		<u>Foreman</u>	<u>H.P.</u>	<u>Clerical</u>		
1. Preparation of Documentation for Regulatory Agencies	<u>16</u>	<u>N/A</u>	<u>16</u>	<u>160</u>	<u>432(1)</u>	<u>\$26,000</u>
2. Submittal of Decommissioning Plan to NRC when required by 10 CFR 30.36(c)(2), 40.42(c)(2), or 70.38(c)(2)*	<u>16</u>	<u>N/A</u>	<u>8</u>	<u>96</u>	<u>200(2)</u>	<u>\$11,640</u>
3. Development of Work Plans	<u>60</u>	<u>60</u>	<u>80</u>	<u>120</u>	<u>800(3)</u>	<u>\$55,500</u>
4. Procuring of Special Equipment	<u>10</u>	<u> </u>	<u> </u>	<u> </u>	<u>10</u>	<u>\$1,000(4)</u>
5. Staff Training	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>200(5)</u>	<u>\$5,200</u>
6. Characterization of Radiological Condition of the Facility (Including soil and tailings analysis or ground-water analysis, if applicable)	<u> </u>	<u> </u>	<u>80</u>	<u>160</u>	<u>2,000(6)</u>	<u>\$90,800</u>
7. Other	<u>160</u>	<u>240</u>	<u>240</u>	<u>640(7)</u>	<u>2,160(8)</u>	<u>\$243,200(9)</u>
8. Total	<u>262</u>	<u>300</u>	<u>424</u>	<u>1,176</u>	<u>5,802</u>	<u>\$433,340</u>

* For assistance in preparation of cost estimate for 10 CFR Part 72, consult NRC Office of Nuclear Material Safety and Safeguards.

APPENDIX F (Continued)
COST ESTIMATING TABLES

Table 2 (1)

Position	Unit Cost for Workers		Worker Cost/year hr
	Basic Salaries (\$/yr) hr	Overhead Rate (%)	
Supervisor	60	67	100
Foreman	50	67	85
Craftsman	37	35	50
Technician	29	50	44
Health Physicist	45	67	75
Laborer	15	67	25
Clerical	25	50	40
Other	45	64	75

2. Decontamination and/or Dismantling of Radioactive Facility Components*

	No.	Dimensions		No.	Dimensions
Glove Boxes	N/A	(m ³)	Amount of Floor Space	6,624	(m ²)
Fume Hood	4	(m ³)	Ventilation Ductwork	100	(m)
Hot Cells	N/A	(m ³)	Amount of Wall Space	---	(m ²)
Lab Benches	4	(m)	Other (soil excavation)	14,150	---
Sink and Drain	4	(m)			

Table 3(2)

Task	Work Days						Total	Total Cost
	Super- visor	Fore- man	Tech- nicians	H.P.	Crafts- men	La- borer		
1. Decon/Dis- mantle Major Components and/or Proc- essing and Storage Tanks	160	160	320	80	---	1,280	2,320(3)	\$66,880
2. Decon/Dis- mantle Laboratories, Fume Hoods, Glove Boxes, Benches, etc.	20	40	80	20	---	160	360(4)	\$11,520

*Indicate whether component is to be decontaminated to unrestricted release levels or packaged and disposed of at a low-level waste site.

APPENDIX F (Continued)
COST ESTIMATING TABLES

Table 3 (continued)

Task	Work Days		Man-Hours				Total	Total Cost
	Super- visor	Fore- man	Tech- nicians	H.P.	Crafts- men	La- borer		
3. Decon/Dis- mantle Waste Areas	<u>N/A</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
- Radwaste Areas								
- Scrap Recovery Areas								
- Other								
4. Decon/Dis- mantle Service Facilities	<u>20</u>	<u>40</u>	<u>160</u>	<u>40</u>	<u> </u>	<u>160</u>	<u>460(1)</u>	<u>\$16,040</u>
- Maintenance Shop								
- Decontamination Areas								
- Ventilation Systems								
- Other								
5. Decon/Dis- mantle Waste Treatment Facilities and Storage Areas on the Site (Including exhumed and package contaminated soil and tail- ings, if any)	<u>240</u>	<u>1,000</u>	<u>1,000</u>	<u>320</u>	<u> </u>	<u>2,400</u>	<u>5,440(2)</u>	<u>\$177,000</u>
- Fluoride Lagoons								
- Nitrate Lagoons								
- CaF ₂ Waste Recovery								
- Ground Water Restoration								
- Other								

APPENDIX F (Continued)
COST ESTIMATING TABLES

Table 3 (continued)

Task	Work Days		Man-Hours		Crafts- men	La- borer	Total	Total Cost
	Super- visor	Fore- man	Tech- nicians	H.P.				
6. Monitor for compliance, reclean and remonitor, if necessary	20	80	240	60	990	1,590(1)	\$150,960(2)	
7. Other (e.g., contractor fees)						0	\$15,000(3)	

Table 4

Equipment/Supply	Quantity	Cost
Mixing Unit		\$ 80,000
Equipment Maintenance		22,400
Cleaning Materials		3,050
Total		\$106,050

3. Packaging, Shipping, and Disposal of Radioactive Wastes

Table 5

Waste Type	Volume (m ³)	No. of Containers	Type of Containers	Unit Cost of Container	Cost of Container
LLW	41.6	200	Steel drum	43	\$8,600
Rubble	113.3	6	25 yd ³	650	\$3,900
			Intermodal		
Total					\$12,500

Table 6

Waste Type	No. of Shipments	Unit Cost for Shipping	Distance Shipped	Surcharge	Transportation Cost
LLW	3	1	1,000		\$3,000
Rubble	6	1	1,000		\$6,000
Total					\$9,000

Distance Shipped 1,000 (miles)
 Unit cost for shipment 1 (\$/mile/truckload)
 Additional charges
 Overweight (\$/mile)
 Surcharges (\$/mile)

APPENDIX F (Continued)
COST ESTIMATING TABLES

Table 7

	<u>LLW</u>	<u>Rubble</u>	<u>Soil</u>	
Burial Charges	196.2	540	121	(\$/m ³)
Surcharges				
Per container				(\$)
Disposal				(\$/m ³)

<u>Waste Type</u>	<u>Burial Volume</u>	<u>Unit Cost of Burial</u>	<u>Surcharge</u>	<u>Burial Cost</u>
LLW	41.6	196.2		\$ 8,162
Rubble	113.3	540		61,182
Soil	19,496	121		2,359,016
<u>Total</u>				<u>\$2,428,360</u>

4. Restoration of Contaminated Areas on Facility Ground

Table 8 ⁽¹⁾

<u>Task</u>	<u>Supervisor</u>	<u>Work Days</u>			<u>Man-Hours</u>	<u>Total</u>	<u>Total Cost</u>
		<u>Foreman</u>	<u>H.P.</u>	<u>Clerical</u>			
Backfill and Restore Site	90	40	40	80	1,130(2)	\$67,400	

5. Final Radiation Survey

Table 9 ⁽³⁾

<u>Task</u>	<u>Supervisor</u>	<u>Work Days</u>			<u>Man-Hours</u>	<u>Total</u>	<u>Total Cost</u>
		<u>Foreman</u>	<u>H.P.</u>	<u>Clerical</u>			
	160		320	320	2,080(4)	\$124,120(5)	
<u>Total</u>						<u>\$124,120</u>	

APPENDIX F (Continued)
COST ESTIMATING TABLES

6. Site Stabilization, Long-Term Surveillance (if applicable)

Table 10

<u>Task</u>	<u>Supervisor</u>	<u>Work Days</u>		<u>Man-Hours</u>		<u>Total</u>	<u>Total Cost</u>
		<u>Foreman</u>	<u>H.P.</u>	<u>Clerical</u>			
<u>Groundwater Monitoring</u>	_____	_____	_____	_____	_____	2 ⁽¹⁾	\$ 800 ⁽²⁾
<u>Reporting</u>	2	_____	4	_____	_____	6	1,000 ⁽³⁾
<u>Grass Mowing</u>	4	_____	_____	8	_____	84 ⁽⁴⁾	2,000 ⁽⁵⁾
<u>Fence Repair</u>						Lump Sum	1,200
<u>Cell Cover Repair</u>						Lump Sum	1,000
<u>Environmental Consultant</u>	2					22 ⁽⁶⁾	1,600 ⁽⁷⁾
						Total	\$7,600/yr

Note: To cover \$7,300 per year costs, a cash bond with a 2 percent yield would be required in the amount of \$365,000.

**Attachment 1
Final Cost Summary
Decommissioning Funding Plan
Fansteel, Inc.
Muskogee, Oklahoma
February 2001**

	Item	Table No.	Cost
1.	Planning and Preparation	1	\$433,340
		2	
2.	Decontamination and/or Dismantling of Radioactive Facility Components	3	\$437,400
		4	\$106,050
3.	Packaging, Shipping, and Disposal of Radioactive Wastes	5	\$12,500
		6	\$9,000
		7	\$2,428,360
4.	Restoration of Contaminated Areas on Facility Grounds	8	\$67,400
5.	Final Radiation Survey	9	\$124,120
6.	Site Stabilization & Long-Term Surveillance	10	\$365,000
	Total Decommissioning Fund Cost		\$3,983,170
	Letter of Credit (LOC) Amount		\$4,456,460
	Difference (LOC-Total)		\$473,290
	Contingency (Difference ÷ Total)		11.88%
	Total Decommissioning Fund Cost - 2000		\$3,962,678
	Total Decommissioning Fund Cost - 2001		\$3,983,170
	Percentage Difference		0.52%

**Attachment 2
Table 2A
Decommissioning Funding Plan
Fansteel, Inc.
Muskogee, Oklahoma
February 2001**

Table 2A

<u>Position</u>	<u>Basic Salary (\$/hour)</u>	<u>Overhead Rate (%)</u>	<u>Worker Cost/Hour</u>
Supervisor	40	50	60
Foreman	30	50	45
Health Physicist/PRSO	37	35	50
Laborer	14	35	20
Clerical	14	35	20
Health Physicist	45	67	75
Rad Technician	29	35	40

Note: Table 2A is a combination of local contractor and Fansteel rates applied to the actual effort involved in implementing the Decommissioning Plan.

Attachment 3
Footnotes to Cost Estimating Tables
Decommissioning Funding Plan
Fansteel Inc.
Muskogee, Oklahoma
February 2001

Page F-1

- (1) Includes 240 Technical man-hours.
- (2) Includes 80 Technical man-hours.
- (3) Includes 380 Technical man-hours.
- (4) Will use self-owned, in-house equipment except for mixing unit.
- (5) Includes 160 Laborer man-hours and 40 PRSO man-hours (see attached Table 2A for rates).
- (6) Includes 1600 Technician man-hours and 160 PRSO man-hours (see attached Table 2A for rates).
- (7) Includes 160 Clerical man-hours using Table 2A rates (attached) and 480 Clerical man-hours using Table 2 rates.
- (8) Includes 720 Technical man-hours and 160 Administrative Supervisor man-hours.
- (9) Includes Environmental Assessment preparation which includes a lump sum estimate for Regulatory Agency costs.

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- (1) Rates developed in Table 2 are a combination of contractor rates and in-house Fansteel personnel rates used in building the costs in Table 1 (Planning). Table 2A (attached) shows the local contractor rates and Fansteel rates applied to the actual effort involved in implementing the technical plan. It is used in all other tables except where noted.
- (2) See attached Table 2A for labor rates used in Table 3.
- (3) Includes 320 Clerical man-hours.
- (4) Includes 40 Clerical man-hours.

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- (1) Includes 40 Clerical man-hours.
- (2) Includes 480 Clerical man-hours.

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- (1) Includes 200 Clerical man-hours.
- (2) Includes Ground Water Treatment Plant operation for 17 years after reprocessing operation ceases.
- (3) Includes laboratory analysis.

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- (1) See attached Table 2A for labor rates used in Table 8.
- (2) Includes 800 Laborer man-hours, 80 Technical man-hours, and \$35,000 for backfill materials.
- (3) See Table 2 for labor rates used in Table 9.
- (4) Includes 1280 Technical man-hours.
- (5) Includes laboratory analysis.

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- (1) Includes 2 Technician man-hours. See attached Table 2A for labor rates.
- (2) Includes ground water analysis (semiannual event).
- (3) See Table 2 for labor rates (semiannual event).
- (4) Includes 72 Laborer man-hours (quarterly event).
- (5) See attached Table 2A for labor rates.
- (6) Includes 20 Technical man-hours.
- (7) See Table 2 for labor rates.