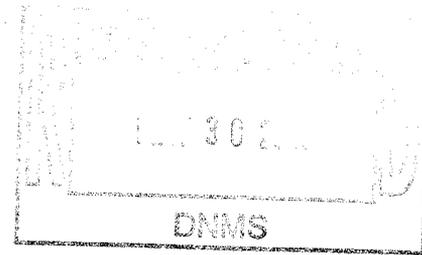


Fansteel Inc.

number ten tantalum place muskogee, oklahoma 74403-9297
(918) 687-6303 Fax: (918) 687-6112



May 26, 2000

Dwight D. Chamberlain, Director
Division of Nuclear Materials Safety
Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive, Suite 400
Arlington, Texas 76011-8064

Dear Mr. Chamberlain,

Please find attached information regarding the NRC INSPECTION REPORT 040-7580/00-01, dated May 2, 2000, conducted for Fansteel's Muskogee, OK site.

This information hopefully will provide necessary documentation for the NRC to make determinations with regard to Fansteel's items identified in the May 2nd inspection report. It is Fansteel's intent to acknowledge these findings and take the appropriate actions to bring all matters to closure with the mutual understanding and agreement with the NRC. In addition, it is our hope that this information will provide the necessary path for the NRC to have a clear understanding of Fansteel's current site status as well as serve as a benchmark for any future discussion points as we progress towards full operation of the metals recovery process.

It is our expectation that this information should serve as a precursor, for your review, for the upcoming meeting scheduled for May 31, 2000 at NRC's Arlington, Texas Office. Hopefully, this information will provide the necessary insight into Fansteel's position concerning the inspection issues and set precedent for future operations. Please be assured that our definition of "successful" holds the highest regard to both radiation and chemical process safety. We fully intend to create a working facility that meets the NRC's expectations for a "safe" operation.

Please review this information and if you have questions please contact me or Monty Mooring at 918.687.6303.

Sincerely,

A. Fred Dohmann

Cc: Mike Mocniak
Monty Mooring
James Burgess
Louis Carson
file

SEPARATOR SHEET

Fansteel

Inc.

number ten tantalum place muskogee, oklahoma 74403-9297
(918) 687-6303 Fax: (918) 687-6112

May 26, 2000

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn: Document Control Desk

Re: Fansteel, Inc. – Muskogee, Oklahoma
License No. SMB 911
“Reply to Notice of Violation”

Response to notice of violation:

The following is a response to the Notice of Violation dated May 2, 2000 regarding operation of the groundwater treatment system.

Reason for the activities in question:

The groundwater collection system was included as part of the decommissioning plan in order to capture impacted groundwater before it leaves the site. Gas fired evaporators were included as part of the design. This feature was described in the decommissioning plan, which contemplated that captured groundwater would be evaporated and any solids remaining would be mixed with the process feed streams. This material would become part of the process feed stream and eventually be processed during the next ten years as part of the processing plant.

Rather than evaporating the groundwater and then processing the sludge through the lime slaker on the wastewater treatment system, the captured groundwater was processed through the lime slaker, without first evaporating the water, and placed in process feed streams. All solid residue of the groundwater is deposited in process feed streams, whether or not the evaporators are operated.

Although the decommissioning plan contemplates operation of the evaporators, it also contemplates that these evaporators may not operate at all times. In that event the groundwater would necessarily require treatment without evaporation. The groundwater from the collection

trench was processed in the same fashion as the groundwater formerly collected by the french drain around Pond 3 which is now collected by the new interceptor trench. Eliminating use of the evaporators is consistent with historic practice.

Corrective Action:

On March 3, 2000, Fansteel initiated the unit operation of evaporation within the groundwater treatment system.

Corrective Action to avoid reoccurrence:

Section 2.1.2.9 of the Decommissioning Plan states that as information is developed during the decommissioning activities and commercial reprocessing of ore residues, calcium fluoride residues and wastewater treatment residues ("WIP residues"), the relative importance of various tasks identified with the decommissioning plan may be altered. Entire new tasks may be added and some may be eliminated in their entirety. As changes are made to the decommissioning plan, Fansteel will submit revised pages to the NRC for review and comment.

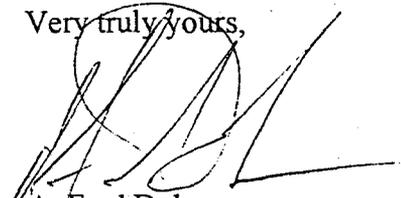
Fansteel will modify Section 2.1.2.8.2 to reflect operating conditions, which would provide for flexibility in operation of the evaporators and groundwater treatment system.

Date of Compliance:

Fansteel is now in full compliance with current license and decommissioning plan activities noted in this violation effective May 3, 2000.

In conclusion, Fansteel believes that the non-operation of the evaporators did not jeopardize the safety of plant personnel or adversely affected the environment in any manner. Fansteel hopes the information provided is sufficient in addressing the Notice of Violation identified in the inspection report. Should you have any questions concerning this response, please contact me or Monty Mooring, Radiation Safety Officer, at (918) 687-6303.

Very truly yours,



A. Fred Dohmann
General Manager

Cc: Mike Mocniak
Monty Mooring
James Burgess
Louis Carson
file

SEPARATOR SHEET

Re: URI and Followup items

Unresolved Issues:

- 1) The following information is provided as a response to the two URIs identified in the inspection report issued May 2nd of 2000.
 - See attachment #3 for explanation of issues involving URI 40-7580/0001

Follow-up Items:

- 1) The following responses are developed to close the followup items listed in the incident report issues May 2nd of 2000.
 - During the March 17th inspection, supporting documentation that identified the corrective actions had been completed following the incident of June 1st of 1999. In addition, Fansteel's management has reviewed the requirements of 40.60 reporting on several occasions following the NOV response submittal (see attachment #2); however, the issue was only formally referenced once following the response submittal.

(The intent of the commitment was that Fansteel's management would be aware of 40.60 reporting requirements following the reporting requirement failure and Fansteel believes we have satisfied this requirement.)
 - The memo structured for management on the 40.60 reporting requirement dubbed as an emergency response memo. This document was observed during the inspection. This memo prompts the managers to understand there is a reporting requirement in the mist of an incident (see attachment #1).

- 2) The following information is provided to close the followup item listed in the May 2nd 2000 inspection report.
 - The original groundwater treatment procedure was approved by the radiation safety committee 12/16/99. This procedure has been revised as of 3/16/00 and a copy of the coversheet is provided (see attachment #4).

- The radiation safety procedures were approved on 12/16/99.
- The procedure to develop or modify a procedure was in progress during the inspection. The procedure was finalized on 3/30/00. (see attachment #5)

SEPARATOR SHEET

Re: Attachment to follow-up response (memo to management concerning reporting 40:60 issues)

The attached memo was issued to insure that management did not over look the reporting requirements during an incident. This memo was not specific to 40:60 but does during an incident.

Emergency Response Information

Evacuations initiated by releases of hazardous materials (such as hydrofluoric acid, anhydrous ammonia or sulfuric acid in excess of 100 lbs.) will require immediate reporting. Notify the Radiation Safety Officer or refer to 10 cfr 40.60 for reporting requirements involving radioactive materials.

- a) The following groups will be informed immediately

Fire Department
Local Emergency Planning Committee
ODEQ
EPA
NRC
OSHA

These groups will be notified of the incident and Fansteel's designated spokesman should be prepared to discuss information on the incident attached checklist.

Emergency Contact Information and
Critical Fansteel Phone Numbers

Service	Location	Telephone No.
Emergency Contacts		
Police, Fire, Ambulance	Muskogee, OK	911
Hospital	Muskogee Regional Medical Center 300 Rockefeller Drive Muskogee, OK 74401-5075	(918) 682-5501
Poison Control	Poison Information Center Oklahoma City, OK	(800) 764-7661 (800) 522-4611
Local Emergency Planning Committee	Muskogee County LEPC P.O. Box 2274 Muskogee, OK 74402	(918) 682-2551 or (918) 682-6021
State Emergency Response Commission	Oklahoma Civil Emergency Management Department P.O. Box 53365 Oklahoma City, OK 73152	(405) 521-2481
Oklahoma Department of Health	Oklahoma City, OK	(405) 271-5600
Oklahoma State Department of Environmental Quality Spill Hotline	P.O. Box 1677 Oklahoma City, OK 73101	(800) 522-0206
National Spill Response Center	c/o U.S. Coast Guard 2100 2 nd St. SW-Room 2611 Washington, DC 20593-0001	(800) 424-8802
EPA Emergency Response	USEPA Region 6 Emergency Response Bureau 1445 Ross Avenue Dallas, TX 75202	(214) 665-2222
Federal Emergency Response	National Response Center c/o United States Coast Guard 2100 2 nd Street, SW-Room 2611 Washington, DC 20593-0001	(800) 424-8802
Nuclear Regulatory Commission Operations Center	Immediate Notification Hotline	(301) 816-5100 or (301) 951-0550
Nuclear Regulatory Commission Region IV	611 Ryan Plaza Drive Suite 400 Arlington, TX 76011	(708) 829-9500
CHEMTREC	Emergency Response Information	(800) 424-9300
U.S. Coast Guard District 8 (24 Hour Command Center)	Hale Boggs Federal Building 501 Magazine St. Rm. 1340A New Orleans, LA 70130-3396	(504) 589-6225
U.S. Army Corps of Engineers	Highway 69 Muskogee, OK, 74402	(918) 687-6091

Service	Location	Telephone No.
County Commissioner Dexter Payne	Muskogee County Commission Chair P.O. Box 2307 Muskogee, OK 74402	(918) 682-9601
Mayor, City of Muskogee Jim Bushnell	Muskogee City Hall 229 W. Okmulgee St. Muskogee, OK 74402	(918) 682-6602
Waste Management Consultants		
Earth Sciences Consultants (Radiation Safety Officer)	Keith J. Mahosky One Triangle Lane Export, PA 15632	(724) 733-3000 or (724) 527-0859
Earth Sciences Consultants (Health and Safety Officer)	Donna L. Wilson One Triangle Lane Export, PA 15632	(724) 733-3000 or (724) 850-0557
Applied Health Physics	2986 Industrial Boulevard Bethel Park, PA 15102	(412) 835-9555
Chem-Nuclear Services, Inc.	140 Stoneridge Drive Columbia, SC 29210	(803) 256-0450
Envirocare of Utah, Inc.	46 West Broadway, Suite 240 Salt Lake City, UT 84101	(801) 532-1330
Scientific Ecology Group, Inc.	P.O. Box 2530 Oak Ridge, TN 37831-2530	(615) 376-8206
Remediation Contractors		
AWS Remediation, Inc.	One Triangle Lane Export, PA 15632	(724) 733-1009
ALARON Corporation	Northwest Regional Service Facility R.D. 2, Box 2140A Wampum, PA 16157	(412) 535-5777
Applied Radiological Control, Inc. (ARC)	500 Chastain Center Boulevard, Suite 545 Kennesaw, GA 30144-5559	(404) 429-1188 or (800) 241-6575
B & W Nuclear Environmental Services, Inc.	2220 Langhorne Road Lynchburg, VA 24501	(804) 948-4601 or (800) 442-1223
Disposal Solutions, Inc.	P.O. Box 2828 Sherman, TX 75091	(800) 544-1313
Radiation Safety Associates, Inc. (RSA)	19 Pendleton Drive, P.O. Box 107 Hebron, CT 06428	(203) 228-0487
Scientific Ecology Group (SEG)	1560 Bear Creek Road Oak Ridge, TN 37830	(615) 481-0222
Analytical Laboratories		
Accu-Labs Research, Inc.	4663 Table Mountain Drive Golden, CO 80403	(303) 277-9514
Applied Radiological Control, Inc. (ARC)	500 Chastain Center Boulevard, Suite 545 Kennesaw, GA 30144-5559	(404) 429-1188 or (800) 241-6575
B & W Nuclear Environmental Services, Inc.	2220 Langhorne Road Lynchburg, VA 24501	(804) 948-4601 or (800) 442-1223

Service	Location	Telephone No.
NUS Laboratories	Campbells Run Road Pittsburgh, PA 15205	(412) 747-2555
RSA Laboratories, Inc.	19 Pendleton Drive, P.O. Box 61 Hebron, CT 06428	(203) 228-0721
Fansteel Personnel Phone Numbers		
Plant Safety Director	Monty Mooring Number Ten Tantalum Place Muskogee, OK 74401	(918) 687-6303 or (918) 775-2123
Operations Manager	Charles Pettit Number Ten Tantalum Place Muskogee, OK 74401	(918) 687-6303 or (918) 748-9239
Plant Radiation Safety Officer	James Burgess Number Ten Tantalum Place Muskogee, OK 74401	(918) 687-6303 or (918) 458-0031
Fansteel Site General Manager	John Hunter Number Ten Tantalum Place Muskogee, OK 74401	(918) 687-6303 or (918) 682-0242
Crew Leader		

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OSHA

1-800-321-6742

Dennis LaPoint [Acting Site GM]

Cell Phone - (919) 949-2913

Home Phone - (919) 968-8871

Accident Notification Checklist

- Oklahoma Department of Environmental Quality (OKDEQ)
1000 N. E. 10th St.
Oklahoma City, OK 73117-1221
(405) 271-8056
- Nuclear Regulatory Commission Operations Center (Immediate Notification Hotline)
Main Telephone: (301) 816-5100
Backup Telephone: (301) 951-0550
- Muskogee County Emergency Planning Commission
P.O. Box 2274
Muskogee, Oklahoma 74402
Telephone: (918) 682-6021
- U.S. Environmental Protection Agency National Response Center
Washington, DC
Telephone: (800) 424-8802 (24-hour answering)
- Federal Emergency Management Agency Region VI
Federal Regional Center
800 North Loop 288
Denton, TX 76201-3698
Telephone: (940) 898-5104
- U.S. Nuclear Regulatory Commission Region IV
611 Ryan Plaza Drive Suite 400
Arlington, TX 76011
(708) 829-9500

INCIDENT CHECKLIST

DATE: _____ TIME: _____

COMPANY SPOKESMAN: _____

TYPE OF INCIDENT: (Check one)

- Spill/Release of Radioactive Material
- Detection of Radioactivity in Non-Process Area
- Personal Contamination
- Detection of Radiation in Outfall Water
- Detection of Radiation in Perimeter Air Samples

EXTENT OF INJURIES (if any): _____

INCIDENT INFORMATION:

Radioactivity Measurement: _____

Specify isotope name, if known: _____

Location (building/floor/area): _____

Who was involved: _____

Time Discovered/Occurred: _____

Duration (how long did it last): _____

Source (where did it come from): _____

How much damage to facilities? (Was damage confined to company property? What damage was done to property of others?) _____

Actions Initiated (what has been done so far and who is assisting with control?): _____

Is radioactive contamination a problem? (How extensive is contamination – on-site or off-site? What is being done to control contamination?) _____

On-Scene Contact: _____ Extension: _____

HAZARD ASSESSMENT:

Weather Conditions (rain/snow/high winds): _____

Has the material reached or is there a potential to reach one or more of the following?

- Sewer Inlet
- Arkansas River
- Ground
- Property Boundary

Describe any hazards to human health or the environment inside the plant and outside the plant boundaries as a result of this incident: _____

RECORD OF AGENCY NOTIFICATIONS MADE BY RADIATION SAFETY OFFICER:

- Fire Department
- Company Spokesman
- Remediation Contractor
- Muskogee County Emergency Management Agency
- Department of Health, Bureau of Radiation Protection
- Oklahoma EPA Emergency Response Center
- National Response Center
- Nuclear Regulatory Commission
- Occupational Safety and Health Administrator
- Families of the Injured
- Employees
- Other: _____
- Other: _____

RECORD OF COMPANY SPOKESMAN NOTIFICATIONS:

	<u>TIME</u>	<u>Person Notified</u>
<u>Community Leaders</u>		
Mayor, City of Muskogee	_____	_____
<u>Radio Stations</u>		
	_____	_____
<u>Newspapers</u>		
	_____	_____

RETURN THIS FORM TO:

MANAGER, SAFETY AND SECURITY

SPOKESMAN RELEASE DATA FORM

RECORD OF COMPANY SPOKESMAN NOTIFICATION:

- Newspapers
- Radio Stations
- Television Stations

TYPE OF INCIDENT: (Check One)

- Spill/Release of Radioactive Material
- Detection of Radioactivity in Non-Process Area
- Personal Contamination
- Detection of Radiation in Outfall Water
- Detection of Radiation in Perimeter Air Samples

EXTENT OF INJURIES (names, injuries, exposure levels): _____

INCIDENT INFORMATION:

What happened? _____

When did it happen (give time and date) _____

Location (building, floor, area): _____

Who was involved? _____

How much damage to facilities? (Was damage confined to company property? What damage was done to property of others?) _____

Potential risks (radiological/chemical) _____

On-Scene Contact: _____ Extension: _____

Fansteel Inc. Incident Investigation Form		Case Number			
Release Classification		<input type="checkbox"/> Spill	<input type="checkbox"/> Fire	<input type="checkbox"/> Explosion	<input type="checkbox"/> Radiological Event
Name of Division Environmental Coordinator		Phone	Fax	Box	
Name of Investigator		Phone	Fax	Box	
Division		Department			
Date of Release		Time Release Started		Time Release Discovered	
Specific Location					
Material Involved					
Probable Source					
Amount Released (included copies of any calculations)					
<p>DESCRIPTION: How? Where? Why? What happened? Extent of any injuries. Extent of contamination. Weather conditions. Personnel who helped with cleanup. Actions taken to clean up. Hazards to human health or the environment inside or outside the plant. Include all necessary sizes, shapes, weights, distances, sewers. Use additional sheet if needed.</p>					
Root Cause of Release		<input type="checkbox"/> Human Error	<input type="checkbox"/> Act of God		
		<input type="checkbox"/> Equipment Failure	<input type="checkbox"/> Unknown		
		<input type="checkbox"/> Container Failure			
State all violations or actions that contributed to the release. (If a violation, quote the part of rule, SJP or specific instruction violated)					
Is the present procedure adequate to prevent future releases?					
What physical or mechanical conditions may have contributed to the release (such as lighting, clearances, visibility, defective equipment, layout or equipment design).					
Was the cause(s) of the release recognized or reported before the release? <input type="checkbox"/> Yes <input type="checkbox"/> No					
If yes, had anything been done about it?					

January 1999
(Rev. 0)

Name of Line Manager Assigned to Write Action Plan	Action Plan Due Date	General Manager Approval
--	----------------------	--------------------------

Line Manager's Action Plan to prevent similar occurrences

Line Manager's Signature	Line Manager's Title	Date
--------------------------	----------------------	------

PEOPLE WHO WERE INTERVIEWED

Name	Title	Date

PEOPLE WHO WERE ON THE INVESTIGATION TEAM

Name	Title

Copies to Division Manager, Division Environmental Advisor, Environmental Affairs Manager, Vice-President Operations

(2) The transferor may have in his possession a written certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct material to be transferred, specifying the license or registration certification number, issuing agency and expiration date;

(3) For emergency shipments the transferor may accept oral certification by the transferee that he is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct material to be transferred, specifying the license or registration certification number, issuing agency and expiration date: *Provided*, That the oral certification is confirmed in writing within 10 days;

(4) The transferor may obtain other sources of information compiled by a reporting service from official records of the Commission or the licensing agency of an Agreement State as to the identity of licensees and the scope and expiration dates of licenses and registrations; or

(6) When none of the methods of verification described in paragraphs (d)(1) to (4) of this section are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the Commission or the licensing agency of an Agreement State that the transferee is licensed to receive the source or byproduct material.

[45 FR 65532, Oct. 3, 1980]

RECORDS, REPORTS, AND INSPECTIONS

§ 40.60 Reporting requirements.

(a) *Immediate report.* Each licensee shall notify the NRC as soon as possible but not later than 4 hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.).

(b) *Twenty-four hour report.* Each licensee shall notify the NRC within 24 hours after the discovery of any of the following events involving licensed material:

(1) An unplanned contamination event that:

(i) Requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area;

(ii) Involves a quantity of material greater than five times the lowest annual limit on intake specified in appendix B of §§ 20.1001-20.2401 of 10 CFR part 20 for the material; and

(iii) Has access to the area restricted for a reason other than to allow isotopes with a half-life of less than 24 hours to decay prior to decontamination.

(2) An event in which equipment is disabled or fails to function as designed when:

(i) The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;

(ii) The equipment is required to be available and operable when it is disabled or fails to function; and

(iii) No redundant equipment is available and operable to perform the required safety function.

(3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

(4) An unplanned fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:

(i) The quantity of material involved is greater than five times the lowest annual limit on intake specified in appendix B of §§ 20.1001-20.2401 of 10 CFR part 20 for the material; and

(ii) The damage affects the integrity of the licensed material or its container.

(c) *Preparation and submission of reports.* Reports made by licensees in response to the requirements of this section must be made as follows:

(1) Licensees shall make reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center.¹ To the extent that the information is available at the time of notification, the information provided in these reports must include:

(i) The caller's name and call back telephone number;

(ii) A description of the event, including date and time;

(iii) The exact location of the event;

(iv) The isotopes, quantities, and chemical and physical form of the licensed material involved; and

(v) Any personnel radiation exposure data available.

(2) *Written report.* Each licensee who makes a report required by paragraph (a) or (b) of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the U.S. Nuclear Regulatory Commission, Document Control Desk, Washington, DC 20555, with a copy to the appropriate NRC regional office listed in appendix D of 10 CFR part 20. The reports must include the following:

(i) A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

(ii) The exact location of the event;

(iii) The isotopes, quantities, and chemical and physical form of the licensed material involved;

(iv) Date and time of the event;

(v) Corrective actions taken or planned and the results of any evaluations or assessments; and

(vi) The extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

¹The commercial telephone number for the NRC Operations Center is (301) 816-5100.

(3) The provisions of § 40.60 do not apply to licensees subject to the notification requirements in § 50.72. They do apply to those part 50 licensees possessing material licensed under part 40 who are not subject to the notification requirements in § 50.72.

[56 FR 40768, Aug. 16, 1991, as amended at 59 FR 14086, Mar. 25, 1994]

§ 40.61 Records.

(a) Each person who receives source or byproduct material pursuant to a license issued pursuant to the regulations in this part shall keep records showing the receipt, transfer, and disposal of this source or byproduct material as follows:

(1) The licensee shall retain each record of receipt of source or byproduct material as long as the material is possessed and for three years following transfer or disposition of the source or byproduct material.

(2) The licensee who transferred the material shall retain each record of transfer or source or byproduct material until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(3) The licensee shall retain each record of disposal of source or byproduct material until the Commission terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(4) If source or byproduct material is combined or mixed with other licensed material and subsequently treated in a manner that makes direct correlation of a receipt record with a transfer, export, or disposition record impossible, the licensee may use evaluative techniques (such as first-in-first-out), to make the records that are required by this Part account for 100 percent of the material received.

(b) The licensee shall retain each record that is required by the regulations in this part or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, each record must be maintained until the Commission terminates the license that authorizes the

SEPARATOR SHEET

Attachment #2

Re: Attachment to follow-up response (RSC minutes discussing 40:60 reporting requirements)

The tomado incident took place on June 1st of 1999. The attachment contains Radiation Safety Committee minutes in which the 40:60 reporting requirements were reviewed by the committee.

RADIATION SAFETY MEETING: JUNE 8, 1999

SUBJECT: REPORTING OF THE SPILL SOD. REDUCTION
TORANADO

PERSONS IN ATTENDANCE: J. BURGESS, J. RICHARDS, J.
HUNTER, C. PETTIT.

10 CFR 40.60 IS ABOUT RECORDS REPORTS AND
INSPECTIONS.

PARAGRAPH (1) IS ABOUT AN UNPLANNED CONTAMINATION
EVENT THAT (I) REQUIRES ACES TO THE CONTAMINATED
AREA, BY WORKERS OR THE PUBLIC, TO BE RESTRICTED FOR
MORE THAN 24 HOURS BY IMPOSING ADDITIONAL
RADIOLOGICAL CONTROLS OR BY PROHIBITING ENTRY INTO
THE AREA: FANSTEELS PERSONELL WENT INTO THE AREA
WITHIN 24 HOURS TO CLEAN UP THE AREA AND 16 HOURS
OF WORK HAD THE AREA CLEANED UP.

CONCENSUS OF THE COMMITTEE IS THAT IT IS NOT
REPORTABLE FOR EACH ITEM LISTED.

- 3) I have had some employee complaints of skin on their feet being irritated. These employees have both been spending the majority of their time in the cryolite production area.
- 4) Employees are still having trouble finding safety equipment. During the shutdown I expect the demand for this equipment to increase. Any employee not wearing the proper PPE for a given job will be disciplined appropriately. The excuse of not being able to find the proper PPE will be unacceptable.
- 5) Drum and container labeling
- 6) Designate a floor wash-down two days a week. I need the days identified.

hold 3

**Radiation Safety Committee Meeting
October 29, 1999**

Items of discussion:

- 1) On November the 3rd, Leslie, Louis and Susan Woods will be in to tour our facility. In addition to looking around, Louis wants to discuss the unresolved issues that have been identified.
 - 1) Container labeling of the bags in Sodium Reduction
 - 2) The DAC issue of Action Limit being greater than the true DAC limit.
 - 3) Reporting requirements for the tornado incident.
- 2) All process changes and temporary operating procedures need to be okayed by the RSC. Industry standard is as follows:
 - 1) Process change is thought of and then passed to the RSC to be okayed. (this gives each expert in his field and opportunity to evaluate the change from their perspective.
 - 2) After the change has been okayed, the change will be implemented via operating procedures, employee training and physical process change.

The tasks that are accomplished by handling the process change in this manner are, number one: viewpoints from each area of expertise have an opportunity to identify deficiencies, two: problems that may arrive prior to or after the changes can be analyzed. Three: regulatory and safety issues can be properly identified.

RADIATION SAFETY COMMITTEE MEETING

8/20/99

1. John – opened giving an update on issues that are pending NRC approval.
 - Decon plan for plant following process completion.
 - Amendment of license to place Monty Mooring as PRSO. This will go in with the next amendment sent.
 - Training for phase two following the completion of phase one start-up.
2. Monty – review of the incident reports was done.
 - John – asked that we use the safety meetings to review these issues with the employees.
 - Monty – follow-up RSM issue, should there be different levels of incidents. It was decided that there would be no difference.
3. Monty – opened the issue of required training that has not been completed yet.
 - New shift worker training, fork truck training, and fire extinguisher training.
 - It was also identified that we have two new employees that require HAZWHOPER.
4. Set a date for internal audit
 - ~ late September
5. Monty – let everyone know I spoke with Louis Carson. He will look at unresolved issues.
 - Labeling of bags in sodium reduction.
 - Personal air sampler DAC numbers.
 - Reporting of sodium reduction spill.
 - John asked to have a composite of samples from re-bagged material at sodium reduction spill. Analyze it for U, Th, K40, & Th232.
6. Ray – place signs or cones around chemical unloading area during unloading. This was agreed.
7. Monty – safety tools and safety equipment need to be stored in the safety cage. Supervisors will be required to maintain logging the equipment in and out.

Attendees: John Hunter James Burgess
 Gary Richards Monty Mooring
 Chip Pettit Tim Lawrence
 Ray Spradling

Radiation Safety Committee
January 13, 2000

[Agenda]

- 1) Quarterly Trend analysis:
 - TLD
 - Personal monitoring
 - Area monitoring
 - Perimeter monitoring
 - Bioassay monitoring
 - Surface contamination
- 2) Incident reports review:
- 3) Process Changes or Procedural changes:
- 4) Plant suggestions:
 - a) A fixed ladder or a chain driven valve that would allow the operators to close the manual sulfuric valve in emergency situations.
 - b) The dumping of the cyclone dust is creating a lot of dust the way its being accomplished. Also dumping these drums on the side of the ponds create a potential hazard.
 - 1) Fork truck could potentially slide into the pond.
 - 2) The material is being poured on the edge of the pond bankSuggested fix: Design a lid that would allow us to flood the drums with water. A structured dumping area should be designed for dumping materials into the pond.
 - c) Operators have ask that a stationary ladder for accessing boiler steam shut off be installed for emergency situations.
- 5) We are currently looking for a tagging board that will help identify personnel that are in the plant specifically for emergency situations.
- 6) Statues of NOV and Licenses Amendment — *included review of 40.60 violation.*
- 7) Open for questions or general discussion

Radiation Safety Meeting

May 26, 2000

From: Safety Department

Attendees: Fred Dohmann, Monty Mooring, Tim Lawrance, James Burgess

I. Review of last safety meeting:

II. Reason for Meeting(discussion)

Monty - NRC reporting requirements 40:60

Monty - Make management aware of the reporting responsibilities under 40:60 and the emergency response memo structured for management's quick reference.

Fred - Fred suggested that the phone numbers on the response list be changed to match job titles.

III. New issues:

IV. Job delegation:

Monty - Change job titles on list and add Fred Dohmann

SEPARATOR SHEET

Re: Explanation of caustic scrubber failure

Fansteel has conducted an investigation of the incident that occurred on February 12, 2000, where two workers were exposed to hydrogen fluoride and concludes that this incident did not affect the safety of licensed radioactive materials.

The incident did not involve a radioactive material hazard, because it occurred in the cryolite system where only non-radioactive materials are handled. This system is not located near the part of the process where radioactive materials are processed and is not directly connected to that part of the process. An indirect connection exists between the cryolite system and the systems handling radioactive material via their vessel offgas venting systems. The tanks in the cryolite system contain non-radioactive materials, and they are kept under negative pressure by a vessel offgas venting system (the "Cryolite caustic scrubber"). This caustic scrubber joins another offgas system which vents equipment that handles radioactive material. This second offgas venting system (the "HF scrubber") draws hydrogen fluoride gas off of the calciner which may also contain particles of radioactive material. (The calciner does not operate at temperatures high enough to volatilize the radioactive materials.) The HF offgas passes through an HF scrubber, after which, it joins with offgas from the cryolite offgas venting system. The combined offgas streams pass through a caustic scrubber prior to release to the atmosphere. There is a fan on the HF offgas venting system and another fan on the combined offgas system. At the time of the incident, an obstruction in the caustic scrubber rendered the scrubber partially operational. This allowed the HF scrubber blower to overcome the caustic scrubber's draw capability, and HF gas entered the cryolite offgas venting system. Because of the low particulate loading in the HF offgas (especially after the water scrubber) and the lengthy pipe run between the offgas system and the cryolite system where the HF release occurred, it is not believed that any particulate radioactive material was involved in the incident.

In addition, the incident did not create any plant conditions which would have reduced the level of radiation safety. The incident involved only a chemical hazard, which was limited to the immediate vicinity of the release. This area was in a non-radioactive system and no radioactive materials were nearby. The chemical release did not threaten any portion of the plant where radioactive materials were present. Furthermore, the workers who were affected had no responsibilities for radiation

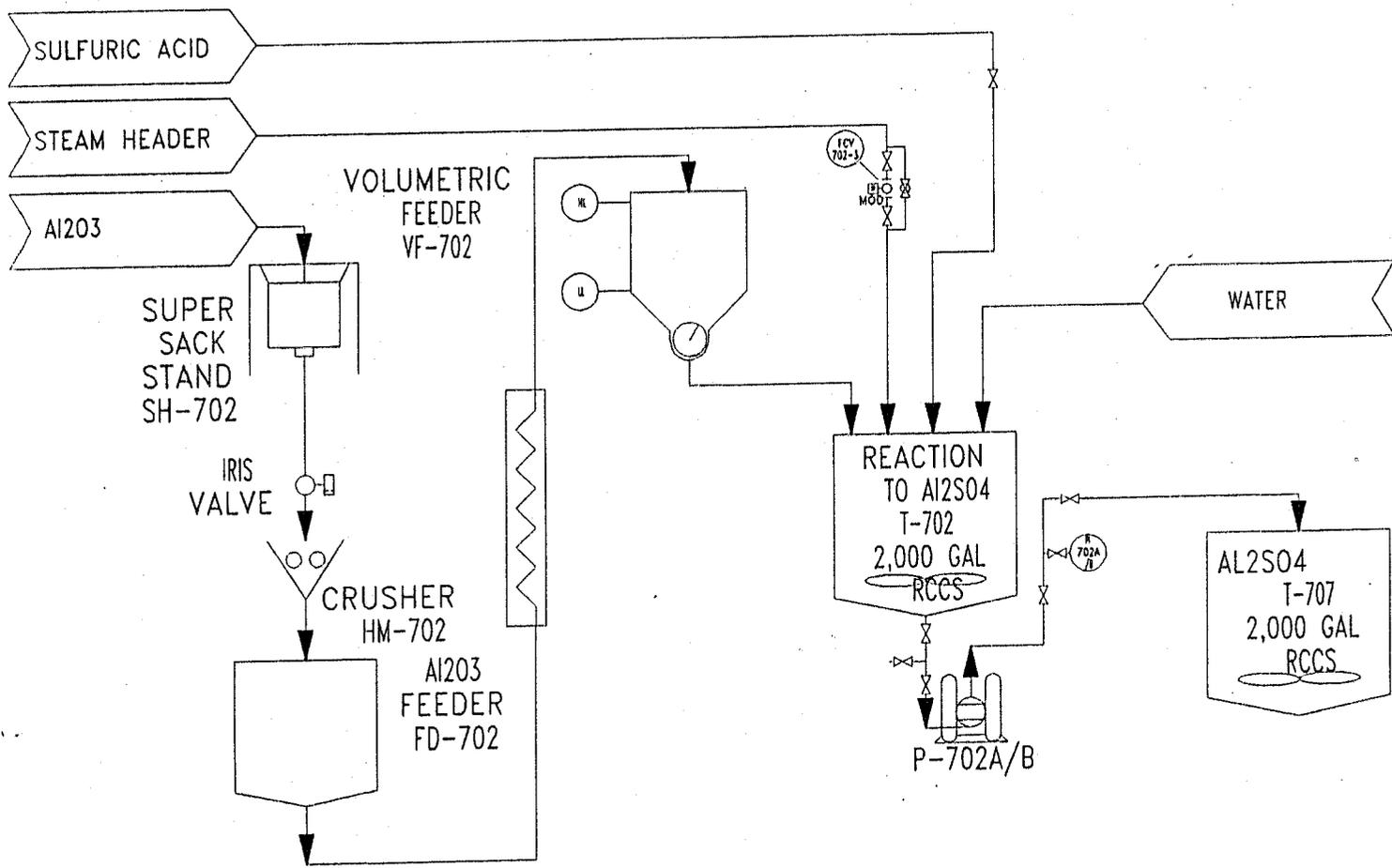
safety (i.e., they were not responsible for monitoring or operating any systems related to radiological safety).

Because the incident did not involve or impact any radioactive materials or interfere with radiological safety activities, we conclude that there was no effect on the safety of licensed radioactive material.

SEPARATOR SHEET

Re: Tank 702 inputs

The following diagram is provided as an explanation of the inputs into tank 702.



SEPARATOR SHEET

PROCEDURE COVER SHEET

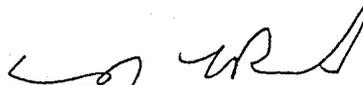
Utilities and Mining- Phase 1

Procedure Title:

SECTION 5.0 – Groundwater recovery

5.0 – Groundwater recovery

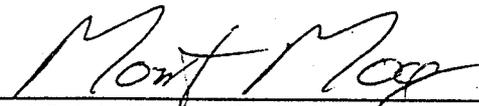
RADIATION SAFETY COMMITTEE APPROVALS



 Site General Manager (SGM)

03/16/00

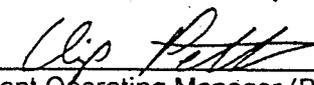
 Date



 Plant Safety Director/Radiation Safety Officer (PSD/PRSO)

3/16/00

 Date



 Plant Operating Manager (POM)

3/16/00

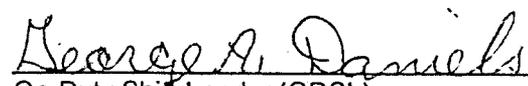
 Date



 Plant Operating Manager (POM) utilities/mining

3/16/00

 Date



 On-Duty Shift Leader (ODSL)

3/16/00

 Date

Rev.	Date:	Description	Approvals		
			SGM	PRSO	POM
A	5-2-00	See Attached.			
B					
C					
D					

PROCEDURE COVER SHEET

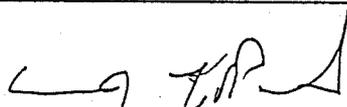
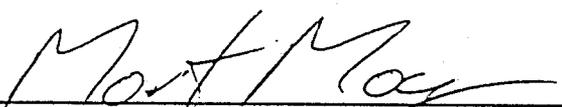
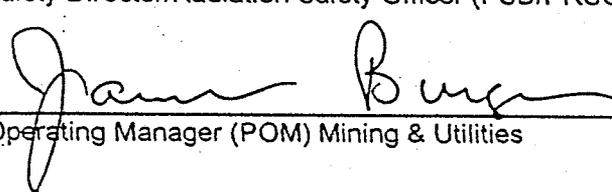
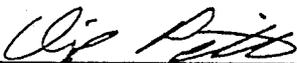
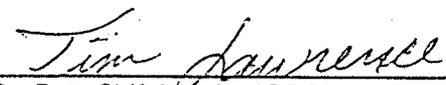
WIP/CaF2 Processing Plant - Phase 1

Procedure Title:

SECTION 0017- Safety Procedure

0017 Health & Safety Procedural Development or Modifications

RADIATION SAFETY COMMITTEE APPROVALS

	03/30/00
Site General Manager (SGM)	Date
	3/30/00
Plant Safety Director/Radiation Safety Officer (PSD/PRSO)	Date
	3/30/00
Plant Operating Manager (POM) Mining & Utilities	Date
	3/30/00
Plant Operating Manager (POM) Process	Date
	3-30-00
On-Duty Shift Leader (ODSL)	Date

Rev.	Date:	Description	Approvals		
			SGM	PRSO	POM
A					
B					
C					
D					

0017 Health & Safety Procedure Devlp or Mod

03/29/00