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December 29, 1999
Project No. 3789ZL-01

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

Submittal of Draft Outline
for an Applicant's Environmental Report
(TAC No. L31216)

Dear Mr. Emeigh:

Fansteel Inc. (Fansteel) has prepared the enclosed draft Applicant's Environmental Report (AER) outline for its restricted release Containment Cell Decommissioning Plan for the Muskogee, Oklahoma site. This AER outline was prepared in response to your December 14, 1999 request for an environmental report pursuant to 10 Code of Federal Regulations (CFR) §51.60(b)(5) and §51.45. Fansteel wishes to use this submittal as the focus of discussion during our meeting with your staff in January.

We believe this §51.45 AER outline is responsive to your information needs relating to preparation of an environmental impact statement (EIS) since it captures most of the subject matter specified in Appendix A to Subpart A of 10 CFR 51. However, information that is unique to an EIS was omitted from the AER outline. We intend to rely on published guidance such as Department of Energy's *EIS Checklist* during preparation of the AER and anticipate receiving further regulatory guidance from your staff (e.g., applicability of the draft Standard Review Plan being prepared for the Part 70 rulemaking).

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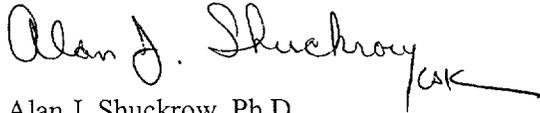
Mr. Charles Emeigh

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We look forward to meeting with you and your staff next month to discuss this important matter. If you have any questions, please contact Mr. John J. Hunter at (918) 687-6303 or me at (724) 733-3000.

Sincerely,

Handwritten signature of Alan J. Shuckrow in cursive, with a horizontal line extending from the end of the signature.

Alan J. Shuckrow, Ph.D.
Senior Engineer

AJS:cak

Enclosure

cc: H. Astwood, NRC
J. Hunter, Fansteel
Document Room, NRC

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Fansteel Muskogee, Oklahoma Facility (TAC L31216)
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Cover Sheet
Summary
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Appendices

Chapter 1 **Purpose and Need for Action**

The statement of purpose will demonstrate the need for the proposed project:

The purpose and need for the proposed action is to decommission the Fansteel Muskogee facility under restricted release conditions to permit termination of its materials license.

A fundamental objective of this ER is to provide sufficient information to facilitate a NRC determination as to whether or not the adverse environmental impacts of decommissioning are so great that license termination would be unreasonable. A description of the Decommissioning Plan (DP) will be included as well as a historical synopsis of operations at the Muskogee site, including interfaces between the restricted and unrestricted release portions of the site.

Chapter 2 **Proposed Action and Alternatives**

Description of the Proposed Action

The summary of the proposed action includes a brief description of the significant characteristics of the containment cell (CC), including the major site features and CC design and operating parameters. The description includes a complete discussion about how radioactive material will be processed including a proposed project schedule showing the dates for initiation of CC preparation, construction, closure, and institutional controls.

Description of Alternatives

Reasonable alternatives include those that are practical or feasible from a common sense, technical, and economic standpoint. The number of reasonable alternatives considered in detail represent the full spectrum of alternatives for meeting Fansteel's purpose and need. Currently, the alternatives to the proposed action for managing WIP and soil-like residues are:

- Onsite protected storage.
- Package and transfer for disposal offsite at a 10 CFR 61 licensed land disposal facility.

- Onsite *in situ* storage (the No Action alternative).

These alternatives will be described in sufficient detail to permit an analysis of impacts in Chapter 4. The no action alternative provides an environmental baseline against which impacts of the proposed action (and alternatives) can be compared. The no action alternative may or may not be considered a reasonable alternative and may not satisfy the underlying purpose and need for Fansteel's action. Nonetheless, the no action alternative will be described in sufficient detail so that its scope is clear and its potential impacts can be identified.

Chapter 3 **Affected Environment**

The information in this chapter is intended to allow the reviewer to understand the overall character of the Muskogee site and the local/regional environment. This chapter will describe the site's setting and the environment affected and as such lay the foundation for evaluating the potential environmental impacts of the proposed action and analyzed alternatives. The description will give particular attention to information that is necessary to assess or understand the impacts discussed in Chapter 4. The 15 topical areas in this chapter are listed below.

3.1 LAND USE AND OWNERSHIP

3.1.1 Site Description

- Site location: State, county, latitude and longitude Universal Transverse Mercator (UTM) coordinates, township, range, and sections.
- A map of the site showing site boundaries; exclusion area; site structures and facilities; major land uses (with land use classifications consistent with the USGS categories); and transportation routes adjacent to the site.

3.1.2 Regional Land Use and Ownership

- A map or maps of the site vicinity within about a 10-km (6-mi) radius of the site showing county and local municipality boundaries; place names; residential areas; airports; industrial and commercial facilities; roads; railroads; major land uses (with land use classifications consistent with the USGS categories); utility rights-of-way; rivers; other bodies of water; wetlands; trust lands; historic sites; archaeological sites; Native American lands; military reservations; and designated Federal, State, and local parks and natural areas.
- A map of the region within about an 80-km (50-mi) radius of the site showing major civil divisions; highways; transmission corridors serving the plant; rivers; other bodies of water; Native American lands; military reservations; designated Federal, State, and local parks and natural areas and nonattainment and maintenance areas defined under the Clean Air Act.

3.2 AIR QUALITY AND CLIMATE

3.2.1 Air Quality

3.2.2 Climate

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 - 3.5.2 Wildlife
 - 3.5.3 Special Status Species
 - Critical and important terrestrial (plant and animal) habitat that may be disturbed by decommissioning activities. Critical habitat are listed and described in 50 CFR 17.95 (fish and wildlife) and 17.96 (plants).
 - Threatened or endangered and special concern species identified on the site or within the site vicinity. These species include those:
 - listed at 50 CFR 17.11 (fish and wildlife) or 50 CFR 17.12 (plants)
 - listed as a threatened, endangered, or other species of concern by the State of Oklahoma.
 - proposed for listing, or are current candidates for the listing in the *Federal Register*.
 - 3.5.4 Wetlands
- 3.6 CULTURAL RESOURCES
- 3.6.1 Archaeological and Historic Resources
 - 3.6.2 Native American Interests
- 3.7 SOCIOECONOMICS
- 3.7.1 Population
 - Regional demography, based on the most current (updated) U.S. Census data: population by city, town, and county for those jurisdictions lying fully or partially within 80 km (50 mi) of the site.
 - 3.7.2 Employment
 - Information related to the area's economic base, including construction industry and construction labor force, total regional labor force, unemployment levels, and future economic outlook.
 - 3.7.3 Taxes
 - Regional tax structure and distribution of the present revenues to each jurisdiction and district.
 - 3.7.4 Housing

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- Housing information, including the sales and rental markets in the region, number and types of units, turnover and vacancy rates, and trends in additions.
 - Local plans concerning land use and zoning that are relevant to population growth, housing, and changes in land use patterns.
- 3.7.5 Public Services
- Information about the local educational system (regional primary and secondary schools and higher institutions), including capacity and present percentage of utilization.
 - Public and private recreational facilities and opportunities, including present and projected capacity and percentage of utilization.
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 - 3.13.5 Materials Management (e.g., waste minimization & P³)
- 3.14 ENVIRONMENTAL JUSTICE
- 3.14.1 Regional
 - A general description of the location of low-income and minority populations within the region surrounding the site. The description will give the percentage of the population for each minority within the region of interest and the proportion of households below the poverty line. This description

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will be accompanied by two maps that highlight the location of low-income and minority populations, respectively. These maps will be based on the most recent Census of Population, supplemented by other information if available.

3.14.2 State of Oklahoma Transportation Routes

3.15 COINCIDENT PROJECTS AND ACTIONS

3.15.1 Local

3.15.2 Regional

- Known and reasonably foreseeable Federal and non-Federal projects and other actions in the vicinity of the site that may contribute to the cumulative environmental impacts of decommissioning will be identified and described.

Chapter 4 **Environmental Consequences¹**

4.1 Proposed Action

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4.1.4 IMPACTS TO BIOLOGICAL RESOURCES

4.1.4.1 Impacts to Biological Resources From CC Construction and Closure

4.1.4.2 Impacts to Biological Resources During the Institutional Controls Phase

¹ Impacts are to be discussed in proportion to their significance. In assessing the magnitude or significance of environmental impacts, we will conform to the following general definitions of significance level in Appendix B to Subpart A of 10 CFR Part 51:

- **Small:** For the affected resource, environmental effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource. For the purposes of assessing radiological impacts, the NRC has concluded that those impacts that do not exceed permissible levels in the NRC's regulations are considered small.
- **Moderate:** For the affected resource, environmental effects are sufficient to alter noticeably, but not to destabilize, important attributes of that resource.
- **Large:** For the affected resource, environmental effects are clearly noticeable and are sufficient to destabilize important attributes of that resource.

For impacts where occurrence probability is a key consideration (i.e. accident consequences), probability is a factor in determining significance.

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4.1.16 UNAVOIDABLE ADVERSE IMPACTS; SHORT-TERM USES AND LONG-TERM PRODUCTIVITY; AND IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT TO RESOURCES

4.1.17 MITIGATION OF ADVERSE EFFECTS

When adverse environmental effects are identified, 10 CFR 51.45(c) requires consideration of alternatives available for reducing or avoiding these adverse effects. Any ongoing mitigation will be identified and the potential for additional mitigation will be discussed. Mitigation alternatives are to be considered no matter how small the adverse impact; however, the extent of the consideration should be proportional to the significance of the impact. CEQ identifies five types of mitigative actions (40 CFR 1508.20):

- Avoiding the impact altogether by not taking a certain action or parts of an action.
- Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
- Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
- Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.

² Environmental impacts, or effects, include direct effects, indirect effects, and cumulative effects. Each type of effect is to be considered in the assessment of environmental issues. Cumulative impact is defined in CEQ's 40 CFR 1508.7:

"Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Direct and indirect effects are defined in CEQ's 40 CFR 1508.8:

- (1) Direct effects, which are caused by the action and occur at the same time and place.
- (2) Indirect effects, which are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable.

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- Compensating for the impact by replacing or providing substitute resources or environments.

If no suitable mitigation measures are identified, the basis of that finding will be provided. For suitable mitigation measures, we will describe the benefits and costs of each of the measures and indicate which measures, if any, would be implemented for license termination to occur.

4.2 Offsite Disposal Alternative

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Chapter 6 **Agency Coordination**

Chapter 7 **References**

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