

PDR 40-8200

# The Cleveland-Cliffs Iron Company



P.O. Box 3140

Phone (307) 234-9133

309 N. McKinley

CASPER, WYOMING 82602

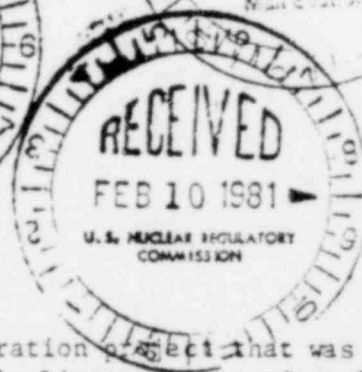
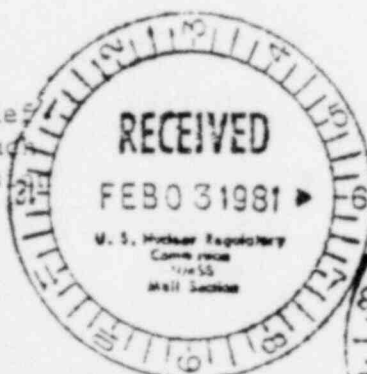
November 13, 1980

Mr. Boss A. Scarano, Branch Chief  
Uranium Recovery Licensing Branch  
U. S. Nuclear Regulatory Commission  
Washington, D. C.

Attention: Mr. Gregory Eadie

Gentlemen:

Re: Source Materials License No. SUA 1199  
Docket No. 40-8200



During the three-phase North Rolling Pin site restoration project that was authorized by Amendment No. 1 to the Source Materials License, approximately 600 gallons (eleven 55-gallon drums) of aqueous waste and one 55-gallon drum of solid waste were produced which require disposal.

The restoration project removed groundwater from the restoration zone which was impounded in an above-ground swimming pool and concentrated by solar evaporation to a volume of approximately 600 gallons. The Cleveland-Cliffs Iron Company seeks approval from the N.R.C. to dispose of this concentrated groundwater with its suspended solids and dissolved solids residue and the pool liner in a licensed uranium mill tailings impoundment.

As discussed on the telephone with Mr. Eadie, on November 10 and 17, 1980, Cliffs requests approval from the Nuclear Regulatory Commission to dispose of the twelve drums of waste in the Getty-Petrochemicals uranium mill tailings pond located at their mill in the Shirley Basin of Wyoming. Written approval from Getty-Petrochemicals to dispose of these wastes in their tailings impoundment is attached.

Chemical analyses are currently being conducted on a sample of the concentrated water and the results of these analyses will be provided to you when they are completed. We do expect the water to contain radium 226, uranium, ammonium, and total dissolved solids composed of salts naturally occurring in the groundwater.

The wastes have been placed in 55-gallon steel drum containers for transport and disposal. The drums will be transported in an enclosed van-type truck. All loading, transporting, and unloading will be conducted by employees of The Cleveland-Cliffs Iron Company. To avoid freezing of the aqueous waste, expansion of the wastewater and bursting of the drums, it is planned to transport all twelve drums to Casper where they will be placed in a heated wire-

8102280423

18380

Ross A. Scarano  
November 13, 1980  
Page 2

house until your approval of the above-stated plan has been received. After receiving approval, the drums will be transported to the disposal site.

Pursuant to CFR Title 10 Parts 40.64 and 150.17, the wastes contain less than 1,000 kilograms of uranium or thorium or combination thereof and therefore a Nuclear Material Transaction Report on Form NRC-741 is not currently being completed and distributed.

Thank you for your continued cooperation and if you should have any questions, please contact me personally at your earliest convenience.

Sincerely,

THE CLEVELAND-CLIFFS IRON COMPANY

*Truman E. Louderback*

Truman E. Louderback  
Director of Environmental Affairs

TEL:ag

Attachment

XC: Mr. Scarano - 4 copies  
Mr. Roger Shaffer, Land Quality Division, WY D.E.Q. - 2 copies  
Region IV - US N.R.C. - 1 copy

S6-TLI-A

# *The Cleveland-Cliffs Iron Company*

RECEIVED  
NOV 12 1980  
J. H. WHITMAN

P. O. Box 3140 Phone (307) 234-9133 309 N. McKinley

CASPER, WYOMING 82602

November 11, 1980

Mr. Judson Whitman, Mine Manager  
Getty-Petrotonics  
P. O. Box 2509  
Shirley Basin, Wyoming 82615

Dear Mr. Whitman:

As we discussed on the telephone November 10, 1980, The Cleveland-Cliffs Iron Company, Manager of the Thunderbird (T-Bird) Joint Venture, is seeking a licensed uranium mill tailings impoundment in which to dispose of approximately 600 gallons (eleven 55-gallon drums) of liquid waste and one 55-gallon drum of solid wastes from an in-situ uranium mining groundwater restoration project.

T-Bird was one of five participants in a solution mining research project conducted at T-Bird's North Rolling Pin uranium deposit in 1974. Wyoming Mineral Corporation was the operator of the project. Cleveland-Cliffs had obtained a U.S.N.R.C. Source Materials License for the North Rolling Pin Project in order to store and sell the yellow cake produced from North Rolling Pin for T-Bird. Prior to terminating the project and abandoning the site, Wyoming Mineral Corporation did not restore the groundwater to a quality that was acceptable to the U.S. Nuclear Regulatory Commission and the Wyoming Department of Environmental Quality.

Since Cleveland-Cliffs had obtained the Source Materials License for the project, the N.R.C. and the D.E.Q. have required of Cliffs the completion of a more acceptable groundwater restoration program on the site. The restoration project that has been conducted during the summer of 1980 involved the injection in the restoration zone of water of high quality in order to elevate the water table in the formation to allow ion exchange and adsorption of the contaminants to occur on clay particles that do not normally contact the groundwater and to conduct a groundwater flush of the restoration zone. During the groundwater flush, a portion of the injected water, approximately 18,000 gallons, was pumped out of the restoration zone.

The flush water that was removed from the formation was placed in an above-ground swimming pool-type container and concentrated by solar evaporation to a volume of approximately 600 gallons. It is this concentrated flush water, its suspended solids and dissolved solids residue, and the swimming pool liner for which Cleveland-Cliffs is seeking an adequate disposal site.

Judson Whitman  
November 11, 1980  
Page 2

Chemical analyses are currently being conducted on a sample of the concentrated water and the results of these analyses will be provided to you when they are completed. We do expect the water to contain radium 226, uranium, ammonium, and total dissolved solids composed of salts naturally occurring in the groundwater.

The Cleveland-Cliffs Iron Company requests your approval to dispose of the eleven 55-gallon drums of wastewater and the one 55-gallon drum containing solid waste in the Getty-Petrotonics uranium mill tailings pond located at your mill in the Shirley Basin of Wyoming. As I informed you on the telephone, I have discussed the disposition of these wastes with Mr. Gregory Eadie of the N.R.C. and he did believe that the disposal of these wastes in your tailings pond was acceptable to his agency. If you approve of the request to dispose of the above-described liquid and solid wastes at your facility, would you please sign the approval form included at the bottom of this letter?

Thank you for your continued cooperation and if you should have any questions, please contact me personally at your earliest convenience.

Sincerely,

THE CLEVELAND-CLIFFS IRON COMPANY

*Truman E. Louderback*  
Truman E. Louderback  
Director of Environmental Affairs

TEL:ag

XC: Charles J. Kundert

On this date, I approve the request for The Cleveland-Cliffs Iron Company to dispose of eleven 55-gallon drums of restoration wastewater and one 55-gallon drum of solid waste in the Getty-Petrotonics uranium mill tailings impoundment at our mill in the Shirley Basin of Wyoming. Subject to the conditions noted below. \*

Name: *J. Whitman*  
Title: Manager, Petrotonics Company  
Date: November 13, 1980

- \* All permits, licenses, transport, loading, unloading and liability in connection with the movement of these wastes will be the responsibility of Cleveland-Cliffs Iron Company.

TLII-H