

7892

IL.14-1

78.14

OTS NOTE

DATE: July 11, 1990

TO: Alexander Williams

FROM: Ed Mitchell ^{EM}

SUBJECT: W.R. Grace Elimination Recommendation

The purpose of this note is to provide you with certain information regarding the recommendation to eliminate W.R. Grace Company (the former Heavy Minerals Company), Chicago, Illinois, from consideration as a site under FUSRAP.

Enclosed is a memo dated July 9, 1990: FUSRAP Considered Site Recommendation, for W.R. Grace Company. It recommends elimination in accordance with FUSRAP protocol. Also enclosed is some typed input material (dated July 9, 1990) about the site that you may want to use in the preparation of your Record of Elimination.

If you concur, please provide a Record of Elimination to indicate DOE's decision to eliminate this site. In lieu of a separate memo, you may want to sign, indicate your DOE organization, and date your approval on the Recommendation. Upon receipt of your office's Record of Elimination, OTS will update the FUSRAP data base for considered sites, and we will add this site to the list of sites to be officially eliminated by DOE and noted to the DOE public document room within 90 days.

Please call me if you have any questions or would like to discuss this information.

cc: J. Wagoner
D. Tonkay
File FUSRAP IL.14
File FUSRAP 1.21.1 w/o enclosure

Approved
7/25/90
W. Alexander Williams
EM-421

MEMORANDUM

TO: FILE 1X.14

DATE 7/8/90

FROM: D. Tonkay

Approved 7/25/90
M. Alexander
EM-421

SUBJECT: FUSRAP Considered Site Recommendation

SITE NAME: W.R. Grace Company

ALTERNATE NAME: Heavy Metals Company

CITY: 836 S. Michigan Avenue Chicago STATE: IL

OWNER(S) Past: W.R. Grace Co () Current: _____
Owner contacted yes no; if yes, data contacted _____

TYPE OF OPERATION

- Research & Development
- Production scale testing
- Pilot Scale
- Bench Scale Process
- Theoretical Studies
- Sample & Analysis
- Production
- Disposal/Storage
- Facility Type
 - Manufacturing
 - University
 - Research Organization
 - Government Sponsored Facility
 - Other Business Address

TYPE OF CONTRACT

- Prime
- Subcontractor
- Purchase Order
- Proposal
- Other information (i.e., cost + fixed fee, unit price, time & material, etc) \$4.50 lb of U₃O₈; \$4.25 lb of ThO₂
Continued

Contract/Purchase Order # _____

CONTRACTING PERIOD: _____

OWNERSHIP:

	AEC/MED OWNED	AEC/MED LEASED	GOVT OWNED	GOVT LEASED	CONTRACTOR OWNED	CONTRACTOR LEASED
LANDS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ?	<input type="checkbox"/>
BUILDINGS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/> ?	<input type="checkbox"/>
EQUIPMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> NA	<input type="checkbox"/>
ORE OR RAW MATL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
FINAL PRODUCT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WASTE & RESIDUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> NA	<input type="checkbox"/>

AEC/MED INVOLVEMENT AT SITE

Control

- AEC/MED managed operations
- AEC/MED responsible for accountability
- AEC/MED overviewed operations
- Contractor had total control
- unknown *if an AEC actual involvement*

Health Physics Protection

- Little or None
- AEC/MED responsibility
- Contractor responsibility

MATERIALS HANDLED:

Type (on basis of records reviewed)

- No Radioactive
- Natural Radioactive from Feed Materials Production
 - Ore
 - Refined Source Material
 - Residue
- Natural Radioactive Material from Non-Nuclear Activities
- Man-Made
- Other _____

Comment Cude thorium hydroxide based on caustic attack of monazite
containing up to 10% uranium oxide
of thorium oxide as

Quantities (on the basis of records reviewed)

- None
- Production Quantities
- Small Amounts

Comment up to 65 Tons per year ^{220 to} (Total of 260 Tons)

OTHER PERTINENT FACTS:

- Facility was Licensed
 - During AEC/MED-Related Operations
 - For Similar Activities
 - For Other Activities

Comment _____

Commercial Production Involving Radioactive Material during AEC/MED Operations

Facility was Decontaminated and Released *(N/A)*

- Availability of Close Out Records
 - None
 - Some
 - Sufficient

<input type="checkbox"/> Radioactive Status:	YES	MAYBE	PROBABLY	NOT
			NOT	
Contaminated Potential for Exposure (accessible)	---	---	---X---	---
	---	---	---X---	---

QUANTITY OF RECORDS AVAILABLE:

Very Little (2 records) Some Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

Low Possible High

RECOMMENDATIONS:

Eliminate
 Consider for Remedial Action
 Collect More Data

Comment _____

REFERENCES: 1) AEC Memorandum dated 12/1/54: "Proposal of Heavy Minerals Company to Supply Crude Thorium Hydroxide"
2) Materials production projection information
(Both Attached)

SUMMARY

A proposal was received by AEC new materials division to contract for up to 65 tons annually of crude thorium hydroxide over a four-year period. The stated price includes delivery to Chattanooga TN. No evidence exists to the source of the material, or whether or not AEC actually purchased such material. The projected delivery schedule was FY 1957-1961. The site should be eliminated from consideration since there is no evidence of purchase of the material or use of the site for anything except a business address.

N.H. Woodruff, Asst. Manager for Operation
Oak Ridge Operations Office

December 1, 1954

R.L. Faulkner, Acting Director
Division of Raw Materials

Symbol: PROPOSAL OF HEAVY MINERALS COMPANY TO SUPPLY CRUDE THORIUM HYDROXIDE
EM:CWT

We are enclosing copy of proposal received from the above company to deliver crude thorium hydroxide over a four-year period beginning late in 1955.

Your review of the proposed specifications and advice regarding the acceptability of the product offered will aid us in our negotiations with this company. Should you conclude that the material meeting these specifications would be unacceptable will you kindly indicate the approximate analysis of a product which could be satisfactorily treated.

Any further comments you may have will be appreciated.

cc: Nelson F. Sievering
w/cy inc. ltr

Encl. 1 cy ltr fra Heavy Minerals Co.
12/1/54

HEAVY MINERALS CO.
836 South Michigan Avenue
Chicago 5, Illinois

December 1, 1954

Atomic Energy Commission
Raw Materials Division
Washington, D. C.

Attention: Mr. Radford Faulkner

Gentlemen:

CRUDE THORIUM HYDROXIDE

We propose to sell crude thorium hydroxide to the Atomic Energy Commission over a four year period, starting during the fourth quarter of 1955. The crude thorium hydroxide we propose to supply will be produced by a process based on the caustic attack of monazite, which process, as well as the characteristics of the product, is known to the Commission.

The crude thorium hydroxide we propose to supply will comply with the following specification:

Moisture	50% maximum
Thorium oxide and uranium oxide	45% minimum (dry basis)
Insolubles in nitric acid	40% maximum (" ")
Rare earth oxides	15% maximum (" ")
Phosphorus pentoxide	3% maximum (" ")
Chlorine	3% maximum (" ")
Fluorine	0.1% maximum (dry basis)
Balance	--hydroxide radical and minor impurities.

In evaluating this specification the Commission should not compare it with specifications of thorium hydroxide made by other processes, such as the sulphuric acid attack of monazite. This specification should be evaluated on the basis of the requirements of the additional processing that the Commission will perform on the crude hydroxide we will supply.

We propose the contract specify our commitment to furnish 55 tons of thorium oxide and that the Commission agree to purchase up to 55 tons annually. Deliveries are to be made in suitable returnable 55-gallon steel drums.

The product we propose to furnish contains uranium oxide amounting to approximately 10 percent of the thorium oxide (dry basis). It is proposed that the Commission pay \$4.50 per pound of contained uranium oxide (U₃O₈), such payment to be in addition to a price, f. o. b. Chattanooga, Tenn., of \$4.25 per pound of contained thorium oxide (ThO₂), both prices to be subject to a mutually agreeable escalation clause.

Very truly yours,

HEAVY MINERALS CO.

E. E. Wyatt
Executive Assistant

E. E. Wyatt

CH:Wrs:co

(Projection based upon information available 1/1/57) SHORT TONS Th

NORTH AMERICA
UNITED STATES

MATERIALS - 2
Inventory

Inventory 6/30/54 1/	F. Y. 1955	F. Y. 1956	F. Y. 1957	F. Y. 1958	F. Y. 1959	F. Y. 1960	F. Y. 1961
Commission-Owned-Fernald Nitrate							
Sludges (From Middlesex)	153						
Davison Chemical Company Crude Hydroxide (GSA Monazite)	367		10				
Lindsay Chemical Company Nitrate	-	-	(130)	260	-	-	-
Heavy Mineral Company Crude Hydroxide	-	284	367	128	-	-	-
	-	-	20	60	60	60	20

SUB TOTAL - NORTH AMERICA

520 284 367 278 320 60 60 20

OVERSEAS

INDIA

Nitrate

- - - (65) 39 - - -

FRANCE

Nitrate

- - - 150 140 - - -

BRAZIL 2/

Crude Hydroxide Carbonate

- - - - - - - - -

SUB TOTAL - OVERSEAS

- - - 215 179 - - -

GRAND TOTAL (AEC Receipts)

520 284 367 493 499 60 60 20

CUMULATIVE " "

520 804 1171 1664 2163 2223 2283 2303

SUPPLEMENTAL (CCC RECEIPTS)

Continental-Lindsay Nitrate

- - - 134 270 270 134 -

CUMULATIVE (CCC RECEIPTS)

- - - 134 404 674 808 808

COMBINED CUMULATIVE (AEC + CCC)

520 804 1171 1798 2567 2897 3091 3111

1/ Active Inventory Only - Does not include 54 tons in form of residues, intermediate products etc.

2/ Does not include 510 tons under contract with Brazil since deliveries appear uncertain.

7/9/90

Input for Elimination from Consideration from FUSRAP

Site Name(s): W.R. Grace Company, the former Heavy Minerals Company
Location: 836 South Michigan Avenue, Chicago, Illinois

Owner: W.R. Grace and Company
Address: 836 South Michigan Avenue, Chicago, Illinois

Summary of MED/AEC Activity: Historical information indicates that the Heavy Minerals Company proposed to sell crude thorium hydroxide to the AEC during the late 1950's for delivery to Chattanooga, Tennessee. No evidence exists whether such material was sold.

Quantity and Materials Handled: The company proposed to provide up to 65 tons annually.

Basis for Decision: The historical evidence indicates that the site was a business address used by Heavy Minerals Company. No evidence was located to indicate that a contract was placed by AEC for the thorium hydroxide. Based on the limited information available, the Heavy Minerals Company is therefore eliminated from consideration under FUSRAP, since there is little or no potential for contamination.