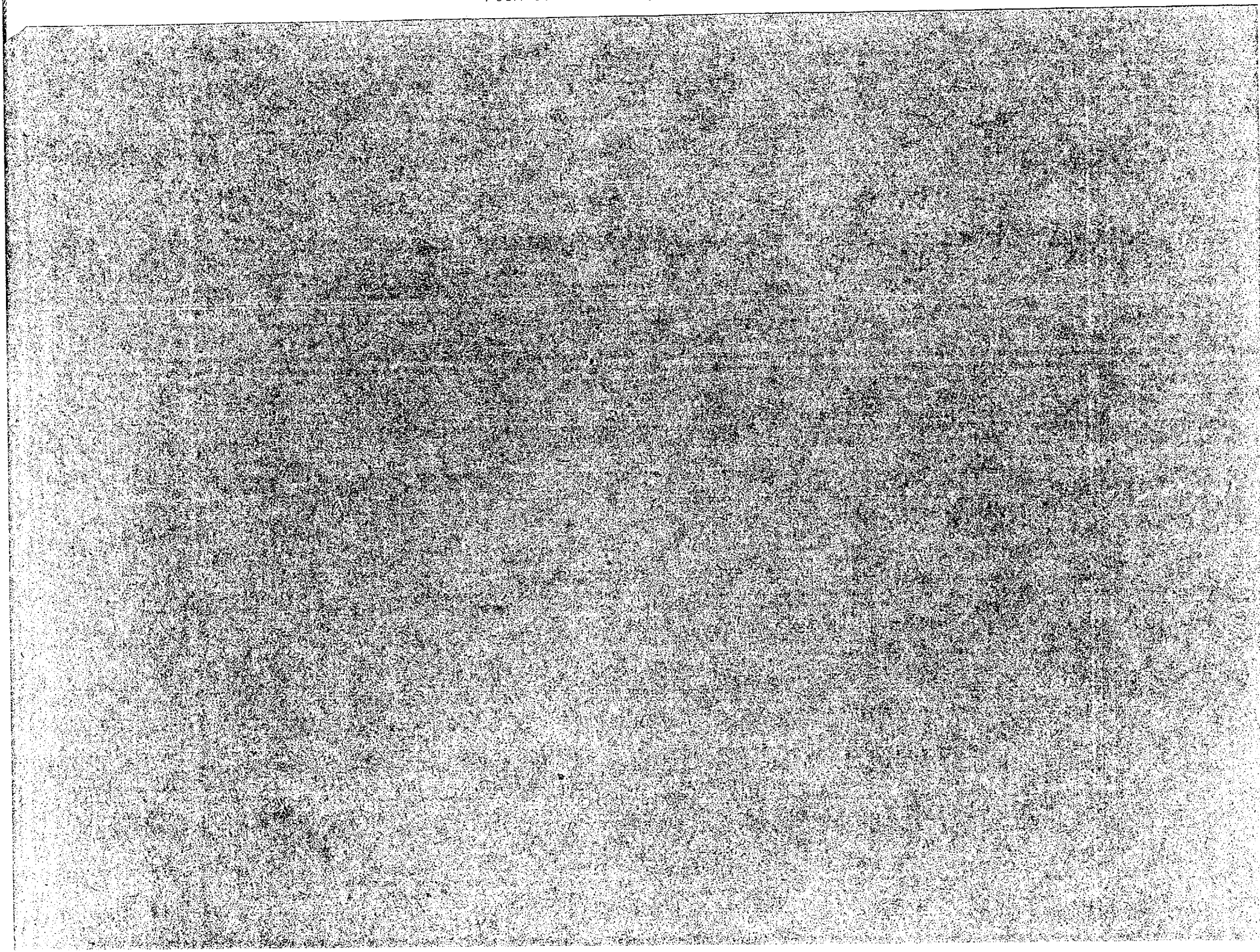


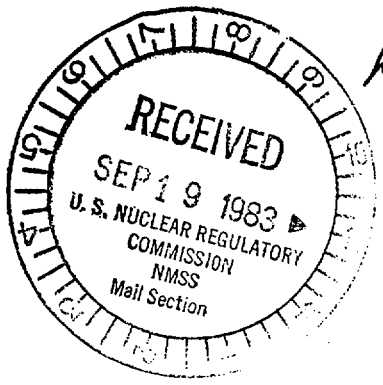
Wayne / Cool
40-86

township of wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800
Police Department
(201) 694-0600

'83 AUG 29 A10:45

PDR
Return to
396SS



August 19, 1983

Nuclear Regulatory Commission
Washington, D. C.
20555

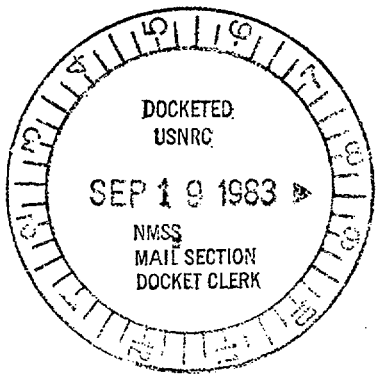
Gentlemen:

Enclosed is a certified copy of Resolution No. 179 of 1983 adopted by the Municipal Council of the Township of Wayne at a regular meeting held on August 17, 1983.

Very truly yours,

John R. O'Brien
Clerk

JRO/dlm
enc.



B1425

ITEM # 428

(3)

22818

8309270536 830819
PDR ADOCK 04000086
C PDR

TOWNSHIP OF WAYNE
COUNTY OF PASSAIC
STATE OF NEW JERSEY
1983
RESOLUTION NO. 179

A motion was made by Frederick Bauer seconded by Gary Webb that the following resolution be adopted:

OPPOSING "TEMPORARY" STORAGE OF THORIUM WITHIN WAYNE

WHEREAS, the Township Council has reviewed the reports of the Center for Disease Control and the other reports forwarded by Congressman Roe on or about June 24, 1983 and the letter from the Department of Energy to Congressman Roe received by the Township on or about July 27, 1983;

NOW, THEREFORE, BE IT RESOLVED by the Municipal Council of the Township of Wayne as follows:

1. The Township Council vehemently disagrees with the conclusion in the Department of Energy letter received by the Township on or about July 27, 1983 that the waste to be removed from the various off-site areas be stored "temporarily on the W.R. Grace Company site" because while the Township Council agrees that a disposal site must be designated and made available for the waste now being temporarily stored on the W.R. Grace site, the Township Council believes that a long term solution should be sought now with a view to the immediate removal of both off-site and on-site waste from the Township of Wayne and the Township of Pequannock without "temporary" storage of the waste on-site.

2. The Township Council opposes the acquisition of the W.R. Grace site by the Department of Energy or by any other governmental agency, unless the acquisition is made in connection with the simultaneous removal of all on-site and off-site contamination.

3. The Council opposes any additional storage of thorium and/or its byproducts on the W.R. Grace site and on any other site in the Township of Wayne. This includes our oppostion to the movement of any off-site thorium onto the W.R. Grace site.

4. The letter from the Department of Energy received on or about July 27, 1983 refers in the fourth paragraph to "early discussions with the owner, N.R.C., and the State of New Jersey." The Township Council strongly urges that the Township of Wayne and the Township of Pequannock be included in these discussions.

5. The Council again urges the N.R.C. to hire a hydrogeologist for the purpose of testing all aquifers which have any contact with any area on which thorium and/or its byproducts are located in Wayne and in Pequannock.

6. The Council supports and urges that the additional testing requested by the Center for Disease Control be performed immediately.

7. The Council requests that Dr. Resnikoff immediately receive copies of all reports received.

8. The Council wishes to thank Congressman Roe for his continuing efforts to bring about the removal of on-site and off-site thorium from Wayne Township and from Pequannock Township.

9. Copies of this Resolution shall be sent to Congressman Roe, the U.S.Center for Disease Control, the Nuclear Regulatory Commission, the U.S.Department of Energy, the State Department of Environmental Protection and our State Legislators.

ROLL CALL:

AYES: Frederick Bauer, Joseph Di Donato, William Hanse, Robert Pacca, David Waks, Gary Webb, Joseph Loffredo

NAYS: None

ABSENT: Joyce Amabile, Bert Tucker

THIS IS TO CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF A RESOLUTION ADOPTED BY THE MUNICIPAL COUNCIL OF THE TOWNSHIP OF WAYNE AT A REGULAR MEETING HELD ON AUGUST 17, 1983.

JOHN R. O'BRIEN
CLERK

OCT 2 7 1982

Township of Pequannock
ATTN: Frank Fitzpatrick
Health Officer
530 Newark - Pompton Turnpike
Pompton Plains, New Jersey 07444

Gentlemen:

Subject: Radiological Surveys of Sheffield Brook, Final Report

Enclosed for your information is a copy of the subject report. This report does not contain the results of measurements made on the W. R. Grace and Company property on Black Oak Ridge Road in Wayne nor at the railroad siding in Pequannock. These measurements will be the subject of a separate report.

If you have any questions concerning this report you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (w/concurrences)

RI:DETP
Kinneman/gwc
10/27/82

OFFICIAL RECORD COPY

ITEM # 5

B/426

[redacted] Return to Dennis Thaper
546-55
40-86

MAR 17 1983

MEMORANDUM FOR: John G. Davis, Director
Office of Nuclear Material Safety and Safeguards

THRU: Richard E. Cunningham, Director
Division of Fuel Cycle and Material Safety

FROM: R. G. Page, Chief
Uranium Fuel Licensing Branch

SUBJECT: ITEMS OF INTEREST

W. R. GRACE SITE IN POMPTON PLAINS, NEW JERSEY

The plant site of W. R. Grace Company in Pompton Plains, New Jersey and vicinity properties are contaminated with thorium from past operations conducted from 1948 to 1971 to extract thorium and rare earths from monazite sand. From 1954 to 1971, the plant operated under a license issued by the Atomic Energy Commission (AEC). Some of the thorium provided at the plant was supplied to AEC under a government contract.

In July 1982 DOE informed NRC that the site appeared to qualify for inclusion under DOE's Formerly Utilized Sites Remedial Action Program (FUSRAP). NRC had already initiated the conduct of a comprehensive radiological survey of the site and agreed to forward the survey results on the site to DOE for its evaluation and any required remedial actions. By letter dated February 18, 1983, DOE notified NRC that it had reconsidered the appropriateness of including the W. R. Grace site under FUSRAP and would no longer include formerly licensed sites as part of the FUSRAP program unless NRC believes remedial actions are required and NRC cannot effect needed remedial actions. The letter asked whether NRC believed remedial actions are required at the W. R. Grace site and whether NRC could effect remedial actions. In reply, we informed DOE on March 11, 1983, that we believed some remedial action is needed at both the W. R. Grace plant site and vicinity properties because the concentrations of thorium in soil and the associated direct radiation levels exceed current NRC guidelines for unrestricted release. We also indicated that NRC has general authority under the Atomic Energy Act to require persons in possession of thorium to take appropriate action needed to protect health and safety of the public. The fact that NRC has authority would not prevent any other agency, such as DOE, from exercising its authority to secure remedial action.

B1427

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C PDR

ITEM # 4

OFFICE ➤							
RNAME ➤							
DATE ➤							

KERR-MCGEE, WEST CHICAGO

W. A. Nixon, FC, visited the Kerr-McGee West Chicago site on March 15, 1983 to observe the location of air sampling stations and to discuss recently obtained Pb-212 air concentration data. On the same day Mr. Nixon attended a meeting between Region III and Kerr-McGee on environmental air monitoring at the West Chicago site. On March 16, 1983, the status of the Final Environmental Statement for the decommissioning of the site was reviewed with the Argonne National Laboratory (ANL) staff.

COMBUSTION ENGINEERING, INC., LICENSE RENEWAL

Combustion Engineering, Inc., was issued a renewal of Materials License No. SNM-1067 on March 14, 1983, for its Windsor Facility authorizing the receipt, possession and use of SNM and source materials related to the fabrication of power reactor fuel assemblies.

Original Signed by
Ralph G. Page

R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

DISTRIBUTION
RGPage
FDFisher
GATerry
WTCrow
VTharpe
PDR
NMSS R/F
FCUF R/F
FCUP R/F
FC Central File
Beveridge/Cornell 1-23
Docket Files 40-86
40-2061
70-1100

OFFICE	FCUF						
URNAME	RGPage/al						
DATE	3/17/83						

RC FORM 318 10-80 NRCM 0240

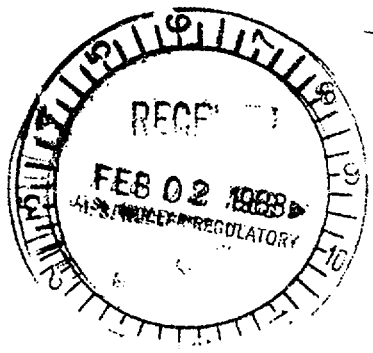
OFFICIAL RECORD COPY

40-86

Oak Ridge Associated Universities
Post Office Box 117
Oak Ridge, Tennessee 37830
Telephone (615) 576-3305

Manpower Education, Research, and Training Division

PDR
Return
to 396



January 31, 1983

Mr. William Crow
Div. Fuel Cycle & Mat. Safety
Nuclear Regulatory Commission
7915 Eastern Avenue
Silver Spring, MD 20912

Dear Mr. Crow:

Enclosed are the remaining 40 copies of the final report on the W.R. Grace property in Wayne, New Jersey. We hope you received the first 20 in satisfactory condition.

If you have any questions, please give me a call.

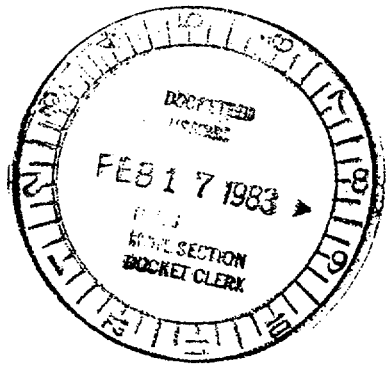
Sincerely,

James D. Berger
Program Manager
Radiological Site Assessment Program

JDB/jm

Enclosures:

Reports (40 copies) in 2 packages



B/428

ITEM # 431

8302280094 830131
PDR ADOCK 04000086
C PDR

D 1/2

Return to Denny Thaper
546-35

FEB 17 1983

NOTE TO: Files

FROM: W. A. Nixon

40-86

SUBJECT: MEETING WITH DOE - FEBRUARY 8, 1983

ATTENDEES

NRC: R. G. Page, R. L. Fonner, J. M. Gutierrez, D. A. Cool, E. Shum, W. T. Crow, W. A. Nixon;

DOE: J. E. Baublitz, E. G. Delaney, A. J. Whitman, S. R. Miller, J. Coleman;

The Aerospace Corporation: E. A. Vierzha

A meeting was held with DOE on February 8, 1983 to discuss remedial action responsibilities for various licensed or formerly licensed sites which may fall under the provisions of Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978 or Section 151 of the Nuclear Waste Policy Act (NWPA) of 1982.

The first subject discussed was the W. R. Grace site in Pompton Plains, New Jersey. DOE stated that a review of the AEC-Grace contracts indicated that only about 5% of the residues now on site were related to contract work, however, DOE has not yet decided if the site can be included in the FUSRAP program. NRC's action must await the DOE decision.

Additional NRC licensed sites that may be subject to NWPA are AMAX, Parkersburg, West Virginia; Kawecki-Berylco, Reading, Pa.; Molycorp, Washington, Pa.; and Whitaker Metals, Greenville, Pa. There are also at least two agreement state licensed sites that may fall under the provisions of the act.

The AMAX site was briefly discussed. It was pointed out that the remedial action taken was for safe storage on site, not disposal. We have not yet developed stabilization criteria suitable for disposal and transfer to DOE under provisions of Section 151(c) of the NNPA. In any event, an extended period of monitoring will be required before NRC will be able to access the suitability of the site as a disposal site.

B/249

8303040369 830217
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C PDR

ITEM # 432

(2)

OFFICE ▶							
SURNAME ▶							
DATE ▶							

The Kerr-McGee West Chicago site was also discussed. Mr. Fonner indicated that the site could fall under the provisions of Title II of UMTRCA. DOE has been asked to state their views on this subject. To assist DOE in the considerations, copies of the Draft Environmental Statement were made available to DOE.

Original Signed By:
W. A. Nixon
W. A. Nixon
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NMSS

DISTRIBUTION:
Docket No. 40-86
40-6940
40-8820
40-7097
40-7455
40-2061
NMSS r/f
FCUP r/f
WANixon
WTCrow
PDR
Beveridge/Cornell 1-23

OFFICE	FCUP	FCUF	FCUP				
SURNAME	WANixon/mts	GTharpe	WTCrow				
DATE	2/ /83	2/ /83	2/ /83				

NRC FORM 318 (10-80) NRCM 0240

OFFICIAL RECORD COPY

40-86

FEB 17 1983

MEMORANDUM FOR: John G. Davis, Director
Office of Nuclear Material Safety and Safeguards

THRU: Richard E. Cunningham, Director
Division of Fuel Cycle and Material Safety

FROM: R. G. Page, Chief
Uranium Fuel Licensing Branch

SUBJECT: ITEMS OF INTEREST

LOUISIANA POWER AND LIGHT COMPANY PART 70 LICENSE

Louisiana Power and Light Company (LPL) was issued Materials License No. SNM-1913 on February 10, 1983, authorizing the receipt, possession, inspection and storage of uranium enriched in the U-235 isotope, contained in fuel assemblies, and the receipt, possession and use of two Pu-Be neutron sources. All requested materials are for eventual use at the Waterford Steam Electric Station, Unit 3.

W. R. GRACE, POMPTON PLAINS, NEW JERSEY

On February 9 a meeting was held between NRC and representatives of W. R. Grace to discuss the contamination at the W. R. Grace site in Pompton Plains, New Jersey. This site was formerly licensed by NRC/AEC for the possession and use of source material for the purpose of extracting thorium and rare earths. The property contains an estimated 3 to 5 million cubic feet of thorium bearing residues that were buried pursuant to the old burial provisions of Part 20. There has been a considerable amount of public and congressional interest because of the contamination that exists both on and off site. The Department of Energy (DOE) is currently evaluating former contracts that the AEC had with W. R. Grace to determine whether or not the site is eligible for inclusion in DOE's Formerly Utilized Site Remedial Action Program.

The attendees of the meeting were R. G. Page, NMSS; W. T. Crow, NMSS; Robert Fonner, OELD, NRC; R. R. Mace, C. B. Kraft, T. D. Tongue, and B. L. Mobley, W. R. Grace.

ITEM # 433

B/430

(2)

8303160635 830217
PDR ADOCK 04000086
C PDR

OFFICIAL RECORD COPY

UNITED NUCLEAR CORPORATION

On February 10, 1983, a meeting was held in Wood River Junction, Rhode Island, with representatives of United Nuclear Corporation (UNC), the State of Rhode Island and the NRC staff to discuss the status of the decontamination activities at UNC. UNC's current plans are to finish decontamination by the first of May and provide the Commission a copy of the close-out survey by mid June.

R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

DISTRIBUTION
RGPage
FDFisher
WTCrow
GATerry
FCUF R/F
FCUP R/F
NMSS R/F
FC Central File
Beveridge/Cornell 1-23
Docket File 70-820
Docket File 40-86
Docket File 70-2946
PDR (3)

OFFICE	FCUF						
NAME	RGPage/al						
DATE	2/ /83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

MAR 17 1983

NMSS MEETING NOTICES
Division of Fuel Cycle and Material Safety

DATE/TIME	DOCKET NUMBER	LOCATION	PURPOSE	ATTENDEES/ APPLICANT	NRC CONTACT
3/16/83 1:00 p.m.	40-8724	Willste Bldg.	To discuss the standards NRC will require the the Corporation's facility at Newburgh Heights, Ohio, to meet prior to termination of the license. The property under consideration includes the former area of operation and the McGean Dump Site. (Radiation Management Corp-Chemetron Corporation)	Representatives from Rad. Mngt. Corp, consultants for Allegany International B. M. Kosla, NMSS	B. M. Kosla
3/22/83 3:30 a.m.	70-371	Willste Bldg.	To discuss amendment application. (United Nuclear Corporation)	T. Gutman, UNC G. H. Bidinger, NMSS	G. H. Bidinger

ITEM # 43

NMSS
Retire

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

DEC 6 1982

Docket No. 40-00086 License No. STA-422

Carl J. Collica, M.S., DABR
C/O Norwalk Hospital
Norwalk, Connecticut 06856

Dear Carl:

This refers to your letter dated November 10, 1982.

I think you are aware that this office has been conducting an extensive review and surveys of the area surrounding the W.R. Grace and Company property in Wayne, New Jersey. Our contractor, Oak Ridge Associated Universities has conducted surveys in the area of the railroad siding you discuss in your letter. Preliminary results indicate the presence of thorium, but low (less than one millirem per hour) radiation levels. Their final report will be available in early 1983. I have placed you on the list to receive a copy.

If I can be of any additional assistance, do not hesitate to call.

Sincerely,

John E. Glenn

John E. Glenn, Chief
Nuclear Materials Section B

B/432

ITEM # 435

OCT 2 7 1982

Environmental Protection Agency
Region II
ATTN: Joyce Feldman
Regional Radiation Representative
26 Federal Plaza
New York, New York 10278

Dear Ms. Feldman:

Subject: Radiological Surveys of Sheffield Brook, Final Report

Enclosed for your information is a copy of the subject report. This report does not contain the results of measurements made on the W. R. Grace and Company property on Black Oak Ridge Road in Wayne. These measurements will be the subject of a separate report.

If you have any questions concerning this report you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (w/concurrences)

RI:DETP
Kinneman/gwc
10/27/82

~~OFFICIAL RECORD COPY~~

B/433

ITEM # 587

Sen. Nicholas F. Brady	ACTION CONTROL	DATES	CONTROL NO. 12470
	COMPL DEADLINE	11/26/82	
			DATE OF DOCUMENT 11/8/82
TO: **Kammerer**	INTERIM REPLY		
	FINAL REPLY	GI Reply for Dircksen 11/26/82	PREPARE FOR SIGNATURE OF: ☐ CHAIRMAN ☒ EXECUTIVE DIRECTOR OTHER
	FILE LOCATION		

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Marilyn Casson concerning buried radioactive [redacted] thorium in Wayne, New Jersey

SPECIAL INSTRUCTIONS OR REMARKS

SECY-82-1111

ASSIGNED TO	DATE	INFORMATION ROUTING
Haynes, Reg. I	11/10/82	Davis Kerr, SP Cunningham, ELD Linderwood

EXECUTIVE DIRECTOR FOR OPERATIONS
[illegible]AL CORRESPONDENCE CONTROL

B1434

ITEM # 437

Central file
40-86

DISTRIBUTION:
See Next Page

NOV 26 1982

The Honorable Nicholas F. Brady
United States Senate
Washington, D. C. 20510

Dear Senator Brady:

I am pleased to address the issue identified in the letter dated October 14, 1982, from Mrs. Marilyn Casson, which was enclosed with your letter of November 8, 1982 to Mr. Carlton C. Kammerer of our Office of Congressional Affairs. Mrs. Casson's letter concerned thorium contamination in Wayne, New Jersey. Background information concerning this problem was previously provided to you with my letter dated July 1, 1982.

The surveys referred to in my July 1 letter have been completed. Enclosed is a copy of a report, "Radiological Survey of Sheffield Brook," which contains the results of a portion of those surveys. The results of the remaining surveys, conducted primarily on the W. R. Grace and Company property on Black Oak Ridge Road, will be contained in a report which is scheduled to be available early in 1983. We will provide you with a copy of that report when it is issued. Based on the results of all surveys and measurements to date, the Nuclear Regulatory Commission (NRC) continues to conclude that the thorium contamination in Wayne does not pose an immediate threat to the health and safety of local residents.

The U. S. Department of Energy is responsible for administering a program (the Formerly Utilized Site Remedial Action Program - FUSRAP) that was created to provide for cleanup of sites contaminated with radioactive material when the contamination resulted from certain U.S. Government sponsored work. Since U.S. Government sponsored work was formerly conducted at the W. R. Grace and Company property in Wayne, the results of our surveys will be transmitted to the DOE so that the site can be considered for inclusion in the FUSRAP.

We realize that this issue is of significant concern to you and your constituents, and are working to resolve it. We will keep you informed of our progress.

Sincerely,

(Signed) T. A. Rehm

for William J. Dircks
Executive Director
for Operations

8212060509 821126
PDR ADOCK 04000086
C PDR

Enclosure:
As Stated

EDO WJDircks 11/24/82
OCA 11/26/82

COM29 (Transmitted to OEDO from RI via word processor on 11/23/82)

OFFICE	RI:DE&TP	RI:DE&TP	RI:DE&TP	RI:SLO	RI:PAO	RI:DRA	RI:RA
SURNAME	Kinneman/cgl	Joyner	Martin	Brenneman	Abraham	Allan	Haynes
DATE	11/22/82	11/23/82	11/23/82	11/23/82	11/23/82	11/23/82	11/23/82

Distribution:
EDO 12470
SECY 82-1111
PDR
CA
Docket No. 40-00086
R. DeYoung
J. Davis
G. Kerr
G. Cunningham
L. Underwood
J. Allan, RI
R. Haynes, RI
T. Martin, RI
J. Kinneman, RI
J. Joyner, RI
Region I Docket File

No. 1111 Logging Date XXXX 11/9/82

NRC SECRETARIAT

TO:
- ☐ Commissioner _____ Date _____
- XXX ☐ Exec. Dir./Oper.
- ☐ Cong. Liaison
- ☐ Public Affairs
- ☐ _____
- ☐ Gen. Counsel
- ☐ Solicitor
- ☐ Secretary
- ☐ Inspector & Auditor
- ☐ Policy Evaluation

Incoming: Sen Nicholas F. Brady, Const Ref
From: Marilyn Casson

To: OCA Date 11/8/82
Subject: removal of radioactive thorium fm industries located Black XXXX Oak Ridge in Wayne

☐ Prepare reply for signature of:
- ☐ Chairman
- ☐ Commissioner _____
- ☐ EDO, GC, CL, SOL, PA, SECY, IA, PE
- ☐ Signature block omitted
- ☐ _____
- ☐ Return original of incoming with response

XXX For direct reply* Suspense: Nov 19
☐ For appropriate action
☐ For information

Remarks: OCA to Ack

For the Commission: billie

*Send three (3) copies of reply to Secy Correspondence and Records Branch

NRC FORM 62A (3-82)

Rec'd Off. EDO
Date 11-10-82
Time

ACTION SLIP

)stribution:
Docket 40-86
NMSS R/F
FCUP R/F
WTCrow
RGPage

NOV 12 1982

Dr. William Mott
Public Safety Division
Office of Operational Safety (EP323)
U. S. Department of Energy
Washington, D. C. 20545

Dear Dr. Mott:

Enclosed are three additional copies of the Radiological Survey Report of Sheffield Brook in Wayne, New Jersey. Five copies were previously hand-carried to your office. The survey report of the W. R. Grace plant site will be sent to you some time in January 1983, when it is completed.

Unless we hear differently, we will assume that any remedial action related to either Sheffield Brook or the W. R. Grace site will be included in DOE's Formerly Utilized Site Remedial Action Program, as you indicated in your April 21, 1982, letter to me.

Sincerely,

(Signed) RGP

R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety, NMSS

Enclosures: As stated

cc: B. Mobley, W. R. Grace Company

8212010495 821112
CF ADOCK 04000086
CF

ITEM # 438

B|435

OFFICE	FCUP	FCUP					
SURNAME	WTCrow/lt	RGPage					
DATE	11/12/82	11/ /82					

OFFICIAL RECORD COPY

NOV 1 1982

The Honorable Robert A. Roe
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Roe:

We are pleased to address the issues identified in a letter dated September 12, 1982, from Dr. Marvin Resnikoff to the Mayor of Wayne, New Jersey, which was enclosed with your letter of October 8, 1982. Dr. Resnikoff's letter concerns the W. R. Grace and Company property and surrounding area in Wayne, New Jersey.

It is apparent that Dr. Resnikoff has carefully reviewed available information concerning the W. R. Grace and Company property in Wayne, New Jersey. While we might come to somewhat different numerical conclusions, his calculations are, in general, consistent with the facts and data available.

There are two issues in Dr. Resnikoff's letter which require some comment. These are, first, whether the AEC improperly allowed the Wayne property to become a waste disposal site and, second, whether the NRC made a proper finding in terminating the license.

With regard to the first issue, 10 CFR 20.304 did, in fact, permit up to 12 burials each year of up to 1,000 pounds of thorium per burial. The quantity of thorium estimated by Dr. Resnikoff to be on the W. R. Grace and Company property could have been placed there during the operating life of the facility in compliance with this regulation. The NRC recognized that the regulations needed to be changed to delete the burial provisions and did so, effective January 28, 1981.

With regard to the second issue, the W. R. Grace and Company property was released for unrestricted use and the license terminated in 1975, following a judgement by the NRC staff that the property met the criteria for release of facilities for unrestricted use. Since that time, NRC criteria for release for unrestricted use have changed. Because of this change and as part of an overall review by NRC of formerly-licensed sites, the NRC decided that a comprehensive, radiological survey would be necessary to determine if the property meets current criteria for release for unrestricted use. Since 1981, the NRC has expended considerable effort to contract for and complete this comprehensive radiological survey.

B/436

ITEM # 439

(12)

We realize that this issue is of significant concern to you and your constituents and are working to resolve it. We will keep you informed of our progress.

Sincerely,

(Signed) William J. Dircks
William J. Dircks
Executive Director
for Operations

Distribution:
EDO 12369
SECY
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
W. Kerr
R. Haynes, RI
J. Allan, RI
T. Martin, RI
J. Kinneman, RI
F. Brenneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
State of New Jersey

RI:PAO
Abraham
10/26/82

NMSS
JDavis
10/26/82
(telecon)

OCA
11/1/82

TRANSMITTED VIA 5520 10/27/82 -#COM20

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DEPOS	RI:DRA	RI:RA	EDO
SURNAME	Kinneman/dmg	Joyner	Martin	Brenneman	Allan	Haynes	WJDircks
DATE	10/26/82	10/26/82	10/26/82	10/26/82	10/26/82	10/26/82	10/27/82

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES
SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT
SCIENCE AND TECHNOLOGY
SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

October 8, 1982

Mr. William J. Dircks
Executive Director for Operations
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Dircks:

In an effort to keep you fully advised on local developments with regard to the thorium radiation situation in Wayne, New Jersey, enclosed for your review is a copy of the September 12 preliminary assessment by Dr. Marvin Resnikoff, the consultant retained by Wayne Township.

Dr. Resnikoff has made a comprehensive review of all of the available documentation and has made some preliminary conclusions and recommendations. I would appreciate your reviewing this report and advising me of your thoughts and observations at your earliset possible convenience.

As with previous correspondence on this issue I am forwarding a copy of this letter to all interested parties.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

ITEM # 40

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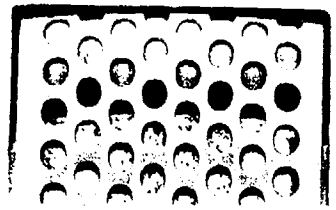

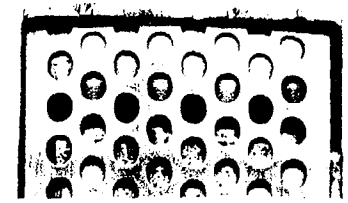

* U. S. GOVERNMENT PRINTING OFFICE: 1980-315-

FROM:	ACTION CONTROL	DATES	CONTROL NO.
Rep. Robert A. Roe	COMPL DEADLINE	10/26/82	12369
	INTERIM REPLY		DATE OF DOCUMENT 10/8/82
TO: Dircks	FINAL REPLY	/s/ Douglas	PREPARE FOR SIGNATURE OF: ☐ CHAIRMAN ☒ EXECUTIVE DIRECTOR OTHER:
	FILE LOCATION	11/2/82	

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Dr. Marvin Resnikoff re throfum radiation situation in Wayne, New Jersey

SPECIAL INSTRUCTIONS OR REMARKS

ASSIGNED TO	DATE	INFORMATION ROUTING
Raynes, Reg. I	10/12/82	Davis, NMSS
		Kerr, SP
		Cunningham, ELD
		CA
		SECY
		LUnderwood

NRC FORM 232
(6-80)

EXECUTIVE DIRECTOR FOR OPERATIONS
PRINCIPAL CORRESPONDENCE CONTROL

September 12, 1982

Memo to: Mayor W. Jasinski
Town Council
A. Bartolozzi

From: M. Resnikoff
Consultant to Wayne Township
on Thorium Contamination

Re: Materials Buried On Site,
Off-Site Releases

Based on a review of the NRC docket 40-86, tentative conclusions are reached in this memo regarding the amount, form and location of radioactivity on the Grace and Company site, whether the Atomic Energy Commission license was properly terminated, responsibility for clean-up, and the level of off-site radioactive releases. Unfortunately, the NRC file is quite sketchy. With the loss of the Grace and Company files in the 1977 fire, it may be impossible to develop a complete understanding, particularly of what is buried on-site. The NRC testing program will be very helpful in this regard.

Contrary to the intent of the regulations, 10 CFR 20.304 (a), and without specific licensing and proper environmental analysis, the AEC allowed the Wayne site to become a waste disposal site. As well as can be determined from the records, the AEC never approved the burial of thorium on the Wayne property, nor did it oppose the practice. As a result, and based on my review of the records, it is entirely possible that 76 tons of thorium, and about 1,300 tons of residue, are now buried, together with mixed earth, in a volume of 70,000 to 90,000 cubic feet in unlined pits on-site. This estimate does not include the nine large pits produced in 1974 for decontamination purposes. It is clear to me that the AEC neglected to make the proper finding in terminating the license. Other than a notation in a county land deed, the NRC has made no provision for permanent monitoring and maintenance of the site. While most of the radioactive contamination was not generated under AEC contract (less than 20 percent of the Ci content), DOE has expressed an interest in decontaminating the site, though DOE has not spelled out exactly what it intends to do.

Amount, Form and Location of Radioactivity at Grace Site

1. Process.

The Grace and Company plant chemically separated thorium and rare earths (cerium and didymium earths) from monazite sands. The monazite sands provided by the AEC in the '50's contained about 59 percent rare earths and 5.9 percent thorium, though the domestic versions processed in the '60's contained only about 3.5 percent of thorium. As can be

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(9)

determined from the records available, the process remained virtually identical from 1950 to the termination of processing in 1971. However, during the period from 1960 through 1966, more thorium radioactive residues remained on-site than at other times.

Without entering into the complicated chemical steps of the Grace and Company process, monazite sand was digested in hot sulphuric acid, and then transferred to an outdoor quench tank. In this step, the thorium would remain mostly in solution in the acid liquor while the rare earths would precipitate and be separated by a centrifuge. The separation would not be clean and further steps in the process would involve removing rare earths from the thorium and vice versa, so that the final products would be pure. These products were rare earths sodium sulphate and thorium hydroxide or thorium fluoride. In addition to monazite sand, the process required, as input, sulphuric acid, caustic soda, sodium fluoride (or hydrofluoric acid) and 35,000 gallons of water a day.

In terms of effluents, final products would be calcined, some radioactivity and water vapor exiting the stack which would also serve the digester. The solids would be dumped into burial pits in the back yard of the six-acre site, specific site locations for waste solids from particular stages of the chemical process. This burial would be in unlined pits, dug to a depth of 12 to 15 feet, with width six to ten feet. In addition to the air releases and solid dumps, including any radioactive waters that would migrate underground, about 25,000 gallons of waste water per day would be released into Sheffield Brook, after first settling for 24 hours on the site.

2. History

Under the name Rare Earths, Inc., the plant began operation in 1948, though the original AEC contract and license are now missing. According to an AEC contract AT (30-1)-1037, dated November 2, 1950, and updated through July, 1953, Rare Earths, Inc. was to produce nine tons of thorium oxide (ThO_2) FY 1951, 12 tons ThO_2 FY 1952 and 1953, respectively. The thorium oxide was in the form of thorium fluoride sludge. Depending on the thorium content of the monazite ore, between 3.5 and 6 percent, this corresponded to processing from 200 to 342 tons of ore per year. According to AEC Inspection Reports, the company was capable of processing 1¼ tons of ore per day (or 325 tons per year) in around-the-clock shifts, not including weekends. The AEC expressed no interest in the rare earth content under the 1950 contract.

According to AEC contract AT(49-6)-993, signed July 18, 1955, Rare Earths Inc. was to process 7,900 tons of monazite ore at the rate of 600 tons a month. This processing contract must also have included the Curtis Bay, Maryland plan of Grace and Company, since this capacity is far above the capabilities of the Pompton Plains plant. Through amendments to the original contract, this agreement terminated June 1960. The ore, supplied by the AEC, came from foreign (Brazil, India, East Indies) and domestic

sources; Rare Earths, Inc. was allowed to independently purchase ores. The source of the domestic ores, particularly if any were purchased from the Stepan Chemical Company in Maywood, New Jersey, could not be ascertained from this NRC file. Under the AEC contract, the government requested delivery of both thorium hydroxide and rare earth sodium sulphate.

After this AEC contract ended, June 1960, Grace and Company, who had purchased Rare Earths, Inc. November 30, 1956, continued to commercially process monazite sands at the rate of 1½ tons per day until 1971, but the nature of the process changed somewhat. In the latter years, only the rare earths were recovered. The entire thorium content of the monazite ore, containing 75 pounds of natural thorium as thorium fluoride in 500 pounds of phosphate cake for each 1½ tons of ore processed daily, was buried on the site. This burial practice concerned AEC inspectors, who cited Grace and Company for non-compliance with the regulations, though the AEC never halted the operation. Most of the on-site thorium residues can be attributed to the operation between 1960 and 1967. Some time after January 1967, Grace and Company began shipping the thorium phophate to their Chattanooga, Tennessee plant, where the thorium was removed for use as a gasoline-cracking catalyst. These off-site shipments continued until April 7, 1971, when the plant ceased operation.

3. Radioactivity On-Site

The records regarding the total Ci content and volume of radioactive materials buried at the Grace and Company site are sketchy. On the one hand, a letter from Grace and Company to the AEC, dated October 30, 1974, reports a total of 7.7 Ci or 152,350 pounds of thorium buried on-site, based on Grace and Company records. The records, upon which the total was based, were destroyed in the 1977 fire. However, as we see below, the number seems realistic. Another estimate can be derived from different pieces of information. A Grace and Company table dated January 12, 1960 summarizes the total thorium content on-site to that date: 34,250 pounds of natural thorium in 768 tons of residue. For an additional five-year period, 1967-1971, the thorium separation process was comparable to the earlier years and one can derive a probable estimate for the number of pounds of natural thorium and tons of residue. During the period 1960 through 1966, all the contained thorium in the monazite sand was buried on-site. For the years 1963 and 1964, an AEC Inspection Report provides the total thorium. For the years 1960 through 1962 and 1965 and 1966, one can assume the same production rate as for 1963 and 1964. The total thorium, based on these estimates, is given in Table I. As seen by the table, one expects 113,821 pounds of thorium in 1,305 tons of residue. This calculated value is 25 percent less than the total pounds of thorium reported by Grace and Company in their October 30, 1974 letter. Thus, the value which appears in the Grace and Company letter, 152,350 pounds of thorium, is reasonable.

4. Thorium Disposal

Prior to 1960, the radioactive contaminated sludges were placed in above-ground piles. Since no drainage ditch was yet constructed about the property, heavy rains caused a run-off of radioactivity. Some time between 1960 and 1964, the piles of radioactivity which had built up were buried in large unlined holes. Though, in later correspondence, Grace and Company claims that AEC Inspector Klevin approved this burial practice, there exists no formal AEC approval of this on-site burial. In fact, in 1964, the company was cited for non-compliance with NRC regulations, for disposing of too much radioactivity in one location. No record shows how this item of non-compliance was resolved. According to affidavits later provided in 1974, when Grace and Company was requesting termination of its license, the radioactivity which was buried in large pits was exhumed in 1965 and reburied in smaller pits. Subsequent burials were also in smaller pits, though each pit contained greater than the allowed levels of radioactivity, according to 10 CFR 20.304. This regulation says that not more than 50,00 microCi of natural thorium, or 1,000 pounds, could be buried at any one location. In 1963 and 1964, a total of seven pits was dug, each pit containing radioactivity limits which exceeded the AEC regulations. Though the company was cited for non-compliance, the inspector went on to say that no hazard existed. This matter was brought up again in 1966, when the inspector stated, "In my opinion, the problem of the disposition of thorium sludge was one-that the company would have to solve in the near future". In response, the company stated that the thorium wastes would be transferred to their Chattanooga, Tennessee plant. The company was not cited for non-compliance in 1966. Even as far back as May 24, 1960, in a meeting between Grace and Company and AEC representatives at the AEC headquarters in Germantown, Maryland, the AEC pointed out that "a problem with serious implications was that of ultimately disposing of thorium-bearing ores from which the rare earths had been extracted".

The total volume of thorium-contaminated waste buried at the Grace and Company site, not including wastes due to decommissioning, can be roughly estimated. Assuming the pits are 15 feet deep and 10 feet wide and that four were dug in a single year (1963), the total volume is approximately 4,500 cubic feet per year. For 20 years operation, this yields about 90,000 cubic feet.

5. Conclusion

The purpose of the regulation 10CFR 20.304(a) was to prevent proliferation of unlicensed burial grounds. Only small quantities of radioactivity could be buried in one location, according to this regulation. Large quantities could only be buried in a licensed burial ground. However, in allowing a licensee to locate many small burial pits in close proximity, the intent of the regulation was negated. As a result, the licensee has

developed a de facto burial ground, without proper findings on whether this is a suitable location for a burial ground and without establishing, as we'll see shortly, proper long-term institutional arrangements. Though Grace and Company is clearly responsible for placing radioactive material on the site, this practice was accomplished with the approval of the AEC, who could have halted the operation at any time.

Termination of AEC License

In December 1973, Grace and Company hired Applied Health Physics, Inc. to conduct a radiological survey and to decontaminate the property. The radioactivity, including dismantled laboratories and buildings, was buried in large pits on the site. The work was completed July 18, 1974, and a survey report was sent to the NRC, September 9, 1974. The NRC released the property for unrestricted use January 22, 1975, under the condition that the Passaic County Land Records note that radioactive material has been buried on the property. It is my opinion that this form of "unrestricted" release will not protect the public health and safety and that the AEC did not make the proper findings when the site was released.

Apparently, AEC Staff were divided on how to terminate the license. An internal AEC memo dated November 7, 1964 took note of the improper burials prior to 1964. The Office of the General Counsel (OGC) believed that "the new owner of the facility should be licensed to possess the buried thorium or the material should be dug up and transferred to an authorized disposal site". Alternatively, Grace and Company believed that the land deed should include restrictions on construction and excavation at the burial site. OGC opposed the Grace and Company suggestion "since future owners would not be obligated to have these restrictions in the land deed".

Aside from this internal AEC discussion on the proper future institutional arrangements, the licensing termination was also held up because the 1964 non-compliance citation for too much radioactivity in a large pit had never been resolved. By producing affidavits ten years after the fact showing that the large piles of thorium-contaminated sludge had been reburied in smaller pits in 1965, Grace and Company was able to convince Licensing that no non-compliance citations were outstanding and that radioactivity was properly buried. On January 22, 1975, the NRC released the property for unrestricted use, with an entry recorded in the Passaic County Land Deed. The land is still owned by Grace and Company, leased to Electronucleonics, Inc. In retrospect, the intent of 10CFR20.304(a) was violated in that a large radioactive dump was created, without proper licensing, as a waste disposal site.

Based on preliminary surveys by the NRC, with a more detailed report due December 1982, it appears that AEC Staff did not carefully evaluate whether public health and safety were protected. On October 6, 1974, an AEC Inspector recorded that "the place is in poor shape and can't be released without further decontamination. It does not meet our criteria for release for unrestricted use." This note mentioned a drain four feet underground which read one millirem

per hour at the surface and high alpha radiation levels in the buildings. The latter radiation problem was cleaned up, but, as far as the records reveal, the drain was never removed since part of it was under the building.* Another AEC memo, dated October 22, 1974, recommended that "prior to release, each burial be identified as to location and amount of material". Instead, in an October 30, 1974 letter, Grace and Company simply provided the total radioactivity buried on-site without reference to exact locations where this material was buried.

A recent preliminary NRC survey shows average radiation readings in some areas of the burial ground to be 1 mr/h, which is above the 1gal limits for unrestricted release. Soil samples showed thorium levels up to 400pCi/g while a recent NRC preliminary survey shows levels as high as 1,200pCi/g. Interim EPA and NRC criteria, respectively, 5 and 10pCi thorium/232 per gram. Further, in response to an NRC request for assurance that the buried material would not be washed by erosion into local streams, Grace and Company made reference to grading and seeding the burial area. One paragraph in one letter was sufficient to satisfy NRC Staff.

More important were the questions not asked by the AEC. The AEC did not ask about underground migration, if any, through the site, and did not request a detailed geological investigation of the possibility of erosion. Most deficient are the future institutional arrangements for the site. What if erosion does occur? Who then is responsible for monitoring and maintenance? Who will be responsible for the long-term maintenance of this radioactive waste disposal site? How can it be assured over the long term that on-site construction and excavation will not take place? The AEC only required a note in the deed that radioactive material was buried on the site without establishing the necessary details of maintenance provisions. In retrospect, if all future site owners were licensed to possess radioactive material, as some AEC Staff argued in 1974, one of the problems of the site, who is responsible for maintenance, would have been resolved,

Off-Site Radioactive Releases

Following a call by the New Jersey Department of Health Sector, the AEC first inspected Rare Earths, Inc., November 25, 1959. The DOH Inspector had noted a milky dispersion in the Pompton River. Samples of this dispersion revealed alpha contamination of 3,370 pCi/l, which is 3,370 times the maximum allowable concentrations for unrestricted areas. The readings in previous years by DOH had shown higher readings. The AEC Inspection Report indicated that ThO_2, stored in a pile on the property, had washed into the river during a rainstorm and also that Grace and Company did not properly control the acidity level of the waste thorium treatment facility. Whether the high radiation levels in the river were also due to illegal dumping cannot be ascertained, though the radiation levels in the river were many times higher than the legal limits.

As a result of the AEC inspection, a series of steps were taken by Grace and Company to reduce the contamination, including digging a drainage ditch around the perimeter of the property to prevent water running off the steep hill

*It appears that the drain line connects to a sump on the NW corner of the property which had high alpha levels measured Aug., 1978. Maps also show an old on-site well. The AEC did not request data on the well depth and water radioactivity levels.

behind the plant. Though not one of the production process steps was altered before or after this inspection, the company did ensure that the liquid level system was operating properly, controlling the tH smelting and burying the sludge cake. Apparently, the radiation levels in Sheffield Brook remained below 20 percent of the maximum allowable levels after this inspection. The company was cited for non-compliance with AEC regulations.

The Rare Earths, Inc. process used 35,000 gallons of fresh water per day and 25,000 gallons per day of waste water flow were released to Sheffield Brook. The remaining 10,000 gallons per day, plus chemical additions, were released via the stack when the final rare earth product was calcine, or pumped to a waste lagoon. Later the waste water treatment process involved control of the PH, and settling of the sludge in a holding tank. The sludge was then pumped to a filter and the process cake, thorium phosphate, was buried in pits on the site. The water was released off-site. No further mention is made of where this lagoon water went or the location of this lagoon on-site.

A rough estimate of outside releases, assuming 20 percent of maximum levels, 35,000 gallons of water per day for 20 years, is a total outside release of 0.18 Ci (or 3,600 pounds of thorium and daughter products), alpha emitters vs. 7.6 Ci of thorium-232 on-site plus equal Ci amounts of daughter products (Pb, Bi, Act). In addition to these releases, as mentioned previously, a portion of the thorium pile was washed off the site. Between 1960 and 1964, a drainage ditch was constructed to alleviate this water run-off problem. This outside release of radioactivity is more than enough to contaminate the brook area west of the plant, without accounting for any alleged dump of thorium.

Responsibility for Radioactive Materials Buried On-Site

Apparently the Department of Energy (DOE) has agreed to take responsibility for clean-up of the on-, off-site radioactive contamination (letter, William E. Mott, DOE to R. G. Hayes, NRC, April 21, 1982) by including the Grace and Company site in DOE's formerly-utilized site program. This same program has responsibility for clean-up of sites at Lewiston (NY), Canonsburg (CA) and Middlesex (NJ), among others. The justification for DOE responsibility for clean-up resides in language in the contract between Grace and Company (through Rare Earths, Inc. and later Davison Chemical Co.) and the AEC, dated July 18, 1955 (AT(49-6)-993), in which the government maintains title to the ores and their associated materials. Under Article XVII-Property, "Title to Monazite delivered to the contractor and to all materials extracted under this contract from such monazite shall be in the Government and shall remain in the Government throughout the performance of all work hereunder." Under this section, DOE has agreed to take responsibility for clean-up of the Grace and Company Curtis Bay, Maryland plant.

An earlier contract between Rare Earths, Inc. and the Atomic Energy Commission, dated November 2, 1950 (AT(30-1)-1037) does not contain the above wording and DOE has disclaimed clean-up responsibility under this contract. An earlier contract dated May 26, 1948, which would place it time-wise within the

Manhattan Project, could not be located by Grace and Company.

Soon after passage of the Atomic Energy Act of 1954, Rare Earths, Inc. obtained a license from the AEC to possess thorium. This license continued to January 1975, when it was terminated by the NRC (the successor to the AEC) at the request of Grace and Company. Actual processing of monazite ore ceased in 1971. In 1981, the NRC, under its previous licensing responsibility, re-surveyed the site and off-site locations.

Since DOE has agreed to assume responsibility for clean-up, it may not be necessary to know further if Grace and Company has any responsibility. Nevertheless, it does appear that Grace and Company violated the letter and spirit of 10CFR20.304(a) in establishing a burial site in Wayne while the NRC did nothing to halt the operation. It also appears that the AEC improperly terminated the Grace and Company license, acting upon incomplete information. If a hitch develops in DOE clean-up plans or for some other reason, the Wayne Legal Department will then have to decide who is responsible for clean-up — DOE, NRC or Grace and Company?

MR:ecm:9/16/82

Table. Estimate of Thorium and Tons Residue on Grace & Co. Site

Years Inclusive	ThO_2 (lbs)	Residue (tons)
1948-1959[a]	34,250	768
1963,1964[b]	18,657	62
1960-1962[c]		
1965,1966	46,643	155
1967-1971[d]	14,271	320
Total	113,821	1305

[a]From Grace&Co table, dated Jan.12, 1960.
[b]From AEC Inspection Report, 1964.
[c]Based on same production rate as the years 1963-1964.
[d]Based on same production rate as years 1948-1959.

OCT 2 8 1982

Docket No. 40-00086 License No. STA-422

Township of Wayne
ATTN: John Leidy
Business Adminstrator
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

On September 23, 1982 a NRC Region I inspector visited the site where dredging of the Pompton River has occurred near the west bank, north of the cove where Sheffield Brook enters the River. Samples of the material dredged from the River were taken by the inspector and were analyzed in our laboratory. These samples showed no detectable radioactivity above normal background. Radiation levels measured on the bank near the area of the dredging and on the sand-gravel removed from the river are indicative of normal background radiation levels.

We hope this information and the attached report will be helpful to you in discussing this matter with the citizens of the Township of Wayne.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: Region I Report No. 99990001/82-12

cc w/encl:
W. R. Grace and Company
Davidson Chemical Division
ATTN: Mr. Burton Mobley
Manager, Environmental Control
P. O. Box 2117
Baltimore, Maryland 21203

Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc w/encl:
Region I Docket Room (with concurrences)
J. Suermann, OCA
RI:DE&TP
Kinneman/cgl

10/27/82

RI:DE&TP
Johansen
10/27/82

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U. S. NUCLEAR REGULATORY COMMISSION
REGION I

Report No. 99990001/82-12

Docket No. 40-00086

License No. STA-422 Priority IV Category E

Licensee: W. R. Grace and Company

Wayne, N. J.

Facility Name: W. R. Grace

Inspection At: West Bank of Pompton River North of Sheffield Brook

Inspection Conducted: September 23, 1982

Inspectors: _____ _____
J. Johansen, Radiation Specialist date

_____ _____
date

_____ _____
date

Approved by: _____ 10/25/82
John D. Kinneman, Chief, Nuclear Materials, Section A date

Inspection Summary:
Inspection on September 23, 1982 Special inspection limited to determination of radiation levels and gathering of samples of material dredged from near the west bank of the Pompton River north of the cove where the Sheffield Brook enters on the east bank of the River and interviews with representatives of the construction company performing the dredging. The inspection involved 3 hours on site by one NRC inspector.
Results: No radioactivity other than normal background was detected in the samples analyzed. Radiation levels measured were indicative of area background.

Region I Form 12
(Rev. February 1982)

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PDR ADOCK 04000086
C PDR

1. Persons Contacted

A. Mr. Patrick Krammer, Ferro Construction Co.

B. Mr. David M. Kulp, Ferro Construction Co.

C. Mr. Jack VanLenten, Ferro Construction Co.

2. Background

NRC Region I was notified by Mr. John Leity, Manager of Wayne Township, New Jersey that the Pompton River was being dredged in an area near Sheffield Brook. Citizens of Wayne had expressed concern that the dredging of the Pompton River near Sheffield Brook might result in spreading of radioactive thorium.

3. Investigation

On September 21, 1982 individual A stated to the inspector during a telephone conversation that dredging of the Pomptom River had occurred only on the west side of the river, north (upstream) of the cove where Sheffield Brook enters the Pompton River. He stated that the individuals who performed the work should be at the site around 9:00 a.m. on September 23, 1982.

On September 23, 1982, the inspector observed that there was evidence of dredging along the west bank of the Pompton River south of the Jackson Avenue Bridge (Pompton Plains Cross Road). No evidence of dredging could be seen either along the east bank of the river north of the cove where Sheffield Brook enters the river, or within and south of the cove along the east and west banks of the river (See Attachment 1).

The inspector talked with individuals B and C at the dredging site. They confirmed the information given the inspector and stated that they had performed the dredging and removal of the material (sand-gravel) from the west side of the Pompton River. They took the inspector to an area on the north side of Jackson Avenue and pointed out piles of sand-gravel which had come from the west side of the river, north of the cove.

4. Measurements and Samples

Measurements of radiation levels along the west bank of the River where dredging had taken place and at the sand-gravel pile north of Jackson Avenue did not exceed 10 micro R per hour as measured with a Ludlum Model 12S micro R meter, calibrated August 25, 1982.

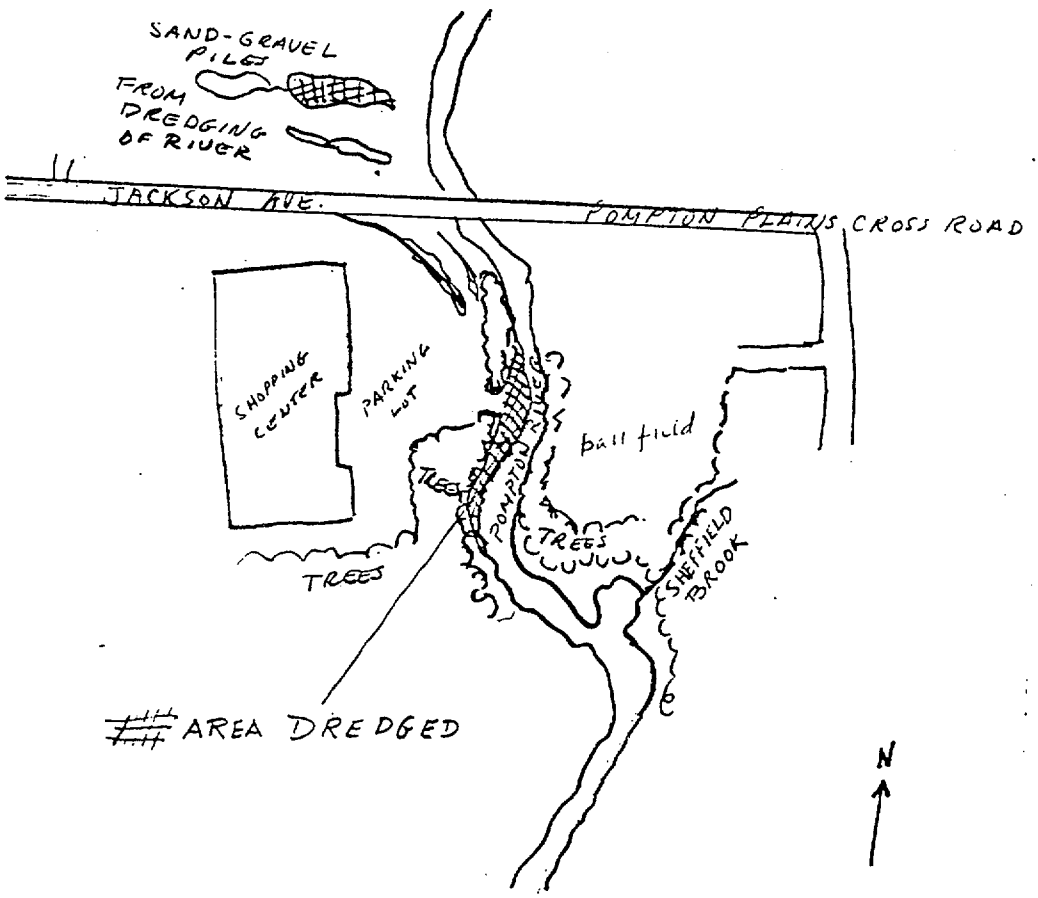
Five sand-gravel samples were taken from various places on the sand piles and one sample was taken from the west bank of the river as far south as evidence indicated dredging had occurred. The samples were returned to Region I for analysis.

5. Sample Analysis Results

All six soil samples were analyzed for radioactivity using a GeLi detector coupled with a computer based multi channel analyzer in the Region I Laboratory. No radioactivity above normal background was detected in these samples.

6. Conclusion

No thorium was identified as a result of the dredging of the west bank of the Pompton River north of the cove where Sheffield Brook enters the river. Radiation levels measured were indicative of background radiation of the area.



ATTACHMENT #1
Report No. 99990001/82-12

40-36

SEP 29 1982

ITEM # 443

The Honorable Jim Courter
Member, United States House of Representatives
22 N. Sussex Street
Dover, New Jersey 07801

Dear Congressman Courter:

I am pleased to address the issue identified in the letter dated August 23, 1982 from Frank Fitzpatrick, Health Officer, Pequannock Township, New Jersey, enclosed with your letter of August 26, 1982. Mr. Fitzpatrick's letter concerned thorium contamination which has been found near a railroad siding in Pequannock Township.

The Nuclear Regulatory Commission (NRC) is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). A number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occurring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W. R. Grace and Company.

As a result of our review and preliminary surveys of the Black Oak Ridge Road site, we determined that radioactive thorium contamination remained on the site which is in excess of currently acceptable criteria for release for unrestricted use; some thorium contamination was also found along the Sheffield Brook, which drains the site. We have contracted with Oak Ridge Associated Universities (ORAU) to conduct detailed radiological surveys of the contaminated areas. The Pequannock Township Health Officer apparently learned that the railroad siding referred to in his letter had, at one time, been used to unload monazite sand destined for the Rare Earths/W. R. Grace facility. The Health Officer conducted surveys, found radioactive contamination and reported this finding to our Region I office. Inspectors from the Region I office confirmed this finding on June 30, 1982 and determined the contamination was thorium. Our contractor, ORAU, conducted detailed surveys of the area in August 1982. The results of these surveys will be contained in a preliminary report which is expected to be available in December 1982. Copies of this report will, of course, be provided to you and Pequannock Township.

B/440

Based on our own surveys of the siding and analysis of samples taken from this siding, we have determined there is no immediate hazard from the thorium contamination to residents of Pequannock Township who reside near the railroad siding.

(2)

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

The surveys described above are part of the process of gathering and evaluating the information necessary to make a decision regarding whether the contaminated soil on the W. R. Grace site, near the Sheffield Brook and/or near the railroad siding should be removed. A decision that removal of the contaminated soil is not necessary would be based on a conclusion that radiation exposures from all routes and to all individuals would be acceptably low. At this time we do not know who will decide whether the contaminated soil must be removed. We also do not know who would bear the expense for removal of the contaminated soil, if its removal is determined to be necessary. W. R. Grace and Company still owns the property on which the thorium was processed. The U. S. Department of Energy (DOE) may have authority to take remedial action, as the result of work performed under a contract between Rare Earths, Inc., predecessor to W. R. Grace and Company, and the former U. S. Atomic Energy Commission. Copies of all our data and reports will be forwarded to DOE so that they can consider this site, including the railroad siding, for inclusion in the Formerly Utilized Site Remedial Action Program.

We realize that this issue is of significant concern to you and your constituents, and are working to resolve it. We will keep you informed of our progress.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director
for Operations

Distribution:
EDO 12288
SECY-82-921
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
G. Kerr, SP
R. Haynes
J. Allan
T. Martin
J. Kinneman
F. Brenneman
J. Johner
M. Campbell
RI Docket File
St. of New Jersey

(Name: R7A)

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	OCA
SURNAME	Campbell/wb	Kinneman	Joyner	Martin	
DATE					9/23/82

OFFICE			RI:PAO	RI:SLO	RI:DRA	RI:RA	EDO
SURNAME			Abraham	Brenneman	Allan	Haynes	WJDircks
DATE						9/24/82	9/ /82

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Mr. Joseph M. Hendrie
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Mr. Hendrie:

Enclosed please find a copy of recent correspondence to my office from the Township of Pequannock, Morris County, New Jersey.

If you might be able to advise me as to how the N.R.C. might be able to assist in the Township's problem, I would be most appreciative. This matter is one of some urgency.

Thank you for your cooperation in this matter.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh
cc: U.S.E.P.A.
N.J. Dept. of Environmental Protection

Enc:

mr.

KINDLY REPLY TO THE DOVER OFFICE/ATTN: W.R. HEALEY

B/441

8208010037

ITEM # 444

(2)

FROM:
Rep. Jim Courter

TO:
Hendrie

ACTION CONTROL	DATE
COMPL DEADLINE	9/27/82
ACKNOWLEDGMENT	
INTERIM REPLY	
FINAL REPLY	5/ Ducke
FILE LOCATION	9/29/82

CONTROL NO. 12288

DATE OF DOCUMENT 8/26/82

PREPARE FOR SIGNATURE OF:
☐ CHAIRMAN
☒ EXECUTIVE DIRECTOR
OTHER:

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Frank Fitzpatrick, Pequannock Township re removal of radioactive thorium

SPECIAL INSTRUCTIONS OR REMARKS

Reply to Dover Office.
Mark envelope ATTN: W.R. Healey

SECY-82-0921

Due Dover Mayor 9/25/82

CLASSIFIED DATA

DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY ☐ NSI ☐ RD ☐ FRD	
POSTAL REGISTRY NO.			

ASSIGNED TO:	DATE
Davis, NMSS	9/13/82
FC	9/13/82
Page	9/17/82
Region I	9/15/82

INFORMATION ROUTING
Cunningham
[redacted]
Haynes, Reg. I
LUnderwood
Kerr, SP

LEGAL REVIEW ☐ FINAL ☐ COPY

ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS
NOTIFY:
☐ EDO ADMIN & CORRES BR
EXT.
COMMENTS, NOTIFY:
EXT.

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232 (11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS
PRINCIPAL CORRESPONDENCE CONTROL

DO NOT REMOVE THIS COPY

Pequannock Township

Township of Pequannock
530 NEWARK-POMPTON TURNPIKE
POMPTON PLAINS, N. J. 07444

(201) 835-5700

August 23, 1982

The Hon. Jim Courter
22 North Sussex Street
Dover
New Jersey 07801

Dear Congressman Courter:

Pequannock Township Health Department personnel recently located three (3) small sites containing radioactive levels in excess of background 1 MR/hour.

These findings were confirmed by NRC and borings were done on August 12, 1982 to determine whether or not it is radioactive thorium and the amount that may be located on these sites.

We would appreciate any help your good offices could provide, especially in the removal of the contaminated soil.

If you require additional information, please feel free to contact us.

Sincerely,

Frank Fitzpatrick
Health Officer

FF/mwp

B/442

ITEM # 445

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Commissioner Robert Hughey
New Jersey Department of
Environmental Protection
CN 1402
Trenton, New Jersey 08625

Dear Commissioner Hughey:

Enclosed for your information is a copy of recent correspondence from the Township of Pequannock, Morris County.

I would be appreciative of your review of the problem presented by the Township in this letter. The Nuclear Regulatory Commission and U.S. Environmental Protection Agency have also been contacted in this matter.

Thank you for your concern on behalf of the Township of Pequannock.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh
cc: Nuclear Regulatory Commission
USEPA
Twp. of Pequannock
Enc:

KINDLY REPLY TO THE DOVER OFFICE

B/443

ITEM # 446

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Ms. Jacqueline Schafer
Regional Administrator
Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Dear Ms. Schafer:

Enclosed for your information is correspondence forwarded to my office from the Township of Pequannock, Morris County, New Jersey.

I would be most appreciative if you would review the problem presented by the Township and advise my office has to how your staff may possibly be of assistance.

Your concern on behalf of Pequannock is gratefully appreciated.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh

cc: Nuclear Regulatory Commission
NJDEP

Enc:

KINDLY REPLY TO THE DOVER OFFICE

B/444

ITEM # 447

40-86

SEP 29 1982

The Honorable Robert A. Roe
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Roe:

I am pleased to address the issue identified in the letter dated August 23, 1982, from Frank Fitzpatrick, Health Officer, Pequannock Township, New Jersey, enclosed with your letter of September 14, 1982. Mr. Fitzpatrick's letter concerned thorium contamination which has been found near a railroad siding in Pequannock Township.

From previous discussions between you and members of the NRC staff and from our previous correspondence, including my letters to you dated May 21 and September 1, 1982, you are familiar with the background of the Wayne, New Jersey situation. In addition, our Office of Congressional Affairs provided you with a copy of a Preliminary Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated July 1982, which was prepared by our contractor, Oak Ridge Associated Universities (ORAU).

The Pequannock Township Health Officer apparently learned that the railroad siding referred to in his letter had, at one time, been used to unload monazite sand destined for the Rare Earths/W. R. Grace facility. The Health Officer conducted surveys, found radioactive contamination and reported this finding to our Region I office. Inspectors from the Region I office confirmed this finding on June 30, 1982 and determined the contamination was thorium. Our contractor, ORAU, conducted detailed surveys of the area in August 1982. The results of these surveys will be contained in a preliminary report which is expected to be available in December 1982. Copies of this report will, of course, be provided to you and Pequannock Township. Since we believe this railroad siding is associated with the W. R. Grace site, all data and reports concerning it will be forwarded to the Department of Energy so that they can consider this site for inclusion in the Formerly Utilized Site Remedial Action Program.

Based on our own surveys of the siding and analysis of samples taken from the siding, we have confirmed that the radiation is from thorium contamination. We have also determined that there is no immediate hazard to residents near the siding from the thorium contamination.

B1445

ITEM # 448

(2)

We realize that this issue is of significant concern to you and your constituents, and are working to resolve it. We will keep you informed of our progress.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director
for Operations

Distribution:
EDO 12298
SECY
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
G. Kerr, SP
R. Haynes, RI
J. Allan, RI
T. Martin, RI
J. Kinneman, RI
F. Brenneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
State of New Jersey

RI:DETP
Campbell/wb
9/24/82

RI:DETP
Kinneman

OCA
9/29/82

(NAME:R7)

OFFICE	RI:DETP	RI:DETP	RI:PAO	RI:SLO	RI:DRA	RI:RA	EDO
SURNAME	Joyner	Martin	Abraham	Brenneman	Allan	Haynes	Dircks
DATE						9/24/82	9/27/82

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES
SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT

SCIENCE AND TECHNOLOGY
SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

September 14, 1982

Mr. William J. Dircks
Executive Director for Operations
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Dircks:

Enclosed please find a copy of a letter from Mr. Frank Fitzpatrick, the Health Officer of Pequannock Township, in which he requests an update on the tests the Nuclear Regulatory Commission performed in Pequannock on August 12.

I would appreciate the information he desires.

Thank you for your assistance.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

B/446

8208010047

ITEM # 449

(2)

FROM:

Rep. Robert A. Roe

TO:

Dircks

ACTION CONTROL	DATES
COMPL DEADLINE	9/29/82
ACKNOWLEDGMENT	
INTERIM REPLY	
FINAL REPLY	S/ Dircks
FILE LOCATION	9/29/82

CONTROL NO. 12298

DATE OF DOCUMENT 9/14/82

PREPARE FOR SIGNATURE OF:
☐ CHAIRMAN
☒ EXECUTIVE DIRECTOR
OTHER:

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Frank Fitzpatrick, Pequannock Township re removal of radioactive thorium

SPECIAL INSTRUCTIONS OR REMARKS

Ref: EDO 12298

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DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY ☐ NSI ☐ RD ☐ FRD	
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Haynes, Reg. I	9/15/82

INFORMATION ROUTING

Cunningham, ELD
Davis, NMSS
Karr, SP
CA
SECY
Lieberwood

LEGAL REVIEW ☐ FINAL ☐ COPY

ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS
NOTIFY:
☐ EDO ADMIN & CORRES BR
EXT.
COMMENTS, NOTIFY:
EXT.

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

PRINCIPAL CORRESPONDENCE CONTROL

DO NOT REMOVE THIS COPY

Pequannock Township

Township of Pequannock
530 NEWARK-POMPTON TURNPIKE
POMPTON PLAINS, N. J. 07444

(201) 835-5700

August 23, 1982

The Hon. Robert A. Roe
156 Boonton Road
Wayne
New Jersey 07470

Dear Congressman Roe:

Pequannock Township Health Department personnel recently located three (3) small sites containing radioactive levels in excess of background 1 MR/hour.

These findings were confirmed by NRC and borings were done on August 12, 1982 to determine whether or not it is radioactive thorium and the amount that may be located on these sites.

We would appreciate any help your good offices could provide, especially in the removal of the contaminated soil.

If you require additional information, please feel free to contact us.

Sincerely,

Frank Fitzpatrick

Frank Fitzpatrick
Health Officer

FF/mwp

Copy delivered 8/25/82

B/447

ITEM # 450

SEP 29 1982

The Honorable Robert A. Roe
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Roe:

I am pleased to address the issues identified in the letter dated August 25, 1982, from Marvin Resnikoff and in Resolution No. 235 of the Wayne Township Council, which were enclosed with your letter of September 14, 1982. The letter and the Resolution concerned the W. R. Grace and Company property and surrounding area in Wayne, New Jersey.

From previous discussions between you and members of the NRC staff and from our previous correspondence, including my letters to you dated May 21 and September 1, 1982, you are familiar with the background of the Wayne situation. In addition, our Office of Congressional Affairs provided you with a copy of a Preliminary Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated July 1982, which was prepared by our contractor, Oak Ridge Associated Universities (ORAU).

Detailed responses to the specific issues in Dr. Resnikoff's letter and in the Resolution are contained, respectively, in Enclosures 1 and 2 to this letter.

We realize that these issues are of significant concern to you and your constituents, and are working to resolve them. We will keep you informed of our progress.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director
for Operations

Enclosures:
1. Response to Dr. Resnikoff's letter
2. Response to Resolution No. 235

B1448

ITEM # 451

(b)

OFFICE ▶							
SURNAME ▶							
DATE ▶							

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-9

Distribution:
EDO 12299
SECY
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
W. Kerr
R. Haynes, RI
J. Allan, RI
T. Martin, RI
J. Kinneman, RI
F. Brenneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
State of New Jersey

(Name: R7B)

RI:DETP	RI:DETP	RI:DETP
Campbell/wb	Kinneman	Joyner
9/22/82		

OFFICE	RI:DETP	RI:PAO	RI:DEPOS	RI:DRA	RI:RA	EDO (for S)	OCA
SURNAME	Martin	Abraham	Brenneman	Allan	Haynes	WJDircks	
DATE					9/24/82	9/27/82	9/26/82

ENCLOSURE 1

Response to Dr. Resnikoff's letter

Items are numbered as in Dr. Resnikoff's letter dated August 25, 1982.

Item 1: "According to NRC's 'Proposed Radiological Survey Plan,' March 15, 1982, the final report on the stream survey was due in August. The preliminary report was completed on schedule in July. What is the holdup in the final report? Additional core drilling near Sheffield Brook was done in August. What was the purpose of these additional drillings?"

Response: The issuance of the final report has been delayed by the need of Oak Ridge Associated Universities to respond to NRC staff comments on the preliminary report and consider additional data which was not available at the time the preliminary report was published. The final report is scheduled to be available in October. The additional core drillings were conducted to provide additional and more complete information on conditions near the Brook. The results of these drillings will be incorporated in the final report.

Item 2: "The preliminary report has no recommendations. Though the Town Council and I will come to conclusions, and make recommendations, I think it would be useful to have the NRC do likewise, both for off- and on-site."

Response: The reports of the NRC contractor (Oak Ridge Associated Universities), who performed the radiological surveys around the Sheffield Brook and on the W. R. Grace site, are intended only to provide results of the survey measurements and observations of the survey group. Recommendations are the responsibility of the agency or party responsible for disposition of the site. Since the Department of Energy (DOE) has agreed to consider this site for the Formerly Utilized Site Remedial Action Program, this is likely to be the DOE staff. The NRC has previously concluded that there is no immediate hazard to the residents of Wayne from the presence of this thorium contamination. No data obtained from the contractor to date has changed this conclusion.

Item 3: "Finally, the site has an aquifer which may be passing through the burial pits. The on-site core drilling should include an investigation of the underground soil structure by a geologist, particularly a hydrogeologist. The NRC will be taking water samples from the drill-holes, where available."

Response: Drinking water samples taken from homes in this area have all been well within U.S. EPA standards for radioactivity. The results of the surveys on the W. R. Grace property will provide data to determine whether the site is affecting any water supplies. Such investigations will be the responsibility of the agency or party with ultimate responsibility for the site.

Item 4: "One of the Concerned Citizens asked how it would be possible to know the full extent of the buried materials on-site without core drilling into the burial pits. Grace & Company has objected to such drillings for fear the clay liner under the burial pits should be pierced. The NRC has instead carried out radar measurements of the pits and core drilling around the pits. Much of this awaits the NRC report, but unless the pits contain drums, it is also unclear to me how the full extent of buried materials will be known."

Response: Until the ORAU report is complete, it will not be known whether the core drilling and radar survey will provide sufficient information concerning the buried waste. They will certainly provide an important basis for planning additional work, should such work be necessary.

ENCLOSURE 2

Response to Resolution No. 235 of The Wayne Township Council

Items are lettered as in Resolution No. 235

Item a: "The hiring by the Nuclear Regulatory Commission of a Hydro geologist."

Response: The Nuclear Regulatory Commission has access to qualified hydro geologists both on staff and as consultants. We assume that the Resolution intends to suggest that a hydrogeologist review the situation in Wayne. Such a review will be the responsibility of the agency or party with responsibility for disposition of this site.

Item b: "That the contemplated flyover be performed over the entire Township."

Response: EG&G, under contract to the Department of Energy, began an additional aerial radiological survey over Wayne Township on September 16, 1982. EG&G has informed us that this survey will include essentially all of Wayne Township.

Item c: "That the material being dredged from the Pompton and Passaic River systems, as well as soil systems, be properly tested for radioactive material."

Response: The NRC Region I office has made arrangements to test samples of the dredged material for thorium.

Item d: "That the Nuclear Regulatory Commission perform additional tests on the W. R. Grace site in the actual burial pits."

Response: The recent surveys by ORAU include a large number of onsite measurements, including sampling from a number of boreholes near the burial pits. Additional testing is not planned until the analysis of these samples is complete and the results of all measurements are reported. A determination regarding additional testing will be made at that time.

Item e: "That the Nuclear Regulatory Commission immediately advise the Township and the affected residents of the results of the core samples taken from said residents' backyards."

Response: The NRC has made available to Township officials the preliminary report of the radiological survey of Sheffield Brook, Wayne, New Jersey dated July 1982. This report contains the preliminary results of the core samples. The final report of the survey at Sheffield Brook is expected to be available during October 1982 and a copy will be furnished to the Township officials and to the residents.

Item f: "That the Nuclear Regulatory Commission furnish the Township with final reports and recommendations for all the tested sites without further delay."

Response: The surveys and sample analysis being conducted by ORAU under contract to the Nuclear Regulatory Commission are both time consuming and complex. Due to the concerns of the people in Wayne, the NRC has expended considerable effort to produce the final reports as quickly as possible. A final report of the surveys of Sheffield Brook is scheduled to be available in October 1982. A preliminary copy of the final report of the surveys on the W. R. Grace property is expected to be available during December 1982.

JUL 1 1982

Docket No. 40-00086
License No. STA-422

The Honorable Nicholas F. Brady
United States Senate
Washington, D.C. 20510

Dear Senator Brady:

I am pleased to provide you with information regarding the thorium contamination in Wayne, New Jersey, as requested in your June 14, 1982 letters.

The Nuclear Regulatory Commission (NRC) is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). A number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occurring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W.R. Grace and Company. A summary of the historical background of this facility is enclosed for your information.

Following a site visit and surveys by NRC inspectors, the State of New Jersey arranged for an aerial radiological survey of the area surrounding the W.R. Grace and Company facility. The survey was performed by EG&G, Inc., a contractor of the U.S. Department of Energy, in May, 1981.

Our review of the results of the aerial survey and the surveys by NRC inspectors indicated slightly elevated radiation levels on the W.R. Grace and Company property and along the Sheffield Brook which drains the property. Although these radiation levels do not pose any immediate hazard to the health and safety of the individuals living near or frequenting the areas around the Brook or the W.R. Grace and Company property, additional surveys and evaluations seemed appropriate. We arranged for an NRC contractor, Oak Ridge Associated Universities (ORAU), to perform these surveys which include detailed radiation level measurements and analysis of numerous soil and water samples. The surveys of the Brook area were completed on May 1, 1982, and the surveys of the W.R. Grace and Company property are scheduled to be performed in July of 1982.

B/449

Although the ORAU report of the surveys performed in the area of the Sheffield Brook will not be completed until September, we have been informed that their results for the samples of well water taken from nearby residences and a nearby farm showed no detectable activity. All of the well water samples met standards set by the U.S. Environmental Protection Agency for radioactive materials in

(5)

OFFICE ▶	ITEM # 452						
SURNAME ▶							
DATE ▶							

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-9

drinking water. In addition, surveys by NRC inspectors indicate that: 1) it is very unlikely that any individual will exceed the recommended dose limits for individual members of the general public, 2) no radiation levels above normal background exist in any residence, and 3) areas where radiation levels are above normal background are near the rear boundaries of the properties that abut the Brook.

Some of your constituents have indicated concern about the potential long-term effect of exposure to the contaminated soil, particularly to children who play in the soil and may ingest small quantities of it. We will not have sufficient information to fully determine the degree of hazard associated with ingesting small quantities of the contaminated soil until our contractor has completed the analysis of the samples collected during the field work. However, analysis of several samples of water from the Brook has not revealed radioactive contamination in the water. This indicates that the contamination is probably insoluble and would not remain in the body if it were ingested. In addition, the actual concentration of radioactive material in surface soil is quite low. Therefore, we conclude that any hazard associated with exposure to the contaminated soil during the time required to complete our investigation is insignificant.

The surveys described above are part of the process of gathering and evaluating the information necessary to make a recommendation regarding whether the contaminated soil should be removed. A recommendation that removal of the contaminated soil is not necessary would be based on a conclusion that exposures from all routes and to all individuals will be acceptably low. We do not know who would bear the expense for removal of the contaminated soil, if its removal is determined to be necessary. W.R. Grace and Company still owns the property on which the radioactive material was processed. The U.S. Department of Energy may have authority for remedial action, as the result of work performed under a contract between Rare Earths, Inc., predecessor to W.R. Grace and Company, and the former U.S. Atomic Energy Commission.

We realize that these issues are of significant concern to you and your constituents, and are working to resolve them. We are pleased to be of service to you and your constituents in this matter and will keep you informed of our progress.

Sincerely,

(Signed) T. A. Rehm

for William J. Dircks
Executive Director
for Operations

Enclosure:
W.R. Grace and Company
Historical Background

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
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Distribution:
EDO 11995
SECY 82-0619
SECY 82-0621
Docket No. 40-00086
PDR
R. DeYoung
CA
J. Davis
G. Kerr
G. Cunningham
L. Underwood
J. Allan, RI
R. Haynes, RI
T. Martin, RI
J. Kinneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
K. Abraham

OCA
6/1/82

Transmitted via IBM 5520
Name: Document from Region I

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	RI:DRA	RI:RA	EDO
SURNAME	Campbell:as	Kenneman	Joyner	Martin	Allan	Haynes	WJDircks
DATE	6/29/82	6/29/82	6/29/82	6/29/82	6/29/82	6/29/82	6/30/82

W. R. Grace and Company
Historical Background

In approximately 1948, Rare Earths, Inc. began processing monazite sand at Pompton Plains, New Jersey, to extract thorium and rare earth elements. The work may have been conducted under contract with the Atomic Energy Commission (AEC). In 1954 the AEC issued a license authorizing the possession, transfer and use of source material (thorium) by Rare Earths, Inc. at this site. In 1957 this activity was taken over by the Davison Chemical Division of W.R. Grace and Company. The processing of monazite sand at this location ceased in 1971. The processing produced large quantities of wastes containing residual thorium. In 1974, W.R. Grace and Company hired a consultant to decontaminate the site to meet AEC criteria for release for unrestricted use. These criteria required that average radiation levels on the ground be less than 0.2 millirem per hour and maximum levels be less than 1 millirem per hour and that removeable alpha contamination in the buildings not exceed 1000 disintegrations per minute (dpm) per 100 square centimeters. The facility was released by the Nuclear Regulatory Commission (NRC), which was established in 1974 to succeed the AEC, for unrestricted use on January 22, 1975, following a confirmatory survey. Documents supplied by W.R. Grace and Company in support of their request for release indicated that 1600 pounds of materials slightly contaminated with thorium were buried on the site in 1974 and that 19,000 pounds of thorium had previously been buried.

In August 1980, the NRC requested that its Regional offices review specified formerly licensed facilities, including the W.R. Grace and Company (Rare Earths) facility in Wayne (Pompton Plains), New Jersey, to determine whether they met current criteria for unrestricted use.

In January 1981, an inspector from the NRC Region I office in King of Prussia, Pennsylvania, accompanied by a representative of the New Jersey Bureau of Radiation Protection, conducted a survey of the Rare Earths property. Based on measurements made at the site and analyses of soil samples in the NRC Region I Laboratory, it was concluded that surface soil contamination levels greater than current (1981) criteria for release for unrestricted use, and elevated radiation levels in excess of current criteria, exist on the site. The highest radiation level measured was 1.0 millirem per hour. These contamination and radiation levels do not presently result in a hazard to the health and safety of persons working at or living near the site. Further surveys and evaluations are scheduled for the summer of 1982. On September 10, 1981, an NRC inspector surveyed the interior of all buildings at the site and found that the buildings met current criteria for release for unrestricted use.

On May 25, 1981, an aerial radiological survey of this facility and the surrounding area was conducted by EG&G, Inc., at the request of the State of New Jersey.

Enclosure

The aerial survey identified one offsite area west of the site that exhibited radiation readings higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey found normal background radiation levels in most areas, but radiation levels up to 0.2 millirem per hour were found in one area along Sheffield Brook which runs from the W.R. Grace and Company property towards the Pompton River. Background in this area of New Jersey is affected by the presence of natural uranium deposits, but averages about 0.02 millirem per hour or less. While radiation levels of the magnitude discussed above present no immediate hazard, more extensive surveys were conducted in the offsite area in April and May, 1982. Additional surveys will be conducted on the W.R. Grace and Company property during the summer of 1982 by Oak Ridge Associated Universities under contract with the NRC's Office of Nuclear Material Safety and Safeguards.

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND
TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES

SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT

SCIENCE AND TECHNOLOGY

SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND
APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

September 14, 1982

Mr. William J. Dircks
Executive Director for Operations
Nuclear Regulatory Commission
Washington, D.C. 20555

-CD012220

Dear Mr. Dircks:

Thank you for your letter of September 1. I appreciate the excellent assistance the Nuclear Regulatory Commission has been providing with regard to the thorium radiation problem in Wayne.

Recently the Wayne Township Government secured the services of Marvin Resnikoff, Ph.D. of the Council on Economic Priorities (New York City) as a consultant on this issue. As per a recent meeting of the Mayor's Thorium Advisory Committee in Wayne Dr. Resnikoff has requested me to obtain certain information from the NRC. A copy of his letter is enclosed, along with a related resolution by the Municipal Council.

Thank you for your continuing help.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

cc: Mr. Carlton Kammerer
Office of Congressional Affairs

B/450

ITEM # 453

8208010048

FROM:

Rep. Robert A. Roe

TO:

Dircks

ACTION CONTROL	DATES
COMPL DEADLINE	9/29/82
ACKNOWLEDGMENT	
INTERIM REPLY	
FINAL REPLY	9/29/82
FILE LOCATION	9/29/82

CONTROL NO 12299

DATE OF DOCUMENT 9/14/82

PREPARE FOR SIGNATURE OF:
- ☐ CHAIRMAN
- ☒ EXECUTIVE DIRECTOR
- OTHER:

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Marvin Resnikoff regarding thorium radiation [illegible] problem in Wayne, N.J.

SPECIAL INSTRUCTIONS OR REMARKS

CLASSIFIED DATA

DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY ☐ NSI ☐ RD ☐ FRD	
POSTAL REGISTRY NO.			

ASSIGNED TO:	DATE	INFORMATION ROUTING
Haynes, Reg. I	9/15/82	Cunningham, ELD
		Davis, NMSS
		Kerr, SP
		CA
		SECY
		Lindenwood

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ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS

NOTIFY:
- ☐ EDO ADMIN & CORRES BR
- _____ EXT. _____

COMMENTS, NOTIFY:

_____ EXT. _____

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

PRINCIPAL CORRESPONDENCE CONTROL

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August 25, 1982

Representative Robert Roe
U. S. House of Representatives
Washington, D. C. 20510

Dear Representative Roe:

It was a pleasure to meet you Monday night. I was quite impressed by your responsiveness in addressing citizen concerns on the thorium contamination problems at Wayne. As you said, the federal government has not yet set policy on this issue. With 70 or more such contaminated sites dating back to the Manhattan project, it is time to come to grips with the problem. With your leading role on the House Science and Task Committee, your knowledge of the issues and the support of the many Congressmen whose districts are affected, perhaps Congressional hearings can be held next session on the possible longer-range solution to this problem. Rather than DOE dealing on a piecemeal basis with Middlesex, Canonsbury and Lewiston, it would be useful to have them present testimony on the larger picture.

I mentioned at the meeting three matters regarding NRC testing, and you asked that I put this in writing.

1) According to NRC's "Proposed Radiological Survey Plan", March 15, 1982, the final report on the stream survey was due in August. The preliminary report was completed on schedule in July. What is the holdup in the final report? Additional core drilling near Sheffield Brook was done in August. What was the purpose of these additional drillings?

2) The preliminary report has no recommendations. Though the Town Council and I will come to conclusions, and make recommednations, I think it would be useful to have the NRC do likewise, both for off- and on-site.

3) Finally, the site has an aquifer which may be passing through the burial pits. The on-site core drilling should include an investigation of the underground soil structure by a geologist, particularly a hydrogeologist. The NRC will be taking water samples from the drill-holes, where available.

One of the Concerned Citizens asked how it would be possible to know the full extent of the buried materials on-site without core drilling into the burial pits. Grace & Company has objected to such drillings for fear the clay liner under the burial pits should be pierced. The NRC has instead carried out radar measurements of the pits and core drilling around the pits. Much of this awaits the NRC report, but unless the pits contain drums , it is also unclear to me how the full extent of buried materials will be known.

B/451

ITEM # 454

Thanks for your assistance on these matters.

Best,

Marvin Resnikoff
Council on Economic Priorities
84 Fifth Avenue
New York, New York 10011

MR:ecm

NSHIP OF WAYNE
COUNTY OF PASSAIC
STATE OF NEW JERSEY
1982
RESOLUTION NO. 235

A motion was made by Frederick Bauer , seconded by William Hanse that the following resolution be adopted:

REQUESTING CERTAIN ACTIONS BY THE NUCLEAR REGULATORY COMMISSION

WHEREAS, the Township Council has discussed the following problems with the Township consultant, Dr. Marvin Resnikoff and with Congressman Robert Roe; and

WHEREAS, the following items are of continuing concern to the Council and the Township consultant.

NOW, THEREFORE, BE IT RESOLVED by the Municipal Council of the wnship of Wayne as follows:

The Nuclear Regulatory Commission is requested to immediately do the following:

a. The hiring by the Nuclear Regulatory Commission of a Hydrogeologist.

b. That the contemplated flyover be performed over the entire Township.

c. That the material being dredged from the Pompton and Passaic River systems, as well as soil systems, be properly tested for radioactive material.

That the Nuclear Regulatory Commission perform additional tests on the W. R. Grace site in the actual burial pits.

That the Nuclear Regulatory Commission immediately dvise the Township and the affected residents of e results of the core samples taken from said sidents' back yards.

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND
TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES

SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT

SCIENCE AND TECHNOLOGY

SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND
APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

August 11, 1982

Honorable Nuncio J. Palladino
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Mr. Chairman:

As part of the Commission's investigation into radia[illegible] levels at the W.R. Grace property in Wayne, New Jersey, I would appreciate a comprehensive response to the enclosed [illegible] from Ms. Karen Lieberman and Ms. Gail Van Dyken, represen[illegible] of the Concerned Citizens Committee.

Now that the preliminary testing has been completed s[illegible] of their questions seem particularly appropriate.

Your swift cooperation is appreciated.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

B1452

ITEM # 455

8207180008

No. 0837 Logging Date XXX 8/13/82

NRC SECRETARIAT

TO:
- ☐ Commissioner _____ Date _____
- ☒ Exec. Dir./Oper.
- ☐ Cong. Liaison
- ☐ Public Affairs
- ☐ _____
- ☐ Gen. Counsel
- ☐ Solicitor
- ☐ Secretary
- ☐ Inspector & Auditor
- ☐ Policy Evaluation

Incoming: Rep Robert A. Roe, Const Ref
From: Karen Lieberman

To: Palladino Date 8/11/82
Subject: would like response to const ltr concerning the investigation into radiation levels at the W.R. Grace site

☐ Prepare reply for signature of:
- ☐ Chairman
- ☐ Commissioner _____
- ☐ EDO, GC, CL, SOL, PA, SECY, IA, PE
- ☐ Signature block omitted
- ☐ _____
- ☐ Return original of incoming with response

☒ XXX For direct reply* Suspense: Aug 27

☐ For appropriate action

☐ For information

Rec'd Off. EDO
Date 8-17-82
Time 8:15A

Remarks: _____

For the Commission: billie

*Send three (3) copies of reply to Secy Correspondence and Records Branch

NRC FORM 62A
(3-82)

ACTION SLIP

NICHOLAS F. BRADY
NEW JERSEY

United States Senate

WASHINGTON, D.C. 20510

June 14, 1982

Nuclear Regulatory Commission
Congressional Relations
1717 H Street, N.W.
Washington, D.C. 20505

Dear Director:

I am enclosing a copy of a letter I have received from Mrs. Anne DiPasquale of West Paterson, New Jersey.

Please provide any information you might have regarding this issue in order that I might be able to respond to my constituent's inquiry. Please return the enclosed correspondence with your report.

With all good wishes,

Sincerely,

Nicholas F. Brady

Nicholas F. Brady
United States Senator

NFB/wj
Enclosure

B/ 453

ITEM # 456

8206130010

FROM:
Sen. Nicholas F. Brady

TO:
NRC

ACTION CONTROL	DATES
COMPL DEADLINE	6/29/82
ACKNOWLEDGMENT	
INTERIM REPLY	
FINAL REPLY	
FILE LOCATION	

CONTROL NO. 11995

DATE OF DOCUMENT 6/14/82

PREPARE FOR SIGNATURE OF:
☐ CHAIRMAN
☒ EXECUTIVE DIRECTOR
OTHER:

DESCRIPTION: ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER
Encl ltr fm Anna DiPasquale & Robert Kaufmann concerning burial of radioactive thrium in Wayne, N.J.

SPECIAL INSTRUCTIONS OR REMARKS
Ref: EDO 11996

Return incoming w/reply.

SECY-82-0619 & 82-0621

CLASSIFIED DATA

DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY	
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ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS
NOTIFY:
☐ EDO ADMIN & CORRES BR
EXT.
COMMENTS, NOTIFY:
EXT.

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

DO NOT REMOVE THIS COPY

PRINCIPAL CORRESPONDENCE CONTROL

NI[illegible] LAS F. BRADY
EW JERSEY

United States Senate

WASHINGTON, D.C. 20510

June 14, 1982

Nuclear Regulatory Commission
Congressional Relations
1717 H Street, N.W.
Washington, D.C. 20505

Dear Director:

I am enclosing a copy of a letter I have received from Mr. Robert Kaufmann of Wayne Township, New Jersey.

Please provide any information you might have regarding this issue in order that I might be able to respond to my constituent's inquiry. Please return the enclosed correspondence with your report.

With all good wishes,

Sincerely,

Nicholas F. Brady

Nicholas F. Brady
United States Senator

NFB/wj
Enclosure

B/454

ITEM # 457

JUL 1 1982

ITEM # 458

Docket No. 40-00086
License No. STA-422

The Honorable Bill Bradley
United States Senator
P.O. Box 1720
Union, New Jersey 07083

Dear Senator Bradley:

I am pleased to provide you with information regarding the thorium contamination in Wayne, New Jersey, as requested in your June 14, 1982 letter.

The Nuclear Regulatory Commission (NRC) is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). A number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occurring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W.R. Grace and Company. A summary of the historical background of this facility is enclosed for your information.

Following a site visit and surveys by NRC inspectors, the State of New Jersey arranged for an aerial radiological survey of the area surrounding the W.R. Grace and Company facility. The survey was performed by EG&G, Inc., a contractor of the U.S. Department of Energy, in May, 1981.

Our review of the results of the aerial survey and the surveys by NRC inspectors indicated slightly elevated radiation levels on the W.R. Grace and Company property and along the Sheffield Brook which drains the property. Although these radiation levels do not pose any immediate hazard to the health and safety of the individuals living near or frequenting the areas around the Brook or the W.R. Grace and Company property, additional surveys and evaluations seemed appropriate. We arranged for an NRC contractor, Oak Ridge Associated Universities (ORAU), to perform these surveys which include detailed radiation level measurements and analysis of numerous soil and water samples. The surveys of the Brook area were completed on May 1, 1982, and the surveys of the W.R. Grace and Company property are scheduled to be performed in July of 1982.

Although the ORAU report of the surveys performed in the area of the Sheffield Brook will not be completed until September, we have been informed that their results for the samples of well water taken from nearby residences and a nearby farm showed no detectable activity. All of the well water samples met standards set by the U.S. Environmental Protection Agency for radioactive materials in

(5)

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DATE ▶							

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-9

drinking water. In addition, surveys by NRC inspectors indicate that: 1) it is very unlikely that any individual will exceed the recommended dose limits for individual members of the general public, 2) no radiation levels above normal background exist in any residence, and 3) areas where radiation levels are above normal background are near the rear boundaries of the properties that abut the Brook.

Some of your constituents have indicated concern about the potential long-term effect of exposure to the contaminated soil, particularly to children who play in the soil and may ingest small quantities of it. We will not have sufficient information to fully determine the degree of hazard associated with ingesting small quantities of the contaminated soil until our contractor has completed the analysis of the samples collected during the field work. However, analysis of several samples of water from the Brook has not revealed radioactive contamination in the water. This indicates that the contamination is probably insoluble and would not remain in the body if it were ingested. In addition, the actual concentration of radioactive material in surface soil is quite low. Therefore, we conclude that any hazard associated with exposure to the contaminated soil during the time required to complete our investigation is insignificant.

The surveys described above are part of the process of gathering and evaluating the information necessary to make a recommendation regarding whether the contaminated soil should be removed. A recommendation that removal of the contaminated soil is not necessary would be based on a conclusion that exposures from all routes and to all individuals will be acceptably low. We do not know who would bear the expense for removal of the contaminated soil, if its removal is determined to be necessary. W.R. Grace and Company still owns the property on which the radioactive material was processed. The U.S. Department of Energy may have authority for remedial action, as the result of work performed under a contract between Rare Earths, Inc., predecessor to W.R. Grace and Company, and the former U.S. Atomic Energy Commission.

We realize that these issues are of significant concern to you and your constituents, and are working to resolve them. We are pleased to be of service to you and your constituents in this matter and will keep you informed of our progress.

Sincerely,

(Signed) T. A. Rehm

for William J. Dircks
Executive Director
for Operations

Enclosure:
W.R. Grace and Company
Historical Background

OFFICE ▶	.....	.....	.....	.....	.....	.....	.....
SURNAME ▶	.....	.....	.....	.....	.....	.....	.....
DATE ▶	.....	.....	.....	.....	.....	.....	.....

Distribution:
EDO 11996
SECY 82-0619
Docket No. 40-00086
PDR
R. DeYoung
CA
J. Davis
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G. Cunningham
L. Underwood
J. Allan, RI
R. Haynes, RI
T. Martin, RI
J. Kinneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
K. Abraham

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Name: Document from Region I

OCA
6/30/82

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	RI:DRA	RI:RA	EDO
	Campbell:as	Kinneman	Joyner	Martin	Allan	Haynes	WJDircks
SURNAME							
DATE	6/29/82	6/29/82	6/29/82	6/29/82	6/29/82	6/29/82	6/30/82

W. R. Grace and Company
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Enclosure

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BILL BRADLEY
NEW JERSEY

COMMITTEES:
FINANCE
ENERGY AND
NATURAL RESOURCES
SPECIAL COMMITTEE ON
AGING

United States Senate

WASHINGTON, D.C. 20510

June 14, 1982

TO: Carlton Kammerer, Director
Office of Congressional Affairs
Nuclear Regulatory Commission
1717 H Street, NW
Washington, D.C. 20555

RE: Mrs. Patricia Sciarrone et. al.
29 Vanderelinde Road
Wayne, NJ 07470

I forward the attached for your consideration and would appreciate receiving information in regard to this inquiry as soon as possible. Please direct your reply to the attention of the member of my staff listed below.

Thank you very much for your time and assistance in this matter.

Sincerely,

Bill Bradley
United States Senator

Please direct reply to:

Senator Bill Bradley
Post Office Box 1720
Union, New Jersey 07083

Attention: D. F. Marco

B/457

ITEM # 460

8206130011

2107 DIRKSEN BUILDING
WASHINGTON, D.C. 20510
(202) 224-3224

P.O. BOX 1720
UNION, NEW JERSEY 07083
(201) 688-0960

P.O. BOX 1031
TURNERSVILLE, NEW JERSEY 08012
(609) 228-2815

FROM:

Sen. Bill Bradley

TO:

Kammerer

ACTION CONTROL	DATES
COMPL DEADLINE	6/29/82
ACKNOWLEDGMENT	
INTERIM REPLY	
FINAL REPLY	
FILE LOCATION	

CONTROL NO. 11996

DATE OF DOCUMENT 6/14/82

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- ☐ CHAIRMAN
- ☒ EXECUTIVE DIRECTOR
- OTHER:

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encl ltrs fm Patricia Sciarrone et. al. concerning burial of radioactive thorium in Wayne, N. J.

SPECIAL INSTRUCTIONS OR REMARKS

Ref: EDO 11995

Address reply to Home Office.
Mark envelope ATTN: B. F. Marco

SECY-82-0619

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DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY	
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Davis, NMSS	6/15/82
Hayes Regt	6/16/82

INFORMATION ROUTING

Karr, SP
Cunningham
Underwood

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ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS
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☐ EDO ADMIN & CORRES BR
EXT.
COMMENTS, NOTIFY:
EXT.

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232
(11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

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APR 14 1982
US NUCLEAR REGULATORY COMMISSION
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Docket No. 40-00086

License No. STA-422

April 6, 1982

W. R. Grace and Company
Davison Division
ATTN: Mr. B. Mobley
Manager, Environmental Control
P. O. Box 2117
Baltimore, Maryland 21203

Gentlemen:

Subject: W. R. Grace and Company Facility in Wayne, New Jersey

I have been briefed this afternoon by Ms. M. Campbell and Mr. Karl Abraham on their respective meetings today with Mr. Edward F. Heymann of your staff on the general subject of the upcoming ground surveys in Wayne, New Jersey.

Reflected against these discussions, I have re-read my letter to you of April 1, 1982 on this subject, and it appears that one aspect of it may have been misunderstood. Let me remove any possible misunderstanding.

We have informed you of our intended action as well as the State of New Jersey, and the public. This letter was a general notification to the public which was accomplished by means of the Nuclear Safety Information Center and the Public Document Room where we sent copies of our April 1 letter to you describing what is to be done shortly by the NRC staff and its contractors in the Wayne area.

My letter to you of April 1 was to inform you of our intended actions; not to solicit review or concurrence in the documents we have prepared to implement these actions. I regret any inconvenience this apparent misunderstanding caused you.

With regard to the proposed dialogue in the document titled "Discussion Outline" which was enclosed with my letter of April 1, this dialogue is what Ms. Campbell anticipates the property owners will want to talk about--based on several previous experiences Ms. Campbell has had in visits with property owners in other locations. I decided that preparations for these meetings with property owners will include gathering of this information and preparations to discuss this with them at such level of technicality and depth as they individually may desire.

I do want to reiterate that if you have any questions as to our statements of fact as to what we have decided to do in the next several

B/456 (2) IE07 S1/0

OFFICE ▶ .....
SURNAME ▶ .....
DA 8204140446 820406 PDR ADOCK 04000086 PDR C

ITEM # 459

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

USGPO 1980—329

weeks, please contact Ms. M. Campbell or Mr. J. Kinneman of my staff.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:

Ronald C. Haynes
Regional Administrator

cc:
Edward Heymann, General Manager, Advertising
and Public Relations
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

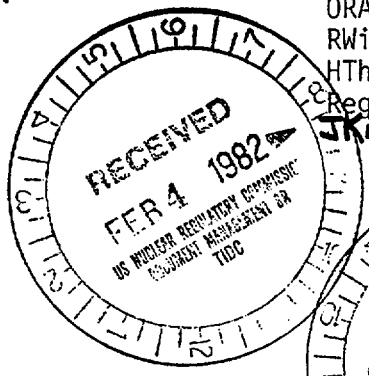
bcc:
Region I Docket Room (with concurrences)
W. Crow, NMSS
K. Abraham, RI

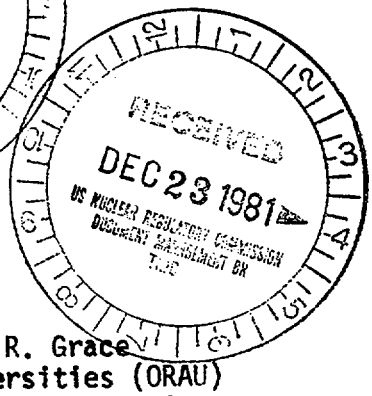
OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	PAO	DEP REG ADM	REG ADM
SURNAME	MCampbell	JKinneman	JJoyner	TMartin	KAbraham	JAllan	RHaynes
DATE	4/6/82	4/6/82	4/6/82	4/6/82	4/6/82	4/6/82	4/6/82

Distribution:
Docket File 40-86
NMSS rf
FCUP rf
WTCrow
RGPage
ORAU
RWilde
HThornburg, IE
Region I
JKinneman, R:I

NOV 3 0 1981

Docket No. 40-86





NOTE TO: Files

FROM: W. T. Crow, Section Leader
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

SUBJECT: W. R. GRACE COMPANY - POMPTON PLAINS, NEW JERSEY

On November 24, 1981, I spoke with Mr. Burton Mobley of the W. R. Grace Chemical Company about his letter to Oak Ridge Associated Universities (ORAU) which questioned the necessity of ORAU's forthcoming survey of the W. R. Grace property in Pompton Plains, New Jersey. Copies of the letter were transmitted to Dr. Mott and Mr. Barber of the Department of Energy (DOE) but no copies were transmitted to the NRC. I informed him that, in the future, contacts with our contractor should be made through this office (NMSS); however, I did not see any problems with him keeping Dr. Mott of DOE informed since DOE may become involved. We agreed that formal contacts between the NRC and W. R. Grace concerning the Pompton Plains site should be made addressed to him (Burton Mobley). Mr. Mobley stated that there were some people in W. R. Grace who feel that the NRC should be forced to get a court order to get onsite. I informed him that I would check with legal council for an opinion. Today, November 25, 1981, I spoke with Mr. Mobley and Mr. Hardwicke (W. R. Grace General Council) and they informed me that W. R. Grace wishes to cooperate with the NRC in every way possible. They stated that it was not necessary to have a court order to gain access to the property and they would like to work with us on the radiological survey. They would, however, like a letter from me stating when our contractor was coming and what they plan to do. I told them that I would prepare a letter to Mr. Hardwicke. (The letter, copy attached, was mailed on November 27, 1981.) They also requested that a opportunity to see any public notice concerning this site prior to release of the notice. I informed him that we would send them a copy of any press releases prior to release for comment; however, I could not guarantee that his comments would be addressed. I also informed him that ORAU would like to make a preliminary visit the week of December 7, 1981. After which they would draw up and transmit to NRC a draft comprehensive radiological survey plan. This plan would also be submitted to W. R. Grace for their information and comment. In conclusion, it was agreed that both groups would work together during the survey and try to resolve any problems as or if any should arise.

ITEM # 461

8201140133 811130
CF ADOCK 04000086
GF

OFFICE							
SURNAME							
DATE							

NOV 3 0 1981

Mr. Burton Mobley can be reached at 301-659-9058 and Mr. John Hardwicke at 301-685-1717.

Original signed by:
W. T. Crow

W. T. Crow, Section Leader
Uranium Process Licensing Section
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety

OFFICE ▶	FCUP WTC						
SURNAME ▶	WTCrow:rad						
DATE ▶	11/30/81						

Docket No.
40-00086

SEP 1 1982

The Honorable Robert A. Roe
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Roe:

I am pleased to address the issues identified in the letters dated July 2 and July 14, 1982, from your constituents, Ms. Lieberman and Ms. Van Dyken, enclosed with your letter of August 11, 1982. These letters concern the W. R. Grace and Company property and surrounding area in Wayne, New Jersey.

From previous discussions between you and members of the NRC staff and from our previous correspondence, including my letter to you dated May 21, 1982, you are familiar with the background of the Wayne situation. In addition, our Office of Congressional Affairs provided you with a copy of a Preliminary Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated July 1982, which was prepared by our contractor, Oak Ridge Associated Universities (ORAU).

Detailed responses to the specific questions in Ms. Lieberman's and Ms. Van Dyken's letters are contained, respectively, in Enclosures 1 and 2 to this letter.

The field work for the surveys by ORAU is largely complete. A great deal of laboratory work and data analysis remains. ORAU has informed us that we can expect a final report on the Sheffield Brook survey results to be available in September 1982 and a more complete report, which will include results of their survey of the W. R. Grace and Company property, in December 1982. Copies of each of these reports will, of course, be provided to you. All of our data and reports will be forwarded to the Department of Energy so that they can consider this site for inclusion in the Formerly Utilized Site Remedial Action Program.

We realize that these issues are of significant concern to you and your constituents, and are working to resolve them. We are pleased to be of service to you and your constituents in this matter and will keep you informed of our progress.

Sincerely,

B/459

(Signed) William J. Dircks

ITEM # 462

(2)

William J. Dircks
Executive Director for Operations

OFFICE ▶	Enclosures:						
SURNAME ▶	1. Response to Ms. Lieberman's Concerns						
DATE ▶	2. Response to Ms. Van Dyken's Concerns						

Distribution:
EDO 12220
SECY 82-0837
Docket No. 40-00086
PMP
V. Stello
[illegible]
[illegible]
J. Davis
L. Underwood
G. Cunningham
S. Kerr
[illegible], RI
J. Allan, RI
T. [illegible], RI
C. Kimmerman, RI
R. [illegible], RI
J. Joyner, RI
[illegible] Campbell, RI
Region I Docket File
State of New Jersey
State of Tennessee
OCA

*Transmitted via word processor 8/25/82
Final typed in OEDO.

	RI:RA	NMSS	EDO	OGC
	RHaynes	JGDavis	WJDircks	
	8/25/82	/ /82	8/31/82	9/1/82

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	RI:PAO	RI:DEPOS	RI:DRA
SURNAME	Campbell/lp	Kenneman	Joyner	Martin	Abraham	Brenneman	Allan
DATE	8/25/82						

OFFICIAL RECORD COPY

~~10 CFR 2.790 INFORMATION~~

1 JUL 1982

Docket No. 40-00086 License No. STA-422

Bergen/Passaic Transport
ATTN: Mr. John Monteferrario
53 Central Avenue
Rochelle Park, New Jersey 07662

Gentlemen:

Subject: Radiation Surveys of the W. R. Grace and Company Property in Wayne, New Jersey

The Nuclear Regulatory Commission is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). As you may know, a number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occuring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W. R. Grace and Company. A summary of the historical background of this facility is enclosed for your information.

Our preliminary surveys of the W. R. Grace and Company property have found radiation levels in excess of current criteria for release for unrestricted use. Although these radiation levels do not pose any immediate hazard to the health and safety of individuals living near or frequenting the areas around the property, additional surveys and evaluations seem appropriate. The results of these surveys will be used to determine if additional actions are required.

We have arranged for an NRC contractor, Oak Ridge Associated Universities (ORAU), to perform additional surveys on the W. R. Grace and Company property. These surveys will involve walking across the ground to measure surface radiation levels, and collecting surface and subsurface soil samples. The subsurface soil samples will be collected using a truck-mounted drill which makes a 6" to 10" diameter hole, which afterward will be filled in.

Your property on Black Oak Ridge Road is immediately adjacent to the W. R. Grace and Company property. We request your permission to have the contractor, ORAU, perform radiological surveys of the type described in this letter on your property, along the border next to the W. R. Grace and Company. The surveys will probably be performed during July, depending on the weather and scheduling of other work. Please sign the enclosed permission form and return it in the enclosed envelope.

If you have questions, you may call this office collect, and speak to Ms. Myu Campbell (215-337-5246) or Mr. John Kinneman (215-337-5252).

~~OFFICIAL RECORD COPY~~

B/460

ITEM # 463

(5)

~~10 CFR 2.790 INFORMATION~~

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:

Ronald C. Haynes
Regional Administrator

Enclosures:
1. Permission Form
2. Historical Background
3. Return Envelope

R1:DETP	R1:DETP	R1:DETP	R1:DETP	R1:DRA	R1:RA
Campbell/wb	Kinneman	Joyner	T. Martin	Allan	Haynes
6/23/82		6/24/82	6/24/82	6/28	6/28

OFFICIAL RECORD COPY

PERMISSION

I give permission to employees, contractor personnel, and agents of the U. S. Department of Energy and the U. S. Nuclear Regulatory Commission to perform a radiological survey on the property described below. I understand that this may involve disturbing some underbrush and vegetation, and will include drilling a few holes in the ground as described in the NRC letter dated JUL 0 1 1982 , which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property located at 826 Black Oak Ridge Road
Wayne, New Jersey 07470

Restrictions:

John Monteferrario
Name

Signature by owner(s) of property or authorized representative

53 Central Avenue
Address

Rochelle Park, New Jersey 07662

Telephone

W. R. Grace and Company
Historical Background

In approximately 1948, Rare Earths, Inc. began processing monazite sand at Pompton Plains, New Jersey, to extract thorium and rare earth elements. The work may have been conducted under contract with the Atomic Energy Commission (AEC). In 1954 the AEC issued a license authorizing the possession, transfer and use of source material (thorium) by Rare Earths, Inc. at this site. In 1957 this activity was taken over by the Davison Chemical Division of W.R. Grace and Company. The processing of monazite sand at this location ceased in 1971. The processing produced large quantities of wastes containing residual thorium. In 1974, W.R. Grace and Company hired a consultant to decontaminate the site to meet AEC criteria for release for unrestricted use. These criteria required that average radiation levels on the ground be less than 0.2 millirem per hour and maximum levels be less than 1 millirem per hour and that removeable alpha contamination in the buildings not exceed 1000 disintegrations per minute (dpm) per 100 square centimeters. The facility was released by the Nuclear Regulatory Commission (NRC, which was established in 1974 to succeed the AEC) for unrestricted use on January 22, 1975, following a confirmatory survey. Documents supplied by W.R. Grace and Company in support of their request for release indicated that 1600 pounds of materials slightly contaminated with thorium were buried on the site in 1974 and that 19,000 pounds of thorium had previously been buried.

In August 1980, the NRC requested that its Regional offices review specified formerly licensed facilities, including the W.R. Grace and Company (Rare Earths) facility in Wayne (Pompton Plains), New Jersey, to determine whether they met current criteria for unrestricted use.

In January 1981, an inspector from the NRC Region I office in King of Prussia, Pennsylvania, accompanied by a representative of the New Jersey Bureau of Radiation Protection, conducted a survey of the Rare Earths property. Based on measurements made at the site and analyses of soil samples in the NRC Region I Laboratory, it was concluded that surface soil contamination levels greater than current (1981) criteria for release for unrestricted use, and elevated radiation levels in excess of current criteria, exist on the site. The highest radiation level measured was 1.0 millirem per hour. These contamination and radiation levels do not presently result in a hazard to the health and safety of persons working at or living near the site. Further surveys and evaluations are scheduled for the summer of 1982. On September 10, 1981, an NRC inspector surveyed the interior of all buildings at the site and found that the buildings met current criteria for release for unrestricted use.

On May 25, 1981, an aerial radiological survey of this facility and the surrounding area was conducted by EG&G, Inc., at the request of the State of New Jersey.

The aerial survey identified one offsite area west of the site that exhibited radiation readings higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey found normal background radiation levels in most areas, but radiation levels up to 0.2 millirem per hour were

found in one area along Sheffield Brook which runs from the W.R. Grace and Company property towards the Pompton River. Background in this area of New Jersey is affected by the presence of natural uranium deposits, but averages about 0.02 millirem per hour or less. While radiation levels of the magnitude discussed above present no immediate hazard, more extensive surveys were conducted in the offsite area in April and May, 1982. Additional surveys will be conducted on the W.R. Grace and Company property during the summer of 1982 by Oak Ridge Associated Universities under contract with the NRC's Office of Nuclear Material Safety and Safeguards.

JUL 0 2 1982

Docket No. 40-00086 License No. STA-422

Delaware Otsego Corporation
ATTN: Mr. David Soule
Vice President
1 Railroad Avenue
Cooperstown, New York 13326

Gentlemen:

Subject: Radiation Surveys in Wayne, New Jersey and Pequannock Township, New Jersey

The Nuclear Regulatory Commission is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). A number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occuring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W. R. Grace and Company. A summary of the historical background of this facility is enclosed for your information.

Our preliminary surveys of the W. R. Grace and Company property have found radiation levels in excess of current criteria for release for unrestricted use. Although these radiation levels do not pose any immediate hazard to the health and safety of individuals living near or frequenting the areas around the property, additional surveys and evaluations seem appropriate. The results of these surveys will be used to determine if additional actions are required.

As noted in the enclosure to this letter, our preliminary surveys also identified an area off the W. R. Grace and Company property where radiation readings exceeded normal background radiation levels. In addition, on June 29, 1982, officials of Pequannock Township, New Jersey, informed the NRC that the Township had investigated allegations that a rail line in their Township might be contaminated because it had been used to ship materials to and from the W. R. Grace facility. They subsequently measured radiation levels of 1.5-2 millirem per hour in an area along a railroad spur near the Pompton Plains Station on the Greenwood Lake Branch of the New York, Susquehanna and Western Railroad. On June 30, 1982, an NRC inspector measured radiation levels of 0.02 to 1.0 millirem per hour in the same area. Analyses of soil samples showed that the contamination was thorium.

We have arranged for an NRC contractor, Oak Ridge Associated Universities (ORAU), to perform additional surveys on the W. R. Grace and Company property beginning on or about July 12, 1982. These surveys will involve walking across the ground to measure surface radiation levels, and collecting surface and subsurface soil samples. The subsurface soil samples will be collected using a truck-mounted drill which makes a 6" to 10" diameter hole, which afterward will be filled in.

B/461

OFFICIAL RECORD COPY

ITEM # 464

MD1 DOCUMENT CONTROL DESK

(2)

JUL 0 2 1982

We request your permission to have the contractor, ORAU, perform radiological surveys of the type described on your property along the railroad spur. The surveys will probably also be performed during the week of July 12, depending on the weather and the ORAU work schedule. Please sign the enclosed permission form and return it in the enclosed envelope.

If you have questions, you may call this office collect, and speak to Ms. Myu Campbell (215-337-5246) or Mr. John Kinneman (215-337-5252).

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:

Ronald C. Haynes
Regional Administrator

Enclosures:
1. Permission Form
2. Historical Background
3. Return Envelope

R1:DETP	R1:DETP	R1:DETP	R1:DETP	R1:DRA	R1:
Campbell/wb	Kinneman	Joyner	T. Martin	Allan	Haynes
7/2/82		7/2/82	7/2/82	7/	7/2/82

OFFICIAL RECORD COPY

10 CFR 2.790 INFORMATION

PERMISSION

I give permission to employees, contractor personnel, and agents of the U. S. Department of Energy and the U. S. Nuclear Regulatory Commission to perform a radiological survey on the property described below. I understand that this may involve disturbing some underbrush and vegetation, and will include drilling a few holes in the ground as described in the NRC letter dated JUL 0 2 1982 which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Area around railroad spur near the Pompton Plains Station of the Greenwood Lake Branch in Pequannock Township, New Jersey

Restrictions:

Delaware Otsego Corporation
Name

Signature of owner(s) of property
or authorized representative

1 Railroad Avenue
Address

Cooperstown, New York 13326

Telephone

Enclosure 1

DELAWARE OTSEGO SYSTEM
1 RAILROAD AVENUE
COOPERSTOWN, NEW YORK 13326-1194
(607) 547-2555

July 8, 1982

Ronald C. Haynes
Regional Administrator
United States Nuclear
Regulatory Commission
Region 1
631 Park Ave.
King of Prussia, PA 19406

RE: Radiation Surveys in Wayne, New Jersey and Pequannock Township, New Jersey

Dear Mr. Haynes:

Per your request, enclosed please find the executed permission form, along with the Attachment A.

If there are any further questions or requests, please contact me at the above number.

Sincerely,

C. David Soule
Vice President Administration

CDS:ksp
Enc.

B/462

~~10 CFR 2.790 INFORMATION~~

ITEM # 465

(3)

PERMISSION

I give permission to employees, contractor personnel, and agents of the U. S. Department of Energy and the U. S. Nuclear Regulatory Commission to perform a radiological survey on the property described below. I understand that this may involve disturbing some underbrush and vegetation, and will include drilling a few holes in the ground as described in the NRC letter dated JUL 0 8 1982 which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Area around railroad spur near the Pompton Plains Station of the Greenwood Lake Branch in Pequannock Township, New Jersey

Restrictions: See Attachment A

New York, Susquehanna and Western
Name / Railway Corporation

Signature of owner(s) of property
or authorized representative

1 Railroad Avenue
Address

Cooperstown, New York 13326

Telephone

~~Enclosure 1~~
~~10 CFR 2.790 INFORMATION~~

Attachment A

1. New York, Susquehanna and Western Railway Corporation is to be advised at least two weeks in advance of any testing and a representative of New York, Susquehanna and Western Railway Corporation is to be present when any testing or anyone enters upon New York, Susquehanna and Western Railway Corporation property for any purpose under this permit.

2. New York, Susquehanna and Western Railway Corporation is to receive a copy of any reports, conclusions or other findings on the results of the tests to be performed.

3. The United States Department of Energy and the United States Nuclear Regulatory Commission agree to indemnify and hold harmless New York, Susquehanna and Western Railway Corporation from any and all liability, claims, damages, injuries and expenses of any nature whatsoever arising as a result of any testing, inspections or examinations by employees, contractor personnel and agents of the United States Department of Energy and the United States Nuclear Regulatory Commission, without regard to whether any such liabilities, claims, damages, injuries or expenses arise as a result of the negligence in whole or in part of New York, Susquehanna and Western Railway Corporation, its employees, agents or servants.

4. New York, Susquehanna and Western Railway Corporation is to receive copies of the Workman's Compensation, Liability and other relevant insurance coverage policies relating to any representatives of the federal, state, or local government or any other organization, contractors, subcontractors, or any other persons entering upon New York, Susquehanna and Western Railway Corporation property, and New York, Susquehanna and Western Railway Corporation reserves the right to withhold permission to enter upon the property to any person who New York, Susquehanna and Western Railway Corporation's opinion does not have adequate insurance coverage.

10 CFR 2.790 INFORMATION

FEB 1 1983

Docket No. 40-00086 License No. STA-422

W. R. Grace and Company
Davison Chemical Division
ATTN: Mr. Burton Mobley
Manager, Environmental Control
P.O. Box 2117
Baltimore, Maryland 21203

Gentlemen:

Subject: Radiological Survey of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information are three (3) copies of the subject report.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosure will be placed in the Public Document Room.

No reply to this letter is required; however, should you have any questions, we will be pleased to discuss them with you.

Sincerely,

Original Signed By:
John D. Kinneman
for Thomas T. Martin, Director
Division of Engineering and
Technical Programs

Enclosure:
Radiological Surveys of W. R. Grace and Company Property,
Wayne, New Jersey (3 copies)

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc w/encl:
Region I Docket Room (with concurrences)

B1463

ITEM # 466

1E:07

OFFICE ▶	RI-DETP						
SURNAME ▶	Kinneman/lp						
DATE ▶	1/27/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Delaware Otsego System
ATTN: C. David Soule
Vice President, Administration
1 Railroad Avenue
Cooperstown, New York 13326-1194

Gentlemen:

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of the W. R. Grace and Company Property, Wayne, New Jersey, dated October, 1982.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc w/encl:
Region I Docket Room (with concurrences)

ITEM # 467

B/464

OFFICE ▶	RI:DETP					
SURNAME ▶	Kinneman/lp					
DATE ▶	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

V. Ottilio and Sons
ATTN: Mr. C. J. Ottilio
555 Preakness Avenue
Patterson, New Jersey 07502

Dear Mr. Ottilio:

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of the W. R. Grace and Company Property, Wayne, New Jersey, dated October, 1982.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc w/encl:
Region I Docket Room (with concurrences)

B/465

ITEM # 468

OFFICE	RI:DETP						
SURNAME	Kinneman/lp						
DATE	1/28/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Bergen/Passaic Transport
ATTN: John Monteferrario
53 Central Avenue
Rochelle Park, New Jersey 07662

Gentlemen:

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of the W. R. Grace and Company Property, Wayne, New Jersey, dated October, 1982.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc w/encl:
Region I Docket Room (with concurrences)

ITEM # 469

B/466

OFFICE ▶	RI:DEIP					
SURNAME ▶	Kinneman/lp					
DATE ▶	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Township of Pequannock
ATTN: Frank Fitzpatrick
Health Officer
530 Newark-Pompton Turnpike
Pompton Plains, New Jersey 07444

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report. This report contains the results of measurements made on the W. R. Grace and Company property on Black Oak Road in Wayne and at the railroad siding in Pequannock.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 470 B1467

OFFICE ▶	RI:DETP						
SURNAME ▶	Kinneman/lp						
DATE ▶	1/27/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Environmental Protection Agency
Region II
ATTN: Joyce Feldman
Regional Radiation Representative
26 Federal Plaza
New York, New York 10278

Dear Ms. Feldman:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 471

B/468

OFFICE	RI:DETP						
SURNAME	Kinneman/lp						
DATE	1/28/83						

NRC FORM 318 (10-80) NRCM 0240

OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

State of New Jersey
Department of Environmental Protection
Bureau of Radiation Protection
ATTN: F. Cosolito
Acting Chief
380 Scotch Road
Trenton, New Jersey 08620

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 472

B/469

OFFICE ▶	RI:DETP					
SURNAME ▶	Kinneman/lp					
DATE ▶	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Dr. Marvin Resnikoff
c/o The Council on Economic Priorities
84 5th Avenue
New York, New York 10011

Dear Dr. Resnikoff:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 494

B/470

OFFICE ▶	RI:DETP					
SURNAME ▶	Kinneman/lp					
DATE ▶	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Willowbrook Nursing Home
897 Black Oak Ridge Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 496

B/47

OFFICE	RA:DETP					
SURNAME	Kinneman/lp					
DATE	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Town of Lincoln Park
ATTN: Frank Grisi
Health Officer
35 Chapel Hill Road
Lincoln Park, New Jersey 07035

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 477

B/477

OFFICE	RA:DETP						
SURNAME	Kinneman/lp						
DATE	1/28/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Township of Wayne
ATTN: John Leidy
Business Administrator
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 478

B/473

OFFICE	RI:DETP						
SURNAME	Kinneman/lp						
DATE	1/28/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Township of Wayne
ATTN: Joseph DiDonato, President
Municipal Council
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 479

8/474

OFFICE ▶	RI/DETP					
SURNAME ▶	Kinneman/lp					
DATE ▶	1/28/83					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Township of Wayne
ATTN: Honorable Walter Jasinski
Mayor
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 480

B/478

OFFICE ▶	RI:DETP						
SURNAME ▶	Kinneman/lp						
DATE ▶	1/28/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

FEB 1 1983

Docket No. 040-00086 License No. STA-422

Township of Wayne
ATTN: John O'Brien, Township Clerk
City Hall
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

Enclosed for your information is a copy of the subject report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (with concurrences)

ITEM # 481

B/478

OFFICE	RI:DETP						
SURNAME	Kinneman/lp						
DATE	1/28/83						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY

OCT 2 7 1982

State of New Jersey
Department of Environmental Protection
Bureau of Radiation Protection
ATTN: F. Cosolito
Acting Chief
380 Scotch Road
Trenton, New Jersey 08620

Gentlemen:

Subject: Radiological Surveys of Sheffield Brook, Final Report

Enclosed for your information is a copy of the subject report. This report does not contain the results of measurements made on the W. R. Grace and Company property on Black Oak Ridge Road in Wayne. These measurements will be the subject of a separate report.

If you have any questions concerning this report you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

Enclosure: As stated

bcc:
Region I Docket Room (w/concurrences)

RI:DETP
Kinneman/gwc
10/27/82

OFFICIAL RECORD COPY

ITEM # 5&6

8/479

Docket No. 40-00086 OCT 2 7 1982 License No. STA-422

Bergen/Passaic Transport
ATTN: John Monteferrario
53 Central Avenue
Rochelle Park, New Jersey 07662

Dear Mr. Monteferrario:

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated October, 1982. This report does not include the results of surveys and measurements made on the W. R. Grace and Company property on Black Oak Ridge Road. These results will be the subject of an additional report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:
John D. Kinneman, Chief
Nuclear Materials Section A

bcc w/encl:
Region I Docket Room (with concurrences)

RI:DETP
Kinneman/gwc

10/27/82

OFFICIAL RECORD COPY

B/478

ITEM # 483

Docket No. 40-00086 OCT 2 7 1982 License No. STA-422

Delaware Otsego System
ATTN: C. David Soule
Vice President Administration
1 Railroad Avenue
Cooperstown, New York 13326-1194

Dear Mr. Soule

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated October, 1982. This report does not include the results of surveys and measurements made on the W. R. Grace and Company property on Black Oak Ridge Road. These results will be the subject of an additional report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

bcc w/encl:
Region I Docket Room (with concurrences)

RI:DETP
Kinneman/gwc
10/27/82

OFFICIAL RECORD COPY

ITEM # 484

B/479

Docket No. 40-00086

OCT 2 7 1982

License No. STA-422

Morton Realty, Inc.
861 Black Oak Ridge Road
Wayne, New Jersey 07470

Gentlemen:

Earlier this year this office requested permission to conduct surveys on property owned by you in Wayne, New Jersey. Enclosed is a copy of the Final Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated October, 1982. This report does not include the results of surveys and measurements made on the W. R. Grace and Company property on Black Oak Ridge Road. These results will be the subject of an additional report.

If you have any questions concerning this report, you may call me at (215) 337-5252.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Nuclear Materials Section A

bcc w/encl:
Region I Docket Room (with concurrences)

RI:DETP
Kinneman/gwc

10/27/82

OFFICIAL RECORD COPY

ITEM # 485

B/480

CONTAIN 10 CFR 2.790 INFORMATION

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

APR 8

Docket No. 40-00086 License No. STA-422

MEMORANDUM FOR: Ronald C. Haynes, Regional Administrator

FROM: James H. Joyner, Chief, Technical Programs Branch

SUBJECT: NOTIFICATION OF PROPOSED RADIATION SURVEYS ALONG SHEFFIELD BROOK AND W. R. GRACE AND COMPANY, WAYNE, NEW JERSEY

I recommend that we send the enclosed letter to the individuals who own property along the Sheffield Brook, to notify them of our proposed surveys and obtain their permission to perform surveys on their property.

James H. Joyner, Chief
Technical Programs Branch

Enclosure: As Stated

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)

ENCLOSURES TRANSMITTED WITHOUT ITEMS
CONTAIN 10 CFR 2.790 INFORMATION

ITEM # 486

B/481

rec'd 3/24/82

PROPOSED RADIOLOGICAL SURVEY PLAN

W.R. GRACE PROPERTY
POMPTON PLAINS, NEW JERSEY

I. Site History and Description

In approximately 1948, Rare Earths, Inc., of Pompton Plains, New Jersey (Figure 1), began processing monazite sand to extract thorium and rare earths. This operation was taken over by the Davison Chemical Division of W.R. Grace in 1957, which continued the thorium ore processing activities until operations ceased in July 1967. The plant was permanently closed in April 1971. In 1974, Applied Health Physics, Inc., decontaminated the site and the property was released by the NRC for unrestricted use in January 1975. On May 14, 1977, the main building was heavily damaged by fire and most of the early records were destroyed. A portion of the damaged building has been restored and the buildings are currently occupied by Electro-Nucleonics, Inc., under a long-term lease. Figure 2 is a current view of the plant.

The W.R. Grace property is located on Black Oak Ridge Road, approximately 3 km north of Wayne, and 2 km east of Pompton Plains, New Jersey. It occupies about 2.6 hectares. There are three main structures, two office buildings and a warehouse. The land area not occupied by buildings, parking lots, and other paved areas, is gently sloping from east to west and is overgrown with small trees and weeds. A small stream passes through the property, starting near the southeast corner, running north, then turning to the west, and leaving the property near the northwest corner. Surrounding properties are primarily residential or light commercial.

Wastes containing low (less than approximately 5%) concentrations of thorium were disposed of in on-site shallow land burial in accordance with 10CFR20.304. Although detailed records of quantities and compositions of waste are not available, W.R. Grace has indicated that approximately 8.6×10^3 kg of thorium residues and 7.3×10^2 kg of slightly contaminated decontamination debris have been buried on the property. Exact locations of these burials are also unknown, but possible locations, based on information from the Applied Health Physics report and conversations with several former employees are shown on Figure 3.

A followup inspection of the property was conducted by representatives of the New Jersey Bureau of Radiation Protection and NRC Region I in January 1981. The findings of that inspection indicated direct radiation levels and surface soil thorium concentrations exceeding the current criteria for release for unrestricted use. An aerial radiological survey performed in

B/482

Prepared by the Manpower Education, Research and Training Division of Oak Ridge Associated Universities, Oak Ridge, TN, under interagency agreement DOE No. 40-770-80, NRC Fin. No. A-9093, between the U.S. Nuclear Regulatory Commission and the U.S. Dept. of Energy.

March 15, 1982

ITEM # 487

May 1981, identified elevated direct radiation levels both on the W.R. Grace property and off-site along a small stream, which runs through the property and then approximately 1 km west to the Pompton River. Preliminary sampling along this off-site stream have also shown above-background concentrations of thorium in sediment and bank soil.

II. Objectives of Survey

The objectives of the survey are to:

A. measure direct radiation levels on the W.R. Grace property and along the small stream to the west of the property,

B. determine the concentrations of radionuclides in surface soil on the property and in soils and sediments along the small stream west of the property,

C. define specific locations and depths of burials, and

D. determine if surface or subsurface radionuclides are migrating from the burial sites.

III. Responsibility

Work described in this survey plan will be performed under the supervision of Mr. J.D. Berger, Certified Health Physicist, with the Radiological Site Assessment Program of the Manpower Education, Research, and Training Division of Oak Ridge Associated Universities.

IV. Procedures

This survey will be conducted in two separate parts. The area along the small stream west of the W.R. Grace facility will be surveyed as soon as possible, due to the sensitive nature of potential thorium contamination. The survey of the main property will be performed several months later.

A. Stream Survey

1. Perform systematic direct gamma exposure level measurements at 50 m intervals along the stream between the W.R. Grace site and the Pompton River. Measurements will be made at the stream edge and approximately 5-10 m from the edge.

2. Collect systematic surface (to 5 cm) soil and sediment samples (1 kg) at points of direct radiation measurement described in step A. 1. Subsurface (0.5 to 1.0 m) soil samples will also be collected at approximately ten locations.

3. Collect stream water samples (4 l) at points where the stream enters and exits the W.R. Grace property and at about four additional locations between the site and the Pompton River.

4. Collect soil, sediment, and water samples and perform direct radiation measurements along the Pompton River, about 100 m upriver and downriver of the junction with the small stream.

5. Scan stream and immediately adjacent bank areas to identify locations of elevated direct radiation levels. Perform radiation measurements and soil and sediment sampling at those locations.

B. W.R. Grace Property

1. Site Preparation

   a. Bush-hog to clear land of weeds and tall grass. (Sub-contract)
   b. Survey land to establish a 20 m grid pattern on the W.R. Grace property and prepare site drawings.

2. Surface Measurements

   a. Perform ground-radar survey of the property to identify location of burial trenches and determine depth and location of subsurface objects. (Sub-contracts)
   b. Conduct a walkover surface level scan with gamma scintillation detectors to identify locations of elevated levels.
   c. Determine exposure levels (μR/h) at 1 m above the ground at each grid intersection and at points identified in B. 2. b. using gamma scintillation instruments calibrated against a pressurized ionization chamber.

3. Vertical Profile Measurements

   a. Drill a pattern of boreholes to a depth which exceeds the depth of the nearest burial trenches and where possible to ground water. (Sub-contract) Approximately 20-40 holes will be drilled between trenches and around the site perimeter; the exact number and location of these holes will be determined by the findings of the ground radar and surface radiation scans.
   b. Perform gross gamma scintillation measurements at 30 cm intervals from surface to ground water depth in these boreholes.
   c. Obtain gamma spectrum measurements at selected boreholes and where elevated levels are noted, to identify radionuclides.

4. Sampling

a. Soil

(1) Collect systematic surface samples from grid point intersections at 40 m intervals.
(2) Collect biased surface samples from locations of elevated surface measurements identified by the walk-over scan.
(3) Collect subsurface samples at several depths in each borehole and at depths of elevated borehole logging measurements.
(4) Collect surface samples at 50 m intervals along the banks of the small stream and sediment samples at the same locations.

b. Water

(1) Collect samples of ground water from boreholes as available.
(2) Collect samples of surface water from several points along the small drainage stream and from other areas of standing or surface water that may be present on the site at the time of the survey.
(3) Collect samples of water from on-site sumps and wells.

c. Vegetation

Collect samples of ground vegetation at approximately six locations on the site.

C. Background and Baseline Samples

Perform measurements of gamma exposure levels and collect samples of soil, sediment, water, and vegetation from off-site locations to establish background and baseline levels for comparison with on-site data.

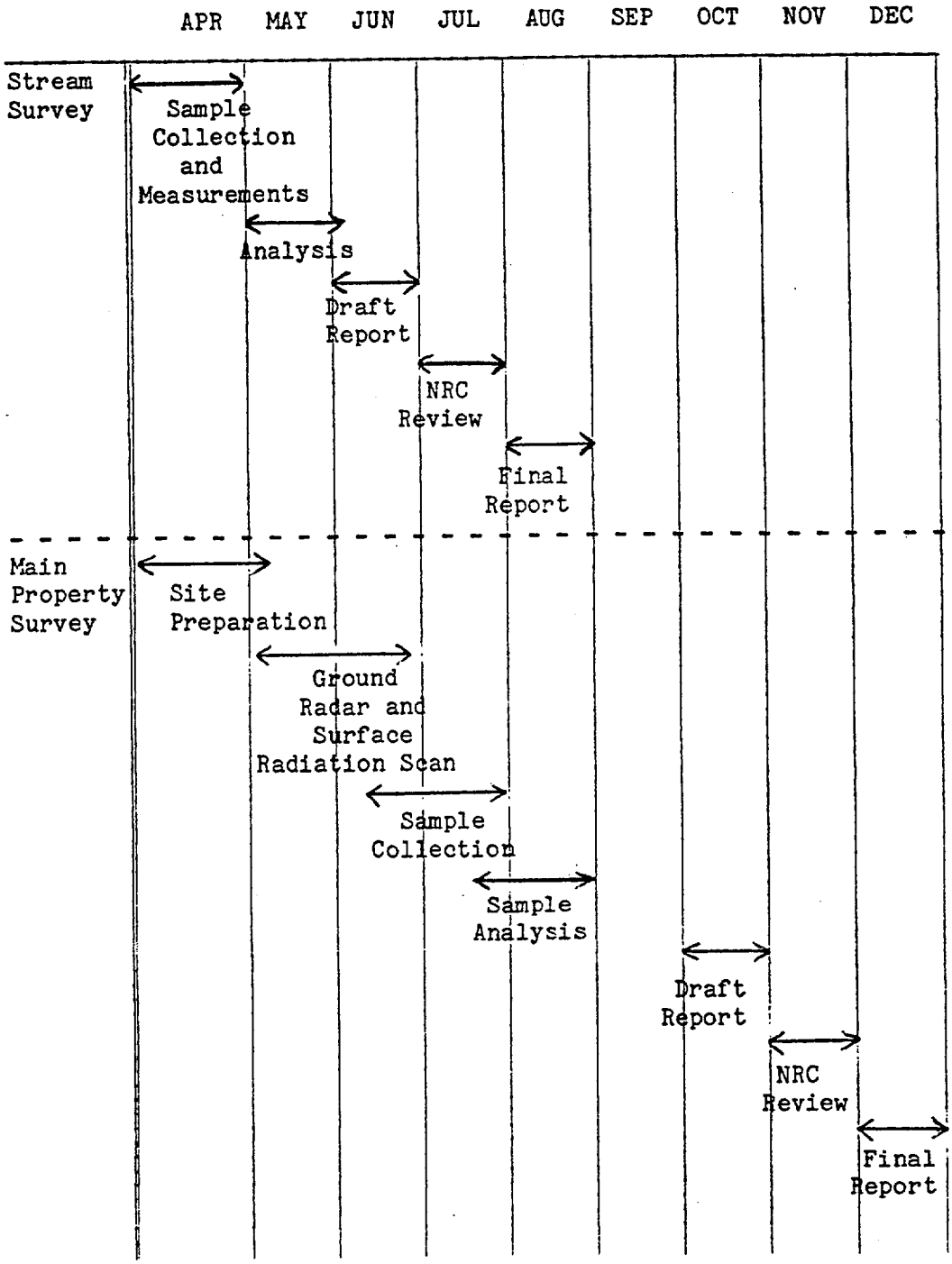
D. Analysis of Samples

Samples will be returned to laboratories in Oak Ridge, Tennessee. Analytical techniques and quality control procedures established by DOE, EPA, and other qualified environmental measurements laboratories will be used.

Samples will be analyzed for major radionuclides of the naturally occurring uranium and thorium series.

V. Schedule

The following is the estimated schedule for various phases of this survey plan. The actual schedule will be determined to a large degree by weather and ground moisture conditions.



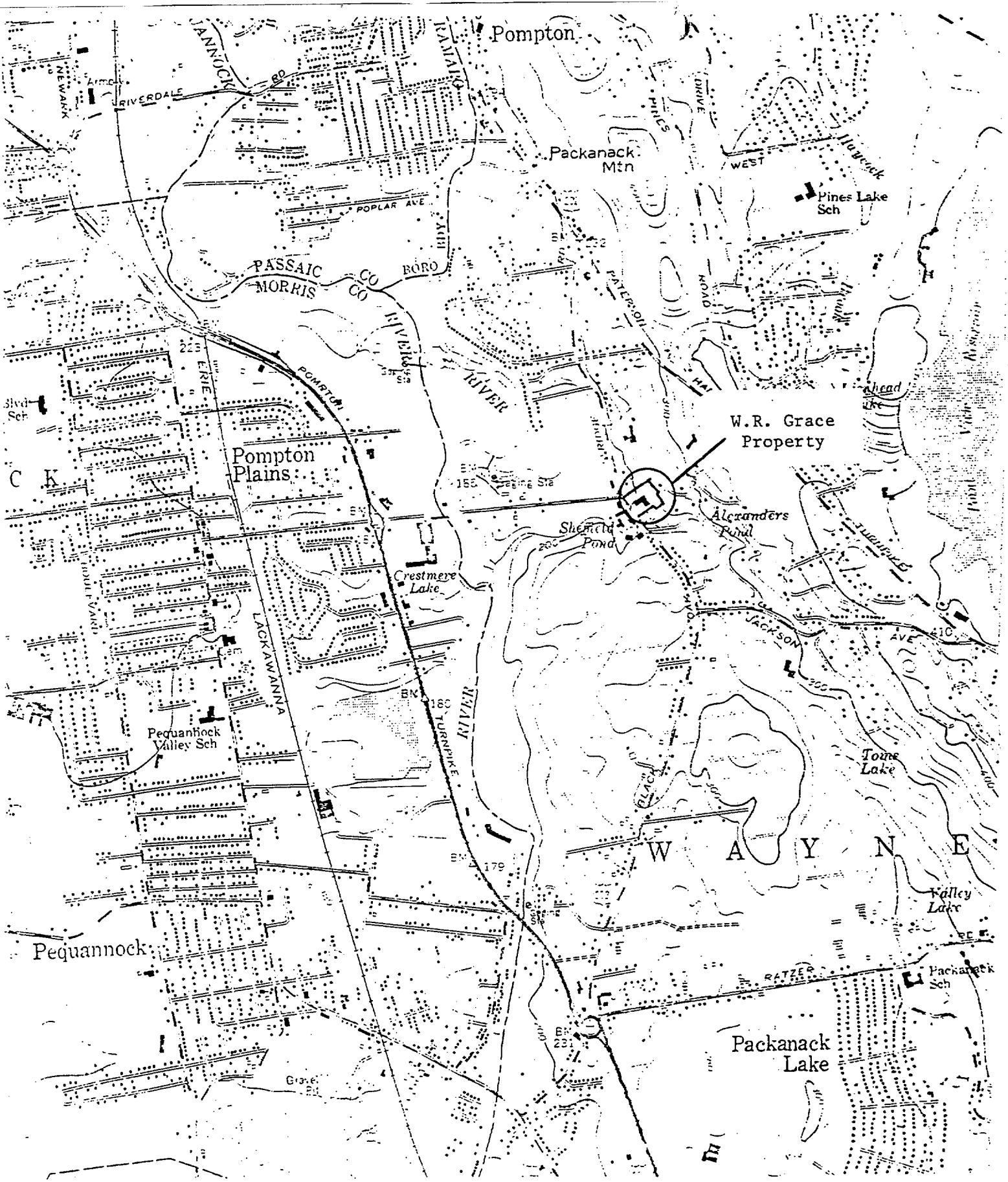


FIGURE 1. Map of Central New Jersey Showing Location of W.R. Grace Property.

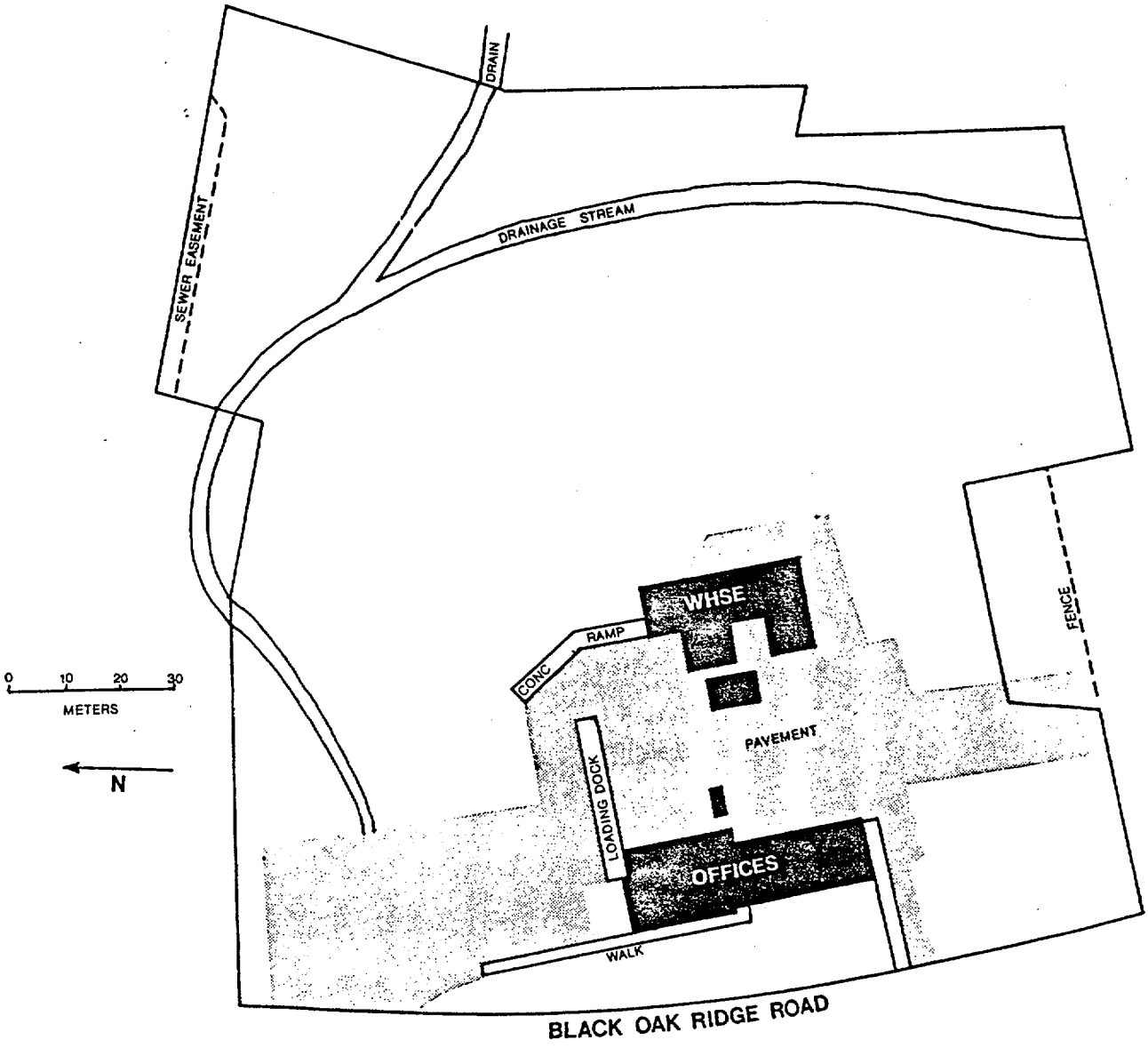
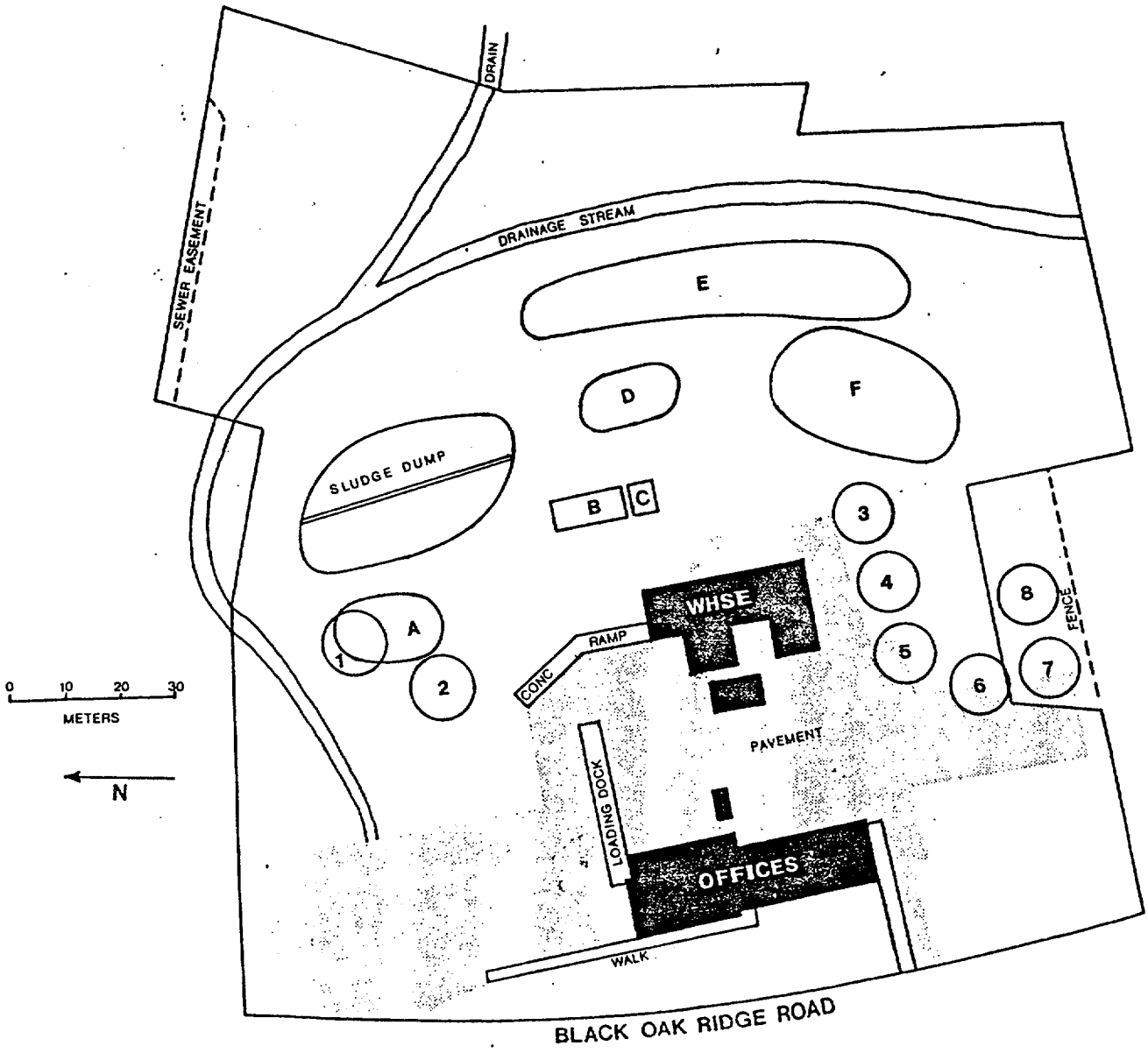


FIGURE 2. Davison Chemical Division Facility, W.R. Grace & Co.



A=Reworked Sludges
B=Yttrium Concentrate
C=Thorium Hydroxide
D=Waste Treatment Disposal
E=Ore Tailings and Gangue
F=Yttrium and Silica Sludges

1-8 = Circular Holes Filled April-June 1974 from Decontaminated Buildings

FIGURE 3. Burial Locations at Davison Chemical Co.

COPYRIGHTED DOCUMENT ADDRESSED UNDER

FOIA/PA

For hard copy, refer to PDR Folder:

FOIA/PA: 2000-0101

Requester Name: Denise Wilt

Response Date: 7-25-00 Resp #1

Record(s): B-417

B-483

B-495

B-512

40-86

APR 2 1 1982

Mr. R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Page:

During our meeting on March 31, 1982, we indicated that we would ask our Office of General Counsel for an opinion relative to our authority for conducting remedial action at the Pompton Plains site of the W. R. Grace Company. The opinion just received is that "DOE would not have the authority to undertake remedial action to remove radioactive materials resulting from Contract No. AT(30-1)-1037, but would have the authority to undertake remedial action to remove radioactive materials resulting from Contract No. AT(49-6)-993 if such action was required to protect public health and safety." As a point of clarification, the first contract (AT(30-1)-1037) was a contract to purchase material from W. R. Grace. The second contract (AT(49-6)-993) was for processing material to the Atomic Energy Commission specifications and including waste disposal, etc. Based on this opinion, it appears that this site can be considered for inclusion in the Department of Energy formerly utilized sites program. The legal opinion notwithstanding, it is understood that this site will be radiologically characterized this month by a Nuclear Regulatory Commission contractor. Please forward the survey results and other pertinent information on the Pompton Plains site to this office so we may review them prior to inclusion in the formerly utilized site program.

Sincerely,

Original signed by:

William E. Mott
Acting Director
Public Safety Division
Office of Operational
Safety (EP-323)

bcc:
W. Goldsmith, ORNL
Aerospace
A. Whitman, EP-323

ITEM # 489 B1484

EP-323:AJWhitman:dlm:353-5439:4/20/82:EP-32-82-123:DF-58

1826-1

OFFICIAL FILE COPY

CONCURRENCES
SYM. EP-323
INITIALS WEMott
DATE 4/20/82
SYM.
INITIALS
DATE

JUL 2 1 1982

Docket No. 40-00086 License No. STA-422

Township of Wayne
ATTN: Arthur Bartolozzi
Health Officer
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

SUBJECT: NRC SURVEYS IN WAYNE, NEW JERSEY

Your July 15, 1982 letter requested a description of the surveys which the NRC has performed or will perform in Wayne, New Jersey. Enclosed is a copy of the Radiological Survey Plan submitted by Oak Ridge Associated Universities. The results of the part of the sampling performed in April are not yet available.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Materials Program Section No. 1

Enclosure:
Radiological Survey Plan

bcc:
Region I Docket Room (w/concurrences)

B1485

ITEM # 490

OFFICE	RI:DETP	RI:DETP					
SURNAME	Campbell	Kinneman					
DATE	7/20/82	7/21/82					

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—335-9

township of wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800
Police Department
(201) 694-0600

ARTHUR R. BARTOLOZZI, R.S., M.A.
HEALTH OFFICER
DIRECTOR OF HEALTH & WELFARE

July 15, 1982

John D. Kinneman, Chief
Materials Program Section No. 1
U.S. Nuclear Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Re: W. R. Grace Property, Wayne, New Jersey

Dear Mr. Kinneman,

At a conference meeting with Wayne Township officials last evening the question of whether the NRC, which is presently conducting tests at the above subject location for radiation levels, plans as part of the test program to conduct tests for the daughter products of thorium, radium and radon gas. The issue regarding the testing program has never been clearly defined and the township officials would like definitive answers regarding this issue.

I would appreciate your advising me regarding the scope of your testing program and what it will entail. I am aware of the surface sampling program, the fly-over and the proposed core sampling which is expected during the second week in August, 1982, by your contractor Oak Ridge Associated Universities. If the results from your April sampling are available, I would appreciate your forwarding them to me.

Thank you for your usual cooperation in this matter.

Sincerely yours,

Arthur R. Bartolozzi
Health Officer

ARB:kms

cc: Mayor Walter Jasinski
Wayne, N.J.

John Leidy, Business Administrator
Wayne, N.J.

ITEM # 491

B/486

Oak Ridge
Associated
Universities

Post Office Box 117
Oak Ridge, Tennessee 37830

Telephone (615) 576-3305

Manpower Education,
Research, and Training
Division

September 30, 1982

Mr. William Crow
Div. Fuel Cycle & Mat. Safety
MS SS396
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Crow:

Enclosed are copies of letters to property owners in the Wayne, New Jersey, area providing the results of the analysis of their well water.

If you have any questions regarding these letters or the analysis, please call me.

Sincerely,

Jim Berger

James D. Berger
Program Manager
Radiological Site Assessment Program

JDB/jm

Enclosures

cc: John Kinneman
NRC, Region I

B/1487

ITEM # 492

Oak Ridge
Associated
Universities

Post Office Box 117
Oak Ridge, Tennessee 37830
Telephone (615) 576-3305

Manpower Education,
Research, and Training
Division

July 26, 1982

Mr. C. David Soule
Vice President Administration
Delaware Otsego System
1 Railroad Avenue
Cooperstown, New York 13326

Dear Mr. Soule:

Your letter of July 8, 1982, to Ronald Haynes of the Nuclear Regulatory Commission, King of Prussia, PA, concerning permission to perform a radiological survey along a railroad spur in Pompton Plains, New Jersey, has been forwarded to my office. Our organization has been designated by the Nuclear Regulatory Commission to conduct the radiological survey of that site. We anticipate that our personnel will be in the Wayne, NJ, area conducting surveys at other sites during the week of August 9, 1982. Per our telephone conversation on July 23, our representative will contact Mr. Bob Kardock regarding specific scheduling of the railroad survey. Findings of our survey will be provided to the Nuclear Regulatory Commission, whose responsibility it will be to relay the report to your organization.

The Travelers Insurance Co. carries the necessary insurance coverage for ORAU. Our administration has requested Travelers to forward appropriate proof of insurance to your office.

If any additional information is required please contact me at the above address or phone.

Sincerely,

James D. Berger

James D. Berger
Program Manager
Radiological Site Assessment Program

JDB/jm

cc: J. Kinneman, NRC, Region 1

B/488

ITEM # 493

RELEASE OF LIABILITY DURING

OAK RIDGE ASSOCIATED UNIVERSITIES RADIOLOGICAL EVALUATION

This release of liability agreement is provided by Oak Ridge Associated Universities (ORAU) with regard to performance of a radiological evaluation, to be conducted by ORAU on a railroad spur of the New York, Susquehanna, and Western Railway Co. (Delaware Otsego System) of Cooperstown, NY, in Pompton Plains, New Jersey. This evaluation will be conducted during the period of approximately August 9, 1982, through August 13, 1982. The evaluation is being conducted in accordance with interagency agreement DOE 40-770-80, NRC Fin. No. A-9093-0 between the Department of Energy and the Nuclear Regulatory Commission.

1. Delaware Otsego System shall assume no liability for any loss arising from injury or damages caused by or resulting from willful or negligent acts or omissions of ORAU or its contractor(s) in performing the evaluation of said premises.

2. Such liability shall be solely that of ORAU or its contractor(s) and ORAU shall assure that its contractors are informed of this liability agreement.

3. ORAU shall bear the cost of repairing damages to Delaware Otsego System property resulting from the radiological evaluation operations.

Agreed to by:

Oak Ridge Associated Universities

William E. Selling

Title Exec. Dir.

Date 7/27/82

B1489

ITEM # 494

Docket No. 40-00086 JUN 29 1982 License No. STA-422

W. R. Grace and Company
Davison Chemical Division
ATTN: Mr. Burton Mobley
Manager, Environmental Control
P. O. Box 2117
Baltimore, Maryland 21203

Gentlemen:

Subject: Surveys for Radioactive Materials in Uncontrolled Areas

Enclosed for your information is a copy of Inspection Report No. 99990001/82-03.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter will be placed in the Public Document Room.

No reply to this letter is required; however, should you have any questions, we will be pleased to discuss them with you.

Sincerely,

James H. Joyner, Chief
Technical Programs Branch
Division of Engineering and Technical Programs

Enclosure: Report 99990001/82-03

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

Township of Wayne
ATTN: Mr. Arthur Bartolozzi
Health Officer
475 Valley Road
Wayne, New Jersey 07470

Town of Lincoln Park
ATTN: Mr. Frank Grisi
Health Officer
35 Chapel Hill Road
Lincoln Park, New Jersey 07035

B/490

ITEM # 495

IE:07 (7)

bcc w/encl:
Region I Docket Room (with concurrences)

R1:DETP
Campbell/wb
6/25/82

R1:DETP
Kinneman

U. S. NUCLEAR REGULATORY COMMISSION

Region I

Report No. 99990001/82-03

Subject: Wayne, and Riverdale, New Jersey Surveys for Radioactive Material in Uncontrolled Locations

Inspection At: Wayne, New Jersey

Inspection Conducted: April 28 and May 13, 1982

Inspectors: M. Campbell
M. Campbell, Radiation Specialist — 6/28/82 date signed

Approved By: M. Campbell for
J. D. Kinneman, Chief, Materials Program
Section No. 1 — 6/28/82 date signed

Inspection Summary: Inspection on April 28 and May 13, 1982

Areas Inspected: Measurements of environmental radiation levels in Wayne and Riverdale, New Jersey. This inspection involved 20 inspector hours by one region based inspector.

Results: There is one area of Wayne, New Jersey where radioactive material exist as contamination in uncontrolled areas which is not part of the Sheffield Brook area. This contamination is in a small spot on an industrial property. There is one other area where reported contamination could not be confirmed. This is in a landfill in Riverdale, New Jersey.

DETAILS

1. Persons Contacted

Individual A
R. Mandel, Former Vice President, Rare Earths, Incorporated
P. Garino, Former Plant Chemist, Rare Earths, Incorporated
E. Fullard, Former Furnace Operator, Rare Earths, Incorporated

2. Background

In 1948, Rare Earths, Incorporated began processing ores to extract thorium. In 1957, the Davison Chemical Division of the W. R. Grace and Company bought the property belonging to Rare Earths, Incorporated in Wayne. Processing ceased in 1971. The thorium processing area was decontaminated between 1973 and 1974. In early 1975, the facility was released for unrestricted use by the NRC. In early 1981, onsite thorium contamination was surveyed and was found to be in excess of current decontamination limits. In November 1981, the report of an aerial survey showed offsite thorium contamination along the Sheffield Brook. NRC activities in this regard are documented in Report No. 99990001/81-21. In April, 1982, further surveys of the Sheffield Brook areas were conducted by Oak Ridge Associated Universities under contract with the NRC. This report covers surveys of areas which will not be included in the Oak Ridge Associated Universities report.

3. Measurements of Environmental Radiation Levels

a. Measurements of Radiation Levels at Nearby Farm

Immediately adjacent to the Sheffield Brook area is a farm where produce is grown for commercial sale. The aerial survey showed radiation levels in excess of background along the nearby Sheffield Brook. Although the aerial survey showed that most of this farm did not have radiation levels in excess of background, the resolution on the aerial survey results was sufficiently poor that the southeast portion of the farm was included in the area which showed higher than background radiation levels. This survey was to determine whether those radiation levels were from the Sheffield Brook area. On April 28, 1982, an NRC inspector performed radiation level measurements with a Ludlum 12S micro R meter and took a sample of the soil from the farm. The measurements with the micro R meter showed no radiation levels in excess of background. Analysis of the soil sample performed in the Region I laboratory showed background concentrations of naturally occurring radioactive material (Appendix 1).

b. Surveys of Residence Adjacent to W. R. Grace and Company Property

On April 28, 1982, an NRC inspector performed surveys of the residential property immediately adjacent to the W. R. Grace and Company property at the request of the residents. No radiation levels in excess of

0.035 mR/hr were measured on the edge of this property. Radiation levels in the portion of the yard not obstructed by weeds were less than 0.020 mR/hr. A sample of the soil from the vegetable garden at this residence showed background concentrations of naturally occurring radioactive material (Appendix 1). Further surveys on this property will be conducted by Oak Ridge Associated Universities in July, 1982.

c. Measurements of Radiation Levels at Nearby Construction Company

On April 28, 1982, an inspector performed measurements of radiation levels at a contracting firm which stores top soil and other building materials near the Sheffield Brook area. No radiation levels above background were observed near the building materials used by this contracting firm. A sample of the construction materials showed background concentrations of naturally occurring radioactive materials (Appendix 1). One area measuring 1 mR/hr was discovered on the ground where the earth moving equipment is stored. A sample of the soil from this location was taken by Oak Ridge Associated Universities. The results of the analysis of the sample will be included in their report.

d. Measurements of Radiation Levels at Reported Dump in Riverdale, New Jersey

On May 11, 1982, the Region I office was contacted by Individual A, who claimed that he had been employed by Rare Earths, Incorporated. He stated that he had been assigned to dump quantities of "thorium waste" in an area in Riverdale, New Jersey which was being used as an unauthorized dump site during the mid-fifties. On May 13, 1982, an NRC inspector met with this individual and visited the area where the individual claimed to have dumped this material. The area is along Route 23 at the circle where Route 23 intersects Route 511. Measurements of surface radiation levels showed no radiation levels in excess of 0.015 mR/hr. The area had evidently been used to dump industrial and other wastes but there was no evidence of radioactive materials.

On June 3, 1982, the inspector interviewed the former vice president of Rare Earths, Incorporated by telephone. He stated that the area near the Riverdale Circle had been used for disposal of barium sulfate resulting from processing bastnasite ore for rare earths. He stated that the bastnasite ore may have contained some thorium but that it would have contained much less than monazite sand. He noted that the bastnasite ore contained approximately 15% rare earth oxides, whereas monazite sand contained 60% rare earth oxides, and that the Atomic Energy Commission only required licensure for the monazite sand. He stated that he recalled that during the mid-fifties, Rare Earths, Incorporated processed both bastnasite ore and monazite sand, and that all of the wastes from the monazite processing were disposed of on the property in Wayne, New Jersey.

The inspector interviewed the former plant chemist for Rare Earths, Incorporated by telephone. He stated that he had worked for Rare Earths, Incorporated in the mid-fifties. He recalled that both bastnasite ore and monazite sand were processed, but he did not recall disposal of any materials offsite.

The inspector also interviewed the former furnace operator for Rare Earths, Incorporated by telephone. He confirmed that he was employed by Rare Earths, Incorporated during the mid-fifties. He remembered that material had been transported offsite for disposal. He was not sure which material(s) were disposed of offsite, but he thought that it may have been the residual sludge from the processing of monazite sand. He recalled that at one point he and the vice president worked down 25 pounds of the sludge to determine if they could profitably extract thorium, but that the result was about "one pea" of material.

APPENDIX 1

Measurements of Concentrations of Radioactive Materials in Soil

	^{226}Ra (^{238}U)	^{228}Ra (^{232}Th)
Average Soil, NCRP-45[1]	0.6 pCi/g	1 pCi/g
Soil from Farm	0.4 pCi/g ±.1	0.7 pCi/g ±.2
Soil at Residence	0.47 pCi/g ±.08	1.7 pCi/g ±.3
Soil from Contruction Firm	0.56 pCi/g ±.08	0.8 pCi/g ±.2
Average Soil, UNSCEAR[2]	0.3-1.4	0.2-1.3

[1]National Council on Radiation Protection Report No. 45, "Natural Background Radiation in the United States," 1975.

[2]United Nations Scientific Committee on the Effects of Atomic Radiation "Sources and Effects of Ionizing Radiation," 1977.

JUN 29 1982

Docket No. 40-00086 License No. STA-422

V. Ottilio and Sons
ATTN: Mr. C. J. Ottilio
555 Preakness Avenue
Patterson, New Jersey 07502

Dear Mr. Ottilio:

Subject: Status of Radiological Surveys of W. R. Grace and Company Property, Wayne, New Jersey

This is in response to your letter dated June 11, 1982 requesting that we inform you of the status of our research of the status of radiological conditions at the W. R. Grace and Company property in Wayne, New Jersey which is currently occupied by Electro-Nucleonics, Inc. An NRC contractor, Oak Ridge Associated Universities is scheduled to perform detailed radiological surveys of this property in July. We expect that their report of the results will be available by November. Our preliminary surveys of radiation and radioactive materials at the W. R. Grace and Company properties indicate that it is unlikely that employees performing site clearing, exploration, excavation and backfilling as you described would be exposed to radiation or radioactive materials in excess of NRC limits for members of the general public. We will send you a copy of the Oak Ridge Associated Universities report when it is completed.

If you have additional questions, please contact myself or Ms. M. Campbell of this office at (215) 377-5252.

Sincerely,

Original Signed By:
M CAMPBELL
for John D. Kinneman, Chief
Materials Program Section No. 1

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey ✓

bcc:
Region I Docket Room (with concurrences)
F. Combs, OCA ✓
W. Crow, NMSS
K. Abraham, RI ✓

R1:DETP Campbell/wb 6/23/82

R1:DETP Kinneman

B/491

ITEM # 496

JUN 2 1 1982

Docket No. 40-00086
License No. STA-422

MEMORANDUM FOR: J. M. Felton, Director, Division of Rules and Records
Office of Administration

FROM: Gary L. Snyder, Chief, Emergency Preparedness and Program
Support Branch, DEPOS, RI

SUBJECT: FOIA REQUEST REGARDING W.R. GRACE AND CO. (FOIA 82-219)

Documents on file in Region I relating to W. R. Grace and Company were transmitted to you by my memorandum dated May 20, 1982. Subsequently, we were requested to show the file to a citizen who later came to the Region I Office. Prior to allowing the individual to examine the file, it was reviewed in greater detail than had been done previously to assure that information was not improperly disclosed. This review identified information which may be useful to you and is in addition to that contained in my May 20, 1982 memorandum.

Referring to the enclosures to my May 20 memorandum:

1. Item 4, Enclosure 1, contains information which may be proprietary but does not contain Privacy Act information.

2. Pages 2.A through 4 of Item 33, Enclosure 2, may also be proprietary information.

3. There are several documents in Enclosure 2 which contain the names of individuals who have been exposed to radiation. These are: Item 56, Exhibit A; Item 62, page 10; Item 72, page 10; and Item 89, page 4. The names should be withheld.

4. Items 2.a and 2.b, Enclosure 1, are the same as Item 160, Enclosure 2.

Original Signed By:

Gary L. Snyder, Chief
Emergency Preparedness and Program
Support Branch

RI:DEPOS
Snyder/pmg
6/21/82

RI:DETP
Kinneman
6/21/82

B/492

ITEM # 492

OFFICIAL RECORD COPY

15 JUN 1982

CC86

Docket No. 40-~~8610~~ License No. STA-422

Township of Wayne
ATTN: Mr. Joseph DiDonato
President, Municipal Council
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Resolution No. 134 of 1982

The Wayne Township Council, in Resolution No. 134 of 1982, urged that the NRC proceed immediately to determine the accurate levels of radiation on the W.R. Grace and Company property and along the Sheffield Brook in Wayne and to prepare proper procedures and complete removal of the thorium located at the W.R. Grace property and the removal of contaminated soil along the Sheffield Brook.

We plan to perform surveys to determine the levels of radiation as discussed by Mr. J. Kinneman of this office at your April 21, 1982 meeting. The surveys of the Sheffield Brook were completed on May 1, 1982, and the surveys of the W.R. Grace and Company property are scheduled to begin in June or July.

The information being collected includes data from detailed radiation surveys and analyses of soil samples collected in the area by our contractor, Oak Ridge Associated Universities. The data for the area of the Sheffield Brook is expected to be available in September of this year and the data for the W.R. Grace and Company property should be available about two months later. However, preliminary surveys by NRC inspectors indicate that: 1) it is very unlikely that any individual will exceed the recommended dose limits for individual members of the general public, 2) no radiation levels above normal background exist in any residence, and 3) areas where radiation levels are above normal background are near the rear boundaries of the properties. We will not have sufficient information to fully determine the degree of hazard associated with ingesting small quantities of the contaminated soil until our contractor has completed the analysis of the samples collected during the field work. However, analysis of several samples of water from the Brook has not revealed radioactive contamination in the water. This indicates that the contamination is probably insoluble and would not long remain in the body if it were ingested. In addition, the actual concentration of radioactive material in surface soil is quite low. Therefore, we conclude that any hazard associated with exposure to the contaminated soil during the time required to complete our investigation is insignificant.

We consider it premature to consider preparation of procedures for removal of the thorium located both on and off the W.R. Grace and Company property until the above surveys have been completed and it can be determined if such action is required to protect the public health and safety. We have not determined

B/498

ITEM # 498

IE07

who would bear the expense for removal of the contaminated soil, if its removal is determined to be necessary. W.R. Grace and Company still owns the property on which the radioactive material was processed. The U.S. Department of Energy may have authority for remedial action as the result of work performed under a contract between Rare Earths, Inc., predecessor to W.R. Grace and Company, and the former U.S. Atomic Energy Commission.

We will keep you informed of our progress.

Sincerely,

for James M. Allan

Ronald C. Haynes
Administrator

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

Department of Energy
ATTN: Dr. W. E. Mott
Acting Director,
Public Safety Division
Office of Operational Safety (EP-323)
Washington, D.C. 20545

W.R. Grace and Company
ATTN: Mr. B. Mobley
Manager, Environmental Control
P.O. Box 2117
Baltimore, Maryland 21203

bcc:
Region I Docket Room (w/concurrences)
W. Crow, NMSS
F. Combs, OCA

RI:DETP	RI:DETP	RI:DETP	RI:DETP	RI:DRA	RI:DA
Campbell:as	Kinneman	Joyner	T. Martin	Allan	Haynes
6/1/82		6-14-82	6/14/82	6/14	6/17

EW-0006 #6

GRACE

Davison Chemical Division

W. R. Grace & Co.
P.O. Box 2117
Baltimore, Maryland 21203

(301) 659-9000
Direct Dial (301)

June 15, 1982

Oak Ridge Associated Universities
P. O. Box 117
Oak Ridge, TN 37830

Attn: Mr. Paul Frame

Dear Mr. Frame:

Per my conversation with L. Cole, I am sending you a copy of a recent newspaper article. The local residents have formed an action group and are keeping things stirred up.

Very truly yours,

DAVISON CHEMICAL DIVISION

Ron Mace

Ronald R. Mace
Industrial Hygienist

RRM/kdb

Enclosure

cc: Mr. B. L. Mobley

8/4/94

ITEM # 499

COPYRIGHTED DOCUMENT ADDRESSED UNDER

FOIA/PA

For hard copy, refer to PDR Folder:

FOIA/PA: 2000-0101

Requester Name: Denise Wilt

Response Date: 7-25-2000 Resp #1

Record(s): B-417

B-483

B-495

B-512

GRACE

Davison Chemical Division

W. R. Grace & Co.
P.O. Box 2117
Baltimore, Maryland 21203

(301) 659-9000
Direct Dial (301)

June 1, 1982

Mr. William Crow
United States
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Bill:

Attached is a letter from the Wayne Council that I promised you, and our reply of May 28, 1982. The delay on sending both was caused by our lengthy consideration of the council's letter before answering.

Very truly yours,

DAVISON CHEMICAL DIVISION

Burt Mobley

Burton L. Mobley
Manager, Environmental Control

BLM/kdb

Enclosure

cc: Ms. Myu Campbell

B/496

ITEM # 501

Telecopy to V M Bakeman
cc. W. Crow, NRC
M. Campbell "
O.M. Favorito - Cambridge

JUN 1 1982 K. Mulley

GRACE

Davison Chemical Division

W. R. Grace & Co.
P.O. Box 2117
Baltimore, Maryland 21203

(301) 659-9000
Direct Dial (301)

May 28, 1982

Mr. John R. O'Brien
Clerk
Township of Wayne
475 Valley Road
Wayne, New Jersey 07470

Dear Mr. O'Brien:

This is in further response to your letter of April 23 to Mr. Grace which was previously acknowledged by C. E. Brookes, Senior Vice President of W. R. Grace & Co. This also responds to your letter of April 28 to Mr. Grace. As indicated in Mr. Brookes' letter, the Pompton Plains site is under the jurisdiction of the Davison Chemical Division of W. R. Grace & Co. ("Grace") and we suggest that further correspondence be addressed to the undersigned at this Division.

At the outset, we wish to assure your community that Grace understands the concerns which have been raised by the citizens of Wayne Township as reflected in your letter, the Wayne Township Council resolution and in the press. We acknowledge that the issue of exposure to radiation is one which triggers public anxiety and must be addressed as quickly as possible. Grace is committed to full cooperation with the Nuclear Regulatory Commission ("NRC").

All parties must necessarily await the results of the sampling and analysis work which has been undertaken by Oak Ridge Associated Universities ("ORAU") for the NRC. In our judgment no action including the requested removal could prudently be taken until the scope of the situation has been quantified, and all available alternative measures evaluated for effectiveness and feasibility. We have urged NRC to complete its work as soon as possible.

ITEM # 502

B/497

(2)

GRACE

As concerns questions related to the health effects of the current situation, we can only repeat the assurances which have been given by the NRC to property owners along Sheffield Brook that there is no immediate hazard to their health and safety.

What we are all dealing with is the application of current guidelines to past accepted practices. This always raises apprehensions but the thrust of the NRC toward a greater assurance of safety should not simultaneously be followed with the assumption that past practices were inadequate.

We fully recognize that to many people these assurances are not enough and there are those who will press for the removal option. Since this option is the most obvious one, it most certainly will be considered in the light of the ORAU findings when they become available.

Very truly yours,

Robert L. Koffler per WRB

Robert L. Koffler
Vice President-Administration

c.c. Mr. J. Peter Grace

Charles E. Brookes, Senior Vice President

W. R. Grace & Co.
Grace Plaza
1114 Avenue of the Americas
New York, N. Y. 10036

April 30, 1982

Mr. John R. O'Brien
Clerk
Township of Wayne
475 Valley Road
Wayne, New Jersey 07470

Dear Mr. O'Brien:

We acknowledge receipt of your letter of April 23 addressed to Mr. J. Peter Grace, Chairman and Chief Executive Officer of W. R. Grace. We acknowledge receipt of the resolution 134 and its contents.

This site is under the supervision of our Davison Chemical Division which is headquartered in Baltimore, Maryland at 10 East Baltimore Street. We have sent them a copy of your resolution.

I have been told they have been in discussion with the Nuclear Regulatory Commission concerning retesting of the site, and we believe that the NRC will promptly undertake such testing.

It should be noted that this site was operated by both Grace and the prior owners under the supervision of the Atomic Energy Commission. When the site was decommissioned, it was in accordance with AEC procedures and secured under their supervision.

You may be sure that the Davison Division will be looking into the matter promptly, and we hope that further NRC testing will confirm the safety of this very old site.

Very truly yours,

Charles E. Brookes

CEB:lr

B/49

ITEM # 503

TOWNSHIP of WAYNE

C.N.G.

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800

Police Department
(201) 694-0500

APR 29 1982

CEB - 1) Need an answer?(!)
2) "Story" for forthcoming Annual meeting, please!

CNG

April 28, 1982

APR 29 1982

C.N. Graf
not ack
4/24/82

Mr. J. Peter Grace
President, W. R. Grace & Co.
1114 Avenue of the Americas
New York, New York 10036

Re: Premises owned in Fee Simple by
W. R. Grace, 868 Black Oak Ridge Road,
Lot 48, Block 613, Tax Map of the
Township of Wayne, New Jersey

Dear Mr. Grace:

I am writing upon direction, by unanimous resolution (as moved and dictated by Councilman William C. Ranse) of the Municipal Council of the Township of Wayne, New Jersey.

Life in the area of the above referred to premises will never be the same!

As you may or may not know, a recent North Jersey aerial survey done by the New Jersey Department of Environmental Protection, under the oversight of the current Bureau Chief for Radiological Protection, disclosed low level radiation being emitted both from your company-owned Wayne premises and from a stream bed down-stream from these premises.

Although the burial on your property of what is thought to be discarded tailings of thorium oxide was done some years ago under license of the A.E.C. (and its successor, the N.R.C.), the present state of public awareness, concern, apprehensions, and even anger is making its prompt removal both appropriate and mandatory.

Last Wednesday evening, following three hours of discussion between the governing body, area residents, and representatives of the Nuclear Regulatory Commissions, the New Jersey Department of Environmental Protection and the representative of Congressman Robert A. Roe (N. J. 8th Congressional District), and upon the presentation of a petition signed by 171 residents, the

B/499

ITEM # 504

(2)

Wayne Township Council requested your firm to begin immediate action to remove from your premises all the subject radioactive material!

Last Thursday, this "story", in all its ugly, negative, emotional form made the Associated Press "Wire". Thereafter, it was picked up by all of the T. V. Networks. It was covered by the Public Broadcasting System on Thursday, N.B.C. and C.B.S. on Friday and they are all returning this week to do a follow-up story on W. R. Grace's "Love Canal".

I am sure you would like to do what is "right for all concerned" in this matter, and thus we, as a Township, are asking you to arrange for its removal - of course, under the oversight of the N.R.C. and the New Jersey D.E.P.

Though the cost will be expensive, I do believe you are going to "pay for its removal" one way or another; either now, or in the negative publicity your firm will receive over the next ten billion years (the estimated 1/2 life of the toxic material). I will also hazard an observation that there will be untold medical, also property and business claims to defend, rightly or wrongly.

Some questions now being publically posed to the Township Council are as follows:

1) What is the <u>immediate</u> danger? What is the <u>long-term</u> danger?

2) How long has the thorium been in both the brook and the W. R. Grace area?

3) When are "you" going to take a survey on illnesses (i.e. Cancer and Leukemia) and deaths in the area?

4) When, how and who is going to "check" our children (and later on, our grandchildren, etc.) for illness? "My kids have played in that brook area, off and on, for years"!

5) Exactly what are its characteristics, and where and how is thorium buried?

6) What are the area water table characteristics, and, can I drink my well water?

7) Have local health, first aid squad and Fire Departments been advised of the "burial" and how to deal with possible resultant illness or other collateral emergency?

8) Is "it" going to remain radioactive (and thus hazardous, is the obvious implication) for a <u>long</u> period of time?

9) Is it still migrating from the site? (The implication resultant from its appearance in a downstream stream bed.)

10) Can my children continue to play in the brook which has shown radioactivity? (The N.R.C. and the D.E.P. said "<u>Don't</u>, until we give it a clean bill of health".)

I have tried to be objective in communicating to you the Council's and the public's anxiety. Obviously, and I believe there is more to come, the emotional intensity of the residents is much more subjective I am sure you too would agree that our children are gifts from God; and, are in no way to be thought expendable or experimental.

Might I urge you to personally take charge of this situation to keep it from getting further out of hand than it is at present, and to arrange for the prompt, orderly removal of the Thorium Oxide.

Wayne Township is a substantial, upper Middle-class, influential, suburban community that prides itself on being a great place to live (50,000 residents), work (American Cyanamid World Hqs., Union Camp, Toshiba, A.F.I.A. U. S. Hqs', are here, among others) and play.

Please use every "means of Grace" at your disposal, not only to allay our fears, but to remove the Thorium. I assure you, in both the long and short run, it will be COST EFFECTIVE to and for Grace.

Very truly yours,

John R. O'Brien
Clerk

P. S. Enclosed is an infinitesimal sampling of the Public Press on the subject for your reference, together with a copy of a companion resolution to this letter, as moved by the 6th Ward Councilman - your area!

JRO/dlm
enclosures — all to CEB

4-11

MAY 28 1982

Docket No. 40-00086 License No. STA-422

Township of Wayne
ATTN: Mr. John R. O'Brien
Township Clerk
475 Valley Road
Wayne, New Jersey 07470

Subject: Farm near Sheffield Brook

Gentlemen:

This is in response to your letter dated April 29, 1982, requesting that we review the possibility of radioactivity at the farm near Sheffield Brook.

An inspector from this office visited the farm on April 27, 1982. Radiation measurements taken by the inspector showed no radiation levels above background. A soil sample was taken from the field next to Pompton Plains Crossing Road, and was analyzed for radioactive materials at the laboratory at the Regional Office Laboratory in King of Prussia, Pennsylvania. The analysis showed normal background concentrations of radioactive materials. From these measurements, it appears that there are no radiation levels or concentrations of radioactive materials above background on the farm property. Samples of each of the water supplies used at the farm were also taken and will be analyzed by Oak Ridge Associated Universities. We will inform you of the results of these analyses when they become available.

If you have any additional questions, we will be pleased to discuss them with you.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Materials Radiological Protection
Section

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

B/80

ITEM # 505

IE:07 (2)

MAY 2 5 1982

bcc:
Region I Docket Room (w/concurrences)

RI:DETP
Campbell/gwc
5/21/82

RI:DETP
Kinneman
5/27/82

TOWNSHIP OF Wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800

Police Department
(201) 694-0600

April 29,1982

Nuclear Regulatory Commission
Office of Inspection &
Enforcement, Region 1
King of Prussia, PA.

Att: Mr. John Kinneman

Dear Mr. Kinneman:

Several people who spoke at the hearing which you attended in Wayne, on April 21,1982, mentioned the possibility of radioactivity in areas nearby the Sheffield Brook. One of those areas mentioned by several people was the nearby farm.

We would just like to urge you to conduct testing in that area as well.

Very truly yours,

John R. O'Brien
Township Clerk

JRO:pha

B/SOI

ITEM # 336

FROM:
Rep. Robert A. Roe

TO:
Chairman Palladino

ACTION CONTROL	DATES
COMPL DEADLINE	5/21/82
INTERIM REPLY	
FINAL REPLY	

FILE LOCATION

CONTROL NO.
11852

DATE OF DOCUMENT
4/23/82

PREPARE FOR SIGNATURE OF:
☐ CHAIRMAN
☒ EXECUTIVE DIRECTOR
OTHER: _____

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER
Constituents concern re radiation levels and surface soil contamination at W. R. Grace and Co. site & surrounding area in Wayne, New Jersey

SPECIAL INSTRUCTIONS OR REMARKS
J. Davis
cc-FC

D
T/T
FC

SECY-82-0474

ASSIGNED TO	DATE	INFORMATION ROUTING
Haynes, Reg.I	5/10/82	Stello
		DeYoung
		Minoque
		Davis
		Cunningham
		Underwood

NRC FORM 232
(6-80)

EXECUTIVE DIRECTOR FOR OPERATIONS
PRINCIPAL CORRESPONDENCE CONTROL

ITEM # 507

8401030024

3/52

4

No. 0476 Logging Date 5/6/82

NRC SECRETARIAT

TO:
- ☐ Commissioner ____ Date ____
- XX☑ Exec. Dir./Oper.
- ☐ Cong. Liaison
- ☐ Public Affairs
- ☐ ____
- ☐ Gen. Counsel
- ☐ Solicitor
- ☐ Secretary
- ☐ Inspector & Auditor.
- ☐ Policy Evaluation

Incoming: Rep Robert A. Roe

From: ____

To: Palladino Date 4/23/82

Subject: radiation levels and surface soil contamination at the W.R. Grace and Company site

XX☑ Prepare reply for signature of:

- ☐ Chairman
- ☐ Commissioner ____
- XX☑ EDO, GC, CL, SOL, PA, SECY, IA, PE
- ☐ Signature block omitted Date due: May 21
- ☐ ____
- ☐ Return original of incoming with response

- ☐ For direct reply*
- ☐ For appropriate action
- ☐ For information

Remarks: Cpys to: RF, OCA to Ack

For the Commission: bac

*Send three (3) copies of reply to Secy: Correspondence and Records Branch

Date 5/6/82

Time 2:00 ACTION SLIP

NRC FORM 52A
(3-82)

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES

SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT

SCIENCE AND TECHNOLOGY

SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

April 23, 1982

Honorable Nuncio J. Palladino
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Mr. Palladino:

Currently the Region I Office of the Nuclear Regulatory Commission is conducting an investigation of a W.R. Grace and Company site and surrounding area in Wayne, New Jersey, because surveys indicated that "radiation levels and surface soil contamination exceed current criteria for unrestricted use".

While I recognize that relevant data is incomplete at this time, there are certain key issues of concern being expressed by my constituents - concerns which I share - which have yet to be addressed by the NRC.

First, if the NRC believes that removal is not necessary, what are the potential long-term effects of exposure to the contaminated soil. There are many children in this area who play in the soil and may even ingest small amounts of it.

Second, at the Wayne City Council meeting of April 21 the NRC representatives present did not comment upon the effects upon nearby water supplies, especially in relation to the vegetable farm in the area. As Chairman of the Subcommittee on Water Resources of the House Public Works and Transportation Committee, as well as being a life-time resident of Wayne, I have a deep personal interest in this aspect of the problem.

The last and equally as important issue is as follows: If it is determined that the contaminiated soil should be removed, who is to bear the expense? It is my expectation that it would be some Federal agency and/or the private company involved,

but certainly not local residents or the municipal government. In this regard I request the official NRC position.

Thank you for your assistance in this most serious matter. The citizens of Wayne and I anxiously await your response.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

Ref: EDO 11822
(Hughes, Ltr I

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES
SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT
SCIENCE AND TECHNOLOGY
SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

May 19, 1982

Honorable Nuncio J. Palladino
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Re: Investigation of Radiation (Thorium) at W.R. Grace and Company Site in Wayne, New Jersey

Dear Mr. Palladino:

I have received your interim acknowledgment of my April 23 letter to you.

Since that time there have been certain actions by interested parties which I would like to call to your attention.

I have contacted Commissioner Robert Hughey of the New Jersey Department of Environmental Protection; a copy of my letter to him is enclosed. I trust that the Nuclear Regulatory Commission will be cooperating fully with the DEP and the Wayne Township Government to quickly address this most important matter.

Along these lines I am also enclosing copies of Wayne Township Resolution Nos. 134 and 135, as well as a letter to Mr. J. Peter Grace, President of W.R. Grace and Company, from the Honorable John R. O'Brien, Wayne Township Clerk, on behalf of the Wayne Municipal Council.

A swift resolution of this issue is of the utmost importance to the residents of Wayne. I hope the NRC is giving it the priority it deserves.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

B/503

#8406030033

5/24..To OCA for Appropriate Action..Cpy to: EDO
82-0546

ITEM # 508

5-216

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES
SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT
SCIENCE AND TECHNOLOGY
SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
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100 HAMILTON PLAZA
ROOM 1402
BOX 26
PATERSON, NEW JERSEY 07505
201-523-5152

158 BOONTON ROAD
WAYNE, NEW JERSEY 07470
201-696-2077

May 12, 1982

Honorable Robert E. Hughey
Commissioner
Department of Environmental Protection
P.O. Box CN 402
Trenton, N.J. 08625

Re: Investigation of Radiation at W.R. Grace and Company Site in Wayne, New Jersey

Dear Commissioner Hughey:

As you know, the Region I Office of the Nuclear Regulatory Commission is conducting an investigation of a W.R. Grace and Company site and surrounding area in Wayne, New Jersey, because surveys indicated that "radiation levels and surface soil contamination exceed current criteria for unrestricted use."

The citizens of Wayne are extremely concerned and disconcerted over this situation-- feelings which I most assuredly share both as their Representative in Congress and as a township resident-- and are desirous of being kept fully informed of actions of both the Federal and State Governments in this matter. Along these lines I have already contacted the Nuclear Regulatory Commission; a copy of my letter is enclosed.

In view of the above I would appreciate a report on what the Department of Environmental Protection is doing to assess this situation, as well as what corrective measures are being contemplated.

Thank you for your assistance.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

ITEM # 509

township of Wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800

Police Department
(201) 694-0600

April 30, 1982

Hon. Robert A. Roe
100 Hamilton Plaza
Paterson, New Jersey

Dear Congressman Roe:

Enclosed are certified copies of Resolution Nos. 134 and 135 of 1982 adopted by the Municipal Council of the Township of Wayne at a regular meeting held on April 21, 1982.

Also enclosed is a copy of a letter sent to Mr. J. Peter Grace, President, W. R. Grace & Co. on April 28, 1982.

Very truly yours,

John R. O'Brien
Clerk

JRO/dlm
enclosures

B/805

ITEM # 510

Township of Wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800

Police Department
(201) 694-0600

April 28, 1982

Mr. J. Peter Grace
President, W. R. Grace & Co.
1114 Avenue of the Americas
New York, New York 10036

Re: Premises owned in Fee Simple by
W. R. Grace, 868 Black Oak Ridge Road,
Lot 48, Block 613, Tax Map of the
Township of Wayne, New Jersey

Dear Mr. Grace:

I am writing upon direction, by unanimous resolution (as moved and dictated by Councilman William C. Hanse) of the Municipal Council of the Township of Wayne, New Jersey.

Life in the area of the above referred to premises will never be the same!

As you may or may not know, a recent North Jersey aerial survey done by the New Jersey Department of Environmental Protection, under the oversight of the current Bureau Chief for Radiological Protection, disclosed low level radiation being emitted both from your company-owned Wayne premises and from a stream bed down-stream from these premises.

Although the burial on your property of what is thought to be discarded tailings of thorium oxide was done some years ago under license of the A.E.C. (and its successor, the N.R.C.), the present state of public awareness, concern, apprehensions, and even anger is making its prompt removal both appropriate and mandatory.

Last Wednesday evening, following three hours of discussion between the governing body, area residents, and representatives of the Nuclear Regulatory Commissions, the New Jersey Department of Environmental Protection and the representative of Congressman Robert A. Roe (N. J. 8th Congressional District), and upon the presentation of a petition signed by 171 residents, the

B/506

ITEM # 5/1

(13)

Wayne Township Council requested your firm to begin immediate action to remove from your premises all the subject radioactive material!

Last Thursday, this "story", in all its ugly, negative, emotional form made the Associated Press "Wire". Thereafter, it was picked up by all of the T. V. Networks. It was covered by the Public Broadcasting System on Thursday, N.B.C. and C.B.S. on Friday and they are all returning this week to do a follow-up story on W. R. Grace's "Love Canal".

I am sure you would like to do what is "right for all concerned" in this matter, and thus we, as a Township, are asking you to arrange for its removal - of course, under the oversight of the N.R.C. and the New Jersey D.E.P.

Though the cost will be expensive, I do believe you are going to "pay for its removal" one way or another; either now, or in the negative publicity your firm will receive over the next ten billion years (the estimated 1/2 life of the toxic material). I will also hazard an observation that there will be untold medical, also property and business claims to defend, rightly or wrongly.

Some questions now being publically posed to the Township Council are as follows:

1) What is the <u>immediate</u> danger? What is the <u>long-term</u> danger?

2) How long has the thorium been in both the brook and the W. R. Grace area?

3) When are "you" going to take a survey on illnesses (i.e. Cancer and Leukemia) and deaths in the area?

4) When, how and who is going to "check" our children (and later on, our grandchildren, etc.) for illness? "My kids have played in that brook area, off and on, for years"!

5) Exactly what are its characteristics, and where and how is thorium buried?

6) What are the area water table characteristics, and, can I drink my well water?

7) Have local health, first aid squad and Fire Departments been advised of the "burial" and how to deal with possible resultant illness or other collateral emergency?

8) Is "it" going to remain radioactive (and thus hazardous, is the obvious implication) for a <u>long</u> period of time?

9) Is it still migrating from the site? (The implication resultant from its appearance in a downstream stream bed.)

10) Can my children continue to play in the brook which has shown radioactivity? (The N.R.C. and the D.E.P. said "<u>Don't</u>, until we give it a clean bill of health".)

"I have tried to be objective in communicating to you the Council's and the public's anxiety. Obviously, and I believe there is more to come, the emotional intensity of the residents is much more subjective. I am sure you too would agree that our children are gifts from God, and, are in no way to be thought expendable or experimental.

Might I urge you to personally take charge of this situation to keep it from getting further out of hand than it is at present, and to arrange for the prompt, orderly removal of the Thorium Oxide.

Wayne Township is a substantial, upper middle-class, influential, suburban community that prides itself on being a great place to live (50,000 residents), work (American Cyanamid World Hqs., Union Camp, Toshiba, A.F.I.A. U. S. Hqs'. are here, among others) and play.

Please use every "means of Grace" at your disposal, not only to allay our fears, but to remove the Thorium. I assure you, in both the long and short run, it will be COST EFFECTIVE to and for Grace.

Very truly yours,

John R. O'Brien
Clerk

P. S. Enclosed is an infinitesimal sampling of the Public Press on the subject for your reference, together with a copy of a companion resolution to this letter, as moved by the 6th Ward Councilman - your area!

JRO/dlm
enclosures

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 12, 1982

NOTE TO: R. E. Cunningham

FROM: John G. Davis

SUBJECT: SOIL CONTAMINATION AT W. R. GRACE AND COMPANY IN NEW JERSEY

Please note the incoming from Congressman Robert A. Roe (EDO 11852). Your office should work closely with Region I and IE Headquarters in preparing the response to Congressman Roe's questions. Every effort should be made to meet the due date and if the reply cannot be completed by the due date an interim reply should be promptly sent.

If you would like to discuss this let me know.

John G. Davis

Enclosure:
EDO 11852

cc: R. DeYoung, IE
R. Haynes, Region I

8/807

ITEM # 512

5-9

TOWNSHIP OF WAYNE
COUNTY OF PASSAIC
STATE OF NEW JERSEY
1982
RESOLUTION NO. 135

A motion was made by William Hanse seconded by Gary Webb that the following resolution be adopted:

AUTHORIZATION FOR CLERK TO WRITE PRESIDENT J. PETER GRACE OF W. R. GRACE CO. RE: REPORTED RADIATION LEVELS ON BLACK OAK RIDGE ROAD

WHEREAS, the Municipal Council of the Township of Wayne having heard input and testimony from residents, Mr. Frank Casolito, Bureau Chief of the Radioactive Protection Agency, a division of the New Jersey State Department of Environmental Protection and Mr. John Kinneman of the Nuclear Regulatory Agency; and

WHEREAS, the Council has concluded after hearing said testimony that the only solution to the radioactive readings on the W. R. Grace property on Black Oak Ridge Road as well as 'hot spot' readings downstrear on the banks of the Sheffield Brook is the removal of radioactive waste and that the Clerk is hereby directed to write to J. Peter Grace, Presider of the W. R. Grace Co. informing him both objectively and subjectively of the problems and further to request that immediate cooperation of the W. R. Grace Co. in removing the radioactive waste; and

WHEREAS, subject letter to become part of this resolution.

NOW, THEREFORE BE IT RESOLVED the Clerk will write, as directed, to Mr. J. Peter Grace and include with the letter a certified copy of resolution No. 134-82 as introduced by Councilman Gary Webb and adopted unanimously on April 21, 1982 along with copies of recent newspaper articles.

AND FURTHER BE IT RESOLVED that a copy of this resolution, including all addendums be forwarded to Congressman Robert A. Roe.

ROLL CALL:

AYES: Joyce Amabile, Frederick Bauer, William Hanse, Joseph Loffredo, Robert Pacca, Bert Tucker, David Waks, Gary Webb, Joseph DiDonat

NAYS: None

THIS IS TO CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF A RESOLUTION ADOPTED BY THE MUNICIPAL COUNCIL OF THE TOWNSHIP OF WAYNE AT A REGULAR MEETING HELD ON APRIL 21, 1982.

JOHN R. O'BRIEN
CLERK

ITEM # 573

B/508

township of wayne

475 Valley Road
Wayne, New Jersey 07470
(201) 694-1800

Police Department
(201) 694-0600

April 23, 1982

Nuclear Regulatory Commission
Office of Inspection &
Enforcement Region 1
King of Prussia, PA.

Gentlemen:

Enclosed is a certified copy of Resolution No. 134 of 1982 adopted by the Municipal Council of the Township of Wayne at a regular meeting held on April 21, 1982.

Very truly yours,

John R. O'Brien
Clerk

JRO/dlm
enc.

B/509

ITEM # _____

TOWNSHIP OF WAYNE
COUNTY OF PASSAIC
STATE OF NEW JERSEY
1982
RESOLUTION NO. 134

A motion was made by Gary Webb seconded by Joseph Loffredo that the following resolution be adopted:

REQUESTING REMOVAL OF NUCLEAR WASTE AT FORMER SITE OF THE RARE EARTH CO. AND W. R. GRACE INC.

WHEREAS, the Nuclear Regulatory Commission (NCR) is reviewing the status of a number of manufacturing facilities throughout the country which were formerly licensed by the Atomic Energy Commission (AEC); and

WHEREAS, one of these sites is located in Wayne Township, N. J. and known as the W. R. Grace property, which was licensed under the AEC for the use of thorium dating back to 1957 and previously to Rare Earths Inc., from 1954; and

WHEREAS, approximately 20,000 pounds of thorium and materials containing thorium and materials containing thorium are buried at this site; and

WHEREAS, the NRC monitored and tested this site in 1981 and determined that surface soil samples were contaminated and that elevated radiation levels in excess of current criteria exist on the site; and

WHEREAS, an aerial radiological survey performed in May of 1981 produced evidence of contamination located in the Sheffield Brook; and

WHEREAS, the site is in close proximity to food and water supplies and also to recreational and residential areas; and

WHEREAS, the Nuclear Regulatory Agency and D.E.P. have stated while present at a Wayne Township Council meeting on April 21, 1982 that they are going to test the W. R. Grace property and Sheffield Brook area for radioactivity; and

WHEREAS, the residents in said areas are deeply concerned about the health and welfare of their families and neighbors; and

WHEREAS, the people of Wayne Township, the Governing Body, the Mayor and Administrator are likewise deeply concerned that all radioactive material be immediately cleaned up and removed from Wayne Township, including both surface and subsurface radioactive materials and radioactivity.

NOW, THEREFORE, BE IT RESOLVED that the Wayne Township Council does strongly urge that the further testing by the NRC and D.E.P. proceed immediately to determine the accurate levels of radiation, and that the NRC simultaneously prepare proper procedures and complete the removal of the thorium located at the W. R. Grace property and the removal of contaminated soil located along the Sheffield Brook.

BE IT FURTHER RESOLVED that a copy of this resolution and background materials be sent to the following requesting aid in acquiring funding for the removal of the contaminated material:

W. R. Grace
Governor Thomas Kean
Congressman Robert Roe
Senator Joseph Bubba
Assemblyman Newton Miller
Assemblyman Terry LaCorte
Department of Energy
N.R.C.

ROLL CALL:

AYES: Joyce Amabile, Frederick Bauer, William Hanse, Joseph Loffredo Robert Pacca, Bert Tucker, David Waks, Gary Webb, Joseph DiDona

NAYS: None

THIS IS TO CERTIFY THAT THE FOREGOING IS A TRUE AND EXACT COPY OF A RESOLUTION ADOPTED BY THE MUNICIPAL COUNCIL OF THE TOWNSHIP OF WAYNE AT A REGULAR MEETING HELD ON APRIL 21, 1982.

JOHN R. O'BRIEN
CLERK

MAY 0 7 1982

NOTE TO: John Kinneman
Myu Campbell ✓
Karl Abraham

The reporter who called us on Friday with information about the possible disposal of thorium-bearing wastes in Riverdale, New Jersey, is employed by Suburban Trends, Butler, New Jersey. Her telephone number is 201-838-9000, ext. 44. She is expecting a call from the NRC on Tuesday, May 11.

Gary Sanborn

ITEM # 5/5

Myra —
If you have questions about this, give me or John Kinneman a call.
Gary

8/510

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 40-00086 License No. STA-422

MEMORANDUM FOR: James H. Joyner, Chief, Technical Programs Branch

FROM: John D. Kinneman, Chief, Materials Radiological Protection Section

SUBJECT: MEETING WITH MAYOR OF WAYNE TOWNSHIP, WAYNE, NEW JERSEY

On Friday, April 16, Ms. Myu Campbell and I met with the Honorable Walter Jasinski, Mayor, Mr. John Leidy, Business Administrator, Mr. Arthur Ham, Industrial Director, Mr. Paul Cavaliere, Township Attorney, and Mr. Arthur Bartolozzi, Health Officer, at the Wayne Township Municipal Building. The purpose of the meeting was to brief the Mayor on the contamination at the W. R. Grace facility and offsite, to discuss the NRC survey plans, and to answer any questions he or his staff had.

The Mayor opened the meeting by discussing newspaper articles about the thorium contamination which had been published in the local papers. He was concerned because he perceived that these articles exaggerated the hazard associated with the contamination and were alarming his constituents.

I explained that the NRC had provided information about the contamination in a press release issued on April 9, 1982, but that we did not control the perspective or content of newspaper stories. I gave the Mayor copies of the press release.

At the request of the Mayor, I described the history of the NRC's review of formerly utilized sites, and the NRC review of the status of the W. R. Grace and Company site. I discussed the results of the aerial survey, and provided the schedule for the Oak Ridge Associated Universities surveys onsite and along the Sheffield Brook. The Mayor and the other township officials appeared satisfied with this schedule for surveys. They will contact me if they have additional questions.

John D. Kinneman, Chief
Materials Radiological Protection
Section

B/5/11

ITEM # 516

COPYRIGHTED DOCUMENT ADDRESSED UNDER

FOIA/PA

For hard copy, refer to PDR Folder:

FOIA/PA: 2000-0101

Requester Name: Denise Wilt

Response Date: 7-25-2000 Resp #1

Record(s): B-417

B-483

B-495

B-512

APR 27 1982

Docket No. 40-00086 License No. STA-422

MEMORANDUM FOR: Thomas T. Martin, Director, Division of Engineering and Technical Programs

FROM: John D. Kinneman, Chief, Materials Radiological Protection Section

SUBJECT: MEETING WITH W. R. GRACE AND COMPANY REPRESENTATIVES

Representatives of NMSS and Region I met with representatives from the Davison Division of the W. R. Grace and Company on March 25, 1982 regarding the surveys we plan to have performed along the Sheffield Brook in Wayne, New Jersey. An attendance list is attached.

The W. R. Grace and Company representatives discussed their concerns about the content of press releases. They emphasized that radioactive material is potentially a very sensitive issue, and that they were concerned that careless statements might cause undue concern by the local residents. In addition, they were concerned that they had not been informed of the aerial survey and had not known a press release would be made.

NRC representatives stated that they had no intention of making alarmist statements and explained that the aerial survey had been handled by the EPA and State of New Jersey. The Region I policy of always informing licensees of press releases was clearly stated. NRC representatives stated they would prepare a letter to the individuals who own property along Sheffield Brook, and a written outline for the follow-up discussions with these individuals. They also agreed to furnish advance copies of these documents to the W. R. Grace representatives.

The NRC representatives and the W. R. Grace and Company representatives agreed that discussions about responsibility for remedial action were premature until the survey is completed, and the necessity for remedial action can be evaluated. NRC representatives stated that no enforcement actions were being considered against the W. R. Grace and Company regarding this facility.

Original Signed By:

John D. Kinneman, Chief, Materials
Radiological Protection Section

Attachment: As Stated

RI:DETP
Campbell:hh
4/6/82

RI:DETP
Kinneman
4/26/82

Joyner
4/26/82

OFFICIAL RECORD COPY

B/8/12

ITEM # 518

(2)

Attendance List

March 25, 1982 Meeting between NRC and
W. R. Grace and Company, Davison Division

NRC - Region I

J. Joyner, Chief, Technical Inspection Branch
J. Kinneman, Chief, Materials Radiological Protection Section
M. Campbell, Radiation Specialist

NRC - ELD

R. Fonner, Attorney

NRC - NMSS

R. Page, Chief, Uranium Fuel Licensing Branch
W. Crow, Chief, Uranium Process Licensing Section
W. Nixon, License Reviewer

W. R. Grace and Co., Davison Division

J. Hardwicke, General Council
E. Heyman, General Manager, Advertising and Public Relations
B. Mobley, Manager, Environmental Control
R. Mace, Industrial Hygienist
T. Tongue, Consultant

19 APR 1982

Docket No. 40-00086 License No. STA-422

Ruth Baum
125 Pompton Plains Crossing Road
Wayne, New Jersey 07470

Dear Mrs. Baum:

Subject: Radioactive Contamination in Wayne, New Jersey

As you requested, we have reviewed the results of the aerial radiological survey of the W.R. Grace facility performed in May 1981 to determine the radiation levels in the area north of Pompton Plains Crossing Road where you store the soil used in your business. The survey measured only natural background radiation over the entire area where you store the soil. Further, we understand that you do not take soil from the Sheffield Brook or the W.R. Grace property. Since these are the only areas where radioactive contamination was measured by the aerial radiological survey, there is no reason to believe that the soil used by your business is contaminated with radioactive materials.

A copy of the aerial survey, and a copy of a closeup photograph of the area are enclosed. If you have any further questions, please contact us.

Sincerely,

John D. Kinneman, Chief
Materials Radiological Protection
Section

cc w/enclosures:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc: w/enclosures
Region I Docket Room (w/concurrences)
K. Abraham, RI

B/S/14

ITEM # 520 IE07

OFFICE	DETP	DETP					
SURNAME	Campbell	Kinneman					
DATE	4/19/82	4/19/82					

NRC FORM 318 (10-80) NRCM 0240

USGPO: 1981—33

EG&G
ENERGY MEASUREMENTS GROUP

THE
REMOTE
SENSING
LABORATORY
OF THE UNITED STATES
DEPARTMENT OF ENERGY

EG&G SURVEY REPORT
NRC—8113
NOVEMBER 1981

AN AERIAL RADIOLOGICAL SURVEY OF THE

W. R. GRACE PROPERTY

WAYNE TOWNSHIP, NEW JERSEY

DATE OF SURVEY: MAY 1981

8/8/5

ITEM # 521

8201250285

(12)

EG&G
ENERGY MEASUREMENTS GROUP

EG&G Survey Report
NRC-8113
November 1981

AN AERIAL RADIOLOGICAL SURVEY OF THE

W. R. GRACE PROPERTY

WAYNE TOWNSHIP, NEW JERSEY

DATE OF SURVEY: MAY 1981

T. S. Dahlstrom
Project Scientist

REVIEWED BY

T. P. Stuart, Manager
Nuclear Radiation Department

This Document is UNCLASSIFIED

G. P. Stobie
Classification Officer

This work was performed by EG&G for the Environmental Protection Agency and The United States Nuclear Regulatory Commission through an EAO transfer of funds to Contract Number DE-AC08-76NV01183 with the United States Department of Energy.

ABSTRACT

During the week of 24 May 1981, an aerial radiological survey was performed over the W. R. Grace property in Wayne Township, New Jersey. The facility is occupied by a firm known as Electronucleonics, Inc. An isoradiation map was generated from the aerial data which shows increased levels of ^{208}Tl, a thorium daughter, over the burial grounds and in an area to the west believed to have resulted from subsurface water erosion of material from the burial grounds.

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7 2.0 Introduction
7 3.0 Background
8 4.0 Discussion and Results

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12 A-2 Net Spectrum of Elevated Activity Over the Burial Ground

Appendix

9 A Survey Method, Data Analysis Equipment, Data Processing Methods and Results

11 *References*

1.0 SUMMARY

An aerial radiological survey was made during the week of 24 May 1981, of the W.R. Grace property located in Wayne Township, New Jersey. The site is occupied by Electro-nucleonics, Inc. and was formerly used to extract rare earths and thorium from monzanite sands. The property contains a 1.67 acre burial site, where building debris, sludges, and ore tailing had been buried. Average radiation levels of greater than 120 μR/h at one meter over the burial ground were inferred from the aerial data. Ground surveys over the same area indicated radiation levels of some local hot spots of 800 to 1000μR/h. These levels were all due to the thorium daughter, ^{208}Tl.

The aerial survey data also suggests there had been some subsurface contamination to the west along a stream running adjacent to the property. The maximum levels in this area were inferred to be 60 to 120 μR/h at the one meter level. The average background levels were 8 to 12 μR/h including 3.7 μR/h cosmic radiation contribution.

2.0 INTRODUCTION

The United States Department of Energy (DOE) maintains an aerial surveillance operation called the Aerial Measuring System (AMS). AMS is operated for DOE by EG&G. This continuing nationwide program, started in 1958, involves surveys to monitor radiation levels in and around facilities producing, utilizing, or storing radioactive materials. The purpose of the surveys, in general, is to document, at a given point in time, the location of all areas containing gamma-emitting radionuclides (visible at the surface) and to aid in evaluating the magnitude and spatial extent of any radioactive contaminants released into the environment. At the request of federal and state agencies, AMS is deployed for various aerial survey operations.

Aerial radiological detection systems average the radiation levels due to gamma-emitting radionuclides existing over an area of several acres. The systems are capable of detecting anomalous gamma count rates and determining the specific radionuclides causing the anomalies; however, because of averaging, they tend to underestimate the magnitude of localized sources as compared with ground-based readings. As such, the indicated radiation levels in the vicinity of anomalies are not definitive. Ground surveys are required for accurate definition of the extent and intensity of such anomalies.

The results of the survey are reported as radiation exposure rates in microroentgens per hour (μR/h) at 1 meter above the ground surface. Approximate annual absorbed radiation dose levels expressed as millirem per year (mrem/y) are obtained by multiplying μR/h by 8.76. This conversion number applies only to the external radiation dose component.

This report is the result of a survey requested by the Environmental Protection Agency for an area centered on the former W. R. Grace Property in Wayne Township, N.J. The preparation of the report was requested by the Nuclear Regulatory Commission.

3.0 BACKGROUND

Natural background radiation originates from radioactive elements present in the earth and cosmic rays entering the earth's atmosphere from space. The terrestrial gamma rays originate primarily from the uranium decay chain, the thorium decay chain, and radioactive potassium. Local concentrations of these nuclides produce radiation levels at the surface of the earth in the range of 1 to 15 μR/h (9 to 130 mrem/y). Some areas with high uranium and thorium concentrations in surface minerals exhibit even higher radiation levels, especially in the western states. For example, in the Colorado Plateau area the average radiation level is above 200 mrem/y. At some locations in Brazil and India, the natural radiation level is above 1000 mrem/y. One member of each of the uranium and thorium decay chains is an isotope of the noble gas, radon, which can diffuse through soil and be borne by air to other locations. Thus, the level of this airborne radiation depends on the meteorological conditions, the mineral content of the soil, the soil permeability, and other conditions existing at each location at any particular time. The airborne radiation contributes from 1 to 10% of the natural background radiation levels.

Cosmic rays (the space component) interact in a complicated manner with the elements of the earth's atmosphere and the soil. These interactions produce an additional natural source of gamma radiation. Radiation levels due to cosmic rays vary with altitude and geomagnetic

latitude: they range from 3.7 to 23 μR/h (up to 200 mrem/y).[1] The cosmic ray contribution in Wayne Township is estimated to 3.7μR/h.

4.0 DISCUSSION AND RESULTS

The results of the aerial survey are shown in Figure 1 as exposure rate isoradiation contours. These contours are derived from gross gamma count rates at survey altitude. The contours are overlaid on a combination of an aerial photograph and a USGS map (a single photograph of the entire survey area was unavailable). Data analysis details are given in Appendix A.

As shown in Figure 1, the natural background radiation levels generally ranged from 8 to 12 μR/h. Lower radiation levels are evident over large bodies of water where cosmic radiation dominates the background levels.

Radiation levels higher than background were found over the burial ground and over an area west of the property. These contours are shown in blue in Figure 1.

The highest radiation levels inferred from the gross gamma count rates from the aerial survey data were above 120 μR/h. However, these numbers represent levels averaged over the total field-of-view of the detector system and do not reflect small localized hot spots. Measurements taken on the ground with hand-held survey meters gave exposure rates from 800 to 1000μR/h in one area (about two feet in diameter) on the western boundary of the burial ground.

The spread of contamination to the west of the plant is most likely due to subsurface erosion along the outer boundaries of a stream which runs along the eastern and southern boundaries of the property and then flows west on the opposite side of Black Oak Ridge road. The highest levels in this region (inferred from the aerial survey data) were 60 to 120 μR/h.

The blue E level contour surrounding the burial ground and the area to the west does not accurately define the boundaries of the higher radiation levels at ground level. Because the burial ground and stream exhibit relatively high level activity and are concentrated in small areas, the detectors "see" the radiation from these areas, both before the helicopter reaches them and after it has passed them.

There are additional E level contours to the west and south of the contaminated areas. However, these are most likely due to natural radiation anomalies and are not associated with the burial grounds.

A gamma ray energy spectrum was extracted from the aerial data taken over the burial ground (see appendix A). The photopeaks of the ^{208}Tl and other isotopes in the thorium decay chain dominated the spectrum.

The survey data were also processed by another method to identify those areas that contained ^{208}Tl in excess of its natural abundance. The results showed only the area contained within the blue contours. The existence of ^{208}Tl identifies the presence of thorium, which was expected to be present in the residue of monzanite sands used in the production of rare earths and thorium compounds at this facility.

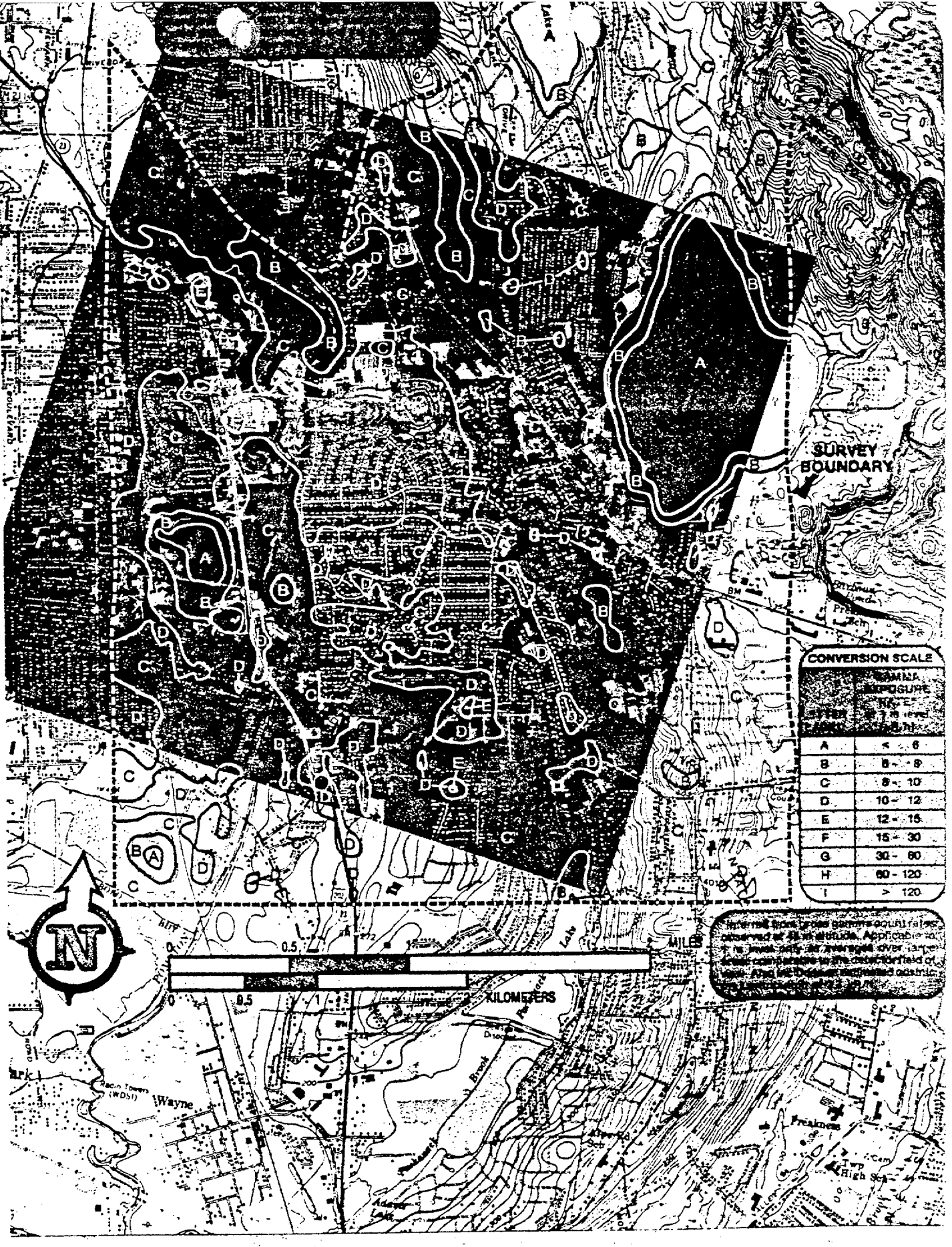

Figure 1. *EXPOSURE RATE ISORADIATION CONTOURS*

APPENDIX A.
SURVEY METHOD, DATA ANALYSIS EQUIPMENT, DATA PROCESSING METHODS AND RESULTS

The data reported here were generated from measurements taken with an airborne system during the week of 24 May 1981. Gamma rays were detected in 12.7-cm diameter by 5.1-cm thick NaI (Tl) crystals arranged in two arrays of ten crystals each. To cover the area of interest the system was flown in a BO-105 helicopter at 45 m altitude along a series of parallel lines. Position information from a microwave ranging system was recorded on magnetic tape along with the radiation data. Correlations between the two and extractions of specific types of nuclides were effected with a computer data processing system. A description of the equipment and operating procedures can be found in References 2 and 3.

Gross Counting Rates

The gamma ray energy spectrum measured during this survey covers the range between 0.05 million electron volts (MeV) and 3 MeV: This spectrum is useful for identifying specific nuclides contributing to the total activity. The most active areas in Figure 1 were singled out for spectral examination. The nuclides responsible for the increased activity were sought by comparing background spectral data with spectral data accumulated while the aircraft was over the anomalous area. The background was taken from data gathered at positions just before or just after the anomaly (Figure 1). A typical background spectrum is shown in Figure A-1. Figure A-2 presents channel-by-channel differences between anomalous and background data. The predominant peaks are due to ^{208}Tl, a daughter of thorium.

The gross count rate isopleths (Figure 1) are based on the sum of all counts in that portion of the gamma ray energy spectrum between 0.05 MeV and 3 MeV. The terrestrial component of gross count rate and the sum of exposure rates due to soil and cosmic ray activity were produced as follows:

1. Overflight of a body of water at the survey altitude to measure the sum of count rates due to aircraft background, cosmic rays, and airborne radon daughter radionuclides.
2. Measurement of count rate over the survey area.
3. Subtraction of Item 1 from Item 2.
4. A predetermined factor obtained over a calibration range near Lake Mead was then applied to convert Item 3 above to exposure rate.

Dependent on (a) the proximity of the survey area to the body of water overflown in Step 2, (b) the differences in topography and meteorological conditions between the areas, and (c) the differences in time between execution of the two flights, the counts resulting from Step 3 and the isopleths shown in Figure 1 may be either rich or poor in airborne radon daughter content. Daily variations in airborne radon daughter concentrations can lead to discontinuities in isopleths across boundaries between areas flown on different days. When necessary, corrections were made for this effect. The correction, based on data from a single cross-track flight, adjusted counting rates to a constant component due to the airborne radon daughter levels. Although not precisely known, this airborne radon daughter component is estimated to contribute an uncertainty of no more than 10% to the exposure rate.

The calibration described in Step 4 was done over an area containing a typical mix of naturally occurring radionuclides. The conversion factor will be in error where the mix is atypical, where man-made nuclides exist, or when airborne radon daughter contributions are not completely subtracted. The conversion factor used was 987 counts per second per μR/h one meter above the ground.

It should be stressed that inherent spatial resolution in any remote sensing survey that uses uncollimated detectors (such as the airborne system) is one to two times the distance between the surveyed surface and the detector. Therefore, ground surveys using detectors at the one meter level will not compare well with an aerial survey over areas that contain sources whose lateral dimensions are small relative to the aircraft altitude. Isopleths constructed from a ground survey over a point source will indicate a source width of one to two meters, whereas aerial survey isopleths over the same source will indictate a source width of at least several tens of meters.

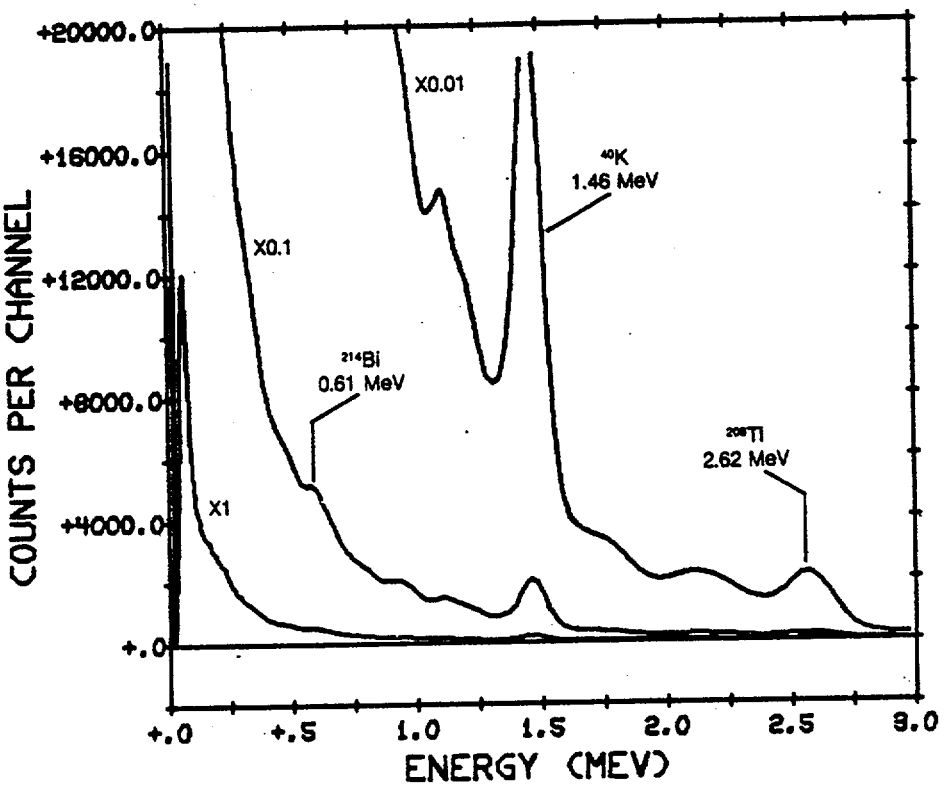

Figure A-1. *GAMMA PULSE-HEIGHT SPECTRUM OF TYPICAL BACKGROUND AREA*

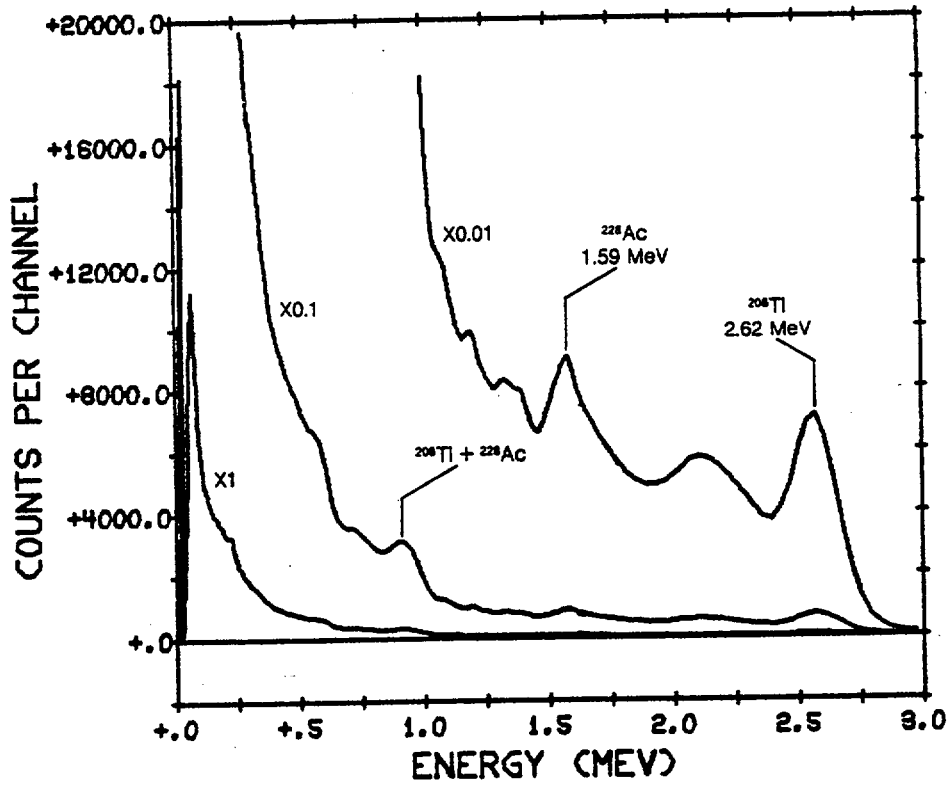

Figure A-2. *NET SPECTRUM OF ELEVATED ACTIVITY OVER THE BURIAL GROUND*

REFERENCES

1. Klement, A. W.; Miller, C. R.; Min, R. P.; Shleren, B. August 1972. *Estimate of Ionizing Radiation Doses in the United States 1960-2000.* U.S. EPA Report ORP/CD72-1. Washington, D.C.: Environmental Protection Agency.

2. Boyns, P. K. July 1976. *The Aerial Radiological Measuring System (ARMS): Systems, Procedures and Sensitivity (1976).* Report No. EGG-1183-1691. Las Vegas, NV: EG&G.

3. Jobst, J. E. 1979. "The Aerial Radiological Measuring Systems Program." *Nuclear Safety 20: 136-47.*

DISTRIBUTION

EPA

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W. R. GRACE PROPERTY
WAYNE TOWNSHIP, NEW JERSEY
NRC-8113
DATES OF SURVEY: MAY 1981
DATE OF REPORT: NOVEMBER 1981

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF PUBLIC AFFAIRS, REGION I
631 Park Avenue, King of Prussia, Pa. 19406

No. I-82-38
Contact: Karl Abraham
Gary Sanborn
Tel: 215/337-5330
5000

April 9, 1982

NOTE TO NEWS AND ASSIGNMENT EDITORS:

The staff of the Nuclear Regulatory Commission and scientists of the Oak Ridge Associated Universities, Oak Ridge, Tennessee, have begun a field investigation into radioactive thorium that over a period of many years may have been deposited along the course of Sheffield Brook in Wayne, New Jersey. Preliminary surveys have shown no immediate health hazard, but more information is needed to properly assess the long-term risks. Approximately 20 owners of private property have been asked by the NRC to permit surveys of portions of their properties as part of the field surveys. Attached are copies of letters recently sent to these property owners and a brief history of an industrial operation formerly carried on at a site on Black Oak Ridge Road in Wayne. After completion of the surveys, a comprehensive report will be prepared by the NRC staff. The report will be made public.

#

ITEM # 532

Docket No. 40-00086 APR 8 1982 License No. STA-422

Township of Wayne
ATTN: The Honorable Walter Jasinski
Mayor
475 Valley Road
Wayne, New Jersey 07470

Dear Mayor Jasinski;

Subject: Proposed Surveys of the Sheffield Brook

Enclosed for your information is a copy of a letter sent by the Nuclear Regulatory Commission to the owners of properties bordering the Sheffield Brook between Black Oak Ridge Road and the Saddle River. The letter and its enclosures are self explanatory.

A copy of the enclosed letter has also been provided to Congressman Roe.

If you have any questions regarding this letter, please contact John D. Kinneman or Myu A. Campbell of my staff at (215) 337-5252.

Sincerely,

James H. Joyner

James H. Joyner, Chief
Technical Programs Branch

Enclosures: Letter to Property Owners

cc w/encl:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc w/encl:
Region I Docket Room (with concurrences)
K. Abraham

ITEM # 523

OFFICE	RI:DETP	RI:DETP	RI:DETP				
SURNAME	Campbell/grd	Kinneman	Joyner				
DATE	4/8/82	4/8/82	4/8/82				

NRC FORM 318 (10-80) NRCM 0240

USGPO: 1981—335-

EG&G ENERGY MEASUREMENTS GROUP
Las Vegas Area Operations
680 E. SUNSET ROAD, LAS VEGAS, NV MAIL: BOX 1912, LAS VEGAS, NV 89101 TEL. (702) 739-0461

7 April 1982

In reply please refer to: PGS-82-052

Mr. John Kinneman
U. S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Kinneman:

Enclosed are the view foils and 8½"x11" color prints you requested of W. R. Grace Property, Perf #3770-67.

If we can be of any further service, please let us know.

Thank you.

Sincerely,

Michael D. Nolan for R. A. Meibaum

Robert A. Meibaum, Manager
Photo/Graphics Services Department

RAM:pac

encl. a/s

3/5/18

ITEM # 524

(2)

Docket No. 40-00086 License No. STA-422

April 6, 1982

W. R. Grace and Company
Davison Division
ATTN: Mr. B. Mobley
Manager, Environmental Control
P. O. Box 2117
Baltimore, Maryland 21203

Gentlemen:

Subject: W. R. Grace and Company Facility in Wayne, New Jersey

I have been briefed this afternoon by Ms. M. Campbell and Mr. Karl Abraham on their respective meetings today with Mr. Edward F. Heymann of your staff on the general subject of the upcoming ground surveys in Wayne, New Jersey.

Reflected against these discussions, I have re-read my letter to you of April 1, 1982 on this subject, and it appears that one aspect of it may have been misunderstood. Let me remove any possible misunderstanding.

We have informed you of our intended action as well as the State of New Jersey, and the public. This letter was a general notification to the public which was accomplished by means of the Nuclear Safety Information Center and the Public Document Room where we sent copies of our April 1 letter to you describing what is to be done shortly by the NRC staff and its contractors in the Wayne area.

My letter to you of April 1 was to inform you of our intended actions; not to solicit review or concurrence in the documents we have prepared to implement these actions. I regret any inconvenience this apparent misunderstanding caused you.

Witn regard to the proposed dialogue in the document titled "Discussion Outline" which was enclosed with my letter of April 1, this dialogue is what Ms. Campbell anticipates the property owners will want to talk about--based on several previous experiences Ms. Campbell has had in visits with property owners in other locations. I decided that preparations for these meetings with property owners will include gathering of this information and preparations to discuss this with them at such level of technicality and depth as they individually may desire.

I do want to reiterate that if you have any questions as to our statements of fact as to what we have decided to do in the next several

8/8/9

ITEM # 525

IE07

weeks, please contact Ms. M. Campbell or Mr. J. Kinneman of my staff.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By:

Ronald C. Haynes
Regional Administrator

cc:
Edward Heymann, General Manager, Advertising
and Public Relations
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc:
Region I Docket Room (with concurrences)
W. Crow, NMSS
K. Abraham, RI

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	PAO	DEP REG ADM	REG ADM
SURNAME	MCampbell	JKinneman	JJoyner	TMartin	KAbraham	JAllan	RHaynes
DATE	4/6/82	4/ 6 /82	4/ 6 /82	4/ 6 /82	4/6 /82	4/ 6 /82	4/ 6 /82

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO 1980-329-824

Docket No. 40-00086 License No. STA-422

APR 1 1982

W. R. Grace and Company
Davison Division
ATTN: Mr. B. Mobley
Manager, Environmental Control
P. O. Box 2117
Baltimore, Maryland 21203

Gentlemen:

Subject: W. R. Grace and Company Facility in Wayne, New Jersey

This refers to the meeting between W. R. Grace and Company representatives and representatives of the Nuclear Regulatory Commission on March 25, 1982 in Silver Spring, Maryland.

As discussed during the meeting, NRC Region I plans to notify the appropriate Congressman and local officials in Wayne, New Jersey during the week of April 5, 1982 of our plans to perform radiological surveys of the Sheffield Brook. Enclosed is an advance copy of the letter, permission slip and historical summary which the owners of property along the Brook will receive during the same week.

Also enclosed is a copy of the outline for our follow-up discussions with the property owners. A press release regarding the survey, consisting of a brief explanatory paragraph attached to a copy of the package sent to each property owner, will be issued following receipt of the letters by the residents.

If you have any questions regarding our planned actions, you may contact Ms. M. Campbell or Mr. J. Kinneman of my staff.

Your cooperation with us is appreciated.

Sincerely,

Original Signed By -

Ronald C. Haynes
Regional Administrator

Enclosures:
1. Letter to Property Owners
2. Discussion Outline

OFFICIAL RECORD COPY

B/8 80

ITEM # 526

IE07

DISCUSSION OUTLINE

Proposed Dialogue with Owners of Properties along Sheffield Brook in Wayne, New Jersey.

I. Introduction of Speaker

II. Discussion of NRC Review of Formerly Licensed Sites

- A. 1975 GAO audit recommended review
- B. Types of Facilities under review
  1. Thorium processors
  2. Uranium processors
  3. Byproduct materials processors
- C. Contamination usually not related to compliance with regulations.
  1. AEC restrictions on disposal and effluent releases implemented in 1959
  2. Information on prior releases and disposal lost over time

III. Discussion of Survey Results

- A. Wayne, New Jersey
  1. aerial survey
  2. water samples
  3. soil samples
- B. Comparison with survey results at other facilities
  1. Expect no significant radiation levels in frequently occupied areas.
  2. Expect neglible solubility of radioactive material.

IV. Comparison of Potential Hazard with Non-radiological Hazards

A. Monazite naturally occuring

B. Review of Non-radiological Hazards

V. Discussion of NRC Survey Plans

A. Measurements of Radiation Levels

B. Soil Samples

VI. Questions

APR 1 1982

Docket No. 40-00086 MD License No. STA-422

MEMORANDUM FOR: John D. Kinneman, Chief, Materials Radiological Protection Section

FROM: Myu Campbell, Radiation Specialist

SUBJECT: ORAU SURVEYS OF THE W. R. GRACE AND COMPANY FACILITY, WAYNE (POMPTOM PLAINS), NEW JERSEY

On February 26, 1982, I met with Messrs. J. Berger and L. Cole of the Oak Ridge Associated Universities (ORAU) and Messrs. B. Mobley, R. Mace, and T. Tongue of the W. R. Grace and Company, and Messrs. R. Mandel and L. Zeeger of Electro-Nucleonics, Inc. (ENI) at the Electro-Nucleonics, Inc. facility in Wayne, New Jersey. This meeting was to provide the ORAU representatives with first hand information on site geography, and to brief the W. R. Grace representatives on the survey.

The ORAU representatives discussed the type of surveys which they plan to perform. Onsite, they plan to have a surveyor establish a reference grid. They will make measurements of surface radiation levels and collect surface soil samples over the entire property. They plan to use ground radar to identify culverts and burial pits. They will drill bore holes avoiding these features, for taking subsurface radiation measurements and earth samples. In addition, they plan to perform radon measurements inside the buildings.

The ORAU representatives also discussed the planned surveys along Sheffield Brook. They will measure surface radiation levels and take surface soil samples. They intend to use a hand auger to drill holes to measure subsurface radiation levels and take subsurface soil samples. The ORAU representatives are planning to perform the offsite surveys by the end of March and the onsite surveys by the end of June. They noted that some of the boreholes might have to be drilled next fall or winter if the ground becomes too soggy for the drill rig at the time of their survey. The ENI representatives mentioned that while some onsite areas get mushy, the stream area regularly floods, closing the Pompton Plains Crossing Road.

The W. R. Grace representatives expressed their concern that the surveys would generate negative publicity. They stated tht W. R. Grace would prefer to make the first press release regarding the surveys. They noted that they were not even included in the distribution of the press release about the aerial survey. (This survey was arranged by the State of New Jersey, with EPA funding, NRC was not involved). I informed them that they would be contacted before the NRC made any press releases regarding their facility.

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B/821

ITEM # 527

(2)

Mr. Mandel of ENI described previous operations at the site to the ORAU representatives. Both he and the W. R. Grace representatives described the decontamination efforts made by W. R. Grace in 1974. The W. R. Grace representatives raised questions about the purpose of the ORAU surveys. I explained that the NRC is reevaluating all of the sites formerly licensed for thorium processing. The W. R. Grace representatives noted that the company plans to continue ownership of this property indefinitely, and to restrict the use of the property. Mr. Mandel of ENI also described the waste water treatment system, which was installed in the late 50's. He agreed to contact the contractor who designed that system to obtain information on underground pipes at this site. The W. R. Grace representatives reiterated their concern that the burials not be drilled into, to avoid puncturing any lining which might be present in the burial pits.

The meeting concluded after a tour of the grounds for the benefit of the ORAU representatives.

I recommend that we make public notifications as soon as a date is chosen for the offsite surveys, in the following sequence. First, we should inform Congressman Roe. Second, we should allow W. R. Grace to make the initial contacts with local officials. We should follow this up as soon as possible with contacts of our own, and perhaps meet with those officials. We should then contact the people whose property borders on Sheffield Brook, to obtain permission for ORAU to perform surveys. I recommend that this last contact be made in person, so that we can perform preliminary surveys of the areas occupied by these individuals.

Myu Campbell
Radiation Specialist

RI:DETP
Campbell/gwc
3/24/82

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Docket No. 40-00086

MEMORANDUM FOR: John D. Kinneman, Chief, Materials Radiological Protection Section

FROM: Myu A. Campbell, Radiation Specialist

SUBJECT: MEETING BETWEEN REPRESENTATIVES OF THE NUCLEAR REGULATORY COMMISSION AND THE DEPARTMENT OF ENERGY TO DISCUSS THE W. R. GRACE & CO. FACILITY, WAYNE (POMPTON PLAINS), NEW JERSEY

A meeting was held on December 14, 1981, between representatives of the Department of Energy (DOE) and the representatives of the Nuclear Regulatory Commission (NRC) to discuss the contamination at the W. R. Grace & Co. facility in Wayne (Pompton Plains), New Jersey. The objective of this meeting was to determine which agency had lead responsibility for this site. A list of attendees is enclosed.

The meeting was called to order by the representative of NRC from IE:HQ. The representatives from the NRC, Region I, started the meeting discussion by describing the history of the use of this site and the current condition of the site. They also described the EG&G overflight and the preliminary ground surveys performed offsite.

The DOE representatives stated that Aerospace, the DOE contractor which is responsible for researching records of contracts, had provided them with copies of the contracts between the W. R. Grace & Co., and the AEC, but that they had not reviewed these documents.

The Region I, NRC representatives described briefly the type of activities performed by the company which is renting the buildings at this facility. These activities do not involve significant quantities of radioactive material and do not involve disturbing the material buried at this facility.

The DOE and NRC representatives agreed that the next step for the lead agency was to have an in-depth survey performed. This survey should characterize the extent of the contamination, onsite and offsite, and determine whether control of erosion and other potential mechanisms for transport of the material are immediate concerns. DOE representatives stated that although they have the authority to perform surveys of this facility from previous AEC contracts, they do not perform surveys on a priority basis unless they also have responsibility for remedial action. They informed the NRC representatives that DOE responsibility for remedial action would have to be determined by their General Counsel, and that this would take a minimum of two weeks.

The representatives from the office of Nuclear Materials Safety and Safeguards (NMSS), NRC stated that a survey could be performed by Oak Ridge Associated Universities (ORAU) in early 1982 under the contract for surveys with the NRC. They stated that they would wait for two weeks to allow the DOE representatives

RI:DETI
Campbell/pja
2/1/82

RA:DETI
Martin

ITEM # 528

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to speak with the DOE General Counsel but that they would discuss accepting responsibility as the temporary lead agency for a survey with their management, so that the survey could proceed. The representative from the Office of Executive Legal Director (OELD), NRC, stated that the NRC had the authority to perform surveys resulting from the activities performed on this site which were authorized by an AEC license. He stated that the termination of the license by the NRC would have to be considered prior to any enforcement action against the licensee to require further decontamination.

The DOE representatives requested a meeting with the representatives from the NMSS, NRC, to discuss criteria for decontamination, to assure that both agencies use the same criteria. They also requested a discussion of survey procedures so that both ORAU and ORNL perform the same type of surveys. DOE also requested that they discuss jurisdiction problems to related to contaminated sites located outside of Region I.

No agreement was reached during this meeting on which should be the lead agency regarding the W. R. Grace facility in Wayne (Pompton Plains) New Jersey. The DOE representatives agreed to inform the NRC about their decision on remedial action. The NRC representatives agreed to inform the DOE about their decision on performing surveys in 1982. A future meeting regarding this site was tentatively discussed.

Originated By:

Myu A. Campbell
Radiation Specialist

Enclosure:
As stated

OFFICIAL RECORD COPY

MEETING OF DOE/OOS AND NRC STAFF
REGARDING RESIDUAL RADIOACTIVE MATERIAL
AT POMPTON PLAINS, NEW JERSEY

DECEMBER 14, 1981

NAME	AFFILIATION	TELEPHONE
Jerry Counts	DOE/OOS	353-5487
Doug Sly	IE/HQ, NRC	492-9896
H. D. Thornburg	IE/HQ, NRC	492-4935
T. T. Martin	Region I, NRC	488-
M. A. Campbell	Region I, NRC	488-1246
R. G. Page	NMSS, NRC	427-4309
W. Crow	NMSS, NRC	427-4100
William E. Mott	DOE/OOS	353-3016
R. L. Fonner	OELD/NRC	492-8692
Arthur J. Whitman	DOE/OOS	353-5439

GRACE

Davison Chemical Division

W. R. Grace & Co.
P.O. Box 2117
Baltimore, Maryland 21203

(301) 659-9000
Direct Dial (301)

March 5, 1982

Ms. Myu Campbell
United States
Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Ms. Campbell:

Confirming our telephone conversation today, I understand you intend to conduct a walk-around survey of properties west of our Pompton Plains site, along the creek in the near future.

Please let us know when you plan this trip in sufficient time that one of us can accompany you on the survey.

Very truly yours,

Burton L. Mobley
Manager,
Environmental Control

BLM/kdb

B/823

ITEM # 529

CONSENT FORM

Employees, contractor personnel, and agents of the U.S. Department of Energy are hereby given permission to enter upon the property described below in order to perform radiation surveys to determine the nature and extent of any radioactive material that might be present. I understand that accomplishing this task may involve disturbing the natural environment (e.g., underbrush, vegetation) and the drilling of a series of holes as outlined in the attachment to this form. I have listed my restrictions below under Exceptions. I have no objections to the Department and its designees disclosing the result of the radiological survey to the general public as may be deemed appropriate by the Department.

Property Description: See attched sheet.

Also, the 89 acres for the Town of Lewiston Public Works Yard should you desire entry upon those properties.

Exceptions: See Attachement.

Name

SUPERVISOR/TOWN OF LEWISTON

Signature by owner(s) of property or authorized representative

1375 Ridge Road

Address

Lewiston, New York 14092

(716)854-8213

Telephone

November 18, 1981

Date

ITEM # 530

CONSENT FORM

Employees, contractor personnel, and agents of the U.S. Department of Energy are hereby given permission to enter upon the property described below in order to perform a radiological survey.

Property Description:

Property identified as Block _____

Lot _____

_____

Name

_____

Signature by owner(s) of property or authorized representative

_____

Address

_____

_____

Telephone

B525

ITEM # 531

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

MAR 5 1982

Township of Wayne
Engineering Department
ATTN: Mr. Steve Emolo
475 Valley Road
Wayne, New Jersey 07470

Dear Mr. Emolo:

Subject: Copy of Tax Map

Please provide us with a copy of sheets 34 and 25b of the tax map. This covers the area through which Sheffield Brook runs between Black Oak Ridge Road and the Pompton River. Please contact me or Ms. M. Campbell by telephone (215-337-5252) if you have any questions.

Your cooperation in this matter is appreciated.

Sincerely,

John D. Kinneman, Chief
Materials Radiological Protection Section

B/526

ITEM # 532

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

FEB 25 1982

Assessment Office
Township of Wayne
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

Subject: Identity of Property Owner

Please provide us with the identity of the owner of the property or properties located between Black Oak Ridge Road and the Pompton River, through which the Sheffield Brook runs. The property appears to be undeveloped, and may be a water right-of-way. It does not appear to be associated with any street address. Please contact me or Ms. M. Campbell by telephone (215-337-5252) if this is an inadequate description of the property.

Your cooperation in this matter is appreciated.

Sincerely,

John D. Kinneman, Chief
Materials Radiological
Protection Section

B/527

ITEM # 533

GREEN TICKET CONTROL NO. 12202

DUE DATE: 8/17/82

FROM: R. C. HAYNES

	WORKING COPY	ROUTE COPY FOR INFORMATION
J. M. Allan		✓
T. T. Martin	✓	
G. H. Smith		✓ (FOR SLO)
R. W. Starostecki		
R. T. Carlson		
K. Abraham		✓

Action Requested:

Provide response for Bill Dircks signature

Tony

DMB

8/11/82

This was transferred to NMSS for reply.

DATE ACTION COMPLETED: 8/5/82

Return this form to Regional Administrator's secretary after action is completed.

TICKLE FILE DATE: 8/17/82

REGION I Form 190
(Sep 81)

ITEM # 534

(4)

K. Haynes, Reg I
Pg. 1/3

FROM: Rep. Robert A. Roe Rep. Marilyn L. Bouquard	ACTION CONTROL	DATES	CONTROL NO. 12202
	COMPL. DEADLINE	8/24/82	
	ACKNOWLEDGMENT		DATE OF DOCUMENT 8/10/82
	INTERIM REPLY		
TO: Chairman Palladino	FINAL REPLY		PREPARE FOR SIGNATURE OF: ☐ CHAIRMAN ☒ EXECUTIVE DIRECTOR OTHER:
	FILE LOCATION		

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Concerns re scope of the radiological survey of the former W. R. Grace property in Wayne Township, New Jersey

SPECIAL INSTRUCTIONS OR REMARKS

SECY-82-0818

CLASSIFIED DATA			
DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY ☐ NSI ☐ RD ☐ FRD	
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Kerr, SP
Cunningham, ELD
L Underwood
Davis, NMSS

LEGAL REVIEW ☐ FINAL ☐ COPY

ASSIGNED TO:	DATE

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☐ EDO ADMIN & CORRES BR
EXT.
COMMENTS, NOTIFY:
EXT.

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232 (11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

DO NOT REMOVE THIS COPY

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COMMITTEE ON SCIENCE AND TECHNOLOGY
U.S. HOUSE OF REPRESENTATIVES
SUITE 2321 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-6371

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MINORITY STAFF DIRECTOR

August 10, 1982

Hon. Nunzio J. Palladino, Chairman
United States Nuclear Regulatory
Commission
Washington, D.C. 20555

Dear Mr. Chairman:

We are writing to ask that the Commission increase the scope of the radiological survey of the former W.R. Grace property in Wayne Township, New Jersey. The preliminary results of the initial surveys done for NRC indicate that there are radiation levels on and off the site that exceed permissible limits. As a result, it is our understanding that the Commission will probably recommend to the Department of Energy that the contaminants be removed and properly disposed of.

We are, however, concerned that the boundaries of the initial aerial survey did not include a wide enough area to detect all the potential radiation anomalies associated with material intentionally removed from the site and deposited as land fill. Any recommendation which the Commission would presently make to DOE regarding the cleanup of this area might, therefore, be incomplete.

The NRC staff has been most helpful in supplying us with background information on the NRC activities pursuant to this radiological survey and we commend them for their cooperation. They have advised us that, in order to perform the expanded aerial survey, contract arrangements would have to be modified. Since the aerial surveillance operation is maintained by DOE and operated by its contractor, EG&G, we would expect that such a change could be arranged with little difficulty.

Our offices would be pleased to discuss the particulars of this request with the appropriate members of your staff. Our staff contacts are Mr. Kenneth Rinzler for Mr. Roe (225-5751) and Dr. John Dugan for

8207110091

Mrs. Bouquard (225-2884). As always, please feel free to contact either of us if you would like to personally discuss this request.

Thank you for your anticipated cooperation.

Sincerely,

Marilyn L. Bouquard

MARILYN L. BOUQUARD
Member of Congress

ROBERT A. ROE
Member of Congress

MB:Vba

EXPRESS MAIL NEXT DAY SERVICE® **POST OFFICE TO ADDRESSEE**

B 18282353

FROM:
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Value Declared, if any: 0

Customer Number, if any: P-169

TO:
Town of Lincoln Park
ATTN: Mr. Frank Grisi
Health Officer
35 Chapel Hill Road
Lincoln Park, New Jersey 07035

ORIGIN:
Initials of Receiving Clerk:
P.O. ZIP Code: 19406
Date in: 8-16-82 Time in: 16:22
Return Receipt Service
☐ To Whom & Date Del.
☐ To Whom, Date & Address of Del.
Weight: 1 Lbs Postage & Fees: $9.35

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- Signature is required upon delivery
- Claims for delay, loss, damage or rifling must be made within 60 days. Claim forms may be obtained at the post office of mailing

AUG 1982

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EXPRESS MAIL NEXT DAY SERVICE® **POST OFFICE TO ADDRESSEE**

B 18282354

FROM:
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Value Declared, if any: 0

Customer Number, if any: P-169

TO:
W.R. Grace and Company
Davison Chemical Division
ATTN: Mr. Burton Mobley
Manager, Environmental Control
P.O. Box 2117
Baltimore, Maryland 21203

ORIGIN:
Initials of Receiving Clerk:
P.O. ZIP Code: 19406
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☐ To Whom & Date Del.
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See USPS Notice 7 or 63 for exclusions of coverage
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- Signature is required upon delivery
- Claims for delay, loss, damage or rifling must be made within 60 days. Claim forms may be obtained at the post office of mailing

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ITEM # 535

(2)

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POST OFFICE TO ADDRESSEE

B 18282351

FROM:
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Value Declared, if any: 0

Customer Number, if any: P-169

TO:
Environmental Protection Agency
Region II-ATTN: Joyce Feldman
Regional Radiation Representative
26 Federal Plaza
New York, New York 10278

ORIGIN:

Initials of Receiving Clerk: [illegible]

P.O. ZIP Code: 19406

Date in: 8-16-82 Time in: 16:22

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(1) *Document Reconstruction Insurance*. Non-negotiable documents are insured against loss, damage, or rifling up to $50,000 per piece, subject to a limit of $500,000 per occurrence.
(2) *Merchandise Insurance*. Parcels are insured against loss, damage, or rifling up to a maximum of $500. The mailer must declare the value of the article at the time of mailing.

- Signature is required upon delivery.
- Claims for delay, loss, damage or rifling must be made within 60 days. Claim forms may be obtained at the post office of mailing.

AUG 16 1982 U.S. POSTAL SERVICE BRIDGEWAY PA

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EXPRESS MAIL NEXT DAY SERVICE

POST OFFICE TO ADDRESSEE

B 18282352

FROM:
U.S. Nuclear Regulatory Commission
Region I
631 Park Avenue
King of Prussia, Pennsylvania 19406

Value Declared, if any: 0

Customer Number, if any: P-169

TO:
Mr. Gene Fisher, Atg. Chief
Bureau of Radiation Protection
Dept. of Environ. Prot.
380 Scotch Road
Trenton, New Jersey 08628

ORIGIN:

Initials of Receiving Clerk: [illegible]

P.O. ZIP Code: 19406

Date in: 8-16-82 Time in: 16:23

Return Receipt Service
- ☐ To Whom & Date Del.
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Weight: 1 Lbs

Postage & Fees: $ 7.35 Official

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- Signature is required upon delivery.
- Claims for delay, loss, damage or rifling must be made within 60 days. Claim forms may be obtained at the post office of mailing.

AUG 16 1982 U.S. POSTAL SERVICE

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Customer Receipt

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John K

FACSIMILE REQUEST

Date 8-11-82

MESSAGE TO: Bill Crow, NMSS
Silver Spring

TELECOPY NUMBER: _____

NUMBER OF PAGES: 4 INCLUDING THIS REQUEST FORM

MESSAGE FROM: Jim Joyner
U.S.N.R.C. REGION I KING OF PRUSSIA, PENNA.

TRANSMITTED BY: [signature]

DATE & TIME: 8/11/82 - 4:37

VERIFIED BY: [signature]

TRANSMITTED VIA FACSIMILE 11 AUG 1982

ITEM # 536

B/S30

REG I Form 124
Feb 77

(H)

UNITED STATES
CLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

8/11/82

Docket No. 40-00086 License No. STA-422

MEMORANDUM FOR: William T. Crow, Uranium Fuel Licensing Branch, Office of Nuclear Materials Safety and Safeguards

FROM: James H. Joyner, Chief, Technical Programs Branch, Region I

SUBJECT: RADIOLOGICAL SURVEY OF SHEFFIELD BROOK, WAYNE, NEW JERSEY PRELIMINARY REPORT, JULY, 1982

We have reviewed the subject preliminary report and have summarized our minor comments in the attachment to the memorandum. We have only one major comment. The report characterizes the appropriate guideline for this area as 10 picrocuries per gram of natural thorium plus natural uranium. We believe that it is inappropriate for a contractor to select the guidelines or criteria, and it is inappropriate to publish a preliminary report which appears to select such criteria. Such guidelines or criteria should be selected by the appropriate (DOE, in this case) staff after the completion of all reports and analysis. Therefore, we suggest that all such references be deleted. Specific deletions are included in the attachment to this memorandum.

Our overall assessment of the report is that it is an excellent piece of work. We appreciate the prompt cooperation of NMSS and ORAU and look forward to receiving the final report.

James H. Joyner, Chief
Technical Programs Branch

Enclosure: As stated

cc: R. Wilde, NMSS

REGION I COMMENTS ON RADIOLOGICAL SURVEY OF
SHEFFIELD BROOK, WAYNE, NEW JERSEY, JULY 1982

1. This report will be read by a large number of individuals with little technical background. An appendix which defines the technical terms (e.g., microR, micro rad, pCi) and provides some perspective on the results would save us a lot of time explaining these terms to various individuals.

2. We are unaware of the source for the page 1 reference to the nine times ten to the fourth kilograms of thorium-containing residues and slightly contaminated debris. There are conflicting reports of how much thorium was buried onsite. The highest estimate in our records is 152,350 pounds of material containing 7.7 curies of thorium. The summary should reflect the uncertainty in our knowledge. It would be helpful if ORAU would estimate the total quantity of material buried based on their onsite measurements.

3. There are a few errors in the Introduction section. W.R. Grace did not stop processing monazite sand until 1971. The wording in paragraph 2 assumes the burials comply with AEC criteria, which may not be a valid assumption. The reference to liquid wastes also implies compliance with AEC limits. These assumptions do not agree with the licensee's compliance history.

4. We are also unsure that the description of the flow path for the Sheffield Brook is accurate in the site description and the various figures. From the tax maps provided by the township, it appears that the actual "Sheffield Brook" may be the stream that now runs through culverts south of the property downhill towards where the Sheffield Pond was, and then towards the river. The drainage ditch at the back of the W.R. Grace and Company property, which then crosses Black Oak Ridge Road and flows through the straight, man-made ditch to the Brook, may not be the "Sheffield Brook".

5. The last sentence of paragraph 1 on page 3 needs to be revised so that it makes sense, perhaps by inserting the word "in" between "banks" and "this".

6. On page 7, "...locations approximately 0.25 to 10 m from ..." should be km.

7. Also on page 7, the words "...in such media." should be deleted from the "Results" section, paragraph 2.

8. A comment should make it clear why the survey results on page 7 differ by a factor or two from those on page 9.

9. On page 9, paragraph 2, "representatives of natural thorium..." should be changed for clarity, perhaps to "which are representative of the amount of thorium present". The significance of the radium-226 results and the source of the radium also needs to be explained.

10. It appears unlikely that the two points noted in the first paragraph on page 8 were exactly the same at 423 microR per hour. Is this a typographical error? Figures ten and eleven don't show radiation levels above 300 microR per hour; however, it appears that results as high as 423 microR per hour were measured. The points where these levels were reported should be noted on Figures ten and eleven.

11. The statement, "In the absence of any significant difference between the open and close d-shield configurations..." on page 9 should be reconciled with the factor of two differences between the surface dose rates on this page and those on page 7.

12. It would be helpful to have an estimate of the total amount of thorium (in kilograms) in various places. The second paragraph on page 12 should be reworded to provide the information that the 5 to 10,000 cubic meters would need to be removed to meet a decontamination limit of 10 picrocuries per gram, but not give the impression that this is necessary or required. The reference to "additional thorium" on page 12, last sentence of paragraph 1, should be reworded to show that this is material which has been removed from the streambed where it originally settled.

13. Figures 16 and 17 should have a better title to indicate what they represent. As it is, one must read the text to understand what the points represent. Also, if there are any differences between the open and closed circles that represent data points in the figures, it should be noted on the figures.

14. Delete Appendix C.

15. The words "sediment," "biased," and "systematic" have somewhat specialized meanings in this report. They should be defined.

16. Data, such as the vegetation sampling results, which will be confirmed by additional sampling should be identified.

17. A surface sample and core borings were taken at one point in the field between the Brook and the river. Since the residents of Wayne are concerned about the field, the data from these samples should be included in this report. Data from samples taken on Mr. Baum's property should also be included.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 40-00086 11 AUG 1982 License No. STA-422

Willowbrook Nursing Home
ATTN: Becky Havermann
897 Black Oak Ridge Road
Wayne, New Jersey 07470

Gentlemen:

This refers to our recent conversation concerning your plans to construct an addition to your facility at the above address. As we discussed, our contractor, Oak Ridge Associated Universities (ORAU) is conducting extensive surveys in the area near your property. A report of the portion of these surveys conducted along the Sheffield Brook will be complete in late August or early September. The final report of all surveys will probably not be available until December of this year.

Based on an aerial radiological survey conducted in May 1981, various surveys and measurements by NRC inspectors and preliminary results of the ORAU surveys, there is presently no hazard to persons occupying your Nursing Home from material processed at the W. R. Grace facility and it is unlikely that any hazard from this material would develop in the future.

I hope this information will be of assistance to you.

Sincerely,

Lawrence F. Freeman
for John D. Kinneman, Chief, Materials
Radiological Protection Section,
Technical Inspection Branch

cc:
Nuclear Safety Information Center (NSIC)
Public Document Room (PDR)
State of New Jersey

bcc:
Region I Docket Room (with concurrences)

B/831

ITEM # 537

Pequannock Township

Township of Pequannock
530 NEWARK-POMPTON TURNPIKE
POMPTON PLAINS, N. J. 07444

(201) 835-5700

July 12, 1982

Ms. Mia Campbell, Radiation Specialist
United States Nuclear
Regulatory Commission
Region 1
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Ms. Campbell:

The local Health Department staff appreciates the expeditious manner in which you dispatched Inspector Nicolosi from your office to confirm three (3) low level "hot spots" found near a railroad siding north of the old Pompton Plains railroad station (owned by New York-Susquahanna and Western Railroad Corporation).

Inspector Nicolosi also surveyed the area east of Rt. 23 and to the rear of Plains Plaza shopping center. Findings in this area were nagative. It is my understanding that soil samples collected from the three (3) low level "hot spots" will be analyzed at the laboratory to determine the radioactive element and these findings will be shared with the local Health Department staff.

When all of the above data is completed, we would appreciate having an opportunity to provide input into the planning and final solution of this matter.

Thank you.

Sincerely,

Frank Fitzpatrick
Health Officer

FF/mwp

cc: Frank Cosolito
Acting Chief
Bureau of Radiation Protection

B/532

ITEM # 538

Brookside Manor, Inc.
Willowbrook, Inc.

P.O. BOX 180
WAYNE, N.J. 07470
PHONE (201) 694-4895

D.F. SUCH
P.P. SUCH
DIRECTORS

July 29, 1982

Ms. Myu Campbell
N C R, Region 1
King of Prussia, Pa. 19406

Dear Ms. Campbell,

When your report on the radiation on Black Oak Ridge Road in Wayne, New Jersey is finished would you please send us a copy.

We are in the process of getting approval to build a new nursing home on the corner of Black Oak Ridge Road and Pompton Cross Roads in Wayne. HUD has imposed a condition to our SAMA Letter. We have to submit a report from a qualified independent environmental scientist that the hazardous site in question poses no threat to the residents of the planned nursing home. In order to compile our report we will have to have a copy of your report.

Thank you for all your help. If you have any questions for us do not hesitate to call.

Sincerely,.

Becky Havemann

Becky Havemann

B/538

ITEM # 539

AUG 9 1982

Docket No. 40-00086 License No. STA-422

Township of Pequannock
ATTN: Mr. Frank Fitzpatrick
Health Officer
530 Newark-Pompton Turnpike
Pompton Plains, New Jersey 07444

Gentlemen:

Subject: Results of Soil Sample Analysis

This is in response to your letter dated July 12, 1982, requesting that we provide you with results of the analysis of the three samples taken in Pequannock Township by Mr. Nicolosi on June 30, 1982.

The analysis showed that the samples contained 213 ± 3 picocuries of thorium-232 per gram, 18.7 ± 0.5 picocuries of thorium-232 per gram, and 6.1 ± 0.7 picocuries of thorium-232 per gram, respectively. While these concentrations are in excess of natural background, they do not indicate an immediate hazard. Our contractor, Oak Ridge Associated Universities, will perform more detailed surveys of this area on August 12 and/or 13, 1982. You will receive a copy of the report of these surveys.

Your cooperation with us is appreciated.

Sincerely,

Original Signed BY:

John D. Kinneman, Chief
Materials Program Section No. 1

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc:
Region I Docket Room (with concurrences)

RI:DETP
Campbell/lp
7/30/82

RI:DETP
Kinneman
8/5/82

B/534

ITEM # 540

IE:07

SEP 15 1982

Docket No. 40-00086 License No. STA-422

Township of Wayne
ATTN: Arthur Bartolozzi
Health Officer
475 Valley Road
Wayne, New Jersey 07470

Gentlemen:

This refers to your recent telephone inquiry concerning the Wayne Township athletic field (Schleer Field or Sheffield Field) located near where the Sheffield Brook empties into the Pompton River. As we have discussed, we believe there is no radiation hazard to anyone, including children, using the athletic field. This conclusion is based on the results of surveys conducted on the field by inspectors from this office and our review of the surveys conducted along the Sheffield Brook by Oak Ridge Associated Universities.

If you have additional questions, please feel free to contact me.

Sincerely,

Original Signed By:

John D. Kinneman, Chief
Materials Program Section No. 1

cc:
Public Document Room (PDR)
Nuclear Safety Information Center (NSIC)
State of New Jersey

bcc:
Region I Docket Room (with concurrences)

B/536

ITEM # 541

OFFICE	RI:DETP						
SURNAME	JKinneman/grd						
DATE	9/15/82						

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO. 1981—335-9

AUG 27 1982

The Honorable Robert A. Roe
U. S. House of Representatives
Washington, D.C. 20515

Dear Congressman Roe:

I am pleased to respond to your and Congresswoman Bouguard's letter of August 10, 1982, to Chairman Palladino regarding an expanded radiation survey of the Wayne Township area. The Department of Energy (DOE) has agreed to consider the W. R. Grace/Rare Earths, Inc., site for inclusion in their Formerly Utilitized Action Program (see attached letter). Also, my staff informs me that Dr. Mott of DOE met with you on August 18, 1982, and that he agreed to perform the requested expanded survey within three to four weeks.

If I can be of any further assistance to you in this matter, please feel free to call.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director for Operations

Enclosure: Ltr from
W. E. Mott to R. G. Page
dtd 4/21/82

cc: Dr. W. E. Mott

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OCA (3)
ABentley
BClausser
FBrenneman, RI
JKinneman, RI

ITEM # 542

8/5/82

RI*
FBrenneman
8/20/82

RI*
JKinneman
8/20/82

Concluded by telephone 8/24

*See previous concurrence copy

OFFICE	FCUP*	FCUP*	FC *	FC*	NMSS*	NMSS	EDO
SURNAME	WTCrow/al	RGPage	DRChapell	RECunningham	DMausshardt	JGDavis	WJDircks
DATE	8/20/82	8/20/82	8/20/82	8/20/82	8/23/82	8/.../82	8/.../82

NRC FORM 318 (10-80) NRCM 0240

OFFICIAL RECORD COPY

AUG 27 1982

The Honorable Marilyn L. Bouquard
U. S. House of Representatives
Washington, D.C. 20515

Dear Congresswoman Bouquard:

I am pleased to respond to your and Congressman Roe's letter of August 10, 1982, to Chairman Palladino regarding an expanded radiation survey of the Wayne Township area. The Department of Energy (DOE) has agreed to consider the W. R. Grace/Rare Earths, Inc., site for inclusion in their Formerly Utilitized Action Program (see attached letter). Also, my staff informs me that Dr. Mott of DOE met with Congressman Roe on August 18, 1982, and that he agreed to perform the requested expanded survey within three to four weeks.

If I can be of any further assistance to you in this matter, please feel free to call.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director for Operations

Enclosure: Ltr from
W. E. Mott to R. G. Page
dtd 4/21/82

cc: Dr. W. E. Mott

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LUnderwood	
EDO R/F	
SECY	

ITEM # 5A3 8/5/82

Bill Dircks by telephone 8/24

RI *	RI*
FBrenneman	JKinneman
8/20/82	8/20/82

*See previous concurrence copy

OFFICE	FCUP*	FCUF*	FC*	FC*	NMSS*	NMSS	EDO
SURNAME	WTCrow/al	RGPage	DRChapell	RECunningham	DMausshardt	JGDavis	WJDircks
DATE	8/20/82	8/20/82	8/20/82	8/20/82	8/23/82	8/24/82	8/ /82

NRC FORM 318 (10-80) NRCM 0240

OFFICIAL RECORD COPY

Department of Energy
Washington, D.C. 20545

APR 2 1 1982

Mr. R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and
Material Safety
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Page:

During our meeting on March 31, 1982, we indicated that we would ask our Office of General Counsel for an opinion relative to our authority for conducting remedial action at the Pompton Plains site of the W. R. Grace Company. The opinion just received is that "DOE would not have the authority to undertake remedial action to remove radioactive materials resulting from Contract No. AT(30-1)-1037, but would have the authority to undertake remedial action to remove radioactive materials resulting from Contract No. AT(49-6)-993 if such action was required to protect public health and safety." As a point of clarification, the first contract (AT(30-1)-1037) was a contract to purchase material from W. R. Grace. The second contract (AT(49-6)-993) was for processing material to the Atomic Energy Commission specifications and including waste disposal, etc. Based on this opinion, it appears that this site can be considered for inclusion in the Department of Energy formerly utilized sites program. The legal opinion notwithstanding, it is understood that this site will be radiologically characterized this month by a Nuclear Regulatory Commission contractor. Please forward the survey results and other pertinent information on the Pompton Plains site to this office so we may review them prior to inclusion in the formerly utilized site program.

Sincerely,

William E. Mott

William E. Mott
Acting Director
Public Safety Division
Office of Operational
Safety (EP-323)

B1838

ITEM # 544

8208250367

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

40-00086

SEP 29 1982

The Honorable Robert A. Roe
United States House of Representatives
Washington, D.C. 20515

Dear Congressman Roe:

I am pleased to address the issues identified in the letter dated August 25, 1982, from Marvin Resnikoff and in Resolution No. 235 of the Wayne Township Council, which were enclosed with your letter of September 14, 1982. The letter and the Resolution concerned the W. R. Grace and Company property and surrounding area in Wayne, New Jersey.

From previous discussions between you and members of the NRC staff and from our previous correspondence, including my letters to you dated May 21 and September 1, 1982, you are familiar with the background of the Wayne situation. In addition, our Office of Congressional Affairs provided you with a copy of a Preliminary Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated July 1982, which was prepared by our contractor, Oak Ridge Associated Universities (ORAU).

Detailed responses to the specific issues in Dr. Resnikoff's letter and in the Resolution are contained, respectively, in Enclosures 1 and 2 to this letter.

We realize that these issues are of significant concern to you and your constituents, and are working to resolve them. We will keep you informed of our progress.

Sincerely,

William J. Dircks
Executive Director
for Operations

Enclosures:
1. Response to Dr. Resnikoff's letter
2. Response to Resolution No. 235

8/83

ITEM # 545

Distribution:
EDO 12299
SECY
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
W. Kerr
R. Haynes, RI
J. Allan, RI
T. Martin, RI
J. Kinneman, RI
F. Brenneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
State of New Jersey

(Name: R7B)

RI:DETP	RI:DETP	RI:DETP
Campbell/wb	Kinneman	Joyner
9/22/82		

OFFICE	RI:DETP	RI:PAO	RI:DEPOS	RI:DRA	RI:RA	EDO (for WJD)	OCA
SURNAME	Martin	Abraham	Brenneman	Allan	Haynes	WJDircks	
DATE					9/24/82	9/29/82	9/ /82

OFFICIAL RECORD COPY

NRC FORM 318 (10-80) NRCM 0240

USGPO: 1981—335-

ENCLOSURE 1

Response to Dr. Resnikoff's letter

Items are numbered as in Dr. Resnikoff's letter dated August 25, 1982.

Item 1: "According to NRC's 'Proposed Radiological Survey Plan,' March 15, 1982, the final report on the stream survey was due in August. The preliminary report was completed on schedule in July. What is the holdup in the final report? Additional core drilling near Sheffield Brook was done in August. What was the purpose of these additional drillings?"

Response: The issuance of the final report has been delayed by the need of Oak Ridge Associated Universities to respond to NRC staff comments on the preliminary report and consider additional data which was not available at the time the preliminary report was published. The final report is scheduled to be available in October. The additional core drillings were conducted to provide additional and more complete information on conditions near the Brook. The results of these drillings will be incorporated in the final report.

Item 2: "The preliminary report has no recommendations. Though the Town Council and I will come to conclusions, and make recommendations, I think it would be useful to have the NRC do likewise, both for off- and on-site."

Response: The reports of the NRC contractor (Oak Ridge Associated Universities), who performed the radiological surveys around the Sheffield Brook and on the W. R. Grace site, are intended only to provide results of the survey measurements and observations of the survey group. Recommendations are the responsibility of the agency or party responsible for disposition of the site. Since the Department of Energy (DOE) has agreed to consider this site for the Formerly Utilized Site Remedial Action Program, this is likely to be the DOE staff. The NRC has previously concluded that there is no immediate hazard to the residents of Wayne from the presence of this thorium contamination. No data obtained from the contractor to date has changed this conclusion.

Item 3: "Finally, the site has an aquifer which may be passing through the burial pits. The on-site core drilling should include an investigation of the underground soil structure by a geologist, particularly a hydrogeologist. The NRC will be taking water samples from the drill-holes, where available."

Response: Drinking water samples taken from homes in this area have all been well within U.S. EPA standards for radioactivity. The results of the surveys on the W. R. Grace property will provide data to determine whether the site is affecting any water supplies. Such investigations will be the responsibility of the agency or party with ultimate responsibility for the site.

Item 4: "One of the Concerned Citizens asked how it would be possible to know the full extent of the buried materials on-site without core drilling into the burial pits. Grace & Company has objected to such drillings for fear the clay liner under the burial pits should be pierced. The NRC has instead carried out radar measurements of the pits and core drilling around the pits. Much of this awaits the NRC report, but unless the pits contain drums, it is also unclear to me how the full extent of buried materials will be known."

Response: Until the ORAU report is complete, it will not be known whether the core drilling and radar survey will provide sufficient information concerning the buried waste. They will certainly provide an important basis for planning additional work, should such work be necessary.

ENCLOSURE 2

Response to Resolution No. 235 of The Wayne Township Council

Items are lettered as in Resolution No. 235

Item a: "The hiring by the Nuclear Regulatory Commission of a Hydro geologist."

Response: The Nuclear Regulatory Commission has access to qualified hydro geologists both on staff and as consultants. We assume that the Resolution intends to suggest that a hydrogeologist review the situation in Wayne. Such a review will be the responsibility of the agency or party with responsibility for disposition of this site.

Item b: "That the contemplated flyover be performed over the entire Township."

Response: EG&G, under contract to the Department of Energy, began an additional aerial radiological survey over Wayne Township on September 16, 1982. EG&G has informed us that this survey will include essentially all of Wayne Township.

Item c: "That the material being dredged from the Pompton and Passaic River systems, as well as soil systems, be properly tested for radioactive material."

Response: The NRC Region I office has made arrangements to test samples of the dredged material for thorium.

Item d: "That the Nuclear Regulatory Commission perform additional tests on the W. R. Grace site in the actual burial pits."

Response: The recent surveys by ORAU include a large number of onsite measurements, including sampling from a number of boreholes near the burial pits. Additional testing is not planned until the analysis of these samples is complete and the results of all measurements are reported. A determination regarding additional testing will be made at that time.

Item e: "That the Nuclear Regulatory Commission immediately advise the Township and the affected residents of the results of the core samples taken from said residents' backyards."

Response: The NRC has made available to Township officials the preliminary report of the radiological survey of Sheffield Brook, Wayne, New Jersey dated July 1982. This report contains the preliminary results of the core samples. The final report of the survey at Sheffield Brook is expected to be available during October 1982 and a copy will be furnished to the Township officials and to the residents.

Item f: "That the Nuclear Regulatory Commission furnish the Township with final reports and recommendations for all the tested sites without further delay."

Response: The surveys and sample analysis being conducted by ORAU under contract to the Nuclear Regulatory Commission are both time consuming and complex. Due to the concerns of the people in Wayne, the NRC has expended considerable effort to produce the final reports as quickly as possible. A final report of the surveys of Sheffield Brook is scheduled to be available in October 1982. A preliminary copy of the final report of the surveys on the W. R. Grace property is expected to be available during December 1982.

40-00066

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SEP 2 9 1982

The Honorable Jim Courter
Member, United States House of Representatives
22 N. Sussex Street
Dover, New Jersey 07801

Dear Congressman Courter:

I am pleased to address the issue identified in the letter dated August 23, 1982 from Frank Fitzpatrick, Health Officer, Pequannock Township, New Jersey, enclosed with your letter of August 26, 1982. Mr. Fitzpatrick's letter concerned thorium contamination which has been found near a railroad siding in Pequannock Township.

The Nuclear Regulatory Commission (NRC) is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). A number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occurring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W. R. Grace and Company.

As a result of our review and preliminary surveys of the Black Oak Ridge Road site, we determined that radioactive thorium contamination remained on the site which is in excess of currently acceptable criteria for release for unrestricted use; some thorium contamination was also found along the Sheffield Brook, which drains the site. We have contracted with Oak Ridge Associated Universities (ORAU) to conduct detailed radiological surveys of the contaminated areas. The Pequannock Township Health Officer apparently learned that the railroad siding referred to in his letter had, at one time, been used to unload monazite sand destined for the Rare Earths/W. R. Grace facility. The Health Officer conducted surveys, found radioactive contamination and reported this finding to our Region I office. Inspectors from the Region I office confirmed this finding on June 30, 1982 and determined the contamination was thorium. Our contractor, ORAU, conducted detailed surveys of the area in August 1982. The results of these surveys will be contained in a preliminary report which is expected to be available in December 1982. Copies of this report will, of course, be provided to you and Pequannock Township.

Based on our own surveys of the siding and analysis of samples taken from this siding, we have determined there is no immediate hazard from the thorium contamination to residents of Pequannock Township who reside near the railroad siding.

8/54

ITEM # 546

The surveys described above are part of the process of gathering and evaluating the information necessary to make a decision regarding whether the contaminated soil on the W. R. Grace site, near the Sheffield Brook and/or near the railroad siding should be removed. A decision that removal of the contaminated soil is not necessary would be based on a conclusion that radiation exposures from all routes and to all individuals would be acceptably low. At this time we do not know who will decide whether the contaminated soil must be removed. We also do not know who would bear the expense for removal of the contaminated soil, if its removal is determined to be necessary. W. R. Grace and Company still owns the property on which the thorium was processed. The U. S. Department of Energy (DOE) may have authority to take remedial action, as the result of work performed under a contract between Rare Earths, Inc., predecessor to W. R. Grace and Company, and the former U. S. Atomic Energy Commission. Copies of all our data and reports will be forwarded to DOE so that they can consider this site, including the railroad siding, for inclusion in the Formerly Utilized Site Remedial Action Program.

We realize that this issue is of significant concern to you and your constituents, and are working to resolve it. We will keep you informed of our progress.

Sincerely,

(Signed) William J. Dircks

William J. Dircks
Executive Director
for Operations

Distribution:
EDO 12288
SECY-82-921
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
G. Kerr, SP
R. Haynes
J. Allan
T. Martin
J. Kinneman
F. Brenneman
J. Johner
M. Campbell
RI Docket File
St of New Jersey

OFFICE	RI:DETP	RI:DETP	RI:DETP	RI:DETP	OCA	RI:PAO	RI:SLO	RI:DRA	RI:RA	EDO
SURNAME	Campbell/wb	Kinneman	Joyner	Martin		Abraham	Brenneman	Allan	Haynes	WJDircks
DATE	9/ /82								9/24/82	9/ /82

(Name: R7A)

NRC FORM 318 (10-80) NRCM 0240 OFFICIAL RECORD COPY USGPO: 1981—33

40-00086

5 OCT 1982

P. P. Such, L.N.H.A.
Administrator
Willowbrook, Inc.
P.O. Box 180
Wayne, NJ 07470

Dear Mr. Such:

Thank you for your letter of September 24, 1982 and the additional inquiry about any possible impact on your nursing facility by the thorium contamination of certain places in Wayne, New Jersey.

On August 11, 1982 in response to inquiries from Becky Havermann of your organization, we sent a written answer to the same question that was in your letter of September 24, 1982, and we still have the same answer. I will quote from our August 11 letter which said the following:

> "Based on an aerial radiological survey conducted in May 1981, various surveys and measurements by NRC inspectors and preliminary results of the ORAU surveys, there is presently no hazard to persons occupying your Nursing Home from material processed at the W. R. Grace facility and it is unlikely that any hazard from this material would develop in the future."

We have recently put together a status report on where things now stand in the overall inquiry into the thorium problems. A copy is enclosed for your use.

We do intend to make the final report of Oak Ridge Associated Universities public when it is completed.

I hope all this provides the additional information you are looking for.

Sincerely,

ITEM # 347

Original Signed By:
Karl Abraham
Public Affairs Officer

Enclosure: As Stated

OFFICE	PAO	DETP					
SURNAME	Abraham:mgm	Kinneman					
DATE	9/30/82	10/4/82					

NRC FORM 318 (10 80) NRCM 0240 OFFICIAL RECORD COPY * USGPO 1980—329

8/541

Sept. '82

Docket No. 40-00086
License No. STA-422

The Honorable Robert A. Roe
United States House of Representatives
Washington, D. C. 20515

Dear Congressman Roe:

I am pleased to address the issue identified in the letter dated August 23, 1982, from Frank Fitzpatrick, Health Officer, Pequannock Township, New Jersey, enclosed with your letter of September 14, 1982. Mr. Fitzpatrick's letter concerned thorium contamination which has been found near a railroad siding in Pequannock Township.

From previous discussions between you and members of the NRC staff and from our previous correspondence, including my letters to you dated May 21 and September 1, 1982, you are familiar with the background of the Wayne, New Jersey situation. In addition, our Office of Congressional Affairs provided you with a copy of a Preliminary Report, Radiological Survey of Sheffield Brook, Wayne, New Jersey, dated July 1982, which was prepared by our contractor, Oak Ridge Associated Universities (ORAU).

The Pequannock Township Health Officer apparently learned that the railroad siding referred to in his letter had, at one time, been used to unload monazite sand destined for the Rare Earths/W. R. Grace facility. The Health Officer conducted surveys, found radioactive contamination and reported this finding to our Region I office. Inspectors from the Region I office confirmed this finding on June 30, 1982 and determined the contamination was thorium. Our contractor, ORAU, conducted detailed surveys of the area in August 1982. The results of these surveys will be contained in a preliminary report which is expected to be available in December 1982. Copies of this report will, of course, be provided to you and Pequannock Township. Since we believe this railroad siding is associated with the W. R. Grace site, all data and reports concerning it will be forwarded to the Department of Energy so that they can consider this site for inclusion in the Formerly Utilized Site Remedial Action Program.

Based on our own surveys of the siding and analysis of samples taken from the siding, we have confirmed that the radiation is from thorium contamination. We have also determined that there is no immediate hazard to residents near the siding from the thorium contamination.

B/542

~~OFFICIAL RECORD COPY~~

ITEM # 548

(2)

We realize that this issue is of significant concern to you and your constituents, and are working to resolve it. We are pleased to be of service to you and your constituents in this matter and will keep you informed of our progress.

Sincerely,

William Dircks
Executive Director for Operations

Distribution
EDO 12298
SECY
Docket No. 40-00086
CA
PDR
V. Stello
R. DeYoung
R. Minogue
J. Davis
L. Underwood
G. Cunningham
W. Kerr
R. Haynes, RI
J. Allan, RI
T. Martin, RI
J. Kinneman, RI
F. Brenneman, RI
J. Joyner, RI
M. Campbell, RI
Region I Docket File
State of New Jersey

R1:DETP R1:DETP R1:DETP R1:DETP R1:PAO R1:SLO R1:DRA
Campbell/wb Kinneman Joyner Martin Abraham Brenneman Allan
9/23/82 9/23/82 9/23

R1:RA EDO OCA
Haynes Dircks

OFFICIAL RECORD COPY

K. Haynes, Reg. I
Pg. 1 of 3

FROM:	ACTION CONTROL	DATES	CONTROL NO.
Rep. Robert A. Roe	COMPL. DEADLINE	9/29/82	12298
	ACKNOWLEDGMENT		DATE OF DOCUMENT
TO:	INTERIM REPLY		9/14/82
Dircks			PREPARE FOR SIGNATURE OF: ☐ CHAIRMAN ☒ EXECUTIVE DIRECTOR
	FINAL REPLY		OTHER:
	FILE LOCATION		

DESCRIPTION ☒ LETTER ☐ MEMO ☐ REPORT ☐ OTHER

Encloses ltr fm Frank Fitzpatrick, Pequannock Township re removal of radioactive thorium

SPECIAL INSTRUCTIONS OR REMARKS

Ref: EDO 12288

CLASSIFIED DATA

DOCUMENT/COPY NO.		CLASSIFICATION	
NUMBER OF PAGES		CATEGORY ☐ NSI ☐ RD ☐ FRD	
POSTAL REGISTRY NO.			

ASSIGNED TO:	DATE	INFORMATION ROUTING
Haynes, Reg. I	9/15/82	Cunningham, ELD
		Davis, NMSS
		Kerr, SP
		CA
		SECY
		LUnderwood

LEGAL REVIEW ☐ FINAL ☐ COPY

ASSIGNED TO:	DATE

NO LEGAL OBJECTIONS
NOTIFY:
☐ EDO ADMIN & CORRES BR
_____ EXT. _____
COMMENTS, NOTIFY:
_____ EXT. _____

JCAE NOTIFICATION RECOMMENDED: ☐ YES ☐ NO

NRC FORM 232 (11-75)

EXECUTIVE DIRECTOR FOR OPERATIONS

DO NOT REMOVE THIS COPY

PRINCIPAL CORRESPONDENCE CONTROL

ITEM # 549

B/543

(3)

243

ROBERT A. ROE
8TH DISTRICT, NEW JERSEY

PUBLIC WORKS AND TRANSPORTATION COMMITTEE
CHAIRMAN—WATER RESOURCES

SUBCOMMITTEES:
ECONOMIC DEVELOPMENT
INVESTIGATIONS AND OVERSIGHT

SCIENCE AND TECHNOLOGY

SUBCOMMITTEES:
ENERGY RESEARCH AND PRODUCTION
ENERGY DEVELOPMENT AND APPLICATIONS

Congress of the United States
House of Representatives
Washington, D.C. 20515

WASHINGTON OFFICE:
ROOM 2243
RAYBURN HOUSE OFFICE BUILDING
202-225-5751

DISTRICT OFFICES:
100 HAMILTON PLAZA
ROOM 1406
BOX 25
PATERSON, NEW JERSEY 07505
201-523-5152

1100 WASHINGTON ROAD
WAYNE, NEW JERSEY 07470
201-696-3077

September 14, 1982

Mr. William J. Dircks
Executive Director for Operations
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Dircks:

Enclosed please find a copy of a letter from Mr. Frank Fitzpatrick, the Health Officer of Pequannock Township, in which he requests an update on the tests the Nuclear Regulatory Commission performed in Pequannock on August 12.

I would appreciate the information he desires.

Thank you for your assistance.

With all good wishes.

Sincerely,

Robert A. Roe
Member of Congress

8208010047

Pequannock Township

Township of Pequannock
530 NEWARK-POMPTON TURNPIKE
POMPTON PLAINS, N. J. 07444

(201) 835-5709

August 23, 1982

The Hon. Robert A. Roe
156 Boonton Road
Wayne
New Jersey 07470

Dear Congressman Roe:

Pequannock Township Health Department personnel recently located three (3) small sites containing radioactive levels in excess of background 1 MR/hour.

These findings were confirmed by NRC and borings were done on August 12, 1982 to determine whether or not it is radioactive thorium and the amount that may be located on these sites.

We would appreciate any help your good offices could provide, especially in the removal of the contaminated soil.

If you require additional information, please feel free to contact us.

Sincerely,

Frank Fitzpatrick
Health Officer

FF/mwp

Rec'd Hand delivered Wed. 8/25/82.

No. 0921 Logging Date 9/10/82

NRC SECRETARIAT

TO:
- ☐ Commissioner ____ Date ____
- XXX ☒ Exec. Dir./Oper.
- ☐ Cong. Liaison
- ☐ Public Affairs
- ☐ ____
- ☐ Gen. Counsel
- ☐ Solicitor
- ☐ Secretary
- ☐ Inspector & Auditor
- ☐ Policy Evaluation

Incoming: Rep Jim Courter, Const Ref
From: Frank Fitzpatrick

To: Hendrie Date 8/26/82
Subject: removal of xxxx radioactive thorium

☐ Prepare reply for signature of:
- ☐ Chairman
- ☐ Commissioner ____
- ☐ EDO, GC, CL, SOL, PA, SECY, IA, PE
- ☐ Signature block omitted
- ☐ ____
- ☐ Return original of incoming with response

XXX ☒ For direct reply* Suspense: Sept 21
☐ For appropriate action
☐ For information

Rec'd Off. EDO
Date 9-13-82
Time 8:30 A

Remarks: ~~OCA to Ack~~

For the Commission: billie

*Send three (3) copies of reply to Secy Correspondence and Records Branch

ACTION SLIP

NRC FORM 62A
(3-82)

8/844

ITEM # 550

9-97

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Mr. Joseph M. Hendrie
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, D.C. 20555

Dear Mr. Hendrie:

Enclosed please find a copy of recent correspondence to my office from the Township of Pequannock, Morris County, New Jersey.

If you might be able to advise me as to how the N.R.C. might be able to assist in the Township's problem, I would be most appreciative. This matter is one of some urgency.

Thank you for your cooperation in this matter.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh
cc: U.S.E.P.A.
N.J. Dept. of Environmental Protection

Enc:

mr.

KINDLY REPLY TO THE DOVER OFFICE/ATTN: W.R. HEALEY

8208010037

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Commissioner Robert Hughey
New Jersey Department of
Environmental Protection
CN 1402
Trenton, New Jersey 08625

Dear Commissioner Hughey:

Enclosed for your information is a copy of recent correspondence from the Township of Pequannock, Morris County.

I would be appreciative of your review of the problem presented by the Township in this letter. The Nuclear Regulatory Commission and U.S. Environmental Protection Agency have also been contacted in this matter.

Thank you for your concern on behalf of the Township of Pequannock.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh
cc: Nuclear Regulatory Commission
USEPA
Twp. of Pequannock
Enc:

KINDLY REPLY TO THE DOVER OFFICE

B/545

ITEM # 551

JIM COURTER
13TH DISTRICT, NEW JERSEY

WASHINGTON OFFICE:
325 CANNON HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
(202) 225-5801

COMMITTEES:
ARMED SERVICES
POST OFFICE AND CIVIL SERVICE

Congress of the United States
House of Representatives
Washington, D.C. 20515

DISTRICT OFFICES:
22 N. SUSSEX STREET
DOVER, NEW JERSEY 07801
(201) 366-0974

7 MAIN STREET
FLEMINGTON, NEW JERSEY 08822
(201) 788-2813

58 TRINITY STREET
NEWTON, NEW JERSEY 07860
(201) 383-9818

August 26, 1982

Ms. Jacqueline Schafer
Regional Administrator
Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

Dear Ms. Schafer:

Enclosed for your information is correspondence forwarded to my office from the Township of Pequannock, Morris County, New Jersey.

I would be most appreciative if you would review the problem presented by the Township and advise my office has to how your staff may possibly be of assistance.

Your concern on behalf of Pequannock is gratefully appreciated.

Sincerely,

Jim Courter
Member of Congress

JAC/wrh

cc: Nuclear Regulatory Commission
NJDEP

Enc:

KINDLY REPLY TO THE DOVER OFFICE

B/546

ITEM # 552

Pequannock Township

Township of Pequannock
530 NEWARK-POMPTON TURNPIKE
POMPTON PLAINS, N. J. 07444

(201) 835-5700

August 23, 1982

The Hon. Jim Courter
22 North Sussex Street
Dover
New Jersey 07801

Dear Congressman Courter:

Pequannock Township Health Department personnel recently located three (3) small sites containing radioactive levels in excess of background 1 MR/hour.

These findings were confirmed by NRC and borings were done on August 12, 1982 to determine whether or not it is radioactive thorium and the amount that may be located on these sites.

We would appreciate any help your good offices could provide, especially in the removal of the contaminated soil.

If you require additional information, please feel free to contact us.

Sincerely,

Frank Fitzpatrick
Health Officer

FF/mwp

B1547

ITEM # 553

Brookside Manor, Inc.
Willowbrook, Inc.

P.O. BOX 180
WAYNE, N.J. 07470
PHONE (201) 694-4895

D.F. SUCH
P.P. SUCH
DIRECTORS

September 24, 1982

Mr Karl Abraham
Public Affairs Officer
U.S. Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Mr. Abraham,

Our nursing home, Willowbrook, is located on the corner of Black Oak Ridge Road and Pompton Cross Road. We are concerned about the thorium levels at our location. Would you please send us any information you have on the status of this location.

Sincerely,

P. Such

P. Such L.N.H.A.
Administrator

PS/bh

ITEM # 534

B/548

11 AUG 1982

Docket No. 40-00086 License No. STA-422

Willowbrook Nursing Home
ATTN: Becky Havermann
897 Black Oak Ridge Road
Wayne, New Jersey 07470

Gentlemen:

This refers to our recent conversation concerning your plans to construct an addition to your facility at the above address. As we discussed, our contractor, Oak Ridge Associated Universities (ORAU) is conducting extensive surveys in the area near your property. A report of the portion of these surveys conducted along the Sheffield Brook will be complete in late August or early September. The final report of all surveys will probably not be available until December of this year.

Based on an aerial radiological survey conducted in May 1981, various surveys and measurements by NRC inspectors and preliminary results of the ORAU surveys, there is presently no hazard to persons occupying your Nursing Home from material processed at the W. R. Grace facility and it is unlikely that any hazard from this material would develop in the future.

I hope this information will be of assistance to you.

Sincerely,

Original Signed By:
for LAURENCE FRIEDMAN
John D. Kinneman, Chief, Materials
Radiological Protection Section,
Technical Inspection Branch

cc:
Nuclear Safety Information Center (NSIC)
Public Document Room (PDR)
State of New Jersey

bcc:
Region I Docket Room (with concurrences)

RI:DETP
for Kinneman/ntm
8/09/82

B/549

ITEM # 255 16:07

Docket No. 40-00086 ✓ OCT 5 1982 License No. STA-422

U.S. Department of Justice
United States Attorney
District of New Jersey
ATTN: Charles S. Crandall
Assistant U.S. Attorney
970 Broad Street, Room 502
Newark, New Jersey 07102

Gentlemen:

Subject: Electronucleonics, Wayne, New Jersey

This refers to your letter dated August 5, 1982 concerning the subject matter. This office has been conducting an investigation and evaluation of the use of thorium at 868 Black Oak Ridge Road, Wayne, New Jersey during the period of about 1948 to 1971. This use of thorium resulted in the storage of thorium waste on that property and apparently resulted in the contamination of the stream draining the property with radioactive material. Our investigation has included a review of old records, interviews of former employees and residents of the area, and extensive surveys of the property and surrounding area in order to detect any radiological hazards. W.R. Grace and Company owned this property during part of the processing time and continues to own the property today. They lease several of the buildings on the property to a firm named Electronucleonics.

We plan to complete a number of radiological surveys and assessments of the hazards caused by the material on this property and in this stream. It is likely that the Department of Energy will then accept responsibility for the site and contaminated areas. If any matter arises which appears to need your attention, we will promptly inform you of it. In addition, should you desire more specific information, including reports of the radiological situation, we will be happy to provide them to you.

Sincerely,

Original Signed By:
John D. Kinneman, Chief
Materials Radiological Protection
Section

bcc:
Region I Docket Room (with concurrences)
R. Shepherd, RI

DETP
Kinneman/wb
9/27/82

OFFICIAL RECORD COPY

B/550
ITEM # 556

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

Dear

The Nuclear Regulatory Commission (NRC) is reviewing the status of a number of manufacturing facilities around the country which were formerly licensed by the Atomic Energy Commission (AEC). As you may know, a number of the facilities in northern New Jersey which used radioactive material in the 1940's and 1950's were later found to have residual onsite and/or offsite contamination. One of the facilities which was licensed by the AEC was Rare Earths, Incorporated, located at 868 Black Oak Ridge Road in Wayne, New Jersey. This company was licensed to extract thorium, a naturally-occurring radioactive material, from monazite sand. In 1957 these activities were taken over by the Davison Chemical Division of W. R. Grace and Company. A summary of the historical background of this facility is enclosed for your information.

To assist with our review of the W. R. Grace and Company facility, the State of New Jersey arranged for an aerial radiological survey of the area surrounding it in May, 1981. The survey was performed by EG&G, Inc. a contractor of the U. S. Department of Energy.

Our review of the results of the aerial survey indicates slightly elevated radiation levels along the Sheffield Brook. However, ground level surveys performed by inspectors from this office have shown no radiation levels above background along Black Oak Ridge Road, Pompton Plains Crossing Road, Farmingdale Road, Deerfield Road or Longport Road. Analysis of water samples from Sheffield Brook has shown no measurable radioactive contamination. The radiation levels measured by the aerial survey appear to be coming primarily from the overgrown area around the Brook. Although these radiation levels do not pose any immediate hazard to the health and safety of individuals living near or frequenting the areas around the stream, additional surveys and evaluations seem appropriate. The results of these surveys will be used to determine if additional actions are required.

We have arranged for an NRC contractor, Oak Ridge Associated Universities (ORAU), to perform these additional surveys. The surveys of the area around the Brook will involve walking across the ground to measure surface radiation levels, and collecting surface and subsurface soil samples. The subsurface soil samples will be collected using a hand carried, motor operated drill which makes a 5" to 7" diameter hole about 2 to 3 feet deep, which afterward will be filled in. The surveys will be performed primarily in the Brook and in the weeded area along the banks of the Brook, although measurements of surface radiation levels will be made in other areas, as well. The NRC contractor will not enter houses or buildings on properties included in this survey. The survey results will be made public.

B/551

ITEM # 558

The Township of Wayne has identified you as an owner of private property along Sheffield Brook. (Block No.). We request your permission to have the contractor, ORAU, perform radiological surveys of the type described in this letter on your property. The surveys will probably be performed during the last two weeks in April, depending on the weather and scheduling of other work. Please sign the enclosed permission form and return it in the enclosed envelope.

A representative of this office will visit you during the week of April 12, 1982, to answer questions you may have about the survey. If you wish to arrange a special time for our representative to visit you or if you have immediate questions, you may call this office collect, and speak to Ms. Myu Campbell (215-337-5246) or Mr. John Kinneman (215-337-5252).

Your cooperation with us is appreciated.

Sincerely,

Ronald C. Haynes
Regional Administrator

Enclosures:
1. Permission Form
2. Historical Background
3. Return Envelope

Date: April 23, 1982

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-81-128B

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety public interest significance. The information is as initially received without ver cation or evaluation, and is basically all that is known by the Region I staff on this date.

Facility:

W. R. Grace and Company
Wayne, New Jersey Facility
Formerly Licensed Under
DN 40-00086

Licensee Emergency Classification
____ Notification of Unusual Ev
____ Alert
____ Site Area Emergency
____ General Emergency
X Not Applicable

Subject: RADIOACTIVE MATERIALS DISCOVERED OFFSITE (UPDATE)

As part of an NRC review of formerly licensed sites, surveys of a W. R. Grace and Company site in Wayne, New Jersey conducted in January 1981 indicated that radiation levels and surface soil contamination exceed current criteria for unrestricted use. The November 1981 report of an aerial radiological survey of the site and the surrounding area conducted on May 25, 1981 identified one offsite area west of the site which exhibited higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey identifie radiation levels up to 0.2 millirem per hour along Sheffield Brook, which runs from the W. R. Grace property to the Pompton River.

On April 8, 1982, Region I sent a letter to the owners of the properties which abut the Brook advising them of the situation and requesting permission for more detailed surveys to be performed by an NRC contractor, Oak Ridge Associate Universities (ORAU). Local officials and Congressman Roe were also informed of our planned surveys on April 8.

The Wayne Town Council requested that Region I representatives attend their April 21, 1982 Council meeting to answer questions about the contamination and the planned surveys. Representatives of the State of New Jersey Department of Environmental Protection and a representative of Congressman Roe also attended the meeting.

The Wayne Town Council resolved to write to the W. R. Grace Company and request that they remove all thorium from the Brook and the site without waiting for the results of the ORAU surveys. They also resolved to write to the NRC requesting that the NRC move promptly to complete the planned surveys and develop procedures to remove the thorium from both the site and offsite areas. The Town Clerk was also directed to write to the Department of Energy requestin a prompt review of this site to determine if it meets criteria for remedial action under the Formerly Utilized Site Program.

Congressman Roe's representative stated that the Congressman was monitoring the situation to assure proper resolution. It is likely that Congressman Roe will write to the NRC in the near future concerning this matter.

The ORAU surveys of the Brook area are scheduled to begin on April 27, 1982. A Region I inspector will accompany the survey team to observe the surveys and to take independent measurements. The State of New Jersey has indicated they also plan to visit the Brook area while the surveys are in progress.

Region I issued a press release on April 9, 1982 summarizing past and planned NRC activities in connection with the contamination and has responded to a number of media inquiries. The W. R. Grace Co. has also responded to media inquiries.

B/552

CONTACT: M. Campbell 488-1246 J. Kinneman 488-1252

ITEM # 65A

FOIA/PA-2000-0101
7-25-2000 Resp. #1
Record B/311

THIS PAGE IS AN OVERSIZED DRAWING OR FIGURE,

THAT CAN BE VIEWED AT THE RECORD TITLED: EXHIBIT 2: RADIATION SURVEY AREAS EQUIPMENT LAYOUT GROUND FLOOR LEVEL

WITHIN THIS PACKAGE...OR, BY SEARCHING USING THE DRAWING NUMBER: EXHIBIT 2

NOTE: Because of this page's large file size, it may be more convenient to copy the file to a local drive and use the Imaging (Wang) viewer, which can be accessed from the Programs/Accessories menu.

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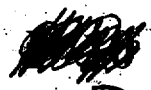

D-3

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