

FACSIMILE REQUEST

A-139

Date 12/1/81

MESSAGE TO: Doug Sily IE HQ

TELECOPY NUMBER: \_\_\_\_\_

NUMBER OF PAGES: 2 INCLUDING THIS REQUEST FORM

*Please return to*

MESSAGE FROM: M Campbell

U.S.N.R.C. REGION I KING OF PRUSSIA, PENNA.

TRANSMITTED BY: Shawna

DATE & TIME: 12/1/81 - 13:15

VERIFIED BY: D. Sily

## Historical Background and Summary of W. R. Grace Inspection Results

In approximately 1948, Rare Earths, Inc. began processing monazite sand to extract thorium and rare earth elements at Pompton Plains, New Jersey. The work was probably conducted under contract with the AEC and was licensed by the AEC in 1954. In 1957 this activity was taken over by the Davison Chemical Division of W. R. Grace. 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 hired a consultant to decontaminate the site to meet the 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 removable alpha contamination in the buildings not exceed 1000 disintegrations per minute (dpm) per 100 square centimeters. The facility was released by the NRC for unrestricted use on January 22, 1975 following a confirmatory survey. Documents supplied by W. R. Grace 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 on the site.

In August 1980, the Office of Inspection and Enforcement issued a temporary instruction which required that the regional offices review specified formerly licensed facilities to determine whether they met current criteria for unrestricted use. The W. R. Grace (Rare Earths) facility in Wayne (Pompton Plains), New Jersey was on the list.

In January 1981, a Region I inspector, accompanied by a representative of the New Jersey Bureau of Radiation Protection, conducted a survey of the site. Based on measurements made at the site and analyses of soil samples in the Regional Office Laboratory, it was concluded that surface soil contamination levels greater than current criteria for release for unrestricted use and elevated radiation levels exist at the site. On September 10, 1981, an NRC inspector surveyed the interior of all buildings at the site. No radiation levels in excess of 0.1 mrem/hr or contamination levels in excess of 100 dpm per 100 cm were detected which indicates that the buildings meet 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 and the U.S. Environmental Protection Agency. The aerial survey identified one offsite area west of the site which exhibited higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey was performed by an NRC inspector in this area. The survey found radiation levels up to 0.2 millirem per hour along the stream which runs from the W. R. Grace property towards the Pompton River. More extensive surveys on the site and in the offsite area with elevated radiation levels will be conducted in early 1982 by Oak Ridge Associated Universities under contract with the NRC's Office of Nuclear Material Safety and Safeguards.

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-81- 128

*A-740*

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by IE 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 Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

Subject: RADIOACTIVE MATERIALS DISCOVERED OFFSITE

As part of an NRC review of formerly licensed sites, in January 1981, surveys of a W. R. Grace and Company site in Wayne, New Jersey indicated that radiation levels and surface soil contamination exceed current criteria for unrestricted use. The Davison Chemical Division of W. R. Grace and Company processed monazite sand for thorium and rare earth elements at this site between 1948 and 1971. This activity was licensed by the AEC starting in 1954. In 1974, the buildings were decontaminated and the grounds were covered with clean fill so that they met then current AEC decontamination criteria. In 1975, the license was terminated by the NRC subsequent to a closeout survey.

On May 25, 1981, an aerial radiological survey of the site and the surrounding area was conducted by EG&G, Inc. The aerial survey identified one offsite area west of the site which exhibited higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey found radiation levels up to 0.2 millirem per hour along the stream which runs from the W. R. Grace property towards the Pompton River. More extensive surveys on the site and in the offsite area will be conducted in early 1982 by Oak Ridge Associated Universities under contract with the NRC's Office of Nuclear Material Safety and Safeguards.

The State of New Jersey has been informed. No press release is planned by the licensee, by the State, or by Region I at this time. The NRC is planning to issue a press release before Oak Ridge conducts surveys in 1982. Media interest may occur during the week of December 7, 1981 due to planned notification of local officials and visits to the site for the purpose of determining the scope of the surveys in 1982.

*PPR 811209 0085*

CONTACT: M. Campbell, 488-1246 J. Kinneman, 488-1252

DISTRIBUTION:					
H. St.	<i>4:20</i>	MNBB <i>4:30</i>	Phillips <i>7:35</i>	E/W <i>H:14</i>	Willsta <i>7:40</i>
Chairman Palladino	EDO	NRR	IE	NMSS	Landow
Comm. Gilinsky	AEOD			RES	OIA
Comm. Bradford	PA	Air Rights <i>4:25</i>			MAIL:
Comm. Ahearne	MPA	SP		INPO <i>NA</i>	IE:TAS
Comm. Roberts	ELD			NSAC <i>NA</i>	ADM:Doc. Mgt. Br.
ACRS					
SECY	Regional Offices			TMI Resident Section <i>7:40</i>	
CA				RI Resident Office <i>NA</i>	

A-141

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE--PNO-I-81-128A

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by IE 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 Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

Subject: RADIOACTIVE MATERIALS DISCOVERED OFFSITE (UPDATE)

As part of an NRC review of formerly licensed sites, in January 1981 surveys of a W. R. Grace and Company site in Wayne, New Jersey indicated that radiation levels and surface soil contamination exceed current criteria for unrestricted use. The Davison Chemical Division of W. R. Grace and Company processed monazite sand for thorium and rare earth elements at this site between 1948 and 1971. This activity was licensed by the AEC starting in 1954. In 1974, the buildings were decontaminated and the grounds were covered with clean fill so that they met then current AEC decontamination criteria. In 1975, the license was terminated by the NRC subsequent to a closeout survey.

On May 25, 1981, an aerial radiological survey of the site and the surrounding area was conducted by EG&G, Inc. The aerial survey identified one offsite area west of the site which exhibited higher than normal background radiation levels. On November 23, 1981, a preliminary ground survey found radiation levels up to 0.2 millirem per hour along the stream which runs from the W. R. Grace property towards the Pompton River.

A coordination meeting is planned for December 14, 1981 between representatives of the Department of Energy and the Nuclear Regulatory Commission, since there is a possibility that some of the thorium extraction performed at this site was under an AEC contract.

The State of New Jersey has been informed. No press release is planned by the licensee, by the State, or by Region I at this time. Notification of local officials has been delayed until after resolution of former contractual responsibilities.

*PDA 8112/40005*

CONTACT: Campbell 488-1246 Kinneman 488-1252

DISTRIBUTION:

H. St. <u>2:13</u>	MNBB <u>2:24</u>	Phillips <u>2:25</u>	E/W <u>2:07</u>	Willste _____	Landow _____
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Comm. Roberts	ELD			NSAC <u>NA</u>	ADM:Doc. Mgt. Br.
ACRS					
SECY	Regional Offices	<i>AIT-2:40</i>	<i>AIT-2:41</i>	TMI Resident Section <u>2:35</u>	
CA		<i>AIT-2:31</i>	<i>AIT-2:44</i>	RI Resident Office <u>NA</u>	

GRACE

Davison Chemical Division

W. R. Grace & Co. *A-142*  
P.O. Box 2117  
Baltimore, Maryland 21203

(301) 659-9000  
Direct Dial (301)

December 11, 1981

United States Nuclear  
Regulatory Commission  
Region I  
631 Park Avenue  
King of Prussia, PA 19406

Attn: Mr. Thomas T. Martin, Director  
Division of Engineering and Technical Inspection

Dear Mr. Martin,

This letter confirms our telephone conversation of December 10, 1981 regarding your letter of December 3, 1981 along with NRC Inspection No. 99990001/81-21 of our property at 868 Black Oak Ridge Road, Wayne, New Jersey. We do not find information of a proprietary nature in this report as defined in 10 CFR 2.790(b)(1) and therefore will not apply to withhold information contained in the report.

We have carefully reviewed the inspection report as well as the EG&G aerial radiological survey and have noted the following inaccuracies and errors:

1. Page 3, paragraph 3a. - "The inspector observed that areas of the grounds are posted with "Caution Radioactive Materials" signs, but access to these areas is not restricted." Signs are posted conspicuously on the inside of the property all along the boundary of the burial site as well as on the outside of the chainlink fence that surrounds the property. These signs read, "Caution Radioactive Material Buried Here". In addition, access to these areas is restricted to the general public by virtue of the aforementioned industrial-type fence and gates which are kept locked at all times except for two gates which are opened by the lessee during normal business hours to allow their employees access to their workplace.
2. EG&G Aerial Survey, Abstract - .... "in an area to the west believed to have resulted from subsurface water erosion of material from the burial grounds." We feel very strongly that this statement contains a technical error and an erroneous assumption. "Subsurface water erosion" technically cannot happen and we believe that the levels of Thallium 208 resulted from process up-sets of the former plant's waste water treatment plant. Furthermore, we believe that using the above terms could be misconstrued by the public through the press to imply a flow of sub-surface water through the burial site and into the creek. This could unnecessarily cause unfounded concerns by the nearby residents and businesses.

We appreciate the opportunity to comment on the report and would be pleased to discuss any other points with you.

Sincerely,

*Armin Wille*  
Armin Wille, P.E.  
Sr. Facilities Engineer

*8201150313*  
*pDR*

A-143

11 DEC 1981

Docket No. 40-00086

U. S. Department of Energy  
ATTN: Dr. William Mott, Director  
Environmental and Safety  
Engineering Division

EP-141  
Washington, D. C. 20545

Gentlemen:

Subject: W. R. Grace Facility, Wayne (Pompton Plains), New Jersey

Region I Report No. 99990001/81-21, which contains a copy of the aerial radiological survey of the W. R. Grace and Company facility in Wayne (Pompton Plains), New Jersey is enclosed for your information. Our contractors at Oak Ridge Associated Universities are planning to perform further ground surveys starting in December 1981.

We will keep you informed of NRC activities at this site.

Sincerely,

Original Signed By:

Thomas T. Martin, Director, Division  
of Engineering and Technical  
Inspection

Enclosure: Region I Report No. 99990001/81-21

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

R1:DETI	DETI	DETI	RV:DETI
Campbell/wb	Kinneman	Boyer	Martin
11/25/81	12/1/81	12/1/81	12/1/81

PDR

9201110154