

UNITED STATES NUCLEAR REGULATORY COMMISSION

REGION I

631 PARK AVENUE KING OF PRUSSIA, PENNSYLVANIA 19406

Docket No. 40-00086 .

APR 8 112

License No. STA-422

MEMORANDUM FOP:

Ronald C. Haynes, Regional Administrator

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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)



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 aer rvey indicates slightly elevated radiation levels along the Sheffiel ... 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.

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

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 , which transmitted this form. My restrictions on this permission are listed below.

Property Description:	
Property Identified as Block Lot	
Restrictions:	
	Name
	Signature by owner(s) of property or authorized representative
	Address
	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 on the site.

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. 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 was performed by an NRC Region I inspector in this offsite area. The 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 in the offsite area will be conducted in the spring of 1982 by Oak Ridge Associated Universities under contract with the NRC's Office of Nuclear Material Safety and Safeguards.

Louis A. Molinari 76 Deerfield Road Wayne, New Jersey	07470	Block	No.	591C/21
Timothy and Pauline 80 Deerfield Road Wayne, New Jersey		Block	No.	591C/21
Barbara Passaro 84 Deerfield Road Wayne, New Jersey	07470	Block	No.	591C/22
Paul and Jeanette ! 88 Deerfield Road Wayne, New Jersey		Block	No.	591C/23
John and Katherine 92 Deerfield Road Wayne, New Jersey		Block	No.	591C/24
John and Margaret 1 96 Deerfield Road Wayne, New Jersey		Block	No.	591C/25
Edward and Vera Ler 100 Deerfield Road Wayne, New Jersey		Block	No.	591C/26
Roy and Lena Slater 104 Deerfield Road Wayne, New Jersey		Block	No.	591C/27
William and Mary La 108 Deerfield Road Wayne, New Jersey		Block	No.	591C/28
Michael and Yolanda 112 Deerfield Road Wayne, New Jersey		Block	No.	591C/29
Ruth Baum 125 Pompton Plains Wayne, New Jersey		Block	Nos.	591C/35 and 591C/31
Doris Knapp 97 Pompton Plains C Wayne, New Jersey		Block	No.	591C/36

J. V. Casman Smith Road, R.D. #1 Denville, New Jersey 07834

Block No. 591C/37

Michael and Jane DeNike 21 Pompton Plains Crossing Road Wayne, New Jersey 07470

Block No. 591C/45

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

Block No. 591C/47

SGL Industries 76 Euclid Avenue Haddonfield, New Jersey 08033 Block No. 591C/50

Township of Wayne 475 Valley Road Wayne, New Jersey 07470 Block Nos. 5915/6 and 590/1

5910/50 SGL Industries 76 Entled Aux Haddingerla, NJ 08033 Maxton Perty, tre 861 BIK OBK Rdg Ril Wayne NJ 07470 145 De Nike, Michael & JANE ColFRX 21 Porpton PICR WAYNE, M.J. 07470 " /37 Casman, J. V. South Rd RD=1 Derville , N.J. 07834 KNAPP, DORW 97 Pompton PICR 10 Ayrs, NJ 07470 Baum, Roth 125 Pompton Pls CR WAYNE, NJ 07470 Boum, Roth same " /20 MOLINARI, LOVIS A 76. Deerpield Isd hayre NJ 07470 VAN Orden AREN, TIMOThy - Parling 80 Deer Field Rd -WHYNE NJ 07470 " /22 MASSARO, BARBARA 24 Peer Field Rd

591C /23 Makus Paul - Jehnetie 88 Deere Field Rd Wayne, NI 07470 "/24 Kennedy, John - Katherine 92 Decepield Rd " 125 TRANGONE, John - MARGARet 96 Deerfield Rd Wayne, NJ 07470 LENIK Edward - Vera 100 Deer Field Rd WHYNE, NJ 07476 " /27 Slater, Roy - LENA 104 Perkfield Rd Wayne, 107 07470 LAVEACK JR, William - MARY 108 Deer pield Rd Wayne N.D 07470 " /29 MORANO, Michael - Yolanda 112 Deer rield R.C. hayNE, NJ OZYZU 5910/6 Township of Wayne. 475 Valley Rd, WAYNE, 07470 590/1. Township of Wayne 475 Walley Rd, langue otyti North Jersey Dist Kater Supply Comme WANAque, N.J

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property	Identified	25	Block	591C/47	
			Lot		بالمراجع المراجع
Restrictions:					

The second secon	fin.
Signature by owner(s)	of property
or authorized represen	ntative
861 Black Oak Ridge Ro	ad
Address	
Wayne, New Jersey 074	70
Telephone	

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property	Identified	as	Block	591C/37	
			Lot		

Restrictions:

- 1. The property owner, Elsa M. Cosman, be held harmless from any claims, demands or suits by reason of personal injuries or property damage arising from the activities of the U.S. Department of Energy or U.S. Nuclear Regulatory Commission, their agents or employees, including contractor personnel.
- 2. Any disturbance of any surface conditions beyond that described in the text of the permission granted above be restored.
- 3. That any damaged conditions created by test holes or otherwise be restored or clearly marked.

gnature by owner(s) authorized represent ith Road, R.D. #1 dress nville, New Jersey (of property
dress	
nville, New Jersey (
	7834

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property	Identified	as	Block	591C/22
			Lot	

Restrictions:

Barbara	Passaro	
Name Bert	un £ x	free (President)
Şignatu or auth	re by owner orized repr	r(s) of property resentative
Address		
84 Deert	field Road	
Wayne, M	New Jersey	07470
Telepho	ne	

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Property Description:

Property	Identified	as	Block	591C/45
			Lot	

Restrictions:

Signaturi or author	e by own	er(s) of presentat	property ive
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ayne, Nev	v Jersey	07470	

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Property Description:

Res

Property	Identified as Block Lot	591C/29
trictions:		
		april 17, 1982
		Michael and Yolanda Morano
	leadour	Wordow Galanda Maran Signature by Jowner(s) of property
		or authorized representative
		112 Deerfield Road
		Address
		Wayne, New Jersey 07470

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property	Identified as	s Block	591C/27
		Lot	
Restrictions:			
			Roy and Lena Slater
			Name Pay K. S. vair-
			Signature by owner(s) of property or authorized representative
			104 Deerfield Road
			Address
			Wayne, New Jersey 07470

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

R

Property Identified as Block 591C/36

estrictions:	
	Doris Knapp Name
	Signature by owner(s) of property or authorized representative
	97 Pompton Plains Crossing Road Address
	Wayne, New Jersey 07470

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 4/8/82, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property Identified as Block 591C/50

trictions:		
	N 5	SGL Industries Lame Solvert Peros Signature by owner(s) of property or authorized representative
		'6 Euclid Avenue
	A	ddress
	H	laddonfield, New Jersey 08033

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Property Description:

Property	Identified	as	Block Lot	591-C-	25
Restrictions:					

Name

Milliam (E. Javenne)

Signature by owner(s) of property or authorized representative

108 DEERFIELD RD

Address

WAYNE, N.J. 07470

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, which transmitted this form. My restrictions on this permission are listed below.

Property Identified as Block 591C/35 and 591C/31 Lot

Property Description:

Restrictions:

Ruth Baum
Name Cith Lineral Signature by owner(s) of property or authorized representative 125 Pompton Plains Crossing Road Address Wayne, New Jersey 07470

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property Identified as Block Lot	5910/24
Restrictions: How May BE DRILLS ENLY	IN LOCATIONS MUTUALLY
AGRED TO BY NEC TEAM AND I	
	John and Katherine Kennedy Name Signature by owner(s) of property of authorized representative 92 Deerfield Road Address Wayne, New Jersey 07470
	Telephone

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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property Identified as Block 591C/21

Lot

Restrictions:	
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F Sheffield Brack has been	Timothy and Pauline Van Oudenaren
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The brock used to run	Signature by owner(s) of property or authorized representative
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Road properties according	80 Deerfield Road
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ust year the Passaic County	
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issing in it.	

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Property Description:

Property Identified as Block 591C/23

Lot

omage or	sendebrus	A.
		Paul and Jeanette Makus
		Name Paul Maken Seoutte no Signature by owner(s) of property or authorized representative
		88 Deerfield Road
		Address
		Wayne, New Jersey 07470

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Property Description:

Property	Identified	as	Block	591C/21
			Lot	

Restrictions:

Name	, a	Charles	, , , , , , ,
		ner(s) of epresentat	
Address			
76 Deer	field Roa	ıd	

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 unierstand 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, which transmitted this form. My restrictions on this permission are listed below.

Property Description:

Property	Identified	as	Block	591C/45	
			Lot		

Restrictions:

Signature or authori	by own zed re	er(s) of presentat	property ive
Pompton Address	Plains	Crossing	Road
Wayne, New	Jersey	07470	

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Property Description:

Property	Identified a	lock	591C/22	
		Lot		
Restrictions:				

Barbara Passaro
Name
Berton & Himan (Friend
Signature by owner(s) of property
or authorized representative
Address
84 Deerfield Road
Wayne, New Jersey 07470
Telephone