



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

MAR 15 1984

66-52761

PRINCIPAL STAFF	
RA	DRP
ORA	CE
A/RA	DRSA
PC	DRMA
PAO	SCS
SCA	ML
ENF	FI

Nicholson

MEMORANDUM FOR: Nora Nicholson, Radiation Specialist, RIII

FROM: Francis M. Costello, Radiation Dosimetry Specialist, RI

SUBJECT: RESULTS OF TLD MONITORING AT REED-KEPPLER PARK
(KERR MCGEE) - SECOND AND THIRD QUARTERS, 1983

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Enclosed is a copy of the results of TLD monitoring around the subject facility for the second and third quarters of 1983. The field period for the second quarter was April 12, 1983 - July 13, 1983, and for the third quarter was July 13, 1983 - October 14, 1983. Individual element calibration factors were used to determine these exposures. The dosimeters were calibrated with a cesium-137 source. The data are presented in the following format:

$x \pm r; t$

where

- x = mean exposure measures by the two calcium sulfate elements
- r = random uncertainty (one standard deviation)
- t = total uncertainty (including estimate of systematic uncertainty)

The gross exposure is the total exposure measured by the dosimeter from the time it was annealed until it was read. The net exposure rate is the calculated exposure for a 90 day period after subtracting the estimated transit exposure from the gross exposure.

Please contact me if you have any questions about the data.

Francis M. Costello
Francis M. Costello
Radiation Dosimetry Specialist

Enclosure: As stated

cc w/encl:
L. Cohen, IE:HQ
R. Bellamy, RI
W. Pasciak, RI

MAR 19 1984

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1

KERR: MOGEE
 TLD DIRECT RADIATION ENVIRONMENTAL MONITORING
 FOR THE PERIOD 880325-880721 119 DAYS
 FIELD TIME 93 DAYS

NRC STATION	LOCATION		GROSS EXPOSURE(mR)			NET EXPOSURE RATE	
	AZIMUTH/DIST (deg.) (mi.)		+-	Rdm;Tot.		mR/Std.Qtr. +- Rdm;Tot.	
018	1	1	112.5	+- 3.4	16.9	NO NET DATA	
019	1	1	300.0	+- 9.0	45.0	NO NET DATA	
020	1	1	333.5	+- 10.0	50.0	NO NET DATA	
021	1	1	129.5	+- 3.9	19.4	NO NET DATA	
022	1	1	104.0	+- 3.1	15.6	NO NET DATA	
023	1	1	183.5	+- 5.5	27.5	NO NET DATA	
024	1	1	329.0	+- 9.9	49.4	NO NET DATA	
025	1	1	65.7	+- 2.0	9.8	NO NET DATA	
026	1	1	45.3	+- 1.4	6.8	NO NET DATA	
027	1	1	69.1	+- 2.1	10.4	NO NET DATA	
028	1	1	42.7	+- 1.3	6.4	NO NET DATA	

NO TRANSIT DOSE CALCULATED (TLD CONTROLS MISSING OR OTHERWISE NOT COMPLETE)

JEFF MCCEE
FOR THE PERIOD 800325-800721

TLD DIRECT RADIATION ENVIRONMENTAL MONITORING

AZIMUTH (deg.)	AVER. EXPOSURE RATE (mR/Std.Qtr.) \pm Std. Dev.	# IN GROUP
348.75-11.25 (N)	117.9 \pm 85.9	11
11.25-33.75 (NNE)	NO DATA--NO DATA	0
33.75-56.25 (NE)	NO DATA--NO DATA	0
56.25-78.75 (ENE)	NO DATA--NO DATA	0
78.75-101.25 (E)	NO DATA--NO DATA	0
101.25-123.75 (ESE)	NO DATA--NO DATA	0
123.75-146.25 (SE)	NO DATA--NO DATA	0
146.25-168.75 (SSE)	NO DATA--NO DATA	0
168.75-191.25 (S)	NO DATA--NO DATA	0
191.25-213.75 (SSW)	NO DATA--NO DATA	0
213.75-236.25 (SW)	NO DATA--NO DATA	0
236.25-258.75 (WSW)	NO DATA--NO DATA	0
258.75-281.25 (W)	NO DATA--NO DATA	0
281.25-303.75 (WNW)	NO DATA--NO DATA	0
303.75-326.25 (NW)	NO DATA--NO DATA	0
326.25-348.75 (NNW)	NO DATA--NO DATA	0

DISTANCE(mi) FROM THE REACTOR	AVER. EXPOSURE RATE (mR/Std.Qtr.) \pm Std. Dev.	# IN GROUP
0-2	117.9 \pm 85.9	11
2-5	NO DATA--NO DATA	0
>5	NO DATA--NO DATA	0
UPWIND CONTROL DATA	NO DATA	NO DATA

FA MOGEE
 TLD DIRECT RADIATION ENVIRONMENTAL MONITORING
 FOR THE PERIOD 830629-831018 112 DAYS
 FIELD TIME 94 DAYS

NRC STATION	LOCATION		GROSS EXPOSURE (mR)		NET EXPOSURE RATE	
	AZIMUTH (deg.)	DIST (mi.)	+ -	Rdm; Tot.	mR/Std. Qtr.	+ - Rdm; Tot.
001	1	1	104.0	+ - 3.1	15.6	NO NET DATA
002	1	1	204.5	+ - 9.1	45.7	NO NET DATA
003	1	1	337.0	+ - 10.1	50.6	NO NET DATA
004	1	1	129.0	+ - 3.9	19.4	NO NET DATA
005	1	1	103.0	+ - 3.1	15.5	NO NET DATA
006	1	1	102.5	+ - 3.5	27.4	NO NET DATA
007	1	1	325.5	+ - 9.0	48.0	NO NET DATA
008	1	1	62.4	+ - 1.9	9.4	NO NET DATA
009	1	1	42.1	+ - 1.3	6.3	NO NET DATA
010	1	1	67.5	+ - 2.0	10.1	NO NET DATA
011	1	1	41.1	+ - 1.3	6.2	NO NET DATA
012	1	1	15.1	+ - .5	2.3	NO NET DATA
013	1	1	23.8	+ - .7	3.6	NO NET DATA

NO TRANSIT DOSE CALCULATED (TLD CONTROLS MISSING OR OTHERWISE NOT COMPLETE)

KERR MCCEE
FOR THE PERIOD 830629-831018

2

TLD DIRECT RADIATION ENVIRONMENTAL MONITORING

AZIMUTH (deg.)	AVER. EXPOSURE RATE (mR/Std.Qtr.) \pm Std. Dev.	# IN GROUP
348.75-11.25 (N)	79.7 \pm 76.2	10
11.25-33.75 (NNE)	NO DATA+-NO DATA	0
33.75-56.25 (NE)	NO DATA+-NO DATA	0
56.25-78.75 (ENE)	NO DATA+-NO DATA	0
78.75-101.25 (E)	NO DATA+-NO DATA	0
101.25-123.75 (ESE)	NO DATA+-NO DATA	0
123.75-146.25 (SE)	NO DATA+-NO DATA	0
146.25-168.75 (SSE)	NO DATA+-NO DATA	0
168.75-191.25 (S)	NO DATA+-NO DATA	0
191.25-213.75 (SSW)	NO DATA+-NO DATA	0
213.75-236.25 (SW)	NO DATA+-NO DATA	0
236.25-258.75 (WSW)	NO DATA+-NO DATA	0
258.75-281.25 (W)	NO DATA+-NO DATA	0
281.25-303.75 (WNW)	NO DATA+-NO DATA	0
303.75-326.25 (NW)	NO DATA+-NO DATA	0
326.25-348.75 (NNW)	NO DATA+-NO DATA	0

DISTANCE(mi) FROM THE REACTOR	AVER. EXPOSURE RATE (mR/Std.Qtr.) \pm Std. Dev.	# IN GROUP
0-2	79.7 \pm 76.2	10
2-5	NO DATA+-NO DATA	0
>5	NO DATA+-NO DATA	0
UPWIND CONTROL DATA	199.7 \pm 101.4	3

3035
Rice

COVINGTON & BURLING

1801 PENNSYLVANIA AVENUE, N. W.

D. C. 20044

WASHINGTON, D. C. 20044

August 15, 1984

TELETYPE (202) 662-6250
FAX (202) 662-6250
TELEPHONE (202) 662-6250
CABLE 66250

TO: Mr. George Rice
Dr. Ed Still
Mead Hedgion, Esq.
FROM: Richard A. Meserve

1 Pages follow.

PLEASE CALL THE FOLLOWING NUMBER
TO OBTAIN RECEIPT OF THIS DOCUMENT:

(202) 662-6250

Attached are a few thoughts for the tour next Tuesday. I am sure that many other points will occur to you as you complete your planning. As I have mentioned, it might be appropriate to develop an outline that identifies the locations at which the tour will stop for comments by the guide and defining the points he will make.

I assume that George will be the guide, with assistance from Ivan as necessary.

G. B. Rice
AUG 15 1984

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NOV 30 1987

The Honorable Harris W. Fawell
United States House of Representatives
Washington, DC 20515

Dear Congressman Fawell:

I am pleased to respond to your October 29, 1987, letter to Chairman Zech regarding Kerr-McGee's proposal for permanent onsite radioactive waste disposal at the Rare Earths Facility in West Chicago, Illinois. The issue of decommissioning the Rare Earths Facility is the subject of an administrative proceeding before the Atomic Safety and Licensing Board (ASLB). The parties to the proceeding are the State of Illinois, the Kerr-McGee Chemical Corporation, and the Nuclear Regulatory Commission (NRC) staff.

In an Environmental Impact Statement issued May 1983, the NRC staff recommended temporary storage of the waste on the West Chicago site, with the decision on ultimate disposal of the material being deferred until several years of monitoring data had been accumulated. The staff also recommended delaying the decision on final disposal, allowing for the future adoption of other alternatives that might become available. The ASLB, however, ruled that the Impact Statement had to be supplemented or amended to consider the issue of permanent waste disposal. In response to the ASLB order, the staff prepared and issued in June 1987, a Draft Supplement to the Impact Statement for public comment. A copy of the Draft Supplement is enclosed for your information.

With the Draft Supplement, the NRC staff has evaluated the Kerr-McGee proposal for onsite disposal and four alternatives for offsite disposal. The Draft Supplement does conclude that disposal on the West Chicago site (the proposed action) is the preferred course of action. This conclusion was not based solely on cost, but on environmental and public health and safety considerations along with economic considerations. The environmental issues considered were topography, air quality, socioeconomic, land resources, archeology, mineral resources, water resources, ecology, and radiation exposure. A cost-benefit analysis was conducted on the proposed action and the four alternatives. The analysis did not show any of the four alternatives to be obviously superior to the proposed action.

We have received 12 sets of comments on the Draft Supplement. We will include your letter with these comments. An estimate, similar to yours, of economic losses was included in the City of West Chicago's comments dated September 29, 1987. We recognize that these are important factors to consider in any final decision. These and all other comments, including yours, will be considered and receive response within the Final Supplement.

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We also have received comments on the possibility of waiting for the Central Midwest Compact site to open prior to issuing the Final Supplement. This will be evaluated prior to issuance of the Final Supplement. Some additional information on this issue may be helpful to you at this time. The compact site was not considered as a viable option in the Draft Supplement because a specific site plan and environmental information have not been developed nor has a site location been chosen. Without information on a site it is not possible to provide the analysis which must be performed on each alternative. This situation has not changed since publication of the Draft Supplement because a site has still not been chosen. Another factor is that the majority of the wastes on the West Chicago site are considered to be byproduct material under Section 11.e(2) of the Atomic Energy Act of 1954, as amended (the "AEA"), and are not considered low-level waste for disposal purposes. The Central Midwest Compact, of which Illinois is a member, defines low-level radioactive waste as excluding among other things "by-product material as defined in Section 11.e(2) of the AEA." Different statutes, rules and regulations apply to disposal of low-level radioactive waste and to Section 11.e(2) byproduct material. Therefore, the compact site would not be obligated to accept the wastes even if such a site currently existed. Disposal of the wastes in a site near the compact site (co-location) would be a possibility; however, without a site location an analysis cannot be performed.

The State of Illinois has recently indicated its intention to seek an amendment of the current Agreement with the NRC, under Section 274b of the AEA, to include 11.e(2) byproduct material in the list of radioactive materials that the State will regulate. An application for such an amendment to the Agreement has not yet been received by the NRC. If the State Agreement were amended to include Section 11.e(2) byproduct material, the NRC would relinquish to the State of Illinois regulatory jurisdiction, subject to certain continuing authority of the NRC, for the disposal of the radioactive wastes on the Rare Earths Facility Site.

We hope that this information is helpful to you. If we can be of further assistance in the future, please let me know.

Sincerely, Original Signed By:

James M. Taylor

Victor Stello, Jr.

Executive Director for Operations

Enclosure:

Draft Supplement

DISTRIBUTION EDO-003274 w/o Encl

NMSS R/F	NMSS OFFICE R/F	IMSB R/F	IMUF R/F	DLoosely
DMorris, EDO	MBridgers, EDO	CEstep	CJenkins	
REcunningham	GPA	LCrouse	JJSwift	
JMurray, OGC	JHind, RIII	RBernero	HLThompson	

*See previous concurrence

OFC: *IMUF : *IMUF : *IMUF : *IMSB : *DD/IMNS : D/IMNS : OGC *By phone*
 NAME: MLHorn:ht : VLTharpe : JJSwift : LCRouse : GSjoblom : REcunningham : JMurray
 DATE: 11/18/87 : 11/ /87 : 11/18/87 : 11/18/87 : 11/18/87 : 11/29/87 : 11/18/87

OFFICIAL RECORD COPY

OFC: RIII *By phone* : UD/NMSS : D/NMSS : EDO : GPA

NAME: JHind : RBernero : HLThompson : VStello :

DATE: 11/19/87 : 11/20/87 : 11/20/87 : 11/ /87 : 11/ /87 :

HARRIS W. FAWELL
12TH DISTRICT, ILLINOIS

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LABOR-MANAGEMENT RELATIONS
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SCIENCE, SPACE, AND
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ENERGY RESEARCH AND DEVELOPMENT
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SELECT COMMITTEE ON AGING

WASHINGTON OFFICE
CANNON HOUSE OFFICE BUILDING
(202) 225-3515
CONGRESSIONAL DISTRICT OFFICE
115 W. 56TH STREET
SUITE 100
CLARENDON HILLS, IL 60514
(312) 696-2002

Congress of the United States House of Representatives

Washington, DC 20515

October 29, 1987

Mr. Lando W. Zech
Chairman
Nuclear Regulatory Commission
1717 H Street, N.W.
Washington, DC 20555

Dear Mr. Zech:

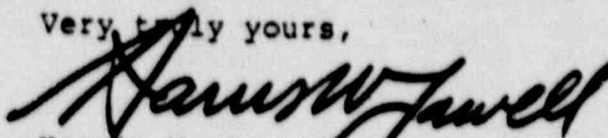
I am writing to protest a proposal by the Nuclear Regulatory Commission to permanently dispose of some 10 million cubic feet of low-level waste inside the city limits of the City of West Chicago, Illinois. I have been contacted by Mayor A. Eugene Rennels of the City of West Chicago and by the DuPage County Board, who strenuously object to this plan. Please be apprised that I was born and raised in West Chicago. I know the subject site very well. When I was a boy in that city, the Lindsay Light & Chemical Company was on that site. Unfortunately, the site is in a residential area and only a few blocks from the West Chicago Community High School. I cannot believe that some 10 million cubic feet of low-level waste should be allowed to remain permanently at that site.

Safety and local concerns, not cost, must dominate the decision-making process. I believe that the NRC has been motivated primarily by a desire to cut costs at the expense of the welfare of the City of West Chicago. I also believe that whatever cost savings the NRC might enjoy would be more than offset by the economic losses to the City of West Chicago, which would include \$12 million in commercial development, 250 new permanent jobs, and \$355,000 per year in local taxes that must be foregone if the waste is permanently stored at its present site.

I would like to know the NRC's own position on this issue. In particular, I would like to know what thought is being given to alternatives to disposal in West Chicago, and why these alternatives are not being taken more seriously. I would also like to know what the NRC sees as being the deciding factors behind its proposal. Finally, I would like to know why this action cannot be postponed until the Illinois low-level radioactive waste compact site is opened in 1993.

I will be awaiting your timely and informative reply. Until then, thank you for your assistance.

Very truly yours,


Harris W. Fawell, M.C.
318 House Office Building

HWF/byb
Enclosures

7001270021
PP

from the
Office of The Mayor



Str:

A. EUGENE RENNELS
Mayor

D.C.

The City of West Chicago SEP 28 1987

September 16, 1987

ILLINOIS

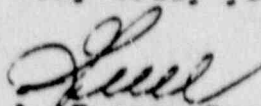
Congressman Harris Fawell
911 North Elm Street
Hinsdale, IL 60521

Dear Congressman Fawell:

Enclosed is a copy of a letter recently sent to Governor Thompson.

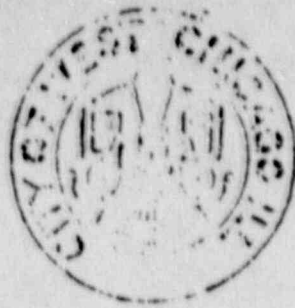
We would greatly appreciate your assistance and support in requesting the Governor to permanently resolve this problem by assuring this radioactive material is located or co-located at the Central Midwest Compact Site.

Very truly yours,


A. Eugene Rennels
Mayor

Att.

NC
2186 CB



A CITY OF ILLINOIS
1900

The City of West Chicago

September 9, 1987

MEMORANDUM

The Honorable James R. Thompson
Governor, The State of Illinois
207 State House
Springfield, IL 62706

Dear Governor:

For more than a decade the City of West Chicago and the various Attorney Generals of the State of Illinois have been fighting one of the state's, if not the nation's, largest low-level radioactive waste problems.

Located on 43 acres in the middle of the City of West Chicago is approximately nine (9) million cubic feet of low-level radioactive waste. The permanent disposal of this material has been the subject of continuing adversarial action and litigation involving state agencies, the City, Kerr McGee Chemical Corp., and the U. S. Nuclear Regulatory Commission.

The major portion of this material has been deemed to be by-product material as defined in Section 11e(2) of the Atomic Energy Act as amended by the Uranium Mill Tailings Radiation Control Act of (UMTRCA).

The U. S. Nuclear Regulatory Commission has now proposed (NUREG0904 Supp 1; June 1987) to allow permanent disposal of the material on 27+ acres of the 43 in the middle of a densely populated residential commercial area in West Chicago. The material is to be placed into an above-grade disposal cell 40' high surrounded by a high security fence and radioactive warning signs with a maintenance, monitoring and surveillance system for 1000 years. NRC proposes that Kerr McGee be responsible for the first 25 years of the MMS system. At the end of that time period their license will be terminated and the federal government will assume ownership and be responsible for the next 975 years of MMS. This decision is predicated totally on lower cost to Kerr McGee Chemical.

The Honorable James R. Thompson
September 9, 1987
Page 2

I have discussed this problem with Dr. Terry Lash, Director, Illinois Department of Nuclear Safety and members of his staff. I have also reviewed the situation with Clark Bullard, Chairman, Central Midwest Interstate Low-Level Radioactive Waste Commission.

It is their consensus that this material should be located at the Central Midwest Compact site. In addition to the West Chicago site not meeting state requirements for disposal of this material, the disposal of this material at the compact site would guarantee an immediate high degree of financial return to the state. In addition this volume would assure the selected developer/operator of the site recovery of a substantial portion of his capital investment.


In addition to the benefit to the state, our Economic Development Director, in collaboration with a local developer, has determined that by moving this material out of West Chicago and releasing the 27 acres to unrestricted use a commercial development could be located on the site. The estimated construction cost, in 1987 dollars, is \$12,000,000.00. This development would generate 250 new permanent jobs and return \$355,000.00 per year to the local taxing bodies.

As discussed with Dr. Lash, in order to locate this material on the site starting in 1993, the agreement between the State of Illinois and the Nuclear Regulatory Commission would need to be amended to incorporate the authority for the state to assume Sec. 11e(2) by-product regulatory jurisdiction.

Accordingly, and on behalf of the residents of West Chicago, we respectfully request your assistance in the matter by your requesting that the Agreement State status be amended to include State of Illinois Regulatory Authority for all of the material presently under NRC license at the closed Kerr McGee facility in West Chicago.

Respectfully yours,

THE CITY OF WEST CHICAGO


A. Eugene Rennels
Mayor

in

cc: Dr. Terry Lash, Director, Illinois Dept. Nuclear Safety
Mr. Clark Bullard, Chairman,
Central Midwest LLRW Compact Commission
Representative Donald Hensel
Senator Doris Karpel

**RESOLUTION
EX-0069-87
OPPOSING PERMANENT SITING OF
RADIOACTIVE WASTE IN DUPAGE COUNTY**

WHEREAS, 10 million cubic feet of radioactive waste was generated and left undisposed in the City of West Chicago on a 27-acre site bounded by a residential and factory area; and

WHEREAS, the Nuclear Regulatory Commission now proposes to permanently dispose of this waste by burying it on this parcel in the City of West Chicago, and to implement a 1000-year monitoring program; and

WHEREAS, disposal of the radioactive waste on this site would make the City of West Chicago and the County of DuPage the home of the second largest radioactive waste site in the nation.

NOW, THEREFORE, BE IT RESOLVED by the members of the DuPage County Board that we join with the City of West Chicago in asserting that it would not be in the best interests of the health, welfare and safety of the citizens of the County of DuPage to locate this hazardous waste site in the County, and that siting of the radioactive waste in the County of DuPage could seriously affect the economic development of the County; and

BE IT FURTHER RESOLVED that the Nuclear Regulatory Commission be urged to dispose of this radioactive waste at one of its alternate locations, including the Illinois low level radioactive waste compact site scheduled to open in 1993; which will not be as adversely affected by disposal of this waste; and

BE IT FURTHER RESOLVED that the County Clerk of DuPage County send a certified copy of this Resolution upon its adoption to each of the following:

President Ronald R. Reagan
2100 Pennsylvania Avenue, Washington D.C. 20515

Hon. Henry J. Hyde
2104 Rayburn, Washington, D.C. 20515

Hon. Farris W. Fawell
Cannon House Office Building, Washington, D.C. 20515

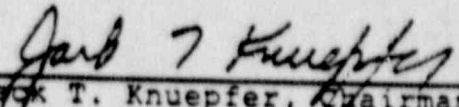
Hon. J. Dennis Hastert
515 Cannon HOB, Washington, D.C. 20515

Governor James R. Thompson
State Capitol, Springfield, IL 62706

Mayor Eugene Rennels
City of West Chicago
475 Main Street
West Chicago, IL 60185

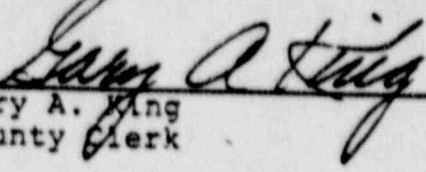
and to Jack T. Knuepfer, Chairman, DuPage County Board.

Approved and adopted this 29th day of September,
1987 at Wheaton, Illinois.



Jack T. Knuepfer, Chairman
County Board

ATTEST:



Gary A. King
County Clerk

Ayes: 19
Absent: 6