U.S. NUCLEAR REGULATORY COMMISSION

RESPONSE TO FREEDOM OF INFORMATION ACT (FOIA) REQUEST

NRC FOIA REQUEST NUMBER(S)
FOIA --89-376

RESPONSE TYPE

	FINAL	X	PARTIAL

DATE DEC 1 4 1989

DOCKET NUMBER(S) *(If applicable)*

REQUESTER
Bruce C. deGrazia

PART I. – AGENCY RECORDS RELEASED OR NOT LOCATED *(See checked boxes)*

	No agency records subject to the request have been located.
	No additional agency records subject to the request have been located.
	Requested records are available through another public distribution program. See Comments Section.
	Agency records subject to the request that are identified on Appendix(es) _____ are already available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC 20555.
X	Agency records subject to the request that are identified on Appendix(es) C are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
	The nonproprietary version of the proposal(s) that you agreed to accept in a telephone conversation with a member of my staff is now being made available for public inspection and copying at the NRC Public Document Room 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
	Agency records subject to the request that are identified on Appendix(es) _____ may be inspected and copied at the NRC Local Public Document Room identified in the Comments Section.
	Enclosed is information on how you may obtain access to and the charges for copying records placed in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.
	Agency records subject to the request are enclosed.
	Records subject to the request have been referred to another Federal agency(ies) for review and direct response to you.
	You will be billed by the NRC for fees totaling $ _____.
	In view of NRC's response to this request, no further action is being taken on appeal letter dated _____ No. _____

PART II. A – INFORMATION WITHHELD FROM PUBLIC DISCLOSURE

X	Certain information in the requested records is being withheld from public disclosure pursuant to the exemptions described in and for the reasons stated in Part II, sections B, C, and D. Any released portions of the documents for which only part of the record is being withheld are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC in a folder under this FOIA number and requester name.

COMMENTS

SIGNATURE, DIRECTOR, DIVISION OF FREEDOM OF INFORMATION AND PUBLICATIONS SERVICES
Donna H. Chung

FREEDOM OF INFORMATION ACT RESPONSE FOIA NUMBER(S): FOIA — 89-376 DATE DEC 1 4 1989

PART II.B – APPLICABLE EXEMPTIONS

Records subject to the request that are described on the enclosed Appendix(es) D are being withheld in their entirety or in part under the Exemptions and for the reasons set forth below pursuant to 5 U.S.C. 552(b) and 10 CFR 9.17(a) of NRC Regulations.

		1. The withheld information is properly classified pursuant to Executive Order (EXEMPTION 1)
		2. The withheld information relates solely to the internal personnel rules and procedures of NRC. (EXEMPTION 2)
		3. The withheld information is specifically exempted from public disclosure by statute indicated. (EXEMPTION 3)
		Sections 141-145 of the Atomic Energy Act which prohibits the disclosure of Restricted Data or Formerly Restricted Data (42 U.S.C. 2161-2165).
		Section 147 of the Atomic Energy Act which prohibits the disclosure of Unclassified Safeguards Information (42 U.S.C. 2167).
		4. The withheld information is a trade secret or commercial or financial information that is being withheld for the reason(s) indicated. (EXEMPTION 4)
		The information is considered to be confidential business (proprietary) information.
		The information is considered to be proprietary information pursuant to 10 CFR 2.790(d)(1).
		The information was submitted and received in confidence pursuant to 10 CFR 2.790(d)(2).
X		5. The withheld information consists of interagency or intraagency records that are not available through discovery during litigation. (EXEMPTION 5) Applicable Privilege:
	X	Deliberative Process: Disclosure of predecisional information would tend to inhibit the open and frank exchange of ideas essential to the deliberative process. Where records are withheld in their entirety, the facts are inextricably intertwined with the predecisional information. There also are no reasonably segregable factual portions because the release of the facts would permit an indirect inquiry into the predecisional process of the agency.
	X	Attorney work-product privilege. (Documents prepared by an attorney in contemplation of litigation.)
		Attorney – client privilege. (Confidential communications between an attorney and his/her client.)
		6. The withheld information is exempted from public disclosure because its disclosure would result in a clearly unwarranted invasion of personal privacy. (EXEMPTION 6)
		7. The withheld information consists of records compiled for law enforcement purposes and is being withheld for the reason(s) indicated. (EXEMPTION 7)
		Disclosure could reasonably be expected to interfere with an enforcement proceeding because it could reveal the scope, direction, and focus of enforcement efforts, and thus could possibly allow them to take action to shield potential wrongdoing or a violation of NRC requirements from investigators. (EXEMPTION 7 (A))
		Disclosure would constitute an unwarranted invasion of personal privacy (EXEMPTION 7(C))
		The information consists of names of individuals and other information the disclosure of which could reasonably be expected to reveal identities of confidential sources (EXEMPTION 7 (D))
		OTHER

PART II. C – DENYING OFFICIALS

Pursuant to 10 CFR 9.25(b) and/or 9.25 (c) of the U.S. Nuclear Regulatory Commission regulations, it has been determined that the information withheld is exempt from production or disclosure, and that its production or disclosure is contrary to the public interest. The persons responsible for the denial are those officials identified below as denying officials and the Director, Division of Freedom of Information and Publications Services, Office of Administration and Resources Management, for any denials that may be appealed to the Executive Director for Operations (EDO).

DENYING OFFICIAL	TITLE/OFFICE	RECORDS DENIED	APPELLATE OFFICIAL	
			SECRETARY	EDO
Robert M. Bernero	Director, Office of Nuclear Material Safety and Safeguards	D/1		X
Joseph Scinto	Deputy General Counsel for Hearings and Enforcement	D/2 - D/3 - D/4	X	

PART II. D – APPEAL RIGHTS

The denial by each denying official identified in Part II.C may be appealed to the Appellate Official identified in that section. Any such appeal must be in writing and must be made within 30 days of receipt of this response. Appeals must be addressed as appropriate to the Executive Director for Operations or to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should clearly state on the envelope and in the letter that it is an "Appeal from an Initial FOIA Decision."

APPENDIX C

1.	12/2/81	Letter from Percy to Kammerer (9 pages)
2.	12/8/81	Note from Felton to Files (1 page)
3.	12/10/81	Note from Felton to Files (1 page)
4.	1/12/82	Letter from Kammerer to Corcoran (1 page)
5.	5/25/82	Letter from Dircks to Corcoran (2 pages)
6.	3/15/83	Decision of the Presiding Officer, signed by Maussnardt (17 pages)
7.	11/16/84	Memorandum from Hind to Lieberman (30 pages)
8.	12/10/84	Record entitled, "Kress-Creek - Staff Affirmative Case" (18 pages)
9.	11/26/85	Memorandum from Cunningham to Kerr (1 page)
10.	2/18/86	Letter from Crow to Fort (1 page)
11.	4/14/86	Memorandum from Mapes to Lubenau (1 page)
12.	5/14/86	Letter from Vaughn to Lickus (3 pages)
13.	9/19/86	Memorandum from Cunningham to Kerr (1 page)
14.	8/4/88	PNO-III-88-69 (1 page)
15.	10/13/88	Adjudicatory Issue Information (2 pages)
16.	4/4/89	Memorandum from Cunningham to Thompson (1 page)
17.	4/19/89	Daily Highlights (1 page)
18.	4/19/89	Letter from Salus to Holt (41 pages)

APPENDIX D

RECORDS WITHHELD IN ENTIRETY

1. 6/27/84 Letter from Steve Y. Tsai to W. A. Nixon transmitting revised draft report entitled, "Evaluation of the Kerr-McGee Proposed Stabilization Plan for Compliance with Environmental Protection Agency Standards" (51 pages)
Exemption 5 - Deliberative Process*

2. 9/20/86 Memorandum from William J. Olmstead to G. Wayne Kerr, subject: Licensing of Kress Creek Radioactive Materials (3 pages)
Exemption 5 - Attorney Work-product

3. 8/19/88 Memorandum from James P. Murray to Hugh L. Thompson, subject: Commission Decision Regarding 274B Agreement with Illinois and Related Order in Kress Creek (2 pages)
Exemption 5 - Attorney Work-product

4. 8/19/88 Revised memorandum from James P. Murray to Hugh L. Thompson, subject: Commission Decision Regarding 274B Agreement with Illinois and Related Order in Kress Creek (2 pages) with attached draft letter to Terry Lash (3 pages)
Exemption 5 - Attorney Work-product

*For your information, this draft document was never issued as a final report. Factual contents of the document were published in NUREG-0904, which is available for public inspection and copying in the NRC Public Document Room.

BURDITT, BOWLES & RADZIUS, CHARTERED

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August 25, 1989

FREEDOM OF INFORMATION ACT REQUEST
FOIA-89-376
Rec'd 8-28-89

Mr. Dick Lavins
Freedom of Information Officer
Nuclear Regulatory Commission
Washington, D.C.

Re: FOIA Request #89-266
Re: Kerr-McGee, etc., et al.
Our File No. 10350-023

Dear Mr. Lavins:

I received the package of documents you sent pursuant to the above request. I was surprised to find that so few documents fulfilled that request. Upon consulting with my colleague John Pfeifer who, as you recall, was present during our telephone discussion regarding our FOIA requests to your agency, we concluded that there had been a misunderstanding about the scope of the request, which we believe was much broader than what was actually fulfilled.

As a result, in order to eliminate any further misunderstandings, I am making another FOIA request to include all documents after 1970 not in the NRC Public Document Room and which refer or relate to any of the following entities and their connection with the thorium milling facility in West Chicago, Illinois: Kerr-McGee Corporation, Kerr-McGee Chemical Corporation, American Potash and Chemical Corporation and/or the Lindsay Light Company.

Moreover, inasmuch as there may be some duplication between the documents fulfilling this request and those already in our possession, we request

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that we be permitted to examine these documents at your offices, so that we may select those items we wish duplicated.

Very truly yours,

Bruce C. deGrazia

cc: John G. Pfeifer, Esq.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

NOV 16 1984

MEMORANDUM FOR: James Lieberman, Director and Chief Counsel
Regional Operations and Enforcement Division
Office of the Executive Legal Director

FROM: Jack A. Hind, Director,
Division of Radiation Safety
and Safeguards
Region III

SUBJECT: KRESS CREEK DECONTAMINATION LITIGATION

Enclosed is information obtained from Region III files and other sources relating to certain of the questions set out in your memorandum dated September 6, 1984. The questions addressed are those which Region III was asked to comment on during a September 9, 1984 telephone conference with OELD and NMSS representatives. Although the search included the complete file, it was not exhaustive. Further review will undoubtedly be necessary as the staff case is developed.

Thus far, we have found little information to indicate significant releases from either the disposal or factory sites and little or no information was found indicating release or environmental monitoring before 1980 by Kerr McGee or its predecessor companies. There is anecdotal information about transfer of process wastes to ponds on the disposal site but no system details were found. In this connection, we have found no construction details on building 34, which we believe housed the pumping station for this process. Similarly, we have no details concerning an abandoned drain line from the vicinity of a process building (#9) other than its inclusion on a system drawing. These may be fruitful areas to pursue under discovery.

Our information concerning details of the city storm sewer system that leads to Kress Creek is also scanty. Both NMSS and Region III have a map of the system. We have identified two of the onsite manholes but have found no evidence of altered drains or indications of direct pathways from the tailings piles. The portion of the sewer on the disposal site is enclosed in a berm for about half its length but we have no information whether it was part of the original (circa 1924) construction. Neither do we have any information about repairs or modifications to this line by anyone and we were told that the city keeps no such records. This may also be a matter for discovery.

c/7

(BRACKETED) WITHHELD IN

P/ 8506190231 (4pp)

As noted in the enclosure, we found elevated radiation levels in a manhole upstream of the Kerr McGee factory site but don't know what the material is or where it came from. We intend to pursue this matter further with the help of the city engineer if possible.

Region III will continue to cooperate in the development of information necessary to this case. M. Schumacher (FTS 388-5514) continues to be the Region III technical contact in this matter.

Jack A. Hind

Jack A. Hind, Director
Division of Radiation Safety
and Safeguards
Region III

Enclosures: As stated

cc w/encls:
R. Page, NMSS
W. Crow, NMSS
W. Nixon, NMSS
L. Cuoco, ELD
S. Burns, ELD
B. Davis, RIII

ENCLOSURE

#3 Location and number of tailings piles and detention ponds.

The following are abridged quotations of inspection reports.

April 2, 1956; "The waste is...in sludge piles on 12 acres...." "...liquid waste is pumped into open sumps on the 12 acres."

December 3, 1957; "Liquid process wastes are discharged...into a large sump basin."

April 19, 1961; "The pile of gangue is located at the southwest corner of the plot and is within 30 feet of the west fence."

March 23, 1963; "...and the licensee has several retention ponds for the collection of all liquid process waste from the plant."

July 7, 1973; "The liquid is discharged into pond 1,...into #2 ...into #3...pond #4."

The "Site Stabilization Plan for Kerr-McGee Chemical Corps." blueprint dated July 10, 1978, shows the location of five ponds. The Plan For Permanent Disposition of Thorium Bearing Waste Solids at West Chicago, IL states, that ponds 1 and 2 were built in the 1950's, and a small pond on the manufacturing site was abandoned. About 1966 No. 3 pond was placed in use and operated in series with No. 1 or No. 2. In 1970 ponds No. 4 and No. 5 were put into operation in series downstream of No. 3. The dotted outlines, added by RIII personnel, are ponds 1-5 located approximately where they are shown on the June 10, 1978 blueprint previously cited.

The attached drawings (not to scale) and copies of photographs show a waste pile near the southwest corner of the "12 acre" waste storage area. This appears to be the same pile that is currently on the licensee's disposal site. The northern most "Gray Mud Waste Pile" on the drawing (attachment 1) appears to be approximately where a pond is shown on the photograph copies. This would be pond #2 on the current numbering system.

Several pits shown in the center of photograph #11 (attachment 2) and the right center of photograph #12 (attachment 3) are on the "production" site. One of these may be one referred to in the Plan cited above.

#4 Controls that have existed over Tailing Piles

Region III's first dealings with the West Chicago site was an information gathering inspection on April 2, 1956. A description of the 12 acre site stated that it was not fenced on one side. The next report, of an inspection on December 3, 12, 1957 and April 9, 1958, described the "Restricted Waste Storage Area" in Enclosure B, Drawing #1 (see attachment 1) as "Area enclosed by an eight foot wire fence and posted

with appropriate radiation warning signs. Gates equipped with chain and locks." The first mention of a guard was in a report of an inspection conducted between April and August 1962. The guard was located in the production area.

The piles remained uncovered until July 1983 when an asphalt suppression system (a light coat of cationic asphalt emulsion followed by a nonwoven geotechnical fabric and then a relatively thick top coat of asphalt emulsion) was applied.

Currently, the site is completely fenced with a round the clock guard at the only entry.

#5 Evaluation of the ORAU Survey

We have no fundamental problem with this study. It was conducted in accordance with a satisfactory plan and gave results generally consistent with previous surveys by Frigerio (1978) and by ORAU (1981). However, we note that contamination undoubtedly extends beyond the southern boundary of the survey, i.e., further downstream along the West Branch of the DuPage River from its confluence with Kress Creek.

#6 Theories and Supporting Facts as to when Kress Creek Contamination Occurred.

It is generally supposed that thorium reached Kress Creek via the storm sewer throughout the operation of the site. According to the city engineer, the storm sewer has been in existence since the 1920's. It may be further speculated that releases may have been higher during earlier periods when presumably fewer controls may have been exercised. However, we have no real factual basis to support these suppositions. Our first pass through the Region III files found nothing to point to a specific period of high release. The monitoring records which date from about 1980 indicate continuing storm sewer release from the factory site but at levels below regulatory limits. We do not know if releases at these levels for a period of 40 or 50 years could account for the contamination found along Kress Creek, but we suspect not.

In October, we located two storm sewer manholes (circled on Attachment 4) on the Kerr McGee site. Water samples were taken from them. Direct radiation readings taken inside (about 100 uR/hr) indicate the presence of radioactive material. We were not equipped to take sediment samples at the time but will try again.

We also located two apparent storm sewer manholes (circled) on George Street north of the site. Both were dry so that the direction of water flow could not be ascertained, but the map shows they are upstream on a line that joins the Kress Creek storm sewer upstream of the disposal site. We were not equipped to take sediment samples - they will be taken later. However, direct radiation measurements on the one west of the EJ&E railroad showed near background radiation level inside (10 uR/hr) while the one east of the tracks (upstream) was much higher (about 2000 uR/hr) than any of the others encountered. We can't explain this but we note that the sewer appears to originate in the direction of the Westrum Building located at 185 West Washington Street (see attachment 7).

The map shows no sewer connection. This building, formerly called the W1 building by Kerr McGee was said to have been used as a laboratory by Kerr McGee and/or its predecessor companies.

Measurements and observations during an extended (November 1979 - January 1980) inspection of the building indicated radioactivity in various pipes and drains, including a basement sewer pipe. We can only speculate as to the possible connection, if any, between these findings and those in the storm sewer (presumed) manholes on George Street. One would expect the building sewer to connect to the sanitary sewer and not the storm sewer. The different sewers observed through the numerous manholes on George Street near the tracks appear to be of different vintages.

Various bottles and vials observed during the above mentioned inspection, including a bottle with a Lindsay Chemical Company label marked "mesothorium" (radium-228) and dated 1944. The inspection report states that "activities with mesothorium as a separated product and with Ra-228 were conducted under the jurisdiction of the State of Illinois."

In summary, we have not yet been able to ascertain just when Kress Creek became contaminated. It is likely that it has occurred to some degree throughout the history of the factory site. In addition there is evidence suggesting the possibility that material from a former laboratory on West Washington Street may have also entered the sewer system and hence the creek at some unknown time in the past.

#7 Possible pathways by which material may have migrated from the site.

a) Factory Site

1. Rain carrying contamination from the site via building gutters and downspouts to street or site surface drains. Material washed to the street would go to the storm sewer system by way of street curbs, gutters, and gutter drains. Street gutter drains are present on Factory Street. The presence of building gutters and downspouts discharging directly onto the street could not be verified.

2. Site surface drains connected directly to the storm sewers would allow for a direct pathway. Although an existing drain pipe connected to an abandoned drain near building 9 is shown on Calalytic, Inc. Engineering Department "Water Treatment Underground Piping Plan" (attachment 5) no evidence for or against this possibility could be found upon examining sewers on Factory Street due to (1) confusion between sanitary and storm sewers and (2) the apparent differences in vintages of some sewers.

3. Site surface drains connected to building 14 sump and pump house would discharge through the building by overflowing the sump to the storm sewer. An existing discharge pipe from building 14 is shown on the Calatytic Plan. The system was modified in November 1982 to eliminate this discharge method except for extremely heavy rainfall.

4. Process waste in a slurry or liquid form, discussed in inspection reports and licensee system descriptions, was transferred to the disposal site from the production site by way of building 14. Although the exact architecture of this building is not currently obvious, it appears that more than one sump (pit) was below the building. If the process waste flowed to one of these sumps by gravity for pumping to the disposal site, the potential for a release to the storm sewer due to overflow or direct communication between the process waste and surface drain discharge sump may have existed. This is simply speculation at this time.

b. Disposal Site

Material washed off the tailings pile on the disposal site to the storm sewer by way of leaching, direct flow through ground fissures, animal burrowing, vegetation intrusion (roots) or deterioration due to age. The manhole immediately west of the tailings pile did not appear to have been modified and no entry pipe from the direction of the pile could be seen in the manhole. Although run-off of material found beyond the storm sewer line was documented in a report of a Region III inspection performed in July 1976, an earth berm is currently present above the storm sewer line between the pile and the west fence line. We do not know if the berm was part of the original sewer construction, but in a letter from F. Lyons to J. Keppler dated July 26, 1976, it was stated that "The contour of our property has been graded to prevent runoff." This was in reference to contamination found off site west of the disposal site boundary. The berm merges into the general surface elevation some distance south of the pile as the sewer line moves toward the southwest portion of the disposal site. The ground surface elevation is generally lowest at the southwest corner of the site where it appears that surface water may temporarily collect during wet periods. It is possible that surface runoff could have entered the sewer in this area by percolating through the ground but this could not be confirmed. We were unable to find any manholes in this area although the city engineer's map indicates one is present.

#9 Factual basis for concluding the Kress Creek contamination came from the Kerr McGee West Chicago site.

The circumstantial basis for this conclusion appears strong. The material in Kress Creek is predominantly thorium-232 and daughters similar to that used on the site and at the West Washington Street location formerly owned by Kerr McGee. We know of no other source of such material in the area that could plausibly be cited as the cause. There is also the known overflow connection between the storm sewer collection sump in building 14 on the factory site and the West Chicago storm sewer leading to Kress Creek. Our records indicated that this sump and the outfall at Kress Creek have been monitored for thorium since about 1980 with occasional positive analyses being made. There is reference made in a letter dated October 21, 1975 (attachment 6) of considerable drainage from the percolation ponds into the storm sewer under the west border of the 27 acre site and also southerly into the DuPage River.

At this time we don't appear to have a stronger basis for this conclusion. We believe, however, based on indications from our files, that building 14 was also a pumping station for transferring waste from the factory to the disposal site during the entire licensed operational period.

We also suspect, without basis in fact, that there may have been a connection between this transfer operation and the city storm sewer. However, we know nothing definite about the history and construction and little about use of building 14 or of the transfer system and so have difficulty in further developing a plausible scenario.

This may be a fruitful area for discovery both as to this question and question 6.

#10 Known routine or extraordinary discharges, releases or spills from the site.

A review of 35 inspection reports covering December 3, 1957 through August 1, 1984 did not produce any information on known routine or extraordinary discharges, although several nonroutine discharges were documented. The discharges were via the building 14 sump which drained the factory site, fed into the West Chicago storm sewer and discharged into Kress Creek. Releases associated with heavy rains occured 4/28/81, 3/15-16, 4/2-3, 16 and 12/6/82. None of the releases were above regulatory limits (10 CFR 20.106(a)).

The only airborne release noted (see question 11) would not support the Kress Creek contamination observed.

One instance of material beyond the disposal site west boundary was noted in a July 1976 inspection report. Direct readings of 0.5-6 mR/hr were recorded "to several feet out from the fence." This material was removed on or about July 26, 1976. It is unlikely that this isolated instance alone can account for the Kress Creek contamination.

#11 Enforcement history of Kerr-McGee and predecessors.

Twenty-nine items of noncompliance in 10 out of a total of 35 inspection reports for the period of December 3, 1957 through August 1, 1984 were categorized to determine their potential for involvement in the Kress Creek contamination. Of the 29 items, 3 dealt with excessive radiation levels in unrestricted areas, 1 with incineration of contaminated items and 1 with the release of materials to an unrestricted area.

The excessive radiation levels were measurements taken between the licensee's west fence and the E. J. and E. Railroad by AEC representatives and ranged from "1.2 to 1.9 milliroentgens per hour (mR/hr)." The readings were of the waste material on site, not of material in the unrestricted area.

Incineration of contaminated items took place twice (January 5 and 12, 1968). Empty monazite ore bags were incinerated with a resultant maximum in-stack air sample concentration of "0.137 x 10^{-11} uCi/ml." (Authorization to incinerate was received by Amendment No. 2 dated March 27, 1968.) Subsequent samples from 23 licensed incinerations between 4/1/70 and 2/11/72 resulted in the highest result being "0.367 x 10^{-11} uCi/ml." Most ranged from "0.3-0.1 x 10^{-11} uCi/ml."

The release of materials to an unrestricted area occurred for the one year period ending June 11, 1983 during which time the annual average concentration limit for lead-212 (6E-10 uCi/cc) was exceeded by a factor of 1.4. The annual average concentration for thorium was not exceeded during this period.

It appears unlikely that airborne releases offsite due to incineration and the waste pile contributed appreciably to the contamination measured in Kress Creek.

#13 Storm sewer that crosses the West Chicago site.

The portion of the West Chicago storm sewer system which parallels the factory site on the east and the disposal site on the west and crosses Kerr McGee property near the southern boundary of the intermediate site, was constructed about 1924 in accordance with a West Chicago ordinance. This section originates at Factory and Blair Streets. No maps of the storm sewer system were available until 1979 when the current city engineer had a storm sewer system drawn, presumably from the ordinance specifications. A copy of this map was obtained from West Chicago and is available in Region III.

The engineer stated that no written maintenance records are kept. Two mentioned instances of repair of this system were due to a collapse of a section at the intersection of Brown and Factory Streets, and replacement of a section crossing under Roosevelt Road. The only substantiation of these would be purchase requisitions for materials used. Further information may be obtainable from the recollections of a foreman who has been a city employee for approximately 30 years.

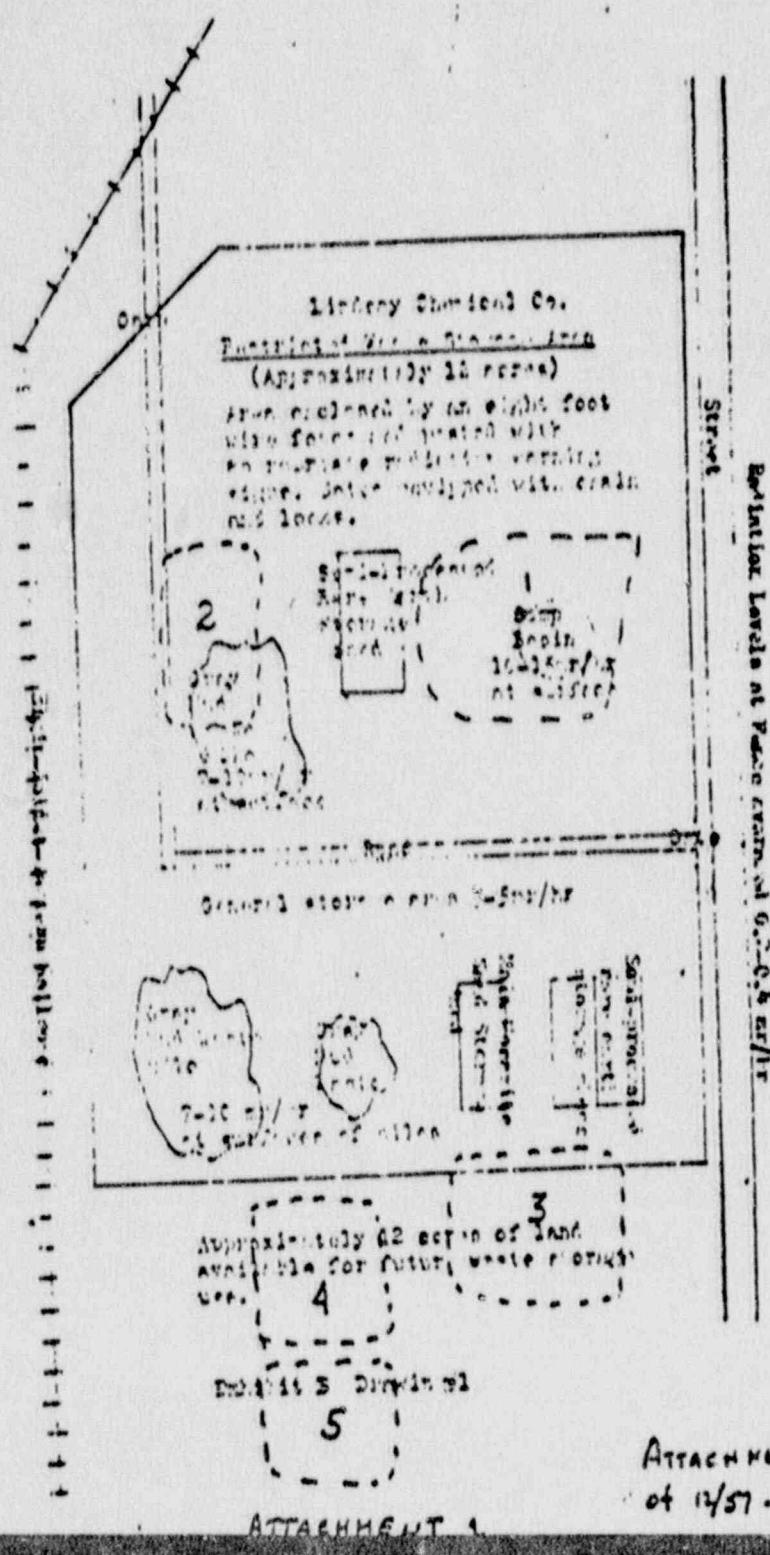
A section of storm sewer paralleling the factory site on the west side of the E.J.&E added circa 1951 runs under the railroad embankment and joins the east section on the disposal site. Comprised of sections from both 1924 and 1951, it appears to originate as far north as Washington and Wood Streets, the direction of the West Washington location of bulding W1 mentioned in Question 6 (see attachment 7). There is some uncertainty about the storm sewer in this area and where it crosses the tracks on George Street. Some modifications may have been made about the time of the 1951 connection. Better understanding may shed some light on the contamination of Kress Creek.

In addition to the manholes discussed in response to question 6, the licensee knows the location of an additional manhole which connects the west section to the section running south on the disposal site.

The manhole south of the one closest to the tailings pile on the disposal site could not be located by regional personnel walking the site.

#14 Measurements of activity at the storm sewer outlet

Attached are copies of records in our files of measurements made at the Kress Creek storm sewer outfall. Our files do not indicate any routine sampling being done before April 1980. The attached record covers the period through October 1982 and includes both gross measurements and isotopic analyses.

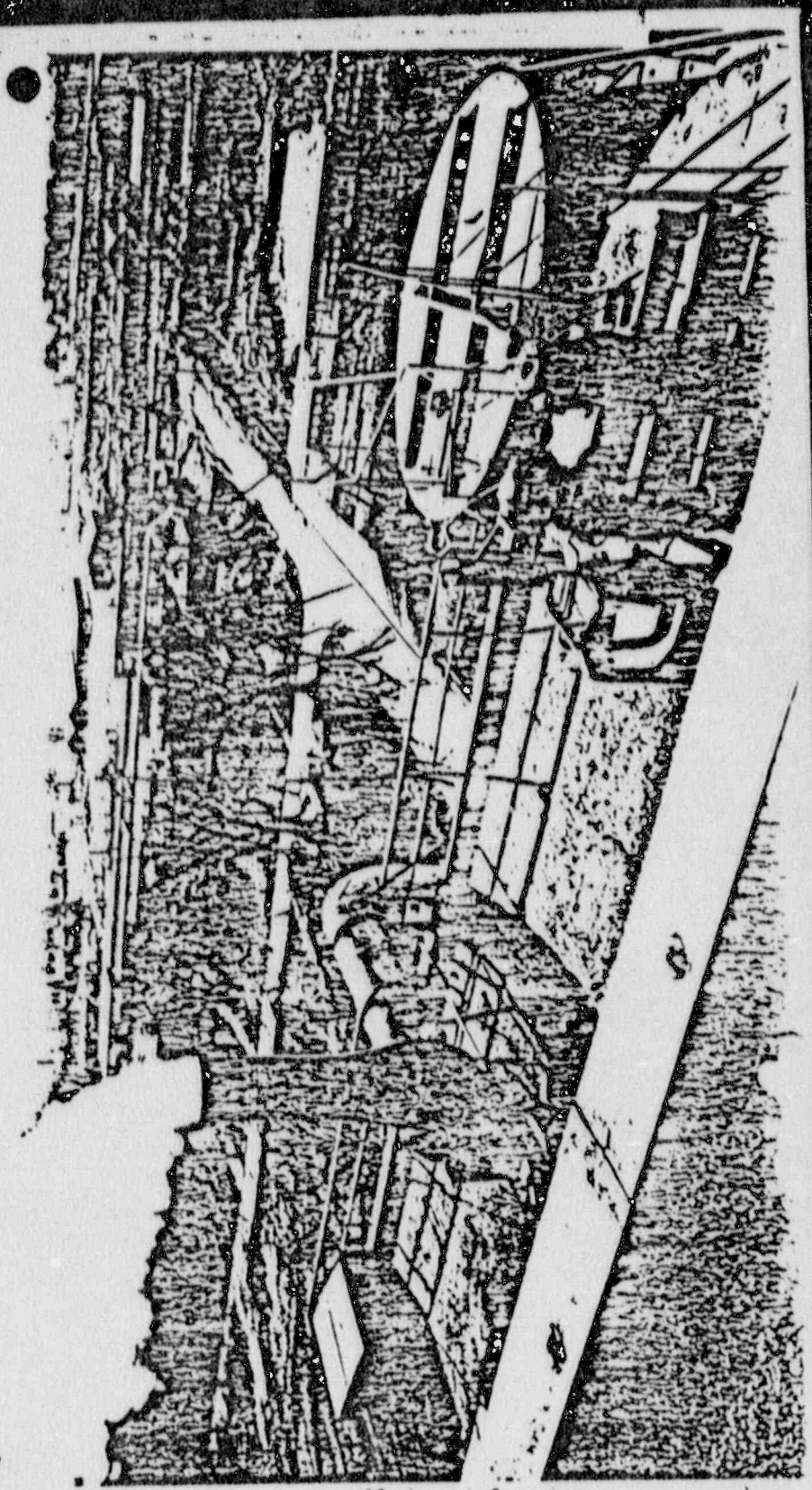


ATTACHMENT 1

ATTACHMENT TO REPORT
of 12/57 - 4/58

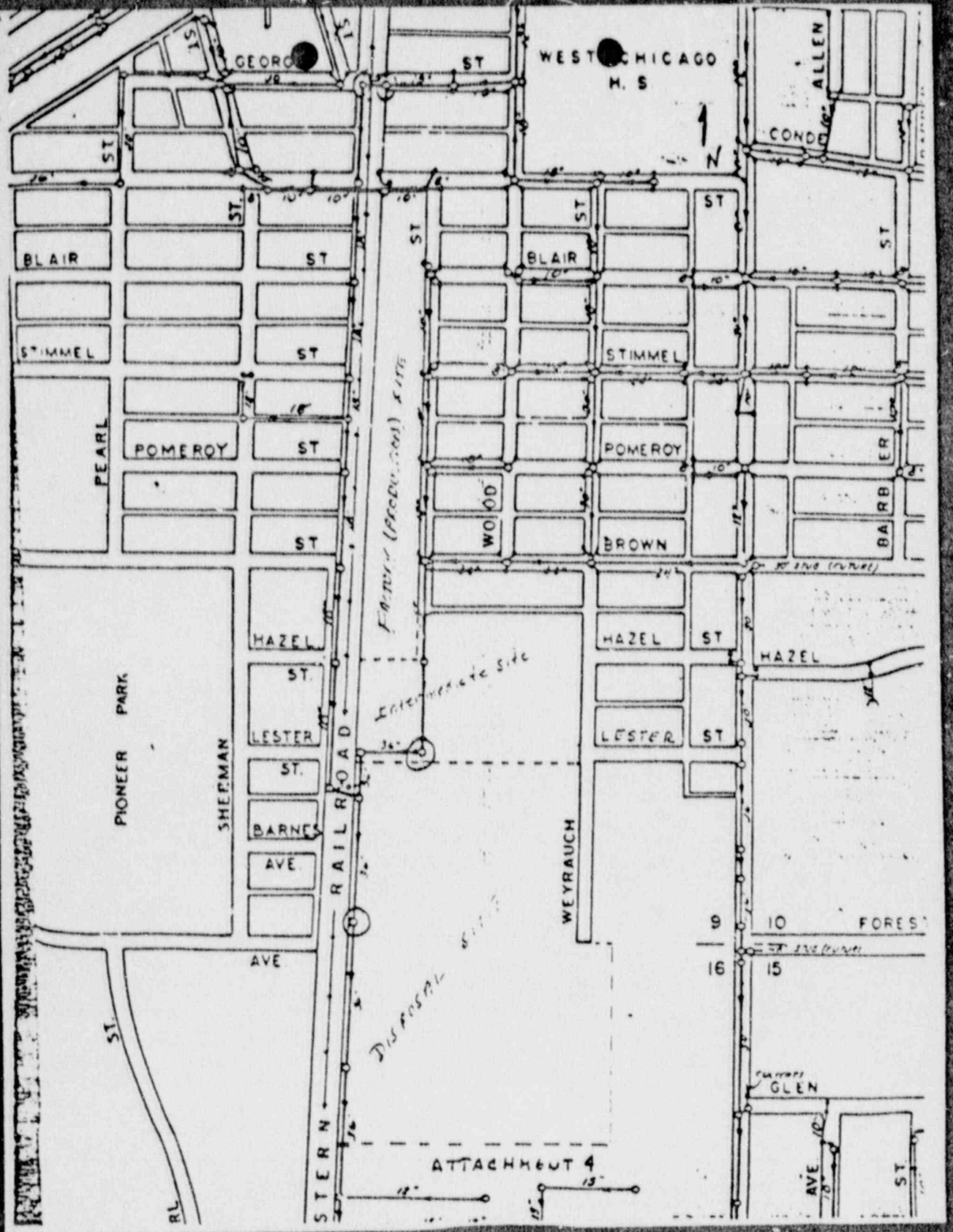
ATTACHMENT TO REPORT
of 12/57 - 4/58

ATTACHMENT 2



ATTACHMENT TO REPORT
of 12/57 - 1/58

ATTACHMENT 3


WEST CHICAGO H. S
ALLEN
COND
GEORGE
ST
BLAIR
STIMMEL
PEARL
POMEROY
BROWN
WOOD
BARBER
HAZEL
LESTER
BARNES
AVE
PIONEER PARK
SHERMAN
FARLEY (PROPOSED) SITE
Intermediate Site
RAILROAD
STERN
WEYRAUCH
DISPOSAL SITE
FOREST
GLEN
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16
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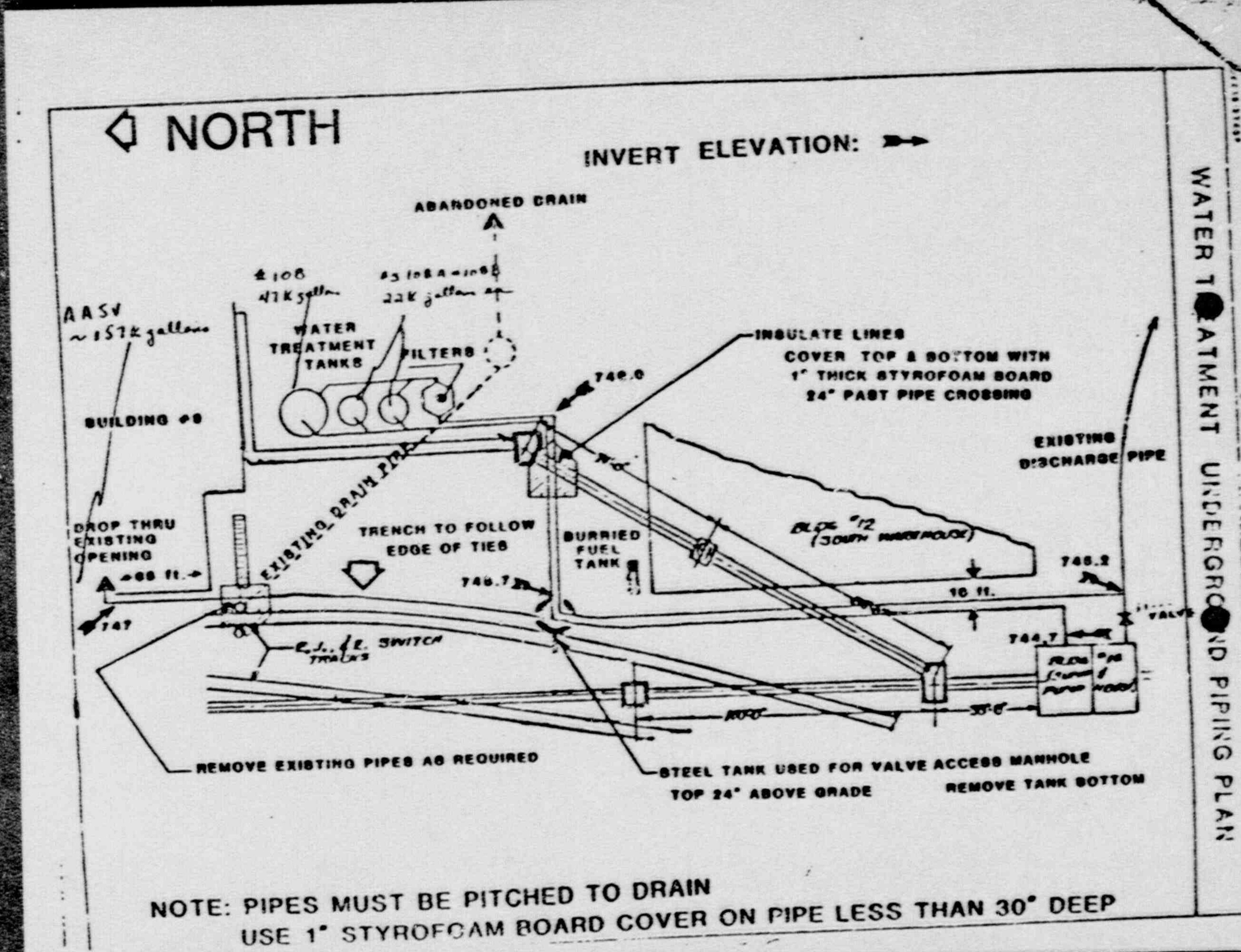


NORTH
INVERT ELEVATION:
ABANDONED DRAIN
#108
47K gallons
AASV
~157K gallons
WATER
TREATMENT
TANKS
FILTERS
BUILDING #9
INSULATE LINES
COVER TOP & BOTTOM WITH
1" THICK STYROFOAM BOARD
24" PAST PIPE CROSSING
746.0
EXISTING
DISCHARGE PIPE
DROP THRU
EXISTING
OPENING
TRENCH TO FOLLOW
EDGE OF TIES
EXISTING DRAIN PIPE
BURRIED
FUEL
TANK
BLDG #12
(SOUTH WAREHOUSE)
746.7
746.2
10 ft.
VALVE
744.7
747
E.J. & E. SWITCH
TRACKS
REMOVE EXISTING PIPES AS REQUIRED
STEEL TANK USED FOR VALVE ACCESS MANHOLE
TOP 24" ABOVE GRADE
REMOVE TANK BOTTOM
NOTE: PIPES MUST BE PITCHED TO DRAIN
USE 1" STYROFOAM BOARD COVER ON PIPE LESS THAN 30" DEEP
WATER TREATMENT UNDERGROUND PIPING PLAN

KERR-McGEE

October 21, 1975

Mr. William Crow, Chief
Fuel Fabrication & Reprocessing Branch
Directorate of Licensing
United States Nuclear Regulatory Commission
Washington, D. C. 20545

RE: Docket No. 40-2061
License STA 583

Dear Mr. Crow:

This is in further reference to the request of Kerr-McGee Chemical Corporation to amend its license for its West Chicago Facility.

Development of Disposal Plan

The closing of this facility and the disposition of the property and particularly of the waste disposal area has been under study by Kerr-McGee since 1971. The first study in late 1971 was primarily a radiation survey of the buildings and property to determine the scope of the project. In 1972 the decision was made to terminate manufacturing operations at West Chicago at the end of 1973. During 1973, a concerted effort was made to sell the facility as a going business. Many companies, large and small, showed an interest and made investigations of the property and facilities. Nevertheless, no one purchased the business.

In 1974 the Corporate Physical Science and Measurement Department studied the options available for decommissioning the facility.

Several options were discarded as being impractical or uneconomical. These included the idea of diluting all of the thorium-bearing wastes to under the "source material" level of 0.05% thorium plus uranium. This would have required about 640 acre-feet of soil and raised the elevation of the 97-acre storage site by about 24 feet.

A second option, also discarded, was the proposal to remove the thorium-bearing wastes from the site and transport them to another Kerr-McGee facility such as Cimarron, Oklahoma or Grants, New Mexico. The cost to contain the wastes at Cimarron was estimated at almost $2,900,000 plus the transportation costs. Transportation costs to Grants were estimated at over $3,000,000. The total cost for either of these proposals would be considerably more than these amounts. In November, 1974 this proposal was also discussed with the Illinois Division of Radiological Health at Springfield. They stated that they did not want this waste material transported to the Illinois disposal site.

2138

ATTACHMENT 6

The final plan, as submitted to you on September 25th, was developed late in 1974 on consultation with Mr. Paul Klevin of Valley Stream, New York. Mr. Klevin, formerly with the AEC and EPA, had been employed by the W. R. Grace Corp. in 1974-75 as a consultant to supervise the decommissioning of their rare earth and thorium facility at Pompton Plains, New Jersey. Mr. Klevin was then employed by Kerr-McGee Chemical Corporation as a consultant to help develop our disposal plan. The W. R. Grace facility was similar to but consideraly smaller than the West Chicago Facility.

A civil engineering survey and plans for the 27-acre disposal site were prepared for us by Rempe-Sharpe Associates, Inc. of Geneva, Illinois. Upon completion of the civil survey Rempe-Sharpe estimated the cost of grading the 27-acre disposal site as shown on the submitted drawings at $254,000.

In early 1975 Kerr-McGee's Corporate Real Estate Department determined that the 7.5 acre manufacturing site and buildings were not readily salable as such and that this property should be cleared for sale as land. In the Spring of this year bid proposals were sent out to clear the buildings from the site. It was understood that any contaminated rubble or equipment would be buried on the 27-acre site.

At the time these bids were being reviewed, several parties expressed an interest in purchasing all or part of the facility in an "as-is" condition. On this basis the property was offered for sale and the successful bidders have signed a contract of sale contingent on the transfer of the NRC license. The purchasers understood the need for and have agreed to the decontamination of buildings and equipment and to continue the Kerr-McGee plan for the waste storage area as a permanent storage site for the thorium-bearing waste materials.

Environmental Effects of Waste Storage

It was indicated in the plan submitted on September 25th that the thorium-bearing waste materials stored at the 27-acre site contained insoluble thorium compounds, the ore residues being thorium phosphate and the precipitated residues being largely thorium fluoride, thorium oxalate or thorium oxide (or hydroxide).

We have resampled all of the solid wastes and have taken several samples of ground water from the area and the existing ponds. These samples are presently at the Kerr-McGee Technical Center at Oklahoma City awaiting tests. The solids will be tested for water leachability at several levels of pH. At the request of your Mr. Wayne Hansen all samples will be run for isotopes of thorium and uranium. Results of these tests are not expected until some time in November.

It is to be expected that all soluble and readily dissolvable materials have long since leached into the ground. The surface soil structure in the storage area is a layer of about 20 to 30 feet of gravelly soil under which is a layer of clay. Mr. Joseph Rempe of Rempe-Sharpe Associates had indicated to us that the flow of

sub-surface drainage is in a generally southeast and then southerly direction. In a study in 1967 Mr. Rempe showed that there was considerable drainage from the percolation ponds into the storm sewer under the west border of the 27-acre site and also southerly into the DuPage River. This data was presented to the Illinois EPA. The drainage into the storm sewer was readily detected and was monitored regularly by Kerr-McGee and by the Illinois EPA.

During the operation of the rare earth plant and the disposal of liquid effluents by percolation, the liquid effluents were maintained in an acid condition at a pH of about 2.0. It is the opinion of those experts familiar with uranium extraction and the chemistry of our processes that the small amount of uranium occurring in monazite ore was extracted by acid and transported to the waste disposal ponds in a soluble form where it percolated into the subsurface. To our knowledge, no attempt was made by the company or the State to monitor uranium in any effluents other than what may have been reported as radioactivity in our standard test reported to the Illinois EPA, examples of which are attached to the Plan.

I will report the results of the leachability tests of the thorium-bearing solids as soon as they are available from our Technical Center. I understand there is some delay due to tests being made for renewal of our Sequoyah Facility license.

Please let me know if there is any further information you need to facilitate the amendment of our license.

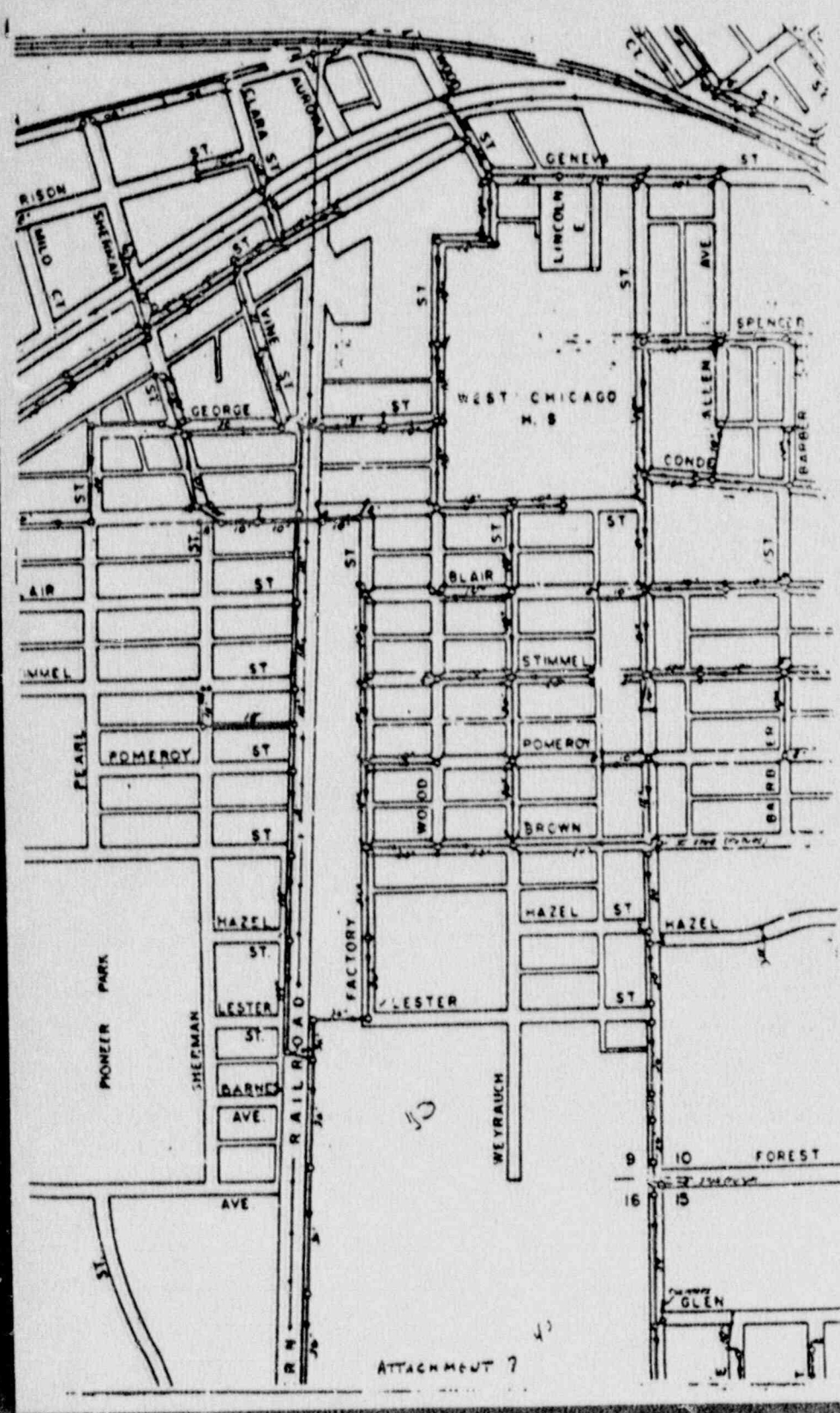
Very truly yours,

R J Vreeland

R. J. Vreeland
Senior Project Engineer

RJV:ph

cc: L. E. Craig
R. P. MacLean (2)



ATTACHMENT 7

Radiological Survey of Kress Creek - Final Report - 11/81
(ORAU)

TABLE 1

RADIONUCLIDE CONCENTRATIONS IN SOME SOILS ALONG RIVER CREEK

Sample No.	Type and Location*	Radionuclide Concentration (pCi/g)					Exposure Rate at 1 meter above surface (μR/hr)
		Th-232	Th-228	Ra-226	U-235	U-238	
1	Systematic - upstream	1.3 ± 0.5[b]	0.99 ± 0.08	1.2 ± 0.3	0.16 ± 0.11	< MDA[c]	8
2	Systematic - upstream	<0.5	<0.27	1.1 ± 0.3	0.15 ± 0.13	< MDA	8
3	Systematic - upstream	1.0 ± 0.4	<0.27	1.5 ± 0.3	0.16 ± 0.12	< MDA	8
4	Systematic - upstream	1.1 ± 0.4	0.75 ± 0.30	1.1 ± 0.2	<0.02	< MDA	8
5	Systematic - upstream	1.1 ± 0.3	0.84 ± 0.30	0.89 ± 0.29	<0.05	< MDA	8
6	Systematic - upstream	0.42 ± 0.32	0.27 ± 0.30	0.15 ± 0.18	0.09 ± 0.07	< MDA	9
7	Systematic - upstream	0.99 ± 0.73	1.7 ± 0.5	0.97 ± 0.30	<0.07	< MDA	9
8	Systematic - at outfall	99.8 ± 2.4	39.6 ± 1.0	2.8 ± 0.7	0.9 ± 0.8	< MDA	55
9	Biased - downstream	82.4 ± 1.9	25.8 ± 1.5	2.0 ± 0.6	<0.16	20 ± 19	40
10	Systematic - downstream	7.7 ± 1.1	5.1 ± 0.9	0.78 ± 0.93	<0.19	<MDA	60
11	Systematic - downstream	5.3 ± 0.9	3.9 ± 0.6	2.0 ± 0.3	0.35 ± 0.16	<MDA	30
12	Systematic - downstream	9.6 ± 1.2	0.1 ± 0.9	1.9 ± 0.6	<0.03	<MDA	25
13	Systematic - downstream	1.7 ± 0.9	1.3 ± 0.4	1.7 ± 0.3	0.16 ± 0.13	<MDA	10
14	Systematic - downstream	7.7 ± 1.1	5.9 ± 0.9	1.5 ± 0.9	0.01 ± 0.23	<MDA	40
15	Systematic - downstream	6.1 ± 0.8	3.6 ± 0.9	2.1 ± 0.5	<0.11	<MDA	10
16	Systematic - downstream	3.9 ± 0.8	3.6 ± 0.6	1.1 ± 0.3	0.12 ± 0.17	<MDA	25
17	Systematic - downstream	6.9 ± 1.0	5.9 ± 0.9	1.9 ± 0.3	<0.13	<MDA	23
18	Systematic - downstream	12.0 ± 1.3	9.6 ± 0.9	1.9 ± 0.5	0.29 ± 0.29	<MDA	35
19	Systematic - downstream	17.9 ± 1.5	15.3 ± 1.2	0.88 ± 0.89	<0.02	99 ± 29	35
20	Biased - downstream	856 ± 5	905 ± 3	2.9 ± 1.2	1.7 ± 0.7	<MDA	502
21	Systematic - downstream	79.6 ± 2.8	58.1 ± 2.1	1.5 ± 0.8	0.79 ± 0.58	<MDA	90
22	Biased - downstream	98.2 ± 3.3	69.6 ± 2.1	2.1 ± 0.9	0.57 ± 0.52	<MDA	110
23	Systematic - downstream	27.8 ± 1.7	16.5 ± 1.2	<0.35	<0.01	<MDA	80
24	Biased - downstream	69.7 ± 2.7	48.2 ± 2.1	2.9 ± 0.7	0.97 ± 0.52	<MDA	100
25	Biased - downstream	60.9 ± 2.8	41.5 ± 2.1	<0.59	1.9 ± 0.5	<MDA	60
26	Systematic - downstream	2.0 ± 0.5	1.2 ± 0.3	0.99 ± 0.22	<0.04	<MDA	23
27	Systematic - downstream	11.9 ± 1.2	10.5 ± 0.9	0.76 ± 0.09	0.27 ± 0.20	<MDA	95
28	Biased - downstream	35.3 ± 1.0	15.6 ± 1.5	0.32 ± 0.12	0.39 ± 0.39	<MDA	80
29	Systematic - downstream	12.9 ± 1.1	10.8 ± 0.9	0.78 ± 0.30	0.24 ± 0.99	<MDA	29
30	Systematic - downstream	1.5 ± 0.9	1.5 ± 0.5	0.91 ± 0.22	<0.07	<MDA	11
31	Systematic - downstream	1.7 ± 0.9	1.1 ± 0.3	0.76 ± 0.23	0.12 ± 0.15	<MDA	9
32	Biased - downstream	12.5 ± 1.7	9.3 ± 0.9	1.1 ± 0.4	<0.12	<MDA	62

TABLE 2

RADIONUCLIDE CONCENTRATIONS IN CREEK CHECK SEDIMENTS

Sample No.	Type and Location[a]	Radionuclide Concentration (pCi/g)				
		Th-232	Th-228	Ra-226	U-235	U-238
1	Systematic - upstream	1.1 ± 0.6[b]	1.6 ± 0.3	1.2 ± 0.3	0.08 ± 0.11	<MDA[c]
2	Systematic - upstream	0.32 ± 0.34	0.69 ± 0.20	0.60 ± 0.15	0.09 ± 0.13	<MDA
3	Systematic - upstream	3.8 ± 1.7	5.1 ± 1.5	5.7 ± 1.1	<0.96	<MDA
4	Systematic - upstream	0.81 ± 0.25	0.54 ± 0.27	0.47 ± 0.14	0.15 ± 0.10	<MDA
5	Systematic - upstream	1.7 ± 0.4	1.0 ± 0.6	0.89 ± 0.23	<0.82	<MDA
6	Systematic - upstream	0.39 ± 0.29	0.63 ± 0.21	0.75 ± 0.19	0.17 ± 0.08	<MDA
7	Systematic - upstream	0.82 ± 0.30	1.4 ± 0.3	1.6 ± 0.3	<0.85	<MDA
8	Systematic - at outfall	1.7 ± 0.5	0.80 ± 0.59	1.1 ± 0.2	0.19 ± 0.12	<MDA
9	Biased - downstream	75.8 ± 2.5	77.7 ± 2.1	3.6 ± 0.8	0.58 ± 0.03	<MDA
10	Systematic - downstream	203 ± 4	187 ± 4	6.8 ± 1.1	<0.59	<MDA
11	Systematic - downstream	158 ± 4	132 ± 4	7.8 ± 1.1	0.55 ± 0.61	<MDA
12	Systematic - downstream	9.3 ± 1.0	11.1 ± 0.9	1.0 ± 0.3	0.31 ± 0.11	<MDA
13	Systematic - downstream	3.0 ± 0.6	2.0 ± 0.5	1.0 ± 0.2	0.13 ± 0.07	<MDA
14	Systematic - downstream	6.6 ± 0.9	6.0 ± 0.6	1.8 ± 0.3	0.35 ± 0.10	<MDA
15	Systematic - downstream	5.8 ± 0.9	5.7 ± 0.6	1.4 ± 0.3	0.20 ± 0.23	<MDA
16	Systematic - downstream	6.3 ± 1.0	5.7 ± 0.9	1.5 ± 0.4	<0.83	<MDA
17	Systematic - downstream	2.5 ± 0.7	2.7 ± 0.5	0.32 ± 0.35	0.31 ± 0.08	<MDA
18	Systematic - downstream	7.6 ± 1.0	7.2 ± 0.9	0.80 ± 0.32	<0.90	<MDA
19	Systematic - downstream	18.7 ± 1.4	15.9 ± 1.2	1.9 ± 0.5	0.27 ± 0.33	<MDA
20	Biased - downstream	29.8 ± 1.8	27.3 ± 1.7	1.5 ± 0.5	0.29 ± 0.28	<MDA
21	Systematic - downstream	13.4 ± 1.1	12.3 ± 0.9	1.2 ± 0.4	0.14 ± 0.10	<MDA
22	Biased - downstream	5.5 ± 0.3	5.1 ± 0.3	0.58 ± 0.10	<0.59	<MDA
23	Systematic - downstream	13.1 ± 1.0	12.0 ± 0.9	0.71 ± 0.27	<0.91	<MDA
24	Biased - downstream	29.6 ± 1.6	29.6 ± 1.5	0.77 ± 0.49	0.39 ± 0.39	<MDA
25	Biased - downstream	8.5 ± 0.9	9.9 ± 0.9	1.1 ± 0.4	<0.89	<MDA
26	Systematic - downstream	<0.94	1.2 ± 0.3	1.1 ± 0.2	0.13 ± 0.13	<MDA
27	Systematic - downstream	58.6 ± 1.6	28.7 ± 1.7	0.83 ± 0.51	<0.82	<MDA
28			no sample taken			
29	Systematic - downstream	5.1 ± 0.7	6.9 ± 0.6	0.85 ± 0.29	0.19 ± 0.13	<MDA
30	Systematic - downstream	3.9 ± 0.6	5.5 ± 0.6	0.67 ± 0.22	<0.81	<MDA
31	Systematic - downstream	1.1 ± 0.3	0.75 ± 0.27	0.51 ± 0.15	0.39 ± 0.11	<MDA
32	Biased - downstream	95% ± 5	101 ± 3	2.3 ± 1.1	0.80 ± 0.29	<MDA

Table C cont'd of memo Dennis Kee, Director Air and Hazardous Materials Division, EPA to A. B Davis, Chief R III dated 01/29/81

(EPA)

TABLE C Kress Creek Sediment Samples - August 6, 1980
(Radiochemical Analyses by Eastern Environmental Radiation Facility)

LOCATION	Soil	Sediment	Ra-226	U-234	U-235	U-238	Th-227	Th-228	Th-230	Th-232
			(pCi/gm)							
Kress Creek Upstream of Outfall		X	1.5	.681	.105	.780	.148	.804	1.04	.87
Kress Creek Outfall		X	1.7	1.527	1.571	1.620	1.689	11.64	2.724	17.17
Kress Creek Slightly Downstream of Outfall		X	2.1	1.751	.222	1.678	3.641	14.29	2.355	13.48
Kress Creek Joliet St.		X	2.1	1.258	.187	1.339	5.502	20.62	2.815	19.24
Kress Creek Houle Residence		X	1.7	1.543	.190	1.541	3.225	17.28	3.000	17.17
DuPage River Upstream, Miner Home		X	1.7	.338	.039	.369	.052	.617	.436	.600
DuPage River Slightly Upstream		X	2.4	.959	.233	1.021	.601	3.610	1.593	4.370
Dupage River "Slightly" Downstream		X	1.3	.971	.118	1.026	1.636	11.15	1.500	8.033
DuPage River "Far" Downstream		X	2.8	.652	.069	.727	.104	2.430	1.145	2.970

TABLE D Kress Creek Soil Samples - August 6, 1980
(Radiochemical Analyses by Eastern Environmental Radiation Facility)

LOCATION	Soil	Sediment	Ra-226	U-234	U-235	U-238	Th-227	Th-228	Th-230	Th-232
			(pCi/gm)							
Kress Creek Upstream of Outfall	X		2.3	.716	.089	.823	.196	.903	1.089	.926
Kress Creek Slightly Downstream of Outfall	X		2.5	2.188	.305	2.317	13.20	23.87	3.342	21.24
Kress Creek Joliet Street East Island	X		2.4	2.264	.220	2.215	9.494	33.49	5.399	35.37
Kress Creek Joliet Street Farm Field	X		2.8	.880	.069	.922	.222	1.596	1.207	1.576
Houle Residence Willow Tree	X		2.0	4.242	.298	3.878	2.147	21.47	3.864	22.37
Houle Residence Garden	X		1.9	3.189	.397	3.232	2.566	21.67	3.734	22.69
DuPage River Upstream Miner Home	X		2.0	1.010	.081	1.055	.209	1.800	1.427	1.983
DuPage River "Slightly" Downstream	X		2.8	2.554	.243	2.297	3.018	18.84	3.131	18.38
DuPage River "Far" Downstream	X		2.9	1.611	.139	1.639	1.712	11.78	3.047	12.99

RIII Inspection Report # 04002061/81-03
carried by transmittal letter dated 09/01/81
(KGER-McGEE)

SURFACE WATER & STORM SEWER MONITORING

(2) Storm Sewer Outflow

Drain lines from the factory collect in the Building 14 sump which feeds into the West Chicago storm sewer. The outflow is discharged into Kress Creek. Releases to the storm sewer are currently monitored weekly and after each significant rainfall, primarily at the sump and the Kress Creek outflow. Samples collected from these and ten other stations for surface runoff and sewer outflow concentrations are analyzed for gross alpha and beta concentrations at the Kerr-McGee Technical Center. Radioisotopic analyses are performed on samples with gross alpha concentrations greater than 1.5 E-8 uCi/ml.

Building 14 sump samples average approximately 2.5 E-8 uCi/ml gross alpha and 2.5 E-8 uCi/ml gross beta. Kress Creek outflow values averaged approximately 1.8 E-8 uCi/ml gross beta. These values are less than 3.0 E-8 uCi/ml specified by 10 CFR 20.106(a) for unidentified isotopes in a homogeneous sample, i.e., gross analysis.

No items of noncompliance were identified.

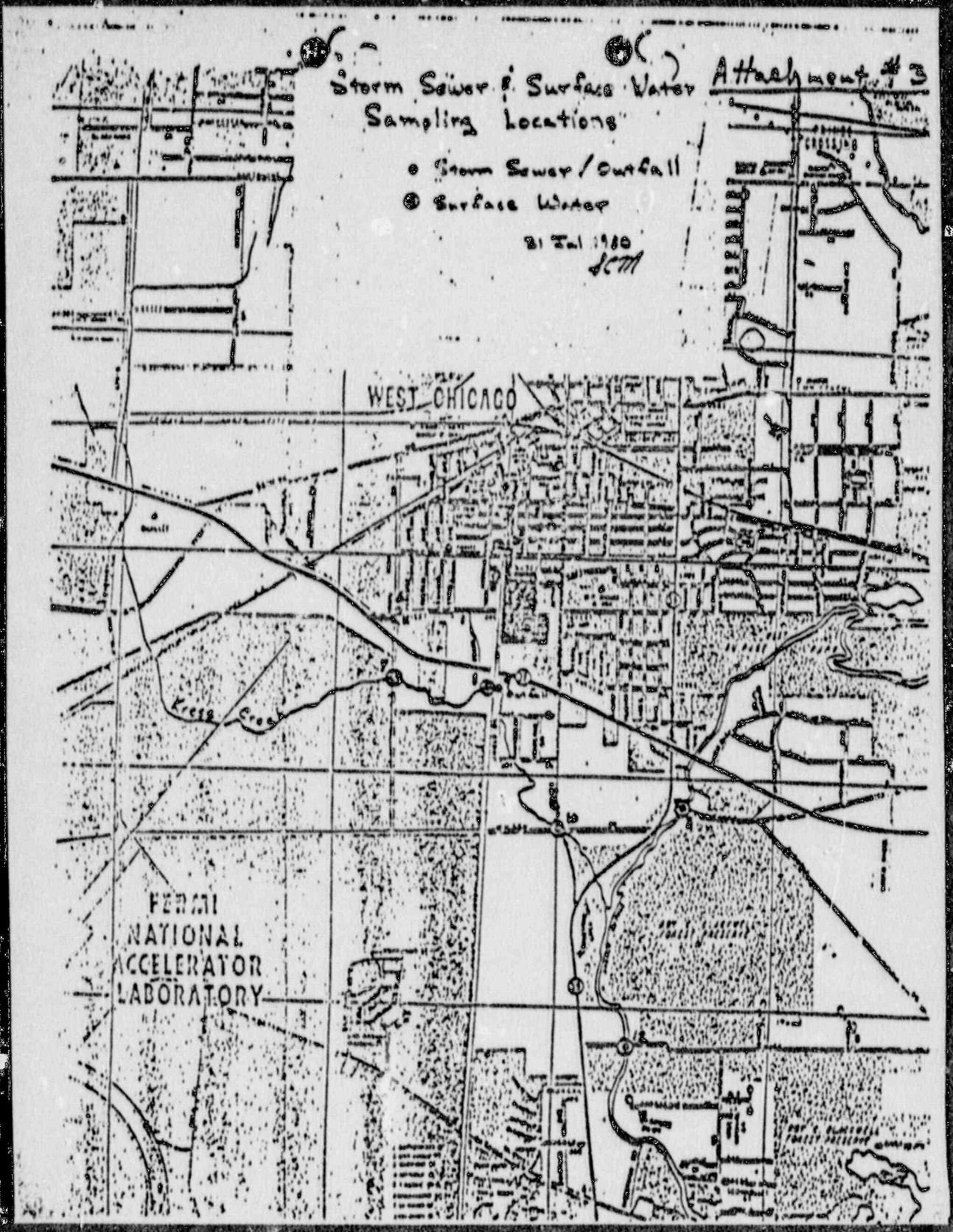
6. Health Physics Program

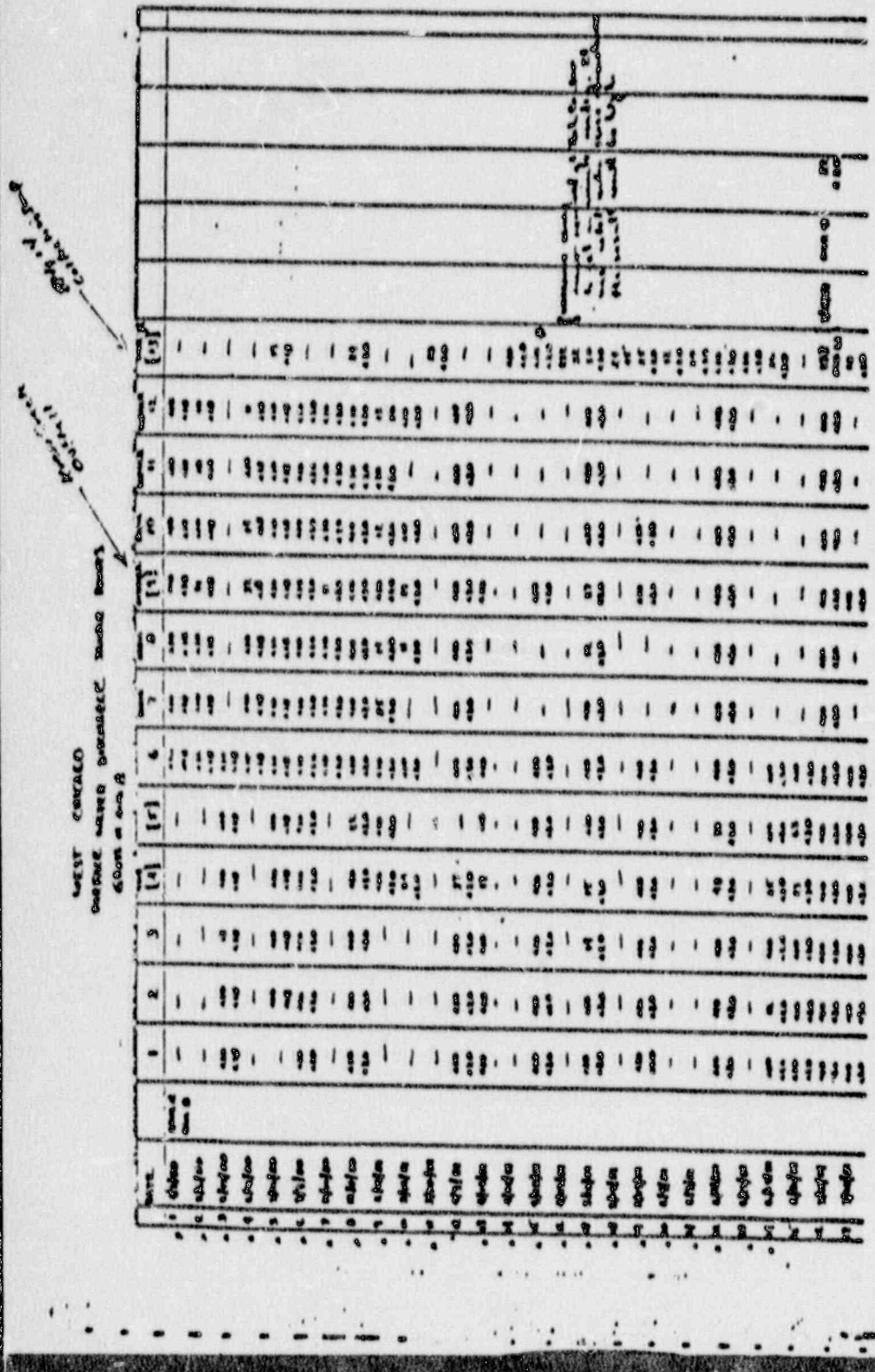
Half-face, MSA approved respirators fitted with Type N cartridges are worn by work crew members in the factory whenever work activities may produce dust. These cartridges are approved for use in environment with radionuclides, asbestos, dusts, fumes and mists up to concentrations of 0.05 mg/m³. Cartridges are changed once a week or more often if workers find breathing difficult because of a clogged cartridge. Respirators are cleaned and sterilized weekly. Currently, each worker is fitted with two respirators by positive and negative fit tests.

The licensee is designing a more comprehensive fit test program for future use. Laborers wear designated coveralls, gloves, hard hats, eye protection, and work shoes into the area. Upon leaving the area, they shower and change into street clothes and shoes in the change room; work clothes are stored for the following day's use. All other personnel entering the work area wear shoe covers, gloves, lab coats, and hard hats.

Surveys for smearable contamination in Building 12 are taken and analyzed daily on the Gamma Products G 4000 alpha beta gas proportional flow counter. Areas smeared include the lunchroom, laundry change room, entry from the factory, frisking stations, showers, and equipment storage area. Records reviewed indicated higher readings (greater than 20 dpm) were primarily confined to the change room entry indicating adequate contamination control. Smears taken by the inspector in the lunchroom and at the change room frisking station during the inspection showed less than 20 dpm/100cm² gross alpha and beta. At the close of the inspection the inspector emphasized the necessity for continued strict surveys of the lunchroom area which is adjacent to the change room.

Attachment #3 of memo G. Chaimoff and J. Berghoff
to S. Chilk dated 12/04/81
(Koch-McGee)


Storm Sewer & Surface Water
Sampling Locations
• Storm Sewer / Outfall
⊕ Surface Water
31 Jul 1980
JCM
Attachment #3
WEST CHICAGO
Kress Creek
FERMI
NATIONAL
ACCELERATOR
LABORATORY



one non-compliance (see p. 4) 12/10/84

- On April 28, 1981 an overflow of the sump was observed into the City's storm sewer. This is the only observed overflow during 1981 to date and therefore represents the only release from the sump to offsite. All other samples from this site represent contained water that was not being released.

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

11/26/85

MEMORANDUM FOR: D. Wayne Kerr, Director
Office of State Programs

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

SUBJECT: STATE OF ILLINOIS AGREEMENT

This refers to your memorandum of November 15, 1985, summarizing the November 12 meeting with state representatives on the proposed Illinois 274b Agreement and the follow-up letter to Mr. Lash.

As you know, we want to include the Kerr-McGee West Chicago site as part of the Agreement. We firmly believe that the decontamination/waste management issues at several West Chicago locations can best be resolved by management under a single regulatory agency rather than dividing it between a federal and a state agency. We further believe it can best be handled by the state because of their close coupling with satisfactory resolution of the issues. Therefore, we suggest an early meeting to develop criteria for including the the Kerr-McGree West Chicago site in the Agreement. We can offer Illinois technical support to reduce their resource requirements for this specific case. William T. Crow will represent the Office of Nuclear Material Safety and Safeguards.

In your next letter to Mr. Lash on the proposed Agreement, it might be useful to note that we are exploring the West Chicago matter with the objective of including the Kerr-McGee site in the Agreement.

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

cc: Mr. [redacted]
Mr. Mausshardt
Mr. Crow

Background

8604240030 (4)

c/9

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

(26)

APR 14 1986

MEMORANDUM FOR: Joel C. Lubenau
Senior Project Manager
State Agreements Program
Office of State Programs

FROM: Jane R. Mapes, Attorney
Regulations Division
Office of the Executive Legal Director

SUBJECT: STATE PROGRAM FILE FOR ILLINOIS - YOUR MEMORANDUM FOR RICHARD SMITH

We have reviewed the subject memorandum and the attached list of documents and have the following comments:

1. The second sentence of the memorandum should be revised to read as follows:

   "We are placing the records pertaining to these negotiations in the Public Document Room (enclosure 1) and will continue to do so as they are generated, subject to the concurrence of the originating office."

2. The description of Document No. 43 in enclosure 2 should be revised to read as follows:

   "NRC Staff Response to Kerr-McGee Motion to Compel Production of Documents, In the Matter of Kerr-McGee Chemical Corporation (West Chicago Rare Earths Facility) (Kress Creek Decontamination) Docket Nos. 40-2061-ML, 40-2061-SC, ASLBP Nos. 83-495-01-ML, 84-502-01-SC, w/encl."

3. The attached document, November 26, 1985 Memo, R. Cunningham, FC to G.W. Kerr, OSP, should be added to the list in enclosure 2.

Subject to these revisions, we concur in the subject memorandum.

Jane R. Mapes

Jane R. Mapes, Attorney
Regulations Division
Office of the Executive Legal Director

CF 10CFR 50

8604250065 (6)

c/11

A-9

APR 0 4 1989

MEMORANDUM FOR: Hugh L. Thompson, Jr.
Deputy Executive Director for
Nuclear Materials Safety, Safeguards
and Operations Support

FROM: Richard E. Cunningham, Director
Division of Industrial and
Medical Nuclear Safety, NMSS

SUBJECT: ISSUANCE OF THE SUPPLEMENT TO THE FINAL ENVIRONMENTAL STATEMENT RELATED TO THE DECOMMISSIONING OF THE RARE EARTHS FACILITY, WEST CHICAGO, ILLINOIS

With regard to our conversation, I am providing background information on the above subject. As previously committed to the Atomic Safety and Licensing Board Panel presiding over the hearing, the staff is supplying on April 7, 1989, prepublication copies of the Supplement to the Panel, the parties to the proceeding (Kerr-McGee and Illinois Attorney General), and the PDR. Formal publication and distribution are expected the week of April 17, 1989.

For your information, an advance copy of the summary chapter is enclosed. The summary and conclusion should not be released until after April 7, 1989. We will provide you with a copy of the document as soon as we receive it from the printer.

Original Signed by
Richard E. Cunningham

Richard E. Cunningham, Director
Division of Industrial and
Medical Nuclear Safety, NMSS

Enclosure:
As stated

cc w/encl: R. Bernero
C. Paperiello

Distribution w/o encl.

NMSS R/F	IMUF R/F	NRC File Center	IMSB R/F
LCRouse	GHBidinger	VLTharpe	RECunningham w/encl
MHorn	JJSwift	SGagner, PA w/encl	GSjoblom w/encl
RLikus, RIII	JKendig, GPA	TCombs, CA	JStrasma, RIII/PA

OFC:	IMUF	IMUF	IMSB	DD/IMNS	D/IMNS
NAME:	MHorn/mh	VLTharpe	LCRouse	GSjoblom	RECunningham
DATE:	4/4/89	4/4/89	4/4/89	4/ /89	4/4/89

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DAILY HIGHLIGHTS

STATE, LOCAL AND INDIAN TRIBE PROGRAMS

APRIL 19, 1989

Request from State of Illinois for an Amended Agreement

Chairman Zech has received a request from the Honorable James R. Thompson, Governor of Illinois, dated April 11, 1989 for an amendment of Illinois' 274b agreement. The State is seeking authority over 11e.(2) by-product material which are the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content including discrete surface wastes resulting from uranium solution extraction processes. This amended agreement package is aimed at achieving jurisdiction over the Kerr-McGee Rare Earth Facility located in West Chicago, Illinois, as discussed in SECY-88-309.

Kathleen Schneider

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to
EDO
for

c/r