

THE CLEVELAND CLINIC FOUNDATION

9500 Euclid Avenue Cleveland, Ohio 44195-5199

A National Referral Center An International Health Resource

Radiation Safety / QQ1
216/444-6645

Mr. Darrel G. Wiedeman
U.S. Nuclear Regulatory Commission, Region III
799 Roosevelt Road
Glen Ellyn, IL 60137

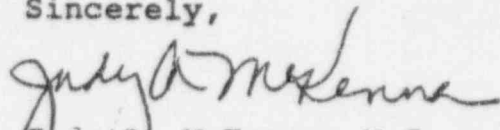
February 18, 1993

Dear Mr. Wiedeman:

As you requested during our telephone conversation today, attached is a copy of the final report from S. Z. Mansdorf & Associates, dated April 3, 1985, regarding the surveys performed on the Chester Conference Center, previously known as the "old Harshaw" building. I hope this is sufficient to complete the followup to this allegation.

If you should need any further information, please do not hesitate to contact me at (216) 444-6645.

Sincerely,


Judy A. McKenna, M.S.
Director, Radiation Safety

Bj/164
COPY

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-04058
Licensee: HARSHAW CHEMICAL COMPANY
Site of operation: 1945 EAST 97TH STREET, CLEVELAND, OHIO

DESCRIPTION OF ACTIVITY OR FACILITY: LABORATORY/RESEARCH

----- MATERIALS INFORMATION FOR THIS LICENSE -----
--Information on type and form of materials--
Material-- --Form--

U HEXAFLUORIDE

Loose material

For evaluation purposes, amounts of the following materials were obtained

---Material---	--Form--	Amount	Unit	Score
U HEXAFLUORIDE	LOOSE	10.00	LB	0.0

1. The loose materials on this license were not significant, and the site was eliminated from consideration on this basis.

FINAL DECISION FOR LOOSE MATERIALS:

POTENTIAL SITE CONTAMINATION:

ELIMINATED FROM CONSIDERATION FOR SITE CONTAMINATION

Reason for elimination: LOW SCORE OF MATERIALS

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 28

Docket 40-02589

Licensee: HARSHAW CHEMICAL COMPANY

Address: 1945 EAST 97TH ST., CLEVELAND 6, OHIO Zip:

State of operation: OH

Site used: 1945 EAST 97TH STREET, CLEVELAND, OHIO

Disposition information present: NO DISPOSITION INFORMATION GIVEN

This license was listed as expired on 04/30/59

Remarks: 10 LBS OF URANIUM HEXAFLUORIDE CONTG DEPLETED U FOR RES. PURPOSES

JOB NUMBER: 1700 BOX NUMBER: 28

Date of last evaluation or revision: 11/23/93

Reviewer: BWK

BWKS

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-05189

Licensee: HARSHAW CHEMICAL COMPANY

Site of operation: 1945 EAST 97TH ST., CLEVELAND 6, OHIO

DESCRIPTION OF ACTIVITY OR FACILITY: STORAGE FACILITY ONLY

----- MATERIALS INFORMATION FOR THIS LICENSE -----

--Information on type and form of materials--

Material--

--Form--

DEPLETED URANIUM

Loose material

For evaluation purposes, amounts of the following materials were obtained

---Material---	--Form--	Amount	Unit	Score
DEPLETED URANIUM	LOOSE	80.00	LB	0.6

INITIAL SITE SCORE, based on LOOSE material possession limits: 0.63

1. License had disposition information which was adequate to disqualify the loose materials.

FINAL DECISION FOR LOOSE MATERIALS:

POTENTIAL SITE CONTAMINATION:

ELIMINATED FROM CONSIDERATION FOR SITE CONTAMINATION

Reason for elimination: Disposition info adequate

Reviewer's comments concerning license C-05189

THE LICENSEE STATED THAT SOURCE MATERIAL WAS IN ORIGINAL CONTAINER. THE MATERIAL WAS RETURNED TO DAVISON CHEMICAL COMPANY, ERWIN, TENNESSEE ACCORDING TO THE CERTIFICATE OF DISPOSITION. LICENSEE WAS CITED FOR TRANSFERRING SOURCE MATERIAL AFTER PREVIOUS LICENSE NUMBER C-4284 HAD EXPIRED.

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 28

Docket 40-02589

Licensee: HARSHAW CHEMICAL COMPANY

Address: 1945 EAST 97TH ST., CLEVELAND 6, OHIO

Zip:

State of operation: OH

Site used: 1945 EAST 97TH ST., CLEVELAND 6, OHIO

Disposition information present: CERTIFICATE

Matl. Transfrd to: DAVIDSON CHEMICAL CO, ERWIN, TN

License to which transferred: UNK

This license was listed as expired on 07/31/61

Remarks:MATL REMAINS IN ORIGINAL CONTAINER WISH TO RET TO SUPPLIER (LTR 6/60
JOB NUMBER: 1700 BOX NUMBER: 28

Date of last evaluation or revision: 11/23/93

Reviewer: BWK

EXPERT SYSTEM LICENSE EVALUATION
EVALUATION REPORT FOR LICENSE C-04284

Licensee: HARSHAW CHEMICAL COMPANY

Site of operation: 1945 E. 97TH ST., CLEVELAND, OH & SEVERAL STORAGE SITES

The final ranking for SITE CONTAMINATION is:	29
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DESCRIPTION OF ACTIVITY OR FACILITY: LABORATORY/RESEARCH

----- MATERIALS INFORMATION FOR THIS LICENSE -----

Material-- --Information on type and form of materials--
--Form--

SOURCE MATERIAL-N.O.	Loose material
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For evaluation purposes, amounts of the following materials were obtained				
---Material---	--Form--	Amount	Unit	Score
SOURCE MATERIAL-N.O.	LOOSE	500.00	LB	2.3

INITIAL SITE SCORE, based on LOOSE material possession limits: 2.4

DESCRIPTION OF FIRST SITE AT WHICH C-04284	WAS USED
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1945 EAST 97TH STREET, CLEVELAND, OHIO

DESCRIPTION OF SECOND SITE AT WHICH C-04284	WAS USED
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LICENSEE'S WAREHOUSES IN CLEVELAND AND/OR ELYRIA, OHIO, LOS ANGELES, CA, PHILADELPHIA AND PITTSBURGH, PA
(THE ELYRIA SITE WAS WHERE REPACKAGING & POSSIBLY PROCESSING WERE DONE (SEE LETTER DATE 12/10/58)).

Description of THE LICENSEE ACTIVITY AUTHORIZED by this license

SOURCE MATERIAL FOR MANUFACTURING AND SALE OF CERAMIC COLORS.
LICENSED ALSO TO PREPARE GLAZED TILES FOR EXPERIMENTAL PURPOSES BUT NOT FOR RESALE.

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1. There was more than one identifiable site with this license. The final score will be the sum of the scores for the sites used under this license. Succeeding conclusions will indicate which site
 2. Each site (or two groups) will be evaluated, with the assumption that all materials authorized on the license could have been used at each site. The final score will be the sum of the site scores.

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3. FIRST SITE: There was insufficient information in file to determine the likelihood of release to atmosphere or to environment from activities at this site.
4. FIRST SITE: Some likelihood that building onsite could have been left with contamination. Score=score*1.0

Reviewer's comments concerning potential CONTAMINATION CERTIAN ACTIVITIES CONDUCTED SUCH AS MIXING, SCREENING, HANDLING, MILLING OR REPACKAGING OF LOOSE MATERIAL COULD CREATE DUST WHICH COULD CONTAMINATE. SPRAYING OF GLAZE IF NOT HANDLED PROPERLY COULD CONTAMINATE.

5. FIRST SITE: There was NO verifiable decontamination of the site at closeout. Score=score*1.2
6. FIRST SITE: There was VERY HIGH turnover of materials in facility. Score=score*2

Reviewer's comments concerning potential TURNOVER OF MATERIALS

LICENSED AMOUNT 100000 POUNDS WAS FOR TERM OF THE LICENSE. IT SEEMS THAT THE LICENSEE MAY NOT HAVE ACTUALLY POSSESSED THAT AMOUNT BASED ON INFORMATION IN LETTER DATED JULY 20, 1959. LICENSEE STATES THAT ACTUAL SALES HAVE BEEN LIMITED TO A FEW HUNDRED POUNDS PER MONTH, LARGELY BECAUSE OF AEC LICENSING RESTRICTIONS.

7. FIRST SITE: There was significant use of glove boxes, hoods, or protective clothing. Change in score depends on subsequent questions.
8. FIRST SITE: Possible inappropriate disposal or abandonment of contaminated material from glove boxes, hoods, clothing. Score=score*1.4
9. FIRST SITE: There was significant generation of waste material in routine cleanup of facility. Score=score*1.5
10. FIRST SITE: Possible inappropriate disposal or abandonment of contaminated material from cleanup. Score=score*1.2
11. FIRST SITE: There was either no documentation of materials disposition or the documentation was inadequate. Score=score*1.2
12. FIRST SITE: Because the score for this site is below 20 at this point, a closeout survey would not necessarily have been warranted.
13. FIRST SITE: There was no closeout survey for this site. The score will not be altered, since the current score for this site is below 20
14. FIRST SITE: There was NOT an NRC FINAL INSPECTION of the facility.
15. SECOND SITE: There was insufficient information in file to determine the likelihood of release to atmosphere or to environment from activities at this site.
16. SECOND SITE: Some likelihood that building onsite could have been left with contamination. Score=score*1.0

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Reviewer's comments concerning potential CONTAMINATION CERTIAN ACTIVITIES CONDUCTED SUCH AS MIXING, SCREENING, HANDLING, MILLING OR REPACKAGING OF LOOSE MATERIAL COULD CREATE DUST WHICH COULD CONTAMINATE. SPRAYING OF GLAZE IF NOT HANDLED PROPERLY COULD CONTAMINATE.

17. SECOND SITE: There was NO verifiable decontamination of the site at closeout. Score=score*1.2
18. SECOND SITE: There was VERY HIGH turnover of materials in facility. Score=score*2
19. SECOND SITE: There was significant use of glove boxes, hoods, or protective clothing. Change in score depends on subsequent questions.
20. SECOND SITE: Possible inappropriate disposal or abandonment of contaminated material from glove boxes, hoods, clothing. Score=score*1.4
21. SECOND SITE: There was significant generation of waste material in routine cleanup of facility. Score=score*1.5
22. SECOND SITE: Possible inappropriate disposal or abandonment of contaminated material from cleanup. Score=score*1.2
23. SECOND SITE: There was either no documentation of materials disposition or the documentation was inadequate. Score=score*1.2
24. SECOND SITE: Because the score for this site is below 20 at this point, a closeout survey would not necessarily have been warranted.
25. SECOND SITE: There was no closeout survey for this site. The score will not be altered, since the current score for this site is below 20
26. SECOND SITE: There was NOT an NRC FINAL INSPECTION of the facility. Score not changed.

FINAL DECISION FOR LOOSE MATERIALS:
POTENTIAL SITE CONTAMINATION:
PRIORITY SITE FOR REVIEW

The final SCORE for SITE CONTAMINATION is:	29
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Reviewer's comments concerning license C-04284

THE ACTIVITIES AUTHORIZED BY THIS LICENSE WERE LIMITED BY AEC LICENSING RESTRICTIONS. THIS IS SUPPORTED BY INFORMATION IN LETTER DATED JULY 20, 1959 WHICH STATED THAT ACTUAL SALES HAVE BEEN LIMITED TO A FEW HUNDREDS POUNDS A MONTH. BASED ON THIS 500 POUNDS WERE ENTERED BY EVALUATION INSTEAD OF 100000 POUNDS WHICH THE LICENSE AUTHORIZED.

THERE WAS NO CLOSEOUT SURVEY OR INSPECTION IN FILE. ACTIVITIES CONDUCTED UNDER THIS LICENSE COULD HAVE CAUSED SOME CONTAMINATION. THE ELYRIA, OHIO SITE APPEARS TO HAVE BEEN MORE THAN A WAREHOUSE, BUT A PLACE WHERE REPACKAGING AND POSSIBLY PROCESSING MAY HAVE OCCURRED. THE PRIMARY SITE APPEARS TO HAVE THE CLEVELAND, OHIO SITE.

EXPERT SYSTEM EVALUATION WAS BASED ON THE
INVENTORY RECORD IN JOB 1700, BOX 28

Docket 40-02589

Licensee: HARSHAW CHEMICAL COMPANY

Address: 1945 EAST 97TH ST., CLEVELAND 6, OHIO Zip:

State of operation: OH

Disposition information present: NO DISPOSITION INFORMATION GIVEN

This license was listed as expired on 01/30/60

Remarks: MATL STORED @ LA, CLEVELAND &/OR ELYRIA, PHILADELPHIA & PITTSBURGH
JOB NUMBER: 1700 BOX NUMBER: 28

Date of last evaluation or revision: 11/24/93

Reviewer: BWK

TELEPHONE CONVERSATION RECORD

License No.: C-04284 (Terminated)

Docket No.: 040-02589

Project: Harshaw Chemical Company

Date and Time: 03/06/95, 02:15 pm CST

Person: John Manchook, Cleveland Clinic Foundation

Telephone No.: 216/444-6645

Incoming or Outgoing: outgoing

Discussion: Informed Mr. Manchook that the NRC is currently reviewing previously terminated licenses to ensure they were closed out properly with adequate disposition of materials forms and surveys. I informed John that I was reviewing a file for the Harshaw Chemical Co. with an address of 1945 E. 97th St., Cleveland, Ohio, where there was inadequate information in the file to determine if the license was closed out properly. My information indicated that the Cleveland Clinic Foundation currently owns the building at 1945 E. 79th St. I requested any information regarding the existence of the building, size of the building, renovations of building, current use of the building and whether the Cleveland Clinic has any old records from the building or had conducted any radiological surveys.

Mr. Manchook informed me that the building still exists and is now called the Chester Conference Center. The building has been renovated. Mr. Manchook informed me that he would forward my requests on to his supervisor, the RSO, Judy McKenna. He informed me that they would get back to me.

Action Required: NONE

Name:

Ken Lambert

Date:

3/7/95

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TELEPHONE CONVERSATION RECORD

License No.: C-04284 (Terminated)

Docket No.: 040-02589

Project: Harshaw Chemical Company

Date and Time: 03/06/95, pm.

Person: Judy McKenna, RSO, Cleveland Clinic Foundation

Telephone No.: 216/444-6645

Incoming or Outgoing: incoming

Discussion: Ms. McKenna returned my call from earlier in the day. I briefed Ms McKenna on the review of the Harshaw License and requested if the Cleveland Clinic had any information on the building at 1945 E. 79th St. Ms. McKenna indicated that the building was formerly owned by the Harshaw Chemical Company and that the question of whether there was radioactive contamination came up in late 1992. Ms McKenna indicate that the building had undergone some remediation and that a letter had been sent to the region regarding this.

I informed Ms. McKenna that I would review the Cleveland Clinic license file to determine if the letter discussed is in the file. I also stated that if I needed additional information I would call her back.

Action Required: Review Cleveland Clinic Foundation license file for information on Harshaw Chemical Co. building remediation.

Name:

Ken Lambert

Date:

3/7/95

B1168

TELEPHONE CONVERSATION RECORD

License No.: C-04284 (Terminated)

Docket No.: 040-02589

Project: Harshaw Chemical Co.

Date and Time: 03/07/95, 0900 CST

Person: Andrew Kopas, Engelhard Corp.

Telephone No.: 216/329-2553

Incoming or Outgoing: outgoing

Discussion: Informed Mr. Kopas that the NRC is currently reviewing all terminated licenses to ensure they were closed out properly with information on disposition of radioactive material possessed and radiological surveys of use areas. Mr. Kopas was informed that I was reviewing a file for the Harshaw Chemical Company, which authorized the possession of depleted uranium. I asked if Mr. Kopas had any information regarding the Harshaw Chemical Co and explained that the license listed locations of use in Elyria, Ohio and at 1945 E. 97th Street, Cleveland, Ohio.

Mr. Kopas stated that the Harshaw Chemical Company is now the Engelhard Corporation, but that there were several organizations which owned Harshaw Chemical Co. assets prior to Engelhard obtaining them. Mr. Kopas indicated that the building in Cleveland is now owned by the Cleveland Clinic Foundation. The facility in Elyria is currently chemical production plant and is owned by Engelhard Corp. Mr. Kopas said he would attempt to obtain information on where the materials may have been used at the facility and asked that I call him back in two weeks.

Action Required: Contact Mr. Kopas on 3/23/95.

Name: Ken Lambert
Ken Lambert

Date: 3/7/95

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TELEPHONE CONVERSATION RECORD

License No.: C-04284 (Terminated)

Docket No.: 040-02589

Project: Harshaw Chemical Company

Date and Time: 03/07/95, 0930 CST

Person: Judy McKenna, RSO, Cleveland Clinic Foundation

Telephone No.: 216/444-6645

Incoming or Outgoing: outgoing

Discussion: I called Ms. McKenna to inform her that I had reviewed the Cleveland Clinic's license and found a letter which discusses the remediation. I requested that a copy of the final survey, mentioned in the letter, be sent to the NRC to include in the Harshaw file. Ms. McKenna stated that she would review her files for the final survey, but stated that the remediation project was performed before she was employed by the Clinic. I asked that if she could not find the letter to let me know and then I would contact Chem Nuclear, the remediation contractor, to see if they maintained any records of the remediation and final survey.

Action Required: Contact Ms. McKenna in two weeks if not heard from to check on status of her review of the Clinic's files for the final survey.

Name: Ken Lambert
Ken Lambert

Date: 3/7/95

3/1/70

TELEPHONE CONVERSATION RECORD

License No.: C-04248 (Terminated)

Docket No.: 040-02589

Project: Harshaw Chemical Company

Date and Time: 03/08/95, 0945 CST

Person: Andrew Kopas, Engelhard Corp.

Telephone No.: 216/320-2553

Incoming or Outgoing: outgoing

Discussion: I returned Mr. Kopas' call from earlier today. Mr. Kopas stated that he had talked to a former employee, Mr. Paul Mining. Mr. Mining was involved with the licensed program and had signed several letters in the license file. Mr. Mining had told Mr. Kopas that he remembered the project and that only one drum was received at the Elyria warehouse, due to the numerous concerns raised by employees when they saw the drum with the radiation warning signs. The fiberboard drum was returned to the supplier within several days and no other drums of radioactive material were received. Mr. Mining also stated, according to Mr. Kopas, that Harshaw never intended to perform repackaging operations. It was only going to relabel the drums and ship them to customers.

I requested that Mr. Kopas send me a short letter detailing his discussion with Mr. Mining, so it could be included in the license file. Mr. Kopas indicated he would fax a letter to the NRC.

Action Required: None

Name:

Ken Lambert
Ken Lambert

Date:

3/8/95

6/17/1