

October 19, 1995

Engelhard Corporation  
Chemical Catalysts Group  
ATTN: Mr. A. G. Kopas, Manager  
Environmental Services  
120 Pine Street  
P.O. Box 4017  
Elyria, OH 44036-2017

SUBJECT: SITE CHARACTERIZATION PLAN (PHASE II) REVIEW

Dear Mr. Kopas:

We have completed our review of your *Site Characterization Plan (Phase II)* submitted to us by letter dated October 6, 1995, for your site at 1000 Harvard Avenue, Cleveland, Ohio. Mr. William Snell of my staff discussed the Plan with Mr. Ted Adams from B. Koh & Associates on October 17, 1995. We found the Plan acceptable and have no additional questions.

If you have any questions or comments, please contact me at (708) 829-9872 or William Snell at (708) 829-9871.

Sincerely,

Original Signed By

J. W. McCormick-Barger, Chief  
Decommissioning Branch

cc: M. Weber, NMSS/DWM/LLDP  
R. Vandegrift, Ohio Department of Health

DOCUMENT NAME: A:\ENGLHARD.II

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OFFICE	RIII	C	RIII <i>MB</i>	C			
NAME	Snell/ <i>WFS</i>		McBarger				
DATE	10/18/95		10/19/95				

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November 13, 1995

Chevron Chemical Company  
Environmental & Health Protection  
ATTN: Mr. R. William Potter  
Senior Environmental Projects Engineer  
6001 Bollinger Canyon Road  
P.O. Box 5047  
San Ramon, CA 94583

SUBJECT: RADIATION PROTECTION INSPECTION OF THE REMEDIATION OF FORMER  
HARSHAW CHEMICAL BUILDING PLANT C IN CLEVELAND, OHIO (CHEVRON  
SITE)

Dear Mr. Potter:

This refers to the special inspection conducted by Messrs. William Snell and John House of this office on October 24-25, 1995. This inspection included a review of the activities involving the remediation of former Harshaw Chemical Building Plant C at 1000 Harvard Avenue, Cleveland, Ohio. At the conclusion of the inspection, aspects of the inspection were discussed with members of the onsite contractor personnel from Foster Wheeler Environmental Corporation.

The areas examined during this inspection are identified in the enclosed report. Within these areas, the inspection consisted of interviews with personnel, examination of representative records, and observation of decontamination and radiation protection practices. The inspectors also toured the Plant C building.

During the course of this inspection, it was determined that an aspect of the radiation protection program was not being implemented consistent with the requirements of 10 CFR Part 19.13(e). Specifically, an actual or estimated record of radiological exposure was not provided to an employee upon request when the employee was terminated. Because you or your contractor, Foster Wheeler Environmental Corporation, are not NRC licensees, this is not considered a violation of NRC requirements. However, we are concerned about this issue.

Although it has been the NRC's policy to not require non-licensed site owners or their contractors to possess an NRC license to conduct decommissioning work, we do expect that the radiological controls program will implement and comply with the NRC's regulatory requirements in 10 CFR Parts 19 and 20. Therefore, please provide a written response within 45 days from the date of this letter as to what actions will be taken to ensure exposure records, if requested, will be provided upon the termination of an employee.

C/47

Chevron Chemical Company

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In accordance with 10 CFR 2.790 of the Commission's regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

Original Signed By

J. W. McCormick-Barger, Chief  
Decommissioning Branch

Project Code: 687

Enclosure: Inspection Report

cc w/encl: R. Vandegrift, Ohio Department of Health  
J. Davis, Foster Wheeler Environmental Corporation

bcc w/encl: M. Weber, NMSS  
P. Goldberg, NMSS  
PUBLIC (IE07)

DOCUMENT NAME: A:\CHEVCHEM.DNM

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NAME	Snell/can		House		McBarger		
DATE	11/9/95		11/9/95		11/13/95		

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Project Code: 687

Docket No. None

License No. None

Owner: Chevron Chemical Company

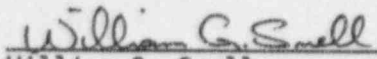
Inspection At: Former Harshaw Chemical Building Plant C  
1000 Harvard Avenue  
Cleveland, Ohio

Onsite Inspection Conducted: October 24-25, 1995

Inspection By:


  
John E. House  
Senior Radiation Specialist

11/4/95  
Date

  
William G. Snell  
Senior Radiation Specialist

11/2/95  
Date

Approved By:

  
J. W. McCormick-Barger, Chief  
Decommissioning Branch

11/13/95  
Date

Inspection Summary

Inspection on October 24-25, 1995

Areas Inspected: This was a routine inspection to assess the radiation protection program and practices conducted for the decommissioning activities at the former Harshaw Chemical Building Plant C. The inspectors also observed decontamination activities and examined radiation protection program records.

Results: In general, the radiation protection program and practices were determined to be acceptable. However, two issues were identified that require action. The first involved the failure to provide an actual or estimated record of radiological exposure to an employee upon request when the employee was terminated as is required by 10 CFR Part 19.13(e). The second issue involved an inconsistency in the Health and Safety Plan as to when urinalyses are required.

## DETAILS

### 1. Persons Contacted

Joe Davis, Health and Safety Coordinator, Foster Wheeler Environmental Corporation  
Ferdinand Rock, Midwest Remediation Manager, Foster Wheeler Environmental Corporation  
Rick Story, Field Operations Leader/Operator, Foster Wheeler Environmental Corporation  
Frank Talbot, Health Physicist, Ohio Department of Health

The above individuals were present during the inspection on October 24-25, 1995.

### 2. Background

Natural uranium was used in the production of uranium hexafluoride for the Manhattan Engineering District and Atomic Energy Commission (AEC) in the 1940's and 1950's at this site. Building C was the main processing building, and is made of brick & concrete with one, two and three-story sections, of 66,500 ft<sup>2</sup>. Building C was decommissioned by the Harshaw Chemical Company and released from AEC control in 1960. Surveys conducted during the 1970's and 1990's determined that Building C, as well as other areas of the site, were still contaminated in excess of NRC regulatory limits. Currently, the Engelhard Corporation owns the entire site except for Building C, which is owned by the Chevron Chemical Company.

In June 1995, Chevron's Decommissioning Plan for the decontamination and demolition of Building C was approved by the NRC, and remediation activities began in July 1995.

### 3. Current Status

To date, the facility has been characterized, with the extent of contamination greater in scope than originally anticipated. The primary area of additional contamination discovered was where a one to two inch concrete floor was poured over an existing floor. Between these two layers of concrete considerable loose contamination has been found.

At the time of the inspection, almost all overhead pipes and wiring had been taken down. These materials were being stored within the building until a formal procedure for surveying the material for release was developed.

The inspectors were able to observe initial testing of a steel shot scabbling machine that had been acquired for decontamination efforts. The system could support up to five scabbling hoses operating simultaneously.



#### 4. Radiation Protection Practices

The inspectors interviewed the contractor individuals identified in Section 1 about the site-specific radiation protection practices, radiological surveys, and the control and free release of contaminated equipment and materials. In addition, records and documentation of surveys, instrument calibrations, air monitor samples, and Radiation Work Permit (RWP) sign-in sheets were reviewed. A tour of the facility was also conducted. The following information was obtained during the tour, records review, and interviews:

- The access control point was clean and well organized with two portable survey instruments available for frisking. Sufficient supplies for suiting out in personal protective clothing as required (e.g., booties, gloves, tape, etc.) were available. RWPs were posted and sign-in sheets indicated personnel were signing in as required. NRC Form 3, *Notice to Workers*, was also -- conspicuously posted adjacent to the RWPs.
- The tour of the building indicated that contamination was being adequately identified and controlled. An onsite laundry had been established with all water being filtered and reused or stored pending authorization from the Northeast Ohio Regional Sewer District that it could be released to the sewer.
- A review of survey records indicated that surveys are being conducted as required and more. Records for the access control point indicated surveys were being conducted two to three times a week on average, although required only weekly.
- The only material that had been free released from the site had been no-longer needed tools/equipment, and items with salvage value such as old lockers and some scrap metal. A review of survey records indicated all these items had been surveyed, decontaminated where necessary, and resurveyed, prior to release.
- During a September 7, 1995 inspection, a concern was identified regarding workers signing the sign-in and sign-out RWP log sheet each time they entered and exited the RCA. This was primarily due to the failure of having the appropriate log sheets posted for use. A review of the log sheets indicated that personnel had been signing in and out as required since that time.
- A review of the air monitoring reports indicated that background varied from 0.26 counts per minute (cpm) to 0.89 cpm, based on a daily calculation. The minimum detectable activity (MDA) of the detector, also determined daily, was calculated to be 0.26 to 0.30 cpm. Because the MDA was within the range of the background measured, the inspectors questioned the appropriateness of the detector or the length of the count times. The contractor stated that he would look into the issue.

- A review of instrument calibration records indicated that calibrations were current and instruments were source checked as required.
- All workers observed during the tour of the facility appeared to be wearing the proper personal protective clothing for the work they were performing.

5. Urinalysis and Dose Records

The Health and Safety Plan provided conflicting information on the requirements for urinalysis. Section 6.10, *Radiation Exposure Records*, states that personnel may be required to complete urinalysis testing at the start and completion of the project. However, Section 8.3.5, *Urinalysis*, states urinalysis shall be performed prior to the start of site activities and upon termination of work in the Exclusion Zone. The Health and Safety Coordinator indicated that he could have urinalysis performed on an as-needed basis, but in fact they had performed them on all personnel. This inconsistency in the Health and Safety Plan should be corrected.

A review was made of dose records to verify if personnel who had been terminated had received their dose record. 10 CFR Part 19.13(e) requires that an actual or estimated record of radiological exposure is provided to an employee, upon request, when the employee is terminated. The contractor stated that they had one employee who was terminated request a copy of his dose record. The contractor believed he had 30 days with which to provide the information. Because the contractor, Foster Wheeler Environmental Corporation, is not an NRC licensee, this is not considered a violation of NRC requirements.

6. Exit Meeting

An exit meeting was conducted on October 25, 1995, with the individuals specified in Section 1 of this report. The preliminary results of the inspection were discussed. The licensee did not identify any information as proprietary.