

DEC 30 1993

Chemetron Corporation
ATTN: David R. Sargent
Assistant Secretary
1 Citizens Plaza
Providence, RI 02903

License No. SUB-1357
Docket No. 040-08724

Dear Mr. Sargent:

This refers to the special inspection and radiological confirmatory survey conducted by Mr. Kenneth Lambert of this office on September 23, 1993 and the review of wipe results on October 21, 1993 of Building 10C. This inspection was conducted in response to the request to release Building 10C floor from restricted control prior to resurfacing.

The enclosed copy of our inspection report identifies the area surveyed. Within this area, the residual radioactive material on the floor of Building 10C is less than NRC's unrestricted use criteria found in "Guidelines for Decontamination of Facilities and Equipment prior to Release for Unrestricted Use or Termination for Byproduct, Source, or Special Nuclear Material," August 1987.

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,

M. McCann
Gary L. Shear, Chief
Fuel Cycle and Decommissioning Branch

Enclosure: Inspection Report
No. 040-08724/93-004(DRSS)

See Attached Distribution

Yes
RIII *HW*
Lambert/djp
12/29/93

Yes
RIII *HW*
McCann
12/29/93

RIII
Shear

Distribution

cc w/enclosure:

Robert E. Owen, Administrator,
Radiological Health Program, Ohio
Department of Health
Donald Schregardus, Director, Ohio
Environmental Protection Agency
Mayor K. Edwards, Village of
Newburgh Heights
Mayor Lou Bacci, Village of
Cuyahoga Heights
Kathryn Jones, Ohio Environmental
Protection Agency, N.E.D.O.
James Benetti, 5AT-26, U.S.
Environmental Protection Agency
Todd Brady, Cuyahoga County Board
of Health
The Honorable Howard K. Metzenbaum,
U.S. Senate
The Honorable John Glenn,
U.S. Senate
The Honorable Martin R. Hoke,
U.S. House of Representatives
Chris Trepal, Co-Director, The
Earth Day Coalition
Barry Koh, B. Koh & Associates,
Inc.

bcc w/enclosure:

J. T. Greeves., NMSS
J. H. Austin, NMSS
T. C. Johnson, NMSS
A. M. Huffert, NMSS
P. Walker, OIG
W. L. Axelson, RIII
G. L. Shear, RIII
G. M. McCann, RIII
D. J. Sreni4wski, RIII
PUBLIC

Inspection Summary

Inspection on September 23, 1993 and October 21, 1993 (Report No. 040-08724/930049(DRSS)) Areas Inspected: This was a special announced inspection to perform a radiological confirmatory survey of the floor of McGean-Rohco Building 10C. The purpose of this survey was to determine if residual radioactive material on the floor surface is less than NRC's unrestricted use criteria. Results: The results of the confirmatory survey indicated the residual radioactive material on the floor surface is less than the NRC's unrestricted use criteria.

U.S. NUCLEAR REGULATORY COMMISSION
REGION III

Report No. 040-08724/93004

Docket No. 040-08724

License No. SUB-1357

Licensee: Chemetron Corporation
One Citizen Place
Providence, RI 02903

Inspection At: McGean-Rohco, Inc. facility, Building 10C, 2910 Harvard Avenue, Newburgh Heights, Ohio.

Inspection Conducted: Onsite September 23, 1993, and in office review of wipe results on October 21, 1993.

Inspection By: George M. McCann for 12/29/93
Kenneth J. Lambert Date
Radiation Specialist

Approved By: George M. McCann 12/29/93
George M. McCann, Chief Date
Fuel Facilities and
Decommissioning Section

DETAILS

1. Persons Contacted

*D. McEleney, B. Koh and Associates *J. Freytag, Health Physics Technician, McGean-Rohco

*Indicates those present during the exit meeting.

2. Background

Chemetron Corporation holds License No. SUB-1357 originally issued on June 12, 1979 by the Nuclear Regulatory Commission (NRC) authorizing possession of depleted uranium for purposes of decommissioning. The license is continuing in effect since it's last license renewal application on October 1, 1990. The license authorizes material at the original factory site (Harvard Avenue) and at a landfill (Bert Avenue) where material was placed during decontamination efforts in the 1970's. The original license (SUB-852), issued on October 8, 1965, authorized Chemetron, through its McGean Unit of the Inorganic Chemical Division, to manufacture catalysts containing depleted uranium. No activities involving source material, other than decontamination, have been conducted at the sites since Chemetron discontinued production of the catalyst in February 1972. In addition, McGean-Rohco, Inc. is in possession of depleted uranium in the form of contamination on buildings, equipment and land at a property (the McGean Site) located immediately east of the Harvard Avenue Site. The licensee has gone through several reorganizations involving internal and vendor decontamination programs since 1972. The licensee submitted to NRC their remediation plan in October 1993, which is currently being reviewed.

In September 1993, Chemetron informed NRC Region III that it was decontaminating the floor of Building 10C to less than NRC unrestricted use criteria prior to resurfacing the floor. NRC informed Chemetron that a confirmatory survey would be conducted by Region III.

3. Confirmatory Survey Procedures

The confirmatory survey covered approximately 10 percent of the floor. The grid system laid out by Chemetron was used. Direct measurements were obtained at grid line intersects. Surveys included direct measurements for alpha and beta activity and scanning the floor surface surrounding the grid line intersects. When scanning indicated a measurement in excess of the grid line intersect measurement, a direct measurement will be performed at that location. Wipes for removable.. contamination were collected at every direct measurement location. Wipes were analyzed for gross alpha (a) and gross beta (0) activity.

4. Survey Results

The survey was performed using an Eberline Model E-520 portable survey meter, serial number 1786, last calibrated on September 22, 1992, coupled to a Geiger-Mueller pancake detector to determine beta/gamma activity. Background was determined to be 58 counts per minute (cpm) with an efficiency of 20 percent for depleted uranium (DU). An Eberline Model PRS-1, serial number 414, last calibrated on May 5, 1993, coupled to a scintillation detector was used to determine a activity. Background was determined to be 3 cpm with an efficiency of 12 percent.

The survey was performed as planned, with direct measurements for a and B activity performed at 20 randomly selected locations. Survey results for a activity ranged from background to 84 disintegrations per minute per 100 square centimeters (dpm/100 CM²) (1.4 Becquerels (Bq)/100 cm²). Beta activity survey results were indistinguishable from background. Wipe analysis results for gross a activity were indistinguishable from background. Wipe analysis results for gross B activity ranged from background to 2 dpm/100 cm². Surface scans of the floor for a and B activity were indistinguishable from background. This survey indicated that residual radioactive material on the floor was less than NRC unrestricted use criteria of *5000 dpm (84 Bq)/100 cm² average a activity; 15,000 dpm (250 Bq) /100 CM² maximum a activity; and 1000 dpm (17 Bq)/100 CM² removable a activity. These criteria are found in NRC's "Guideline for Decontamination of Facilities and Equipment prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," August 1987. A review of the licensee's data indicated the results to be comparable with NRC survey data.

5. Exit Meeting

An exit meeting was conducted on September 23, 1993 with the individuals as specified in the Persons Contacted section of this report. The preliminary results of the confirmatory survey were discussed. The preliminary data indicated that the residual radioactive material on the floor of Building 10C was less than NRC unrestricted use criteria. Chemetron representatives did not identify any information discussed as being proprietary.