

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 999-90003/93041(DRSS)-Supplement

License No. SNM-183 (terminated)
Docket No. 070-00133 (terminated)
License No. 34-00653-01(terminated)
License No. 34-00653-02(terminated)
License No. C-3790 (terminated)
License No. C-3692 (terminated)

Licensee: Clevite Research Center
Division of Clevite Corporation
540 East 105th Street
Cleveland, Ohio

Inspection At: Neighborhood Progress, Inc.
(a former Clevite Corp. facility)
540 East 105th Street
Cleveland, Ohio 44108

Inspection Conducted: December 6 and 8, 1993

Inspectors: *D. G. Wiedeman*
D. G. Wiedeman
Senior Health Physicist

1/12/94
Date

R. L. Glinski
R. L. Glinski
Radiation Specialist

1/12/94
Date

Approved by: *G. M. McCann, III*
for G. M. McCann, Chief
Fuel Facilities and Decommissioning
Section

1/12/94
Date

Inspection Summary

Inspection on December 6 and 8, 1993 (Report No. 999-90003/93041(DRSS)-
Supplement)

Areas Inspected: This report is a supplement to Report No. 999-90003/93041(DRSS) issued December 30, 1993. A sample of contaminated concrete taken from the floor of the former manufacturing area and smear tests from six 1-meter grids were collected December 6 & 8, 1993.

Results: The NRC Region III laboratory analyses confirmed that the radioactive material is predominately a fixed beta emitter and uranium. After review of this data, it was confirmed that the level of fixed contamination within five of the six 1-meter grids exceed the NRC release criteria and the remaining grid approaches the NRC limit.

DETAILS

1. Persons Contacted

#*Raymond J. Pierce, Facilities Manager, Neighborhood Progress, Inc.
(NPI)

*Attended the exit meeting conducted on December 8, 1993.

#Telephone conversation conducted on January 7, 1994 regarding
the results of the laboratory sample analyses.

2. Laboratory Results

Smear Number	Location	Direct Radiation Measurements	Smear Test Results	
		disintegrations per minute * dpm/100 cm ² averaged over 1-meter ²	⊙ Removable Activity dpm/100cm ²	
			alpha	beta
Grid 1	Floor machine shop	7,733	1.0 ± 0.5	5.3 ± 1.1
Grid 2	Floor machine shop	9,200	4.5 ± 1.2	37.3 ± 3.4
Grid 3	Floor machine shop	8,800	0.9 ± 0.5	4.7 ± 1.0
Grid 4	Floor machine shop	6,533	1.1 ± 0.5	4.7 ± 1.0
Grid 5	Floor machine shop	9,400	1.4 ± 0.6	7.8 ± 1.4
Grid 6	Floor hallway	610	0.1 ± 0.1	3.2 ± 0.8

* NRC limit is 5,000 dpm/100 cm² averaged over 1 square meter. Readings were converted from counts/minute (cpm) to disintegrations/minute (dpm) using a conversion factor of 750 cpm = ≈5,000 dpm/100 cm² averaged over 1 square meter.

⊙ NRC limit is 1,000 dpm (alpha)/100 cm² and 1,000 dpm (beta)/100 cm²

Laboratory analysis of \approx 5 grams of chipped concrete taken from Grid 3 indicated uranium.

3. Conclusion

All smear tests for removable contamination were below the NRC release criteria. Five of the six 1-meter grid areas of fixed contamination found on the floor exceed the NRC release limit of 5,000 dpm/100 cm² (averaged over 1-meter) and four individual areas exceeded the NRC maximum limit of 15,000 dpm/100 cm². These areas are described in Report No. 999-90003/93041(DRSS).