

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 07000247/92001(DRSS)

License No. SNM-237 (terminated)

Docket No. 070-00247 (terminated)

Facility: Allis-Chalmers Manufacturing Company  
P.O. Box 512  
Milwaukee, Wisconsin

Inspection At: Reiman Publications  
(a former Allis-Chalmers facility)  
5400 South 60<sup>th</sup> Street  
Greendale, Wisconsin 53129

Inspection Conducted: August 13, 1992

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

*9-8-92*  
Date

Assisted By: William Radcliffe  
Physical Science Aide

*09/08/92*  
Date

Approved: *Roy J. Caniano*  
Roy J. Caniano  
Chief, Fuel Facilities and  
Contaminated Sites Section

*9/8/92*  
Date

Inspection Summary

Inspection on August 13, 1992 (Report No. 7000247/92001(DRSS))

Areas Inspected: This was a special closeout inspection which included a review of the former licensee's activities associated with the decontamination and remediation of their formerly used office area (Building A), materials laboratory (Building B) and the former reactor building area (Building C). This inspection was in response to an NRC project in which an evaluation of approximately 17,000 retired licenses was conducted by an NRC contractor, Oak Ridge National Laboratories (ORNL), which on the basis of the information in the retired license file, may have a potential for significant residual contamination in their former facilities. Due to the lack of documentation in the Allis-Chalmers retired license file, the NRC contractor concluded that the former facilities used by Allis-Chalmers could have significant amounts of residual contamination.

Results: The NRC inspectors did not identify any radiation levels above natural background within the facilities or surrounding environment. Based upon this inspection and previously submitted documents by the former licensee, it is concluded that the facility was successfully decontaminated to levels below the NRC release criteria.

## DETAILS

### 1. Persons Contacted

- Richard H. Vollmer, former employee of Allis-Chalmers
- Richard A. Hartfield, former employee of Allis-Chalmers
- F. A. Maura, former employee of Allis-Chalmers
- John Parkyn, Plant Manager, LaCrosse Boiling Water Reactor, (LACBWR)
- Larry Nelson, Radiation Safety Officer, (LACBWR)
- \* Mark Bunge, Wisconsin Department of Health
- \* Tom Warnte, Wisconsin Department of Health
- \* Michael Mack, Wisconsin Department of Health
- \* Kevin P. O'Brien, Deputy Director, Milwaukee County Emergency Government
- \* Norb Whittle, Vice President, Reiman Associates
- # John Jensen, President, Reiman Associates
  
- \* Attended the exit meeting conducted on August 13, 1992
- # Telephone conversation conducted on August 31, 1992

### 2. Background

Licenses SNM-237 and SMB-680 were issued to Allis-Chalmers for work in their Greendale, Wisconsin laboratory. License SMB-680 (Docket No. 40-2793) authorized use of 1275 pounds of uranium and thorium for fuel element research and development and for analytical purposes. License No. SNM-237 (Docket No. 70-247) authorized use of enriched uranium (up to 47 kilograms) for preparation and storage of fuel elements to be used in LACBWR.

The work was conducted in three buildings on the Greendale site: Buildings A and B which were connected and Building C which was detached. Building C also housed a critical facility operated under AEC License CX-15 which expired on November 13, 1968. License No. SNM-237 expired on September 30, 1967, and License No. SMB-680 expired on December 31, 1967.

Existing records show that the licensee performed a final radiation survey of the critical facility in September 1967 and the AEC performed a closeout survey of this facility on October 6, 1967. The AEC also made a preliminary radiation survey of the critical facility on August 30, 1967 that included portions of Building B. On May 6, 7, and 21 and June 4, and 9, 1982 the NRC conducted a closeout inspection of the facilities. During this inspection residual contamination (up to 40 microrentgens/hour) was identified inside a drain pipe in Building B.

During the license file review by ORNL, references were made in the terminated license file that disposals of radioactive materials were made in accordance with 10 CFR 20 (includes burial of material). This statement could indicate that radioactive materials may be buried on

site and the contaminated pipe drain identified by the NRC in 1982 led the ORNL staff to the conclusion that some contamination may have been released to the environment.

Information regarding past and current activities was provided to the NRC inspectors by the former Allis-Chalmers employees identified under Section 1 of this report, along with Mr. Norb Whittle of Reiman Associates.

### 3. Facility Status

Reiman Publications purchased the property from Allis-Chalmers in 1980 and moved into the building in 1981. During the past 10 years Reiman Publishing has done extensive remodeling and added 42,000 ft<sup>2</sup> of additional office space and warehouse.

### 4. Independent Measurements

The inspectors conducted radiologic surveys in and around the area where Building C once stood and the area in Building B which was identified by the NRC as being contaminated in 1982. The inspectors noted that extensive remodeling of the facility has occurred during the past 10 years. The contaminated sewer drain line identified by the NRC in 1982 had been removed during the extensive remodeling of the facility during the past 10 years. The current property owner did not have any records of the disposition of the building rubble that was removed during the remodeling. The drain was once connected to hoods and sinks in the former licensee's laboratory. This area is now business offices. The NRC inspectors conducted radiologic surveys of this area and did not identify any radiation levels above natural background.

The inspectors also toured the site and adjacent property and conducted independent radiation surveys with a Victoreen, Model 190 survey instrument with a Model RP-1 pancake probe, NRC Tag No. 040520 which was calibrated on June 21, 1992 and a Ludlum, Model 220, Micro R meter, with a sodium iodide (NaI) detector, NRC Tag No. 017114, which was calibrated on May 28, 1992. Background measurements taken in the parking lot with the Victoreen, Model 190 showed 10-12  $\mu$ R/hour. Background measurements with the Ludlum, Model 220 showed 50-100 counts/minute (50-100 cpm). Random measurements of the concrete walkway leading to the former reactor building and environment in and around this location (Building C), and areas of Building B where former licensed activities were conducted showed no radiation levels above natural background. In conclusion, no evidence of 10 CFR 20 burials or radiation levels above NRC release criteria were identified.

### 5. Exit Meeting

The NRC inspectors met with the individuals identified in Section 1 of this report and summarized the findings of the inspection. The inspectors informed the current property owner representative that the

independent radiologic survey indicated that the former Allis-Chalmers office building, Building B and the environment in and around the area where Building C formerly sat did not show any radiation levels above natural background. The inspectors also informed the current property owner that the levels of radiation were below the release criteria described in the NRC document "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material" dated August 1987.