

(AUG 28 1972

G. W. Roy, Chief, Materials & Fuel Facilities Branch
Directorate of Regulatory Operations, HQ

RO INSPECTION REPORT NO. 72-01
WHITTAKER CORPORATION
NUCLEAR METALS DIVISION
WEST CONCORD, MASSACHUSETTS

The subject inspection report is forwarded for your information.

Three violations of license conditions concerning lack of training records, lack of training, and lack of criticality safety inspection records were observed during this inspection. The licensee recently initiated SNM activities at this facility after a lengthy period of inoperation. In addition, the work force at the facility has been reduced from about 90 to 50 persons.

I believe the deficiencies observed in their program directly reflect the low moral at the plant which has resulted from the reductions in force. We plan to reinspect the plant prior to October to examine their corrective actions on the deficiencies and conduct a thorough radiological safety inspection of their program.

H. W. Crocker
Senior Fuel Facilities Inspector

Enclosure:
Subject Inspection Report (Orig & 1)

cc: H. D. Thornburg, RO
R. H. Engelken, RO
RO Files

A124

OFFICE ▶	Cress I					
SURNAME ▶	<i>dw</i> Crocker:dw	<i>MS</i> SMITH				
DATE ▶	8-22-72					

Section I

Enforcement Action

Violations

- A. License Condition 8, License Manual, Section II (b), 1, page II-12, paragraph 3, failure to provide quarterly training of fire brigade members during 1972. (See Paragraph 11)
- B. License Condition 8, License Manual, Section II (b) 1, page II-11, paragraph 4, failure to provide training of employees prior to start up of SNM fuel fabrication operations. (See Paragraph 12)
- C. License Condition 8, License Manual, Section IV (a), 3, (a), vii page IV-4, failure to perform criticality safety inspections of SNM operations. (See Paragraph 13)

Licensee Action on Previously Identified Enforcement Matters

None

Unresolved Items

None

Status of Previously Reported Unresolved Items

None

Persons Contacted

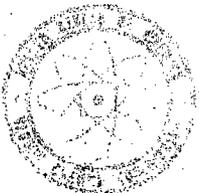
Mr. P. Ulf Gummeson, General Manager
Mr. A. Gilman, Manager of Engineering and Administrative Criticality Officer
Mr. M. Perella, Health & Safety Officer
Mr. L. Clark, Criticality Officer (Consultant from Massachusetts Institute of Technology).

Management Discussion Meeting

A management discussion meeting was held on August 1, 1972. Those present at the meeting were:

Whittaker Corporation, Nuclear Metals Division

Mr. P. Gummeson



RECEIVED
AUG 1 1972
NRC
301 210

Mr. A. Gilman

U.S.A.E.C.

Mr. H. W. Crocker

The inspector described the scope of the inspection to the management representatives.

Each of the violations observed during the inspection were discussed. Mr. Gummeson and Mr. Gilman indicated that corrective actions will be taken to correct each of the deficiencies.

The inspector also informed these gentlemen of the recent organizational changes under the Director of Regulation.



RECEIVED
U.S. A. E. C.
MAY 10 1954
WASHINGTON, D. C.

Section II

Additional Subjects Inspected, Not Identified in Section I, Where No Deficiencies or Unresolved Items Were Found

1. General

The licensee initiated fuel element fabrication operations on a new CP-5 reactor fuel contract for the Argonne National Laboratory in April, 1972. The fuel operations will continue for another year. No fuel fabrications were made during 1971.

The SNM operations at this plant represent a small portion of the plant's overall activities. The licensee devotes most of their efforts to metallurgical activities on zirconium, beryllium, and other metal applications. The total employment at the facility has dropped from 90 to about 50 persons as a result of a decline in many of their business areas.

As a result of the reduction in force, Mr. Perella, in addition to serving as Health & Safety Officer, also performs the technician duties of making the primary alloy castings for the CP-5 fuel element contract. Other plant personnel have also acquired additional assignments.

2. Organization

The overall organizational structure for the plant is unchanged from the last inspection, except that the reduction in force has resulted in a number of personnel serving in more than one capacity.

3. Operating Procedures

Operating procedures NMD-CP-5-1 and NMD-CP-5-2 covering the charge preparation, charge weighing, equipment preparation, melting, pouring and post pour operations for the casting of aluminium-uranium alloy and aluminum-magnesium alloy for CP-5 fuel were reviewed. These written procedures were approved by Mr. Gilman and accepted by Argonne Laboratory for use in the CP-5 work. These particular procedures cannot be altered without Argonne Laboratory concurrence. Copies of these procedures are retained by RO:I.

4. Evacuation Drills

The licensee has not conducted any evacuation drills since the start-up of the current SNM fuel work. Mr. Perella indicated that drills will be held in August, 1972, in accordance with license requirement.

5. Examination of SNM Process Areas

The SNM processing areas were examined for proper exclusion area definition, posting, availability of work procedures, and SNM handling limits. The inspection included the casting furnace, heating furnace, No. 5 hacksaw, extrusion press, lathe room, ultrasonic test area, X-Ray area, and inspection areas.

6. Examination of SNM Storage Area

The Butler Building SNM storage area was examined for limitations on personnel access, confirmation of storage array structure, spacing of SNM in accordance with license conditions, proper storage containers, and adherence to authorized SNM storage limits.

7. SNM Packaging - Shipping

Licensee packaging, radiation survey, and shipping records for March, 1970 through July 31, 1972 were examined. Empty DOT 4969 containers at the plant were examined for proper permit and model labeling. The licensee's use of DOT 4969 containers is authorized through April 30, 1974. Some shipping records were not available due to absence of the accountability representative from the plant.

8. Criticality Monitoring System

The criticality monitoring system was examined for placement of detector heads as authorized by SNM license, operability, and alarm set point adjustment. Records of the weekly alarm tests for the period April, 1972 through July, 1972, were reviewed.

9. Unusual Occurrences

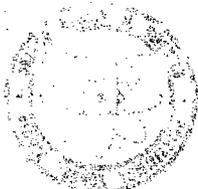
No unusual occurrences and no loss or thefts of SNM have occurred since the last inspection according to the licensee management.

10. Employee Interviews

One employee, an inspection technician, was interviewed regarding his job duties and job knowledge.

Details of Subjects Discussed in Section I

11. Fire Brigade Training



RECEIVED
ATOMIC ENERGY COMMISSION
OFFICE OF HEALTH, SAFETY, AND ENVIRONMENT
WASHINGTON, D.C. 20545

The Health and Safety Officer confirmed that no training was provided for these persons during 1972. In addition, the licensee could not provide records describing the scope of the training and who received the training that was provided in the fall of 1971.

12. Training of Employees

The licensee could not provide records which describe the scope of training or who received the training which employees were said to have been given prior to the startup of the new CP-5 fuel element operations utilizing highly enriched uranium (93% enriched in U-235). Verbal confirmation that such training was received was obtained by the inspector from several employees. The SNM operations were initiated in April, 1972, after a period of about one year in which no SNM operations were performed.

13. Criticality Inspections

The licensee would not produce any records which described the scope, the findings, and the corrective action resulting from their criticality inspections.

The licensee stated that the Administrative Criticality Officer makes daily inspections of the SNM handling areas and that the Criticality Officer (consultant) performs inspections of these areas approximately twice per month. Each of these men stated that no deficiencies in the handling of SNM were observed in their inspections and audits.



NEW YORK NEW YORK 10001
330 BROADWAY
REG. OFF.
DIVISION OF PUBLIC SAFETY
ATOMIC ENERGY COMMISSION
BUREAU OF RADIATION