

U. S. ATOMIC ENERGY COMMISSION
DIRECTORATE OF REGULATORY OPERATIONS
REGION I

RO Inspection Report No.: 70-903/73-03

Docket No.: 70-903

Licensee: Gulf United Nuclear Fuels Corporation

License No.: SNM-871

Grasslands Road

Priority: 1

Elmsford, New York 10523

Category: A(1)

Location: Pawling, New York

Type of Licensee: Fuel Fabrication

Type of Inspection: Routine - Unannounced

Dates of Inspection: October 30-31, 1973

Dates of Previous Inspection: June 28-29, 1973

Reporting Inspector: W. W. Kinney
W. W. Kinney, Fuel Facilities Inspector

11/20/73
DATE

DATE

Accompanying Inspectors: None

DATE

DATE

Other Accompanying Personnel: None

DATE

Reviewed By: H. W. Crocker
H. W. Crocker, Senior Inspector

11/28/73
DATE

SUMMARY OF FINDINGS

Enforcement Action

No violations of AEC requirements or safety items were identified during this inspection.

Licensee Action on Previously Identified Enforcement Items

Items A through F discussed below were enforcement subjects of the letter from Region I of Regulatory Operations to Gulf United Nuclear Fuels Corporation (GUNFC) dated May 17, 1973, and the GUNFC reply dated June 13, 1973. Items G through I were enforcement subjects of the July 30, 1973, Region I letter to GUNFC and the August 21, 1973, GUNFC reply. (Details, Paragraph 4)

A. Stack Sampling

The stack sampler was relocated outside the contaminated facility. (Details, Paragraph 4.a)

B. Emergency Alarm Signal System

The licensee has provisions in the emergency procedures for evacuation due to airborne radioactivity. The extent of the evacuation is dictated by the extent of the airborne radioactivity. (Details, Paragraph 4.b)

C. Emergency Call Lists

The licensee has maintained current emergency call lists. The latest list, which includes GUNFC and AECOR personnel, was issued on October 30, 1973. (Details, Paragraph 4.c)

D. Training Program

The licensee's training program has been curtailed with the curtailment of GUNFC activities at the Pawling Site. (Details, Paragraph 4.d)

E. Drain Water System at Remote Assembly Building

The licensee installed a system in the remote assembly building which would allow collection of the water from the shower and wash facilities. The water can now be collected and analyzed prior to release. (Details, Paragraph 4.e)

F. Survey Instruments to Accompany Contaminated Injured Personnel

Provisions have been made for survey instruments to accompany personnel referred to another location, such as a hospital for medical treatment. (Details, Paragraph 4.f)

G. Storage of Drums of Waste

The drums of waste stored outside were moved into the Transition Building on July 2, 1973, and subsequently shipped for burial. (Details, Paragraph 4.g)

H. Personnel Surveys for Radioactive Contamination

An alpha survey instrument was placed at the Gas House exit on July 3, 1973, for use by personnel leaving the Plutonium Facility by that exit, according to the licensee. (Details, Paragraph 4.h)

I. Criticality Monitor

The criticality monitor serving the Plutonium Laboratory vault was back in service on July 3, 1973, according to the licensee. (Details, Paragraph 4.i)

Design Changes

Not inspected

Unusual Occurrences

None

Other Significant Findings

A. Current Findings

GUNFC has contracted ATCOR, Incorporated to complete the decontamination of the Plutonium Laboratory of the Pawling Laboratories located in Pawling, New York. The gloveboxes, hoods, and ventilation system will be removed in achieving an unconditional radioactive contamination release of the facility. (Details, Paragraph 2)

B. Status of Previously Reported Unresolved Items

None

Management Interview

At the conclusion of the inspection, a management discussion meeting was held at 2:00 p.m. on October 31, 1973, between J. C. Andersen, Manager, Plutonium Operations for GUNFC and W. W. Kinney of the AEC.

The scope of the inspection was presented. The GUNFC responsibilities as licensee were discussed. GUNFC realizes they retain ultimate responsibility for the Plutonium Laboratory while ATCOR is decontaminating it.

The actions on the previously identified enforcement items were discussed. The fact that no violations of AEC requirements or safety items were found during the inspection was mentioned. (Details, Paragraph Nos. 4.a through 4.f)

DETAILS

1. Persons Contacted

a. Gulf United Nuclear Fuels Corporation

J. C. Andersen, Manager, Plutonium Operations
H. E. Clow, Nuclear and Industrial Safety Representative

b. ATCOR

O. Sullivan, Project Manager
P. Levesque, Headquarters Radiation Officer

2. Scope of Operations

Gulf United Nuclear Fuels Corporation (GUNFC) has contracted ATCOR, Incorporated to complete the decontamination of the Plutonium Facility at the Pawling Site. The facility is to be unconditionally released for radioactive contamination and returned to United Nuclear. GUNFC will not continue any activities under License No. SNM-871 after the decontamination of the facility is completed in early 1974.

3. Organization

GUNFC presently has seven people at the Pawling Site. Mr. J. C. Andersen, Manager, Plutonium Operations, retains the prime responsibility for the activities being conducted at the Pawling Site. Mr. H. E. Clow continues to perform the functions of the nuclear and industrial safety representative.

4. Licensee Action on Previously Identified Enforcement Items

Items a through f discussed below were enforcement subjects of the letter from Region I of Regulatory Operations to Gulf United Nuclear Fuels Corporation dated May 17, 1973, and the GUNFC reply dated June 13, 1973. Items g through i were enforcement subjects of the letter from Region I dated July 30, 1973, and the GUNFC reply dated August 21, 1973.

a. Stack Sampling

The sampler for sampling the stack effluents was relocated to a position outside the facility. Filter changes and service can be performed without entering the contaminated area.

b. Emergency Alarm Signal System

The emergency procedures have provisions for evacuation of the site depending upon the circumstances. In the case of a criticality incident, complete evacuation of the site is demanded. In the case of airborne radioactivity, the extent of evacuation is dictated by the extent of the airborne contamination.

c. Emergency Call Lists

The licensee has maintained an up-to-date emergency call list since July 31, 1973. The emergency call list, which includes GUNFC and ATCOI personnel, was issued on October 30, 1973.

d. Training Program

The licensee has curtailed its training program with the curtailment of activities at the Pawling Site. The requirement for emergency drills for criticality is no longer needed because a criticality incident is no longer possible with the amount of fissile material present at the site.

e. Drain Water System at Remote Assembly Building

The licensee installed a system in the remote assembly building which would allow collection of the water from the shower and wash facilities. Should it be necessary to decontaminate personnel at the remote assembly building, the water could be collected and analyzed prior to release.

f. Survey Instrument to Accompany Contaminated Injured Personnel

The licensee provided survey instruments at the remote assembly building for monitoring potentially contaminated personnel. The emergency procedures now include instructions that proper survey instruments accompany the personnel when they are taken to another location, such as a hospital for medical treatment.

g. Storage of Drums of Waste

The drums of waste stored outside were moved into the Transition Building on July 2, 1973, and subsequently shipped, according to the licensee. No drums of waste were found stored outside during the current inspection.

h. Personnel Surveys for Radioactive Contamination

The licensee placed a alpha survey instrument at the Gas House exit on July 3, 1973, for use by personnel leaving the Plutonium Facility by that exit. The instrument was noted to be at that location during the current inspection. The change room had been relocated back into the Plutonium Facility at the time of the current inspection and personnel are now routinely leaving the contaminated zone via the change room. There was an alpha survey meter at the stepover line at the change room.

1. Criticality Monitor

The criticality monitor serving the Plutonium Laboratory vault was made operational on July 3, 1973. Presently, there is only about 19 grams of plutonium in the vault and there is no requirement for a criticality monitor.

5. GUNFC Activities

Gulf United Nuclear Fuels Corporation is taking and analyzing the stack samples on a daily basis and the three environmental samples on a weekly basis.

6. ATCOR Activities

ATCOR is decontaminating the Plutonium Facility under Byproduct Material License No. 31-11640-02. Removal of the gloveboxes and hoods will be accomplished. The ventilation system, including the stack, will be removed. Contaminated equipment will be buried at approved locations. ATCOR intends to have the decontamination completed by January 11, 1974.

7. Inspection of the Plutonium Facility

The location of the standards containing the small amount of plutonium in the locked vault was examined. Inventory labels for material not present in the vault were still posted.

The pressure gauges on the gloveboxes in the wet chemistry and vault areas showed no pressure differential between the atmosphere in the boxes and the room air. The gloves on the gloveboxes were drawn in indicating negative pressure in the gloveboxes. The gloveboxes in the pilot area had gauges indicating proper negative pressure of about 0.8 inches of water.

Many of the gloveboxes had much small equipment inside them.

Some of the floors had a yellow covering painted on them to fix contamination.

ATCOR had two Radiation Work Permits posted in the change room. One was for routine surveillance to obtain smears and inspection. The other was for general decontamination and cleanup limited to damp wipe down and encapsulation techniques.