Central Files

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
631 PARK AVENUE
KING OF PRUSSIA, PENNSYLVANIA 19406

AUG 26 1976

Union Carbide Corporation
Attention: Mr. Dean B. Holzgraf
Manager Nucleonics
P. O. Box 324
Tuxedo, New York 10987

License No. SNM-639
Inspection No. 76-02
Docket No. 70-687

Gentlemen:

This refers to the inspection conducted by Mr. J. Roth of this office on August 18-19, 1976 of activities authorized by NRC License No. SNM-639 and to the discussions of our findings held by Mr. Roth with yourself and Mr. Konnerth of your staff at the conclusion of the inspection.

Areas examined during this inspection are described in the Office of Inspection and Enforcement Inspection Report which is enclosed with this letter. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

Our inspector also verified the steps you had taken to correct the items of noncompliance and deviation brought to your attention in a letter dated May 12, 1976. We have no further questions regarding the steps you took to correct Items C, E and the deviation.

With respect to Items A and B and your statement that you have applied for a license amendment authorizing changes in the composition of your Nuclear Safeguards Committee and current audit requirements, you are advised that changes in composition of your Nuclear Safeguards Committee and deviations from the current audit requirements prior to receipt of the license amendment would constitute noncompliance. With repect to Item D, corrective actions had not been completed at the time of this inspection.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosed inspection report will be placed in the NRC's Public Document Room. If this report contains any information that you (or your contractor) believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit executed by the owner of the information, which identifies the document or part sought to be withheld, and which contains

a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in subparagraph (b)(4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, the report will be placed in the Public Document Room.

No reply to this letter is required; however, should you have any questions concerning this inspection, we will be pleased to discuss them with you.

Sincerely,

Paul R. Nelson

Paul R. Nelson, Chief
Fuel Facility and Materials Safety
Branch

Enclosure:
IE Inspection Report No. 70-687/76-02

IE:I Form 12
(Jan 75) (Rev)

U. S. NUCLEAR REGULATORY COMMISSION

OFFICE OF INSPECTION AND ENFORCEMENT

REGION I

IE Inspection Report No: 70-687/76-02

Docket No: 70-687

Licensee: Union Carbide Corporation

License No: SNM-639

Sterling Forest Research Center

Priority: 2

Category: A(2)

Safeguards Group:

Location: Tuxedo, New York 10987

Type of Licensee: Research and Test Center

Type of Inspection: Routine, Unannounced

Dates of Inspection: August 18-19, 1976

Dates of Previous Inspection: April 19-21, 1976

Reporting Inspector: J. Roth, Fuel Facility Inspector — 8/24/76 DATE

Accompanying Inspectors: _____ DATE

_____ DATE

_____ DATE

Other Accompanying Personnel: _____ DATE

Reviewed By: H. W. Crocker, Chief, Fuel Facility Project Section
Fuel Facility and Materials Safety Branch — 8/24/76 DATE

SUMMARY OF FINDINGS

Enforcement Action

None.

Licensee Action on Previously Indentified Items

The following items were identified during Inspection No. 76-01 and were documented in a Region I letter to the licensee dated May 12, 1976. The licensee's corrective actions were provided in letters to Region I dated June 2, 1976, June 8, 1976, and an acknowledgement letter from Region I to the licensee dated July 6, 1976.

A. Consultant Membership of the Nuclear Safeguards Committee

The inspector verified that the licensee had previously modified the membership of the Nuclear Safeguards Committee by letter to the NRC dated December 16, 1968 by designating Mr. K. D. George as the consultant for the Reactor Facility. However, at this time no attempt was made to redesignate the consultant member of the committee responsible for review of Hot Laboratory Operations. Corrective action on this item has been initiated by means of a license amendment application dated August 12, 1976 in which the current organization of the Nuclear Safeguards Committee has been specified. This item of noncompliance will remain uncorrected until this license amendment application has been approved. (Details, Paragraph 3.a)

B. Audits

The inspector has verified that the required audit of the Hot Laboratory facility had been accomplished by a person outside of the Nuclear Operations line organization on August 17, 1976. No deficiencies in the licensee's program were identified. The licensee has submitted a license amendment application dated August 12, 1976 which deletes the requirement for consultant members of the Nuclear Safeguards Committee to visit the laboratory once each twelve months to review operating procedures and extends the audit requirement stated above from 6 month intervals to 12 month intervals. This item of noncompliance has been partially corrected. Full correction will have been completed upon approval of the August 12, 1976 license amendment application. (Details, Paragraph 3.b)

C. Evacuation Drills

The inspector verified that the licensee has maintained records of unscheduled (false alarm) evacuation drills which occurred on May 18, 1976, August 9, 1976 and August 11, 1976. The corrective actions related to this item of noncompliance have been completed in that the licensee is currently maintaining a record of all evacuation drills. (Details, Paragraph 3.c)

D. 10 CFR 71.54 "Routine Determination" Checklists

The inspector verified that the procedures used by the licensee to prepare casks for shipment have been modified to include the procedures for making routine determination as required by 10 CFR 71.54. The licensee has developed a checklist to use in preparing each shipment of SNM in order to maintain a record of the determinations required by 10 CFR 71.62. However, it was noted by the inspector that the checklist developed did not contain entries to indicate that the routine determinations required by 10 CFR 71.54 had been completed. This item has not been corrected. (Details, Paragraph 3.d)

E. Shipping Cask Model Number Name Plates

Licensee documentation indicates that new name plates, on which the model number of each cask has been engraved, have been prepared and affixed to each cask as required by 10 CFR 71.53(c). Verification that the new name plates were affixed to the cask by the inspector was not possible because the casks were in transit at the time of this inspection. This item has been corrected. (Details, Paragraph 3.e)

F. Criticality Posting Deviation

The inspector verified that permanent criticality safety limit signs have been posted in all SNM storage and use locations. This item has been corrected. (Details, Paragraph 3.f)

G. Calibration of Area Radiation Monitors

The inspector verified that all facility area radiation and criticality monitors were calibrated during the month of April, 1976. The licensee indicated that an annual calibration schedule will be established and maintained. (Details, Paragraph 3.g)

Other Significant Findings

A. Current Findings

None.

B. Status of Previously Reported Unresolved Items

None.

Management Interview

At the conclusion of the inspection a management discussion was held at 1:30 p.m. on August 19, 1976 with the following persons present.

Union Carbide

D. B. Holzgraf, Manager, Nucleonics
C. J. Konnerth, Manager, Health Physics

NRC

J. Roth, Fuel Facilities Inspector

The scope of the inspection was presented and the items previously documented under Licensee Action on Previously Identified Items were presented and discussed. The inspector stated that no items of noncompliance were identified.

DETAILS

1. Persons Contacted

C. S. Konnerth, Manager, Health Physics Department
L. C. Thelin, Health Physicist
H. C. Hart, Assistant Reactor Supervisor

2. Scope of Inspection

This inspection was a reinspection of the criticality control and engineered safety systems to determine the current status on corrective actions for items of noncompliance and a deviation previously cited during Inspection 70-687/76-01. Within this area, the inspection consisted of selective examination of procedures and records, interviews with personnel and examination of the facility by the inspector.

3. Licensee Action on Previously Identified Items

The following items were identified during Inspection No. 76-01 and were documented in a Region I letter to the licensee dated May 12, 1976. The licensee's corrective actions were provided in letters to Region I dated June 2, 1976, June 8, 1976, and an acknowledgement letter from Region I to the licensee dated July 6, 1976.

a. Consultant Membership of the Nuclear Safeguards Committee

The inspector verified that the licensee had previously modified the membership of the Nuclear Safeguards Committee by letter to the NRC dated December 16, 1968 by designating Mr. K. D. George as the consultant for the Reactor Facility. However, at this time no attempt was made to redesignate the consultant member of the committee responsible for review of Hot Laboratory Operations. Corrective action on this item has been initiated by means of a license amendment application dated August 12, 1976 in which the current organization of the Nuclear Safeguards Committee has been specified. This item of noncompliance will remain uncorrected until this license amendment application has been approved.

b. Audits

The inspector has verified that the required audit of the Hot Laboratory facility had been accomplished by a person outside of the Nuclear Operations line organization on August 17, 1976. No deficiencies in

the licensee's program were identified. The licensee has submitted a license amendment application dated August 12, 1976 which deletes the requirement for consultant members of the Nuclear Safeguards Committee to visit the laboratory once each twelve months to review operating procedures and extends the audit requirement stated above from 6 month intervals to 12 month intervals. This item of noncompliance has been partially corrected. Full correction will have been completed upon approval of the August 12, 1976 license amendment application.

c. Evacuation Drills

The inspector verified that the licensee has maintained records of unscheduled (false alarm) evacuation drills which occurred on May 18, 1976, August 9, 1976 and August 11, 1976. The corrective actions related to this item of noncompliance have been completed in that the licensee is currently maintaining a record of all evacuation drills. However, it was pointed out to the licensee that in spite of the number of unscheduled drills occurring, the conduct of scheduled drills must be maintained in that scheduled drills are preplanned simulations of accidents conducted for the primary purpose of testing the adequacy of timing and content of implementing procedures and the adequacy and operability of equipment and facilities under such conditions. Evaluation of drill performance should, therefore, provide licensees with a comprehensive means to evaluate the effectiveness of the Emergency Plan Implementation and a basis for initiating any improvements to increase the effectiveness of the response. While drill participants do receive some degree of training through drills, individuals should be primarily trained under other than simulated accident conditions to preclude compromise of the basic objective for running drills.

d. 10 CFR 71.54 "Routine Determination" Checklists

The inspector verified that the procedures used by the licensee to prepare casks for shipment have been modified to include the procedures for making routine determination as required by 10 CFR 71.54. The licensee has developed a checklist to use in preparing each shipment of SNM in order to maintain a record of the determinations required by 10 CFR 71.62. However, it was noted by the inspector that the checklist developed did not contain entries to indicate that the routine determinations required by 10 CFR 71.54 had been completed. This item has not been corrected.

e. Shipping Cask Model Number Name Plates

Licensee documentation indicates that new name plates, on which the model number of each cask has been engraved, have been prepared and affixed to each cask as required by 10 CFR 71.53(c). Verification that the new name plates were affixed to the cask by the inspector was not possible because the casks were in transit at the time of this inspection. This item has been corrected.

f. Criticaliaty Posting Deviation

The inspector verified that permanent criticality safety limit sings have been posted in all SNM storage and use locations. This item has been corrected.

g. Calibration of Area Radiation Monitors

The inspector verified that all facility area radiation and criticality monitors were calibrated during the month of April, 1976. The licensee indicated that an annual calibration schedule will be established and maintained. Low range calibration data for the criticality monitors indicate that the monitors will respond adequately for criticality monitoring purposes.