

Inspection Notes
~~SPECIAL LIMITED INSPECTION~~

1. Name and address of licensee
*Union Carbide Corporation
Chemicals and Plastics Operations Division
Technical Center, P.O. Box 8361
Mouth Charleston, West Virginia 25303*

2. Date of inspection
9/24/70

3. Type of inspection
Reinspection #

4. License number(s), docket number(s), number and date of last amendment for each license. Category and Priority of each license
*47-260-6 thru amendment # 22 dated 4/29/69
E, III*

5. Date of previous inspection *7/29/64*

6. Is "Company Confidential", or proprietary, or classified information contained in report?
Yes _____ No
(Specify paragraphs)

7. Scope of inspection
Covered all aspects of the license program

8. *Paul R. Grewer*
Inspector

A. Sutherland
Reviewer

10/23/70
Date of Report

10/23/70
Date of Review

Licensee Union Carbide Corp. -6

Summary Exposure to personnel due to external radiation and concentration of radioactive materials have been very limited. No effluents have been released to unrestricted areas in excess of 10CFR20 limits. Radiation levels in unrestricted areas have not exceeded permissible limits. No high radiation levels have been encountered under this license. Work has been made in accordance with 10CFR20 requirements.

Noncompliance and Safety Items

None

Unusual Occurrences

None

Status of Previously Reported Noncompliance or Safety Items

No items of noncompliance noted during the last previous inspection.

Management Interview

Reviewed inspection results with H.R. Gwert, Assistant Director, Research and Development and R.V. Sealey, Chairman, Safety Committee. Informant advised that no items of noncompliance or safety items had been noted during the inspection.

Licensee Union Carbide Corp. -6

DETAILS

accompanied by Robert
Northon, West Va Bureau
of Industrial Hygiene

A. Participants

- Dr W. J. Martley, Research Chemist
- C. R. Lambright, Nuclear Engineer
- R. V. Sealey, Nuclear Engineer

B. Scope of License Program

Research + Development - tracer studies at present time - mostly
in agriculture chemical - at present time being C-14 + H₃ (gas
chromatography)

C. Organization

- J. J. Smith, Director, Research + Development
- H. R. Covert, Asst. " " "
- R. V. Sealey, Chairman, Safety Committee
- R. E. Peeler, Radiation Protection Officer (Qualitative)
- Fred Williams, " " " + Industrial Hygiene

D. Administrative Control

- R. V. Sealey, Chairman
 - N. H. Ketchum, RSO
 - W. J. Martley, Research Chemist
 - Patricia Hudgins, Purchasing Officer
 - R. E. Peeler, Institute RPO
 - Fred Williams, Industrial Hygiene + RPO.
- Committee meet. every 6 months or as
necessary - review usage, approve
users, do authorize new programs
Records kept.

E. Use of Material

Dr William J. Martley (Report to Don Hayward) being C-14
to tag agriculture chemical - metabolic evaluation - used ~ 300 mc
last year - this is the only active program.

F. Facilities

Mr. Bartley Lab located in Bldg 740 - storage in locked cabinet - no changes in facilities since last previous inspection
 have lab + office on 5th floor

G. Equipment

Have numerous types of radiation detection and counting equipment.

H. Radiological Safety Procedures

Survey made in all areas of lab + storage - includes wipe tests - make these surveys at least 2 times a year - brass make surveys during use on a daily basis. Records are being maintained of the results. All personnel using radioactive materials wear film badges. Have written procedures covering use + control of labeled materials.

I. Personnel Monitoring and Exposure to External Radiation

Nuclear-Chicago film badge being worn on a monthly service basis. Records are maintained on the form AEC-5 - all monthly exposures have been less than 17 mrem - one man wore badge while having chest X-Ray - this was noted in his file + not treated as a legitimate exposure.

J. Exposure of Employees to Concentrations of Radioactive Materials

None

Licensee Union Carbide Corp. - 6

K. Effluents to Unrestricted Areas

none

L. Disposals

sent to Chem-Nuclear - one shipment in past year - shipped
Columbia, S.C.
~ 51 MC ^{of C-14} July 27, 1970

M. Miscellaneous Surveys, Evaluations, and Records

Radiation surveys made in all areas of use and storage -
lesser made daily survey - Detailed surveys by trained physicist
are made in all areas at least twice a year. Surveys include
instrument survey + wipe tests. Records - all on hand

N. Special License Conditions

being in accordance with all license conditions,

O. Posting and Labeling

as required by 10 CFR 20.203 -
Form AEC-3's posted in numerous restricted area
locations.

Licensee

Union Carbide Corp. - 6

-6-

P. Independent Measurements

none

Q. Operations Observed

none

R. Incidents, Overexposures, Theft or Loss, Equipment Malfunction

none

S. Other Information or Continuation from Previous Paragraphs

none

October 23, 1970

To: J. Keith Sniderland
Senior Radiation Specialist
Region II Division of Compliance

Subject: Inspection Opinion and Evaluation
Union Carbide Corporation
South Charleston, West Va.
License Nos: 47-260-2, -6, and -9.

Inspections of the activities under the three
licenses revealed that good control and reasonable
safety practices are being followed during the use of
licensed materials. Personnel are well-trained
in handling techniques. The licensee has a good
-hired physical staff of highly trained people
who have up to 20 years experience in radiation
safety. Licensed materials are adequately secured
against unauthorized removal.

Paul R. Quinn
Radiation Specialist

PRQ
10/23/70