

INSPECTION REPORT NO. 83-01

Page 1 of     

Attached

- ☐ Appendix A  
☐ Appendix B  
☐ Appendix C  
☐ Memo

Union Carbide  
P.O. Box 8361  
So. Charleston, WV 25303

Licensee contact: J. Boggers Telephone no.                     

License no. 47-00260-02 Last amendment and date:                     

Category: E, and Priority: III, as of last amendment.

Inspection date(s): 2/17/83 Type of inspection: Routine - unannounced

SUMMARY OF FINDINGS AND ACTION

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> No noncompliance, clear 591 issued | <input type="checkbox"/> Noncompliance, 591 issued      |
| <input type="checkbox"/> Noncompliance, Appendix A                     | <input type="checkbox"/> Regional action      Hq action |
| <input type="checkbox"/> Action on previous noncompliance, Appendix B  | <input type="checkbox"/> Supplemental info, Appendix C  |

RECOMMENDATIONS

See basis in Appendix C or attached memo.

- ☐ Change Category to:        ☐ Change Priority to:         
☐ Next inspection date: 2/86

PERSONS CONTACTED

<u>J.A. Boggers</u>	<u>                    </u>
<u>Mike Green</u>	<u>                    </u>
<u>                    </u>	<u>                    </u>
<u>                    </u>	<u>                    </u>

Inspector: Robert A. Brown 2/22/83  
Approved: [Signature] 2/23/83

A-71

Plan approved: 2Date:           Licensee: Alvin CarbidoLicense no: 47-460-02

Inspection Items	Scheduled for inspection	Post-Inspection status	Module no.	766 Time Info
Management meeting - Entrance and Exit Interviews [REQUIRED]	✓		30703B	1 1/4 hr
Initial Management Meeting				
Program requirements, MC 28 [REQUIRED]	✓		77710B	1 1/2 hr
Licensee Event Followup			92700B	
Followup on Inspector-identified problems			92701B	
Followup on Noncompliance and Deviations			92702B	
IE Bulletin/Immediate Action Letter Followup			92703B	
Followup on Headquarters Requests			92704B	
Followup on Regional Requests			92705B	
Independent Inspection Effort [REQUIRED]	✓		92706B	1 1/4 hr
Inspector Dispatched to Site			93700B	
Followup on Significant Event Occurring During Inspection			93701B	

Mr. D.L. Garrison Assoc. Dir of Engineering

|

Jay Brubaker - RPO  
Group Leader - Special  
Instrumentation

|

Mike Green  
Section Leader

J.A. Boggess - Radiation Technician  
SID

## AREAS INSPECTED AND FINDINGS

77710B - Industrial-Academic

Licensee: Union CarbideLicense no: 47-260-02Amendment no:     

INSPECTION ITEMS	CRITERIA	FINDING
1. <u>Organization</u>	Lic Cond <u>    </u>	<u>OK</u>
Management organization.		
Radiation protection organization.		

## NOTES &amp; REMARKS:

See opposite page.

2. Licensee internal auditsLic Cond     OK

Scope and frequency.  
Management controls.

Radiation Safety Committee -  
meets annually - minutes recorded.

## NOTES &amp; REMARKS:

3. Training and instructions to employees

Lic C

OK

Training program, scope and frequency,  
retraining.

Required tests administered; scores  
satisfactory.

Instructions to workers.

Lic Cond     

exams given  
Training  
records  
maintained

## NOTES &amp; REMARKS:

5 day course for RPO'S - also  
short courses for GG users etc.

4. Radiation protection proceduresLic Cond     OK

Operating & emergency procedures  
implemented.

Security.

20.207

## NOTES &amp; REMARKS:

Radiation Control Manual  
provided to all users

2 -  $\text{Sr}^{90}$  - not in use

2 -  $\text{Am}^{241} \rightarrow 2.39 \text{ Ci}$   
1.3 Ci

59 -  $\text{Cs}^{137}$  process gauges - most in storage  
used in pilot plants.  
most are 200 mCi Texas Nuclear,  
some up to 10 Curies.

9 -  $\text{Ni}^{63}$  foils

## AREAS INSPECTED AND FINDINGS

Licensee: Union Carbide License no: 47-260-2 Amendment no:       

## INSPECTION ITEM

## CRITERIA

## FINDING

5. Materials, facilities and instruments

OK

Authorized uses and quantities.

Lic Cond

Restricted areas, posting requirements.

20.203

Survey instruments &amp; dosimeters; operable, properly calibrated.

Lic Cond

## NOTES &amp; REMARKS:

See opposite page: by licensee - uses Co<sup>137</sup> Records kept.

Eberline ES20'S

Victoreen R-Meters, Cutie Pie's, Teletesters, neutron detectors, NaI'S.

6. Receipt and transfer of materials

OK

Procedures implemented, adequate.

20.205, 71.51

Transfer of byproduct material.

30.41

Labeling and packaging.

71.5, 49CFR 170-189

Records of receipt, transfer, storage, survey, and monitoring

30.51

## NOTES &amp; REMARKS:

Transfers to Union Carbide locations licensed by NRC or agreement states, TX, LA, GA, NJ. Licenses kept on file.

7. Personnel protection - external

OK

Personnel monitoring control; minimize exposures, control of accumulated dose.

20.101, 20.102, 20.202

Surveys conducted, adequate.

20.201

Records of monitoring, surveys, disposals.

20.401, Lic Cond

Levels in unrestricted areas. -

20.1, 20.105

## NOTES &amp; REMARKS:

TLD rings available. Surveys of Nuclear Lab & storage area. Records kept. All exposures are minimal except for an occasional reading of 20 to 30 mrem

8. Personnel protection - internal

OK

Airborne concentrations in restricted areas.

20.103

Exposure of minors.

20.104

Posting of airborne radioactivity areas.

20.203

Survey, monitoring requirements; records.

20.201, 20.401

Leak tests of sealed sources.

Lic Cond

## NOTES &amp; REMARKS:

All sources leak tested every 6 months - also provide leak test services for other locations

## AREAS INSPECTED AND FINDINGS

Licensee:

Union Carbide

License no:

47-260-2

Amendment no:

INSPECTION ITEM	CRITERIA	FINDING
9. Effluent control, waste disposal		OK
Release of effluents.	20.106	
Waste disposal.	20.301, 20.303, 20.304, 20.305	
Procedures, records.	20.401, Lic Cond	
NOTES & REMARKS:	Sealed sources shipped to Chem-Nuclear 6/25/82 - 47 containers - mostly sealed sources, < 50 mCi C <sup>14</sup> - records maintained.	
10. Shipping, shipping incidents		OK
Procedures for pickup, receipt, monitoring of packages.	20.205(b) & (c)	
Transportation of licensed material.	71.5	
Incidents, reports, corrective actions.	49CFR 170-189	
NOTES & REMARKS:	No shipping incidents	
11. Notifications and reports		OK
To individuals.	19.13	
Overexposures, excessive levels & concentrations, incidents.	20.403, 20.405	
Personnel exposures and monitoring, termination reports.	20.407, 20.408	
Theft or loss of licensed material.	20.402	
NOTES & REMARKS:	No reports required	
12. Posting of notices		OK
Part 20, license & documents, procedures, notice of violations.	19.11(a)	
NRC-3.	19.11(c)	
NOTES & REMARKS:	All areas properly posted.	

## AREAS INSPECTED AND FINDINGS

77710B - Industrial-Academic

Licensee:

Union Carbide

License no:

47-260-02

Amendment no:

INSPECTION ITEM	CRITERIA	FINDING
13. <u>Environmental monitoring program</u> Implementation of program, scope and frequency as required. Records maintained, reviewed by management.  NOTES & REMARKS:	Lic Cond _____	
14. <u>Emergency preparedness</u> Procedures available for incidents and accidents. Training for personnel; coordination with supporting groups and agencies.  NOTES & REMARKS:	Lic Cond _____	
15. <u>Other license conditions</u>   NOTES & REMARKS:	Lic _____	
16. <u>Confirmatory measurements</u> Licensee's surveys verified on sampling basis.  NOTES & REMARKS:	20.105, 20.201	
17. <u>Independent inspection effort</u>  NOTES & REMARKS:		OK Radiation levels outside of source storage building < 0.6 mR/hr