

INDUSTRIAL/ACADEMIC INSPECTION FIELD NOTES

Inspection Report No: 90-01

License No: 47-00260-02

Licensee Name and Address:

Docket No: 030-06652

Union Carbide Chemicals and
Plastics Co., Inc.
South Charleston, WV

Licensee Contact: Michael Green, RPO

Telephone No: _____

Last Amendment No. and Date: #41 7/21/89

Category E Priority: 2

Date of Inspection: 7/16/90

Type of Inspection: () Announced () Initial () Reinspection
(☒) Unannounced () Special

Next Inspection Date: 7/92 (☒) Normal () Extended () Reduced

Summary of Findings and Action:

- | | |
|--|----------------------------|
| (<input checked="" type="checkbox"/>) No Noncompliance, Clear 591 Issued | () Action on Previous N/C |
| () Noncompliance, 591 Issued | () Regional Action |
| () Noncompliance, NOV Issued | () HQ Action |

Personnel Contacted:

James A. Boggess, ARSO

Inspector:

[Signature]
(Signature)

7/16/90
(Date Signed)

Inspector:

[Signature]
(Signature)

(Date Signed)

* Those present at exit interview.

A-89

Inspection Items	Scheduled for Inspection	Post-inspection Status	Module No.	766 Time Info
Management Meeting - Entrance and Exit Interviews (Required)			30703	
Initial Management Meeting			30800	
Licensed Materials Programs (Required)			87100	
Licensee Event Followup			92700	
Followup on Inspector-identified Problems			92701	
Followup on Noncompliance and Deviations			92702	
IE Bulletin/Confirmation of Action Letter Followup			92703	
Followup on Head- quarters Requests			92704	
Followup on Regional Requests			92705	
Independent Inspection Effort (Required)			92706	
Inspector Dispatched to Site			92700	
Followup on Significant Event Occurring During Inspection			93710	
Closeout Inspection and Survey			83890	
Inspection of Transportation Activities (Required)			86740	
RadWaste Management/ Waste Generators			84850	
Radiation Protection (Required)			83822	

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
1. <u>ORGANIZATION</u>	Lic. Cond. _____	
Management Organization:		
Radiation Protection Organization:		
Radiation Safety Committee:		
Authorized Users:		<i>No changes since last insp</i>
NOTES:		
2. <u>LICENSEE INTERNAL AUDITS</u>	Lic. Cond. _____	
Scope and Frequency:		
Management Controls:		
ALARA Audits:		
Radiation Safety Committee Meetings Minutes Recorded:		<i>Annual Mtg. requirement</i>
NOTES:		<i>Annual minutes of last meeting held 2/1/90. Good content & attendance.</i>
3. <u>INSPECTION HISTORY:</u>		
a. Violations:		
b. Corrected:		<i>5/31/88 591c</i>

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
4. <u>TRAINING AND INSTRUCTIONS TO EMPLOYEES</u>		OK
Training program, scope and frequency, retraining. Conducted by whom?	Lic. Cond. _____ <u>RSO & ARSO</u>	
Required tests administered; scores satisfactory		OK
Instructions to workers:	OK	
	§19.12 R.G. 8.13 R.G. 8.27 R.G. 8.29	

NOTES:

Noted special training session held for emergency personnel after installation a new level gauge. Also recently completed RSO training.

5. <u>RADIATION PROTECTION PROCEDURES</u>	Lic. Cond. _____	OK
Operating & emergency procedures implemented:	YES	Lic. Cond. _____
Manufacturer's instructions for devices used:	YES	
Protective clothing used:	NA @ this time. (Is available)	
Contamination control procedures:	OK	
Access control "High Radiation Area"	OK	§20.203(c)
Security	good	§20.207

NOTES:

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
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6. MATERIALS, FACILITIES, AND INSTRUMENTS

OK

Authorized uses and quantities: *YES* Lic. Cond. _____
 Restricted areas, posting requirements: \$20.203
 Survey instruments & dosimeters; operable, properly calibrated: *YES* Lic. Cond. _____
 Fixed monitors (operable and calibrated): *OK*

NOTES:

*Calib of portable mts @ 5y/ Month intervals.
 Good mtr instruments (PNR-4, Teletron, ES20's, etc.)*

7. RECEIPT AND TRANSFER OF MATERIALS

OK

Procedures implemented, adequate: Lic. Cond. _____
 Transfer of byproduct material: *OK* *Records maintained* \$30.41
 Labeling and packaging: *OK* \$71.5, (49 CFR 170-189)
 Records of receipt, transfer, storage survey, and monitoring *OK* \$30.51 Lic. Cond. _____
 Procurement procedures Lic. Cond. _____
 Inventory control: *OK* Lic. Cond. _____

NOTES:

*Examined most recent inv. performed 7/5/90
 Record is very good with total info. regards
 transfer, location, status, etc. (5y/ Month frequency)
 (See 1988 Msp for example)*

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
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8. PERSONNEL PROTECTION - EXTERNAL

OK

Personnel monitoring control; minimize exposures, control of accumulated dose OK \$20.101, \$20.102, \$20.202, \$20.104,

Dosimetry supplier, frequency of exchange, Lic. Cond. _____
type dosimeters (W. B. or extremity)

Average exposures (W.B. and extr.) "M"

Maximum exposures (W.B. and extr.) 40 mrem/OK.

Number of persons monitored 3 for NRC personnel - Balance of personnel budget for machine services.

Surveys conducted YES \$20.201, Lic. Cond. _____

Frequency, results, records OK \$20.401

Levels in "Unrestricted Areas" \$20.105

NOTES AND REMARKS:

Landau WB monthly exposure.

9. 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

Ventilation systems Lic. Cond. _____

Installation and Testing

Process or engineering controls \$20.103(b)(1)

NOTES:

NA this
lic. at this time.

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
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10. LEAK TESTS

OK

Performed by whom? Licence

Lic. Cond. _____

Test frequency, records of results

NOTES:

Six mo. frequency. all timely.

11. EFFLUENT CONTROL, WASTE DISPOSAL

OK

Release of effluents:

\$20.106

Procedures, monitoring of effluents

\$20.401, Lic. Cond. _____

Waste disposal

Transfer for final disposal

\$20.311

Release into sanitary sewage

\$20.303

Disposal by incineration

\$20.305, Lic. Cond. _____

Disposal of specific waste

\$20.306

Waste held for decay

Lic. Cond. _____

Labels obliterated

Surveys conducted

Other Specific disposal method(s)

\$20.302

Records of disposal

\$30.51, \$20.401(3)

NOTES:

*NA at this time.
see shipping*

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
12. SHIPPING, SHIPPING INCIDENTS		
Procedures for pickup, receipt, monitoring packages	\$20.205(b) & (c) Lic. Cond. _____	
Transportation (10 CFR 71.5a and 49 CFR 171-178)		
a. Licensee makes shipments of RAM? Such shipments are: () delivered to common carriers? () transported in licensee's own vehicle as private carrier? (<input checked="" type="checkbox"/>) both?		
If above is yes, complete items below:		
b. Are authorized packages used? [173.415-416] Package types used: (<input checked="" type="checkbox"/>) Dot-7A, Type A [173.415(a)] performance test records on file? () DOT-55 [173.416(a)] licensee aware of 6/30/85 cutoff on use? () Excepted, Instruments/articles [173.421-424] () LSA-strong tight [173.425(b)(1)] (<input checked="" type="checkbox"/>) NRC-Certified [173.416(b)] NRC COC's on file? [71.12(c)(1)] <i>YES</i> Registered with NRC as user? [71.12(c)(3)] <i>NA</i> Documented NRC-Approved A/A Program? [71.17(b)] NRC A/A approval No: <i>NA</i> () (Well loggers only if AM 41 source in excess of 8ci)		
c. Special Form Material performance test records available for each source design? [173.416(a)]	<i>YES</i>	
d. Packages labeled as required? [172.403(a)] () Excepted (<input checked="" type="checkbox"/>) WI (<input checked="" type="checkbox"/>) YII (<input checked="" type="checkbox"/>) YIII Surveys performed to select correct label category and compliance with Rad. Limits? [173.474(i)]	<i>YES</i>	
e. Packages marked as required, i.e., proper shipping name, ID No., Spec. No., COC No., etc. [172.300]	<i>YES</i>	
f. Shipping papers prepared for each shipment? [172.200] Such papers contain required information? [172.203(d)]	<i>YES</i>	

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
12. <u>SHIPPING, SHIPPING INCIDENTS</u> (Continued)		
Transportation (Continued)		
g. For licensee private carrier shipments:		
Vehicles placarded as required? [172.500]	NA	
Cargo blocked, braced, tied down in vehicle? [172.842(d)]	YES	
Any incidents reported to DOT? [171.15-16]	None	
h. Does licensee ship any radwaste?	None since last insp	(None for many years)
If yes, are shipments:		
() tendered to common carriers by licensee?		
If yes, name of broker:		
Is licensee aware of 10 CFR 61 waste generator requirements? [10 CFR 61]		
Has licensee classified and characterized waste? [20.311(d)]		
Incidents, reports, corrective actions	49 CFR 170-199	
QA Program (under General License)	\$71.11	
NOTES:		

*Call
selected
sources*

13. NOTIFICATIONS AND REPORTS

To individuals	OK	\$19.13
Overexposures, excessive levels and concentrations incidents	<i>None</i>	\$20.403, \$20.405
Personnel exposures and monitoring, termination reports	OK	\$20.407, 20.408
Theft or loss of licensed material	<i>None</i>	\$20.402

NOTES:

OK

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
14. <u>POSTING OF NOTICES</u>		OK
Part 20, license and documents, procedures, §19.11(a) Notice of Violations		
Form NRC-3		
NOTES: <i>posting as required.</i>		
15. <u>ENVIRONMENTAL MONITORING PROGRAM</u>	Lic. Cond. _____	OK
Implementation of program, scope and frequency as required		
Records maintained, reviewed by management		
NOTES: <i>NA this lic. at this time.</i>		
16. <u>EMERGENCY PREPAREDNESS</u>	Lic. Cond. _____	OK
Procedures available for incidents and accidents <i>YES - Union Carbide Tech Ctr. Rad Control Manual.</i>		
Training for personnel; coordination with supporting groups and agencies		
NOTES: <i>Training provided to on-site emergency squad.</i>		

AREAS INSPECTED AND FINDINGS

INSPECTION ITEMS	CRITERIA	FINDING
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17. OTHER LICENSE CONDITIONS

Reviewed with licensee representative

NOTES:

Renewed all with ARSO.

18. CONFIRMATORY MEASUREMENTS

\$20.105, \$20.201

Licensee's surveys verified on sampling basis

NOTES:

Meter used:

Calib. Date: _____

Serial No: _____

Diagrams of areas surveyed:

19. INDEPENDENT INSPECTION EFFORT

Scope of program:

NOTES:

Made survey at sty. bldg. fence. Max of 0.5 mrem/hr at 18"

*Made survey at bldg. 727 - Two 200 Mci Cs137 level
sources (Texas Nuc.) - Max. of ~~1.2~~ 1.2 mrem/hr at 18"
Model 5192*

Licensee: _____
Inspector: _____
Date: _____

TI 2800/15
Enclosure for
Priority 1, 2, 3
Field Notes
Thru 6/30/90
Pg. 1 of 2

Region II

PERFORMANCE EVALUATION FACTORS

Deficiency Points

Findings

- | | |
|----|---|
| 25 | a. Failure of Isotope Committee (or certain key members thereof) to meet or discuss meaningful issues for a Broad Scope type license. |
| 25 | b. RSO too busy with other assignments (RSO spending less than 25% of time). |
| 15 | c. Excessive customer complaints from major manufacturers or distributors. |
| 50 | d. Excessive allegations which have been substantiated. |
| 15 | e. Significant number of diagnostic misadministrations (greater than 10^{-3} per procedure). |
| 20 | f. High man-rem levels (greater than 50% of workers requiring NRC Form 4).. |
| 20 | g. Frequent or excessive contamination within the restricted area or greater than 10 x NMSS guidance for release to unrestricted areas. |
| 15 | h. Excessive missed surveillances (leak testing, inventory, surveys, etc., greater than 50% per year). |
| 50 | i. Financial instability of licensee (shoe string operations, one or two-man operation such that cost of cleanup would be very significant for continued operation or decommissioning of the facility). |
| 20 | j. Lack of involvement of senior management to oversee RSO performance (management unaware of operations). |
| 20 | k. Inadequate consultant service (consultant not finding any problems but NRC does). |

Licensee: _____
Inspector: _____
Date: _____

TI 2800/15
Enclosure for
Priority 1, 2, 3
Field Notes
Thru 6/30/90
Pg. 2 of 2

- 15 1. Radiation Safety Committee (Broad Scope) gives "rubber stamp" approvals to users and/or issues user permits for indefinite periods of time.
- 20 m. Insufficient technologist/authorized user/radiation safety staffing for licensed program workload.
- 75 n. Excessive numbers of repeat violations (three or more).
- 25 o. Frequent internal uptakes greater than 125 mrem, whole body equivalent but less than 520 MPC-hrs limits.
- p. If total violations exceed 8 for Priority 1; 10 for Priority 2; and 12 for Priority 3 (assign 30 points for each S.L. IV and 20 points for each S.L.V)


TOTAL
DEFICIENCY
POINTS

TOTAL POINTS

PERFORMANCE EVALUATION ACTIONS (TYPICAL)*

- 75 Supervisory Telephone Contact with onsite senior licensee representative and documentation in cover letter - (Sec. Ch. or Br. Ch.)
- >75 ≤ 150 Special reinspection within six months - (Sec.Ch. or Br.Ch. directed)
- >150 ≤ 200 Warning paragraph in Cover Letter - (Br.Ch. signature)
- >200 ≤ 250 Meeting with licensee management - (Div.Dir. action)
- >250 ≤ 300 Confirmatory Action Letter - (Reg.Adm. or Div.Dir. action)
- >300 Management Breakdown - Determine need for enforcement conference then determine appropriateness of Civil Penalty or Order - (Reg.Adm. action)

Section Chief Summary of Regional Action taken: _____

* This is a guide of typical action only and is not an absolute requirement. Irrespective of point total increased or less stringent action may be taken if the circumstances surrounding the case warrant such action.