

# APPENDIX E

## INDUSTRIAL/ACADEMIC INSPECTION FIELD NOTES\*

Region 1

Inspection Report No. 92-001 License No. 06-13053-01  
06-13053-04  
 Licensee (name and address) Miles, Inc  
Miles Research Center  
400 Morgan Lane  
West Haven, CT 06516  
 Docket No. 30-03841  
30-30292  
 Licensee Contact June Tamplin Telephone No. 203-937-2000  
 Last Amendment No. 12/01/01 Date of Amendment 8/1/91/12/13/91  
 Priority: 4/4  
 Program Code(s): 03620/03620  
 Date of Last Inspection 2/10/88  
 Date of This Inspection 12/16/92  
 Type of Inspection: ☐ Announced ☒ Unannounced  
☒ Routine ☐ Special  
☐ Initial ☐ Reinspection  
 Next Inspection Date 12/19/94 ☐ Normal ☒ Reduced ☐ Extended

### Summary of Findings and Action:

- ☐ No violations, Clear 591 or letter issued  
☒ Violations, 591 or letter issued  
☐ Action on Previous Violations

Inspector: James M. Boudrick Date 1/6/93  
Duncan White 1/6/93  
 (Signature)  
 Approved: J. Portelli Date 1/26/93  
 (Signature)

\* All areas indicated in field notes are not required to be addressed during each inspection.

C/2

e. Any previous violations not corrected

( ) Y (X) N

Explain.

### 3. SCOPE OF PROGRAM

a. License has multiple authorized locations of use ( ) Y (X) N

b. If so, list location(s) inspected

(X) N/A

3 buildings at listed address used RAM

B31 - main R+D

B24 - new building for R+D

A1 - administrative/main  
bldg.

c. List those individuals contacted during inspection

\* P. Seprack - user

\* H. Boyce - Director of Services (by phone)

G. Toczylowski - corp.  
env. safety officer

\* P. Janus - RSO

R. Bianca - Asst. RSO

J. McDonald - env. engineer

\* J. Tamplin - RSO designer

G. Ligen - rad. worker

R. McCoy - B31 Bldg. engineer

\* G. Sangos - Sr. V.P. Research

T. Falturo - Director of Support  
Services

G. Pertore - records - admin  
assistant.

\* Indicates presence at exit meeting

d. Briefly describe scope, including types of use involving byproduct material, frequency of use, staff size, etc.

CHIPS - R+D - labeling, metabolic studies etc. - 01 = no activity  
iodinations done in frequently under -04 license will be consolidated into -04

size of program has grown tremendously - close to 60 labs and  
nearly 600 badged individuals. Program will continue to grow  
as licensee consolidates N.A. operations in West Haven.

Use of H-3, S-35 and P-32 ~~is expanding~~ is expanding

HP staff consists of new RSO (1 yr.) and asst. RSO/technician (23 months)

part time staff helping with transcription. Licensee will be upgrading prod. safety  
program and consolidating activities commensurate w/ growth

### 4. INTERNAL AUDITS OR INSPECTIONS

a. Audits are required by license condition

( ) Y (X) N

b. Audits or inspections are conducted

( ) Y (X) N

(1) Audits conducted by \_\_\_\_\_

(2) Frequency \_\_\_\_\_

c. Records maintained.

( ) Y ( ) N

Remarks.

(3) Records maintained

(☒) Y ( ) N

Remarks.

adequate number and variety of survey and analytic instruments maintained  
calibration by Rad. Protection Services, Wickham, Nuclear Inst. Co.  
reviewed select records.

7. RADIOLOGICAL PROTECTION PROCEDURES

- a. Radioactive materials used in accordance with current procedures [L/C]  
b. Individuals understanding of current procedures is adequate [L/C]

(☒) Y ( ) N

- (1) in general rules for safe use of RAM  
(2) in emergency procedures

(☒) Y ( ) N

(☒) Y ( ) N

Remarks.

Inspector observed Asst. 250 identifying and coordinating cleanup of P-32 spill - ~~response~~ actions and understanding of procedures by Asst. 250 were excellent  
Random interviews with users indicated that ~~users~~ they possess adequate knowledge for safe use of RAM

8. MATERIALS

- a. Isotope, chemical form, quantity and use as authorized [L/C]

(☒) Y ( ) N

Remarks.

H-3 71.0/80 C-14 2.1/40  
S-35 63.7/200 I-125 11.2/80  
P-32 44/800 also 0.67 mCi of Cr-51

Fe-55 sealed  
source used  
in

- b. Leak tests and Inventory

- (1) Leak tests of sealed sources performed as required [L/C] ~~NI~~  
(2) Inventory of RAM performed as required [L/C]  
(3) Records maintained

( ) Y ( ) N

(☒) Y ( ) N

(☒) Y ( ) N

Remarks.

computerized tracking system for each use of licensed material - entered by individual user - monitored by rad. safety  
each user has individual limits - inventory updates is continuous  
very good system as long as maintained by users. ~~PSD~~

Remarks.

NK individual badges not returned timely, up to 8 months delay in processing  
 examples: 12/91 → 8/10/92 6/91 → 10/23/91  
 12/91 → 3/20/92

12. PERSONNEL RADIATION PROTECTION - INTERNAL

( ) N/A

- a. Potential for exposure of individuals to airborne RAM exists ( ) Y ( ) N
- b. Monitoring for airborne radioactivity conducted [20.201(b) to meet 20.103] ( ) Y ( ) N
- c. Records maintained [20.401 and L/C] *NI* ( ) Y ( ) ~~N~~
- d. Briefly describe licensee's monitoring system for airborne radioactivity [L/C]

*up to air sampling in room during condensation  
 no in-line monitor - hood containing roughing and charcoal filters.  
 hoods checked yearly by contractor*

- e. Bioassay program implemented as described in correspondence with NRC ( ) Y ( ) N

Remarks.

*NK thyroid records could not be located and were incomplete (only raw counts).  
 since mid 1992 - thyroid scans at Yale New Haven Hospital equipment used for scan could.  
 thyroid records were maintained at individual loss or could not be located*

13. RADIOACTIVE EFFLUENT AND WASTE DISPOSAL

- a. RAM in effluents to unrestricted areas ( ) Y ( ) N
- b. Release in accordance with regulatory limits [20.106(a)] ( ) Y ( ) N

Remarks.

*rules is 2-3%  
 of W. Haven flow*

*Most air-hand  
 are discharged  
 independently to  
 atmosphere*

- c. Describe waste disposal method(s) - solid and liquid:  
*disposal to sewer - records posted at sinks  
 discussed water/air effluents with plant engineers/IH  
 personnel - sewerage flow app is adequate to meet Appendix B  
 both R&D buildings have capability to hold up liquid discharge.*

*Dis - Ar P-32 and T-125*

*Broker for liquid scint. (Quadrat) and long T<sub>1/2</sub> solids (Hawford/  
 Barnwell)*

16. ENVIRONMENTAL MONITORING PROGRAM

*NA*

- a. Licensee has implemented an environmental monitoring program [L/C]  
b. Records maintained

( ) Y ( ) N  
( ) Y ( ) N

Remarks.

- c. Briefly describe the licensee's environmental monitoring program:

17. TRANSPORTATION (10 CFR 71.5(a) and 49 CFR 171-189)

- a. Licensee makes shipments of RAM

(*✓*) Y (*✓*) N

- b. Shipments are:

- (*✓*) delivered to common carriers  
( ) transported in licensee's own private vehicle  
( ) both  
( ) no shipments since last inspection

Remarks.

*waste shipments: current R/M held for shipment*

*1 H-3 1.44597 mCi*

*C-14 0.1413 mCi*

Complete only if shipments made since last inspection:

- c. Shipments

- (1) Authorized packages used  
[173.415,416]

(*✓*) Y ( ) N ( ) N/A

- (2) Package type used DOT 7A 17H drums

- (3) For DOT-7A packages, performance  
test record on file [173.415(a)] *AD*

( ) Y ( ) N ( ) N/A

19. INDEPENDENT MEASUREMENTS

- a. Survey instrument used Ludlum 14C
- b. NRC Serial No. 009657
- c. Last date of calibration July 15, 1992 due Jan 15 93
- d. Inspector's measurements were compared to licensee's (X) Y ( ) N
- e. Describe the type and results of measurements:

*all area, work surface and surfaces were at background of 0.02 - 0.04 mR/hr. At Rm 232, tech found contamination at door entrance = to 8K cpm on licensee's meter.*

*Licensee has "decommissioned" two rooms (D101 & D130) where amounts of RIU were used. Independent measurements at 0.02 mR/hr; no <sup>work</sup> surfaces <sup>in Rm D101</sup> had measurable activity detectable above 0.02 mR/hr by tech. The area was most recently used by Dr. B. Painter who did not use radioactive materials. Rm D130 was not surveyed as the tech could not find the room (since she was a new employee).*

20. BULLETINS AND INFORMATION NOTICES

- a. Bulletins, Information Notices, etc., received by the licensee (X) Y ( ) N
- b. Licensee took appropriate action in response to Bulletins, INs, etc. (X) Y ( ) N

Remarks.

*discussed IN 90-09*

23. PERFORMANCE EVALUATION FACTORS

Licensee (name & location) Miles, Inc.  
West Haven, CT

Inspector White / Bondick  
Inspection Date 12/16/92

- a. Lack of senior management involvement with the radiation safety program and/or Radiation Safety Officer (RSO) oversight ☐ Y ☒ N
- b. RSO too busy with other assignments - ? ☐ Y ☐ N
- c. Insufficient staffing - ? ☐ Y ☐ N
- d. Radiation Safety Committee fails to meet or functions inadequately ☐ Y ☐ N ☒ N/A
- e. Inadequate consulting services or inadequate audits ☐ Y ☐ N ☒ N/A

Remarks (consider above assessment and/or other pertinent PEFs):

Program has greatly increased in size, program needs to be upgraded to meet needs (license is in for renewal) as well as expanded role of RSO and her staff. Management appears to be sensitized to responsibilities for upgrading program for Broad Scope B or A type

Regional follow-up on above PEFs citations:

license renewal to reflect needs for a larger program  
Increase inspection frequency to once every two years.

TAG	LICENSE LIMIT	YTD AMOUNT	ON_SITE AMOUNT
125I	80.000	26.166	11.204
14C	40.000	102.745	2.057
32P	80.000	193.800	43.950
35S	80.000	387.063	63.748
3H	80.000	183.241	71.023
51Cr	40.000	2.000	.670

6 rows selected.



# SEARCH FOR ISOTOPES IN-HOUSE

Enter any of the following items, then hit <FIND> key

Compound Name	Isotope Symbol	Catalog Number	Date Received	Current Amount	Requested By	Tel. Ext.
Alpha_32P-dCT	32P	PB10205	17-OCT-90	.1	DIAZ	5093
Alpha_32P-dCT	32P	PB10205	23-SEP-92	.25	HULL	2772
Alpha_32P-dCT	32P	PB10205	31-AUG-92	.25	HULL	2772
Alpha_32P-dCT	32P	PB10205	31-AUG-92	.25	GORE-WILLSE	2772
Alpha_32P-dCT	32P	PB10205	17-AUG-92	.25	HULL	2772
Alpha_32P-dCT	32P	PB10205	29-JUL-92	.25	GORE-WILLSE	2772
Alpha_32P-dCT	32P	PB10205	27-JUL-92	.25	GORE-WILLSE	2772
Alpha_32P-dCT	32P	PB10205	27-JUL-92	.25	SARR	5063
Alpha_32P-dCT	32P	PB10205	13-JUL-92	.25	GORE-WILLSE	2772
Alpha_32P-dCT	32P	PB10205	14-DEC-92	.15	LIGON	5277
Alpha_32P-dCT	32P	PB10205	09-NOV-92	.25	SARR	5063
Alpha_32P-dCT	32P	PB10205	02-NOV-92	.05	LIGON	5277

PF4 to exit from form <CLRFRM> to begin a new search PF1 more keys...

# SEARCH FOR ISOTOPES IN-HOUSE

Enter any of the following items, then hit <FIND> key

Compound Name	Isotope Symbol	Catalog Number	Date Received	Current Amount	Requested By	Tel. Ext.
ATP	32P	PB.168	29-OCT-90	.15	PERRY	2807
ATP	32P	PB218	30-SEP-91	.9	WILLIAMS	2905
ATP	32P	PB10218	24-JUL-92	1	GERRITSEN	2104
ATP	32P	PB218	26-MAY-92	.5	WILLIAMS	2905
ATP [Gamma-32	32P	NEG-002A	17-MAR-92	.38	GODFREY	2298
ATP-gamma-32P	32P	PB.218	29-JUL-92	.05	BARBOSA	2906
Alpha 32P-CTP	32P	PB20382	27-JUL-92	1	WIRAK	2875
Alpha 32P-CTP	32P	PB20382	21-SEP-92	.08	CAHILL	2867
Alpha 32P-CTP	32P	PB20382	27-JUL-92	.68	WIRAK	2875
Alpha 32P-CTP	32P	PB20382	24-AUG-92	.52	CAHILL	2867
Alpha 32P-UTP	32P	PB20383	17-JUN-91	.25	HSIAU	2767
Alpha 32P-UTP	32P	PB20383	26-AUG-91	.13	HSIAU	2767

PF4 to exit from form <CLRFRM> to begin a new search PF1 more keys...

# INTEROFFICE MEMORANDUM

Date: 18-Nov-1992 12:27pm EST  
 From: RICHARD EARLS  
 EARLS  
 Dept: RESEARCH COMPUTING  
 Tel No: 5108

TO: JUNE TAMKIN  
 TO: ROBERTA BIANCA  
 Subject: REPORT

( TAMKIN )  
 ( BIANCA )

## RADIOISOTOPE STATUS SUMMARY

TAG	LICENSE LIMIT	AMOUNT ON-SITE	AMOUNT IN PROCESS
125I	80.000	11.204	3.165
14C	40.000	2.057	.100
32P	80.000	43.950	.500
35S	80.000	63.748	.750
3H	80.000	71.023	.003
40K	.000	.000	.000
45Ca	.000	.000	.000
51Cr	40.000	.670	.000
86Rb	.000	.000	.000

9 rows selected.

RADIOISOTOPE STATUS SUMMARY

YEAR TO DATE ORDER SUMMARY