

RADIATION PROTECTION PROGRAM AUDIT CHECKLIST

INTRODUCTION

This form documents performance of the annual radiation protection program audit. The audit consists of a review of the program's content and implementation, evaluating its effectiveness in complying with regulatory requirements and keeping radiation exposures to workers and the general public as low as reasonably achievable (ALARA). Records of annual audits must be available for inspection by the agency.

License Name: Optimum layout & Materials Testing

License No.: 44-35402-02

Date of Audit: 10/22

Auditor: Amber Chambers (RSO)

(name, title)

Amber Chambers

(signature)

Management Review:

Richard Layoe PRESIDENT

(name, title)

Richard Layoe

(signature)

II. AUDIT HISTORY

A. Last audit conducted on (date): 10/22

B. Any deficiencies noted?..... Yes No

C. Were corrective actions taken?..... Yes No N/A
(look for signs of recurrence)

D. Brief description of prior deficiencies, corrective actions taken: _____

Leak Testing was not done every 6 mths!
Since then has been done every 6 mths
Started checking 8/5/2019

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III. ORGANIZATION AND SCOPE OF PROGRAM

- A. If the mailing address or permanent address changed, has the license been amended to reflect the change? N/A Yes No
- B. If ownership has changed or bankruptcy has been filed, was the agency notified? N/A Yes No
- C. Does the license authorize all sources & devices possessed? Yes No
- D. Do all temporary job sites meet regulatory definition (serve only one contract, open for less than 18 months)? Yes No
- E. If no to A., has the agency been notified? Yes No
- F. If the RSO has changed, has the license been amended to identify the new RSO? N/A Yes No
- G. Is the RSO meeting the duties & responsibilities for the position? Yes No
- H. Is company management appropriately involved with the radiation protection program & oversight of the RSO's activities? Yes No
- I. Does RSO have sufficient time to perform all duties/responsibilities? Yes No
- J. Staffing sufficient to support to rad. protection program? Yes No

IV. MEMBER OF PUBLIC (MOP) DOSE LIMITS

- A. Has a MOP dose compliance study been developed, submitted & approved by the agency? ~~Yes~~ Yes No
- B. Have licensed activities changed during the year to increase likelihood of public dose limits being exceeded? Yes No
- C. If yes to B., has a new MOP study been performed to demonstrate compliance with MOP dose limits is still being achieved? N/A Yes No

Storage of Gauge is in compliance w/ Public dose limits

V. TRAINING PROGRAM

- A. Are workers likely to exceed 100 mrem/yr provided radiation awareness training? Yes No
- B. Have gauge Authorized Users (AUs) completed approved training? Yes No
- C. Hazmat employee training provided to workers per 49 CFR Part 172? Yes No
- D. Field observations of operators demonstrate use of safe work practices & compliance with regulatory requirements? N/A Yes No

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VI. PERSONNEL MONITORING (PM)

N/A

A. If PM is conducted:

1. PM badges worn properly & protected from heat, light, moisture & chemicals when not being worn? Yes No
2. PM badges consistently stored with the control badge in a protected location when not in use? Yes No
3. Are badges exchanged in a timely fashion to ensure accurate dosimetry reports? Yes No
4. Any badges lost or damaged? Yes No
5. If yes to 4., was RSO immediately notified & record of worker's estimated dose provided to badge vendor and kept on file? Yes No
6. Any spare badges assigned to workers? Yes No
7. If yes to 6., were spare badges marked to identify worker it was assigned to, & vendor notified to add spare badge dose to worker's occupational exposure total? Yes No
8. Are dosimetry reports reviewed by the RSO upon receipt? Yes No
9. Are PM records maintained on NRC-issued or equivalent forms? Yes No
 - (a) NRC Form NRC-4 "Cumulative Occupational Exposure History" or equivalent completed for each monitored worker? Yes No
 - (b) NRC Form NRC-5 "Occupational Exposure Record for a Monitoring Period" or equivalent completed for each monitored worker? Yes No
10. Upon hiring, female workers provided instructions regarding radiation risk to embryo/fetus and procedure for declared pregnancies, and documentation of receipt of instructions maintained on file? N/A Yes No
11. Female workers declaring pregnancy document their declaration, are provided instructions regarding monitoring and limiting the dose to the embryo/fetus, and receipt of instructions documented? N/A Yes No
12. For workers that have declared pregnancies, records kept demonstrating embryo/fetus dose < 50 mrem for gestation period? N/A Yes No
13. Annual & termination reports provided to workers per 64E-5.903? Yes No
14. PM records reviewed from (dates): 07/2017 to 8/2020
15. Highest annual dose: 46 mR Date: 8/20
16. Occupational exposures within limits? Yes No
17. Do PM records indicate that worker doses are being kept ALARA? Yes No

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VI. PERSONNEL MONITORING (PM)

N/A

B. If PM is not conducted:

- 1. Has a request for an exemption been submitted & approved by the agency? Yes No
- 2. Have licensed activities changed during the year to increase workers' radiation exposures (i.e., expanded work load)? Yes No
- 3. If yes to 2., has a new evaluation been performed to demonstrate workers' doses are likely to remain ≤ 500 mrem/yr? Yes No

VII. POSTING AND LABELING

A. Following documented posted at permanent facility:

- 1. Emergency procedures Yes No
- 2. "Notice to Employees" Yes No
- 3. Any notice of violations, proposed imposition of administrative penalties, and agency issued orders and responses to the cited violations Yes No
- 3. Company radioactive materials license, and company operating procedures unless a notice (such as the "Notice to Employees" form) is posted that identifies the documents and where they can be viewed Yes No

B. Above documents posted in conspicuous location(s) to permit workers to observe them on way to/from work? Yes No

C. Radiation signs:

- 1. "Caution (or Danger), Radioactive Material" signs: posted at permanent facility & job sites where portable gauging devices are stored? Yes No
- 2. "Caution (or Danger), Radiation Area" signs: Is manufacturers' information kept on file to demonstrate that device's radiation levels are too low to require posting of radiation area signs around storage areas? Yes No

D. Portable gauging devices bear durable, clearly visible labels w/ radiation symbol, "Caution (or Danger), Radioactive Material" warning, & sufficient information to permit individuals to avoid/minimize exposures? Yes No

VIII. SECURITY

- A. Each portable gauging device is provided a storage/transport container equipped w/ lock? Yes No**
- B. Minimum of two independent physical controls used to prevent access to portable gauging devices during transport and temporary storage? Yes No**

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VIII. SECURITY (Continued)

- C. Portable gauging devices kept secured against unauthorized access/removal when not under direct surveillance?..... Yes No
- D. Extra precautions used to deter theft (e.g., concealing devices from view during transport/storage, maintaining elevated level of awareness in high crime areas? Yes No

IX. OPERATING AND EMERGENCY (O&E) PROCEDURES

- A. Any revisions to O&E procedures made that have not been reviewed & approved by the agency?..... Yes No
- B. O&E procedures list correct phone numbers for RSO & the agency?..... Yes No
- C. O&E procedures accompany portable gauges at all times?..... Yes No

X. TRANSPORTATION

- A. Portable gauging devices transported to job sites are prepared & transported in same manner as when offered to third party for shipment?..... Yes No
- B. Only DOT-7A or other authorized packages used to transport devices? Yes No
- C. Packages used to ship devices properly marked & labeled per 49 CFR Part 172, Subparts D & E? Yes No
- D. Shipping containers properly locked, blocked & braced prior to transport? Yes No
- E. Prior to shipment, transport containers inspected to ensure proper packaging, unimpaired physical condition of container & closure devices?..... Yes No
- F. Properly completed bill of lading & emergency response information provided for each device shipment?..... Yes No
- G. Shipping papers & emergency response information immediately accessible to driver during shipment of devices?..... Yes No
- H. Devices classified as excepted instruments/articles (e.g., XRF analyzers) have notice included w/ package listing consignor/consignee name & conformity statement per 49 CFR 173.422? Yes No

XI. GENERAL RULES OF USE

- A. Management & RSO emphasize to workers importance of maintaining doses ALARA? Yes No
- B. Field observations of workers conducted to evaluate performance? Yes No
- C. Good work practices used by workers to minimize doses (i.e., time, distance, shielding, general use rules)?..... Yes No

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XII. LEAK TESTS

- A. Sealed sources leak tested at required intervals? Yes No
- B. Leak tests conducted by authorized personnel following procedures approved by the agency? Yes No
- C. Leak test records include all information required by the agency? *Used inventory Documented* Yes No
- D. Any sources found leaking, & if so, was the agency notified? Yes No

inventory was done but was not documented will now be documented when leak testing

XIII. GAUGE INVENTORY

- A. Receipt & transfer/disposal records maintained? Yes No
- B. Portable gauging devices physically inventoried at 6-month intervals? Yes No
- C. Inventory records document all necessary information? *Now* Yes No

See XVIII

will document inventory when leak testing is done

XIV. GAUGE MAINTENANCE

- A. Copies of the manufacturer's operation/maintenance manuals maintained on file for reference? Yes No
- B. Manufacturer's procedures referenced & followed for routine cleaning & lubrication of portable gauging devices? Yes No
- C. Non-routine device maintenance performed in-house? Yes No
- D. If yes to C., is non-routine device maintenance conducted by authorized personnel following procedures approved by the agency? Yes No

XV. RADIATION SURVEY INSTRUMENTS

- A. If a survey meter is not possessed, are specific plans in place to have one available when needed? *See XVIII* N/A Yes No
- B. If a survey meter is possessed:
 - 1. Has the meter been approved by the agency? *N/A* Yes No
 - 2. Is there access to an equivalent back-up meter when the primary meter is out for calibration/repair? Yes No
 - 3. Is the meter calibrated annually & after repair by a licensed vendor, & are calibration records maintained? Yes No

XVI. RECORD KEEPING, NOTIFICATIONS & REPORTS

- A. All required documents maintained on file at permanent facility for duration specified by the agency? Yes No
- B. Did any incidents/emergencies occur since last audit? Yes No

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XVI. RECORD KEEPING, NOTIFICATIONS & REPORTS

(Continued) *N/A*

C. If yes to B., was the response appropriate? (i.e., operator followed emergency procedures, required notifications/reports timely filed, cause of incident investigated, corrective actions taken & documented? Yes No

XVII. INDEPENDENT AUDITS/INSPECTIONS

A. Any independent audits/inspections conducted since last internal audit (e.g., consultant or FL BRC inspection)?..... Yes No

B. If yes to A., summary of deficiencies identified & corrective actions taken: _____

XVIII. AUDIT DEFICIENCIES & CORRECTIVE ACTIONS

A. Summary of problems/deficiencies identified during this audit: _____

No inventory list, will be adding this to the leak test list
No Bill of Lading -
forgot Radiation protection program audit
meter Rental

XVIII. AUDIT DEFICIENCIES & CORRECTIVE ACTIONS

(Continued)

B. Description of corrective actions planned or taken: _____

Remember Paperwork, Leak testing started on 8/2019 and has been done every 6 mths, will be better prepared now that i know what is expected and will make time to get everything done (XIII) inventory has been done but wasn't documented and will now be done when leak testing is done

XV- When needed we can rent a meter from U.V.M and or the U.V.M Hosp. Dont know make or model at this time. Waiting on a response from Email, we can also borrow a meter from Burlington Fire Dept.

C. Description of other recommendations for improvement: _____

Now that i know what is expected, i will be better prepared and have all of my paperwork done.

OPTIMUM

CONSTRUCTION LAYOUT - MATERIALS TESTING

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BILL OF LADING

SHIPPER: OPTIMUM Construction Layout & Materials Testing
195 Gosselin Drive, Derby Vermont

Qty.	Description
1 pkg	UN 3332, Radioactive material, Type A package, Special Form, 7, RQ Cs-137, 0.296 GBq (8 mCi) Am-241, 1.48 GBq (40 mCi) Radioactive Yellow II, TI = 0.3

EMERGENCY CONTACT: (802) 673-6015 (Richard Lafoe - President)
OPTIMUM Construction Layout & Materials Testing

Shipper Name (Print) _____

Shipper Name (Signature) _____