

## RADIATION SAFETY PROGRAM AUDIT CHECKLIST

Licensee Name Haley & Aldrich, Inc. (Boston)License No. 20-20825-C2Auditor's Name (print) Nancy StraubDate of Audit 030-34373  
2/16/2005Auditor's Signature Nancy A. Straub

2005-001

AUDIT ITEM	YES	NO	Comments
<b>1. Audit History</b>			
a. Last audit at this location (date)?			
b. Were previous Audits conducted yearly?		X	gauges kept only temp.
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?			
d. Were corrective actions taken?			
<b>2. Organization and Scope of Program</b>			
a. If the mailing address or place of use changed, was the license amended?			Boston license amended 2002.
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?		X	Still lists Steve Lesparance
c. Does the license authorize all of the radionuclides in the gauges possessed?			unknown - we are temp users under Boston license
d. Are the actual uses of the gauges consistent with the authorized uses on the license?	X		in this office - yes
e. Is the RSO fulfilling his/her duties?		X	Corporate - no was - just starting
<b>3. Training and Instructions to Workers</b>			
a. Have all workers received initial radiation safety training? Refresher training?	X		
b. Have all workers received required Hazmat training? Refresher training?	X		
c. Are training records maintained for each Individual?	X		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?		X	not performed before

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<b>4. Radiation Detection Instruments</b>			
a. Is a survey meter available for radiation?	X		1 day ship from Boston or NETS
b. Have the instruments been calibrated within the last year?	X		1 was just calibrated. other - Boston's obligation
c. Are calibration records maintained?			N/A - Boston's job
d. Are operation checks performed prior to use?	X		each day
<b>5. Gauge Inventory</b>			
a. Is a record kept showing receipt of each gauge?	X		but incomplete
b. Are all gauges physically inventoried at least every six months?	X		when in our possession, but must return every 6 months per license
c. Are records of inventories maintained?		X	
<b>6. Personnel Radiation Protection</b>			
a. Are ALARA considerations incorporated into The radiation safety program?	X		monitoring of exposure
b. Are all branch office personnel assigned TLD badges?	X		those who operate/handle gauge
c. Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	X		
d. Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	X		Landauer
e. Are dosimetry reports reviewed by the RSO when received?	X		yes - quarterly
f. If a worker declared her pregnancy, were the applicable requirements met?			N/A
g. Were radiation and contamination surveys in restricted and unrestricted areas performed quarterly?		X	1st one just performed in yr. (dose)
h. Are records of surveys maintained?		X	not yet
<b>7. Public Dose</b>			
a. Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	X		yes.
b. Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)	X		2/14/2005 none shown/found previously.

c. Have there been any changes in the use or storage of gauges or in the use of surrounding areas that would necessitate a new survey or evaluation?		X	
d. Are unrestricted area radiation levels less than 2 mrem in any one hour?	X		only if someone touches gauge & ease - not restricted access
e. Are gauges stored in a manner to prevent unauthorized use or removal?	X		chained, bolted to floor, & locked (2)
f. Are records maintained?	X		daily sign in/out log
<b>8 Operating and Emergency Procedures</b>			
a. Are current copies of operating and emergency procedures available to each individual?	X		include in case
a. Did any emergencies occur? Were they properly handled?			N/A
<b>9. Leak Tests</b>			
a. Was each customer gauge leak tested upon receipt?			when returned recently yes; earlier → check w/ Bos
b. Are leak tests performed in accordance with procedures?			Boston - files
b. Is each gauge in inventory leak tested at least every 6 months?			Boston - files
c. Are records of leak test results maintained for each gauge?			Boston - files
d. Were any sources found leaking?			Boston - files
<b>10. Maintenance of Gauges</b>			
a. Are procedures followed for cleaning and lubrication of gauges?			uncertain - Boston gauges
b. When the source rod is removed from the gauge, is it stored in a shielding pig?			NA - never performed
c. Do personnel observe good ALARA practices?			unknown
<b>11. Transportation</b>			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	X		uncertain if pkg documentation exists in Boston
b. Is special form source documentation maintained?	X		but incomplete

c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide activity and hazard class? Cargo only label?	X					
d. Packages are properly marked?	x					
e. Packages are inspected prior to shipment?	X					
f. Packages are sealed (cases locked)?	X		yes			
g. Shipping papers are properly prepared for all gauges shipped?	X		by NETS			
h. Bill of Lading (shipping papers) and emergency instructions are within drivers reach during transport?	X		yellow folder			
i. Packages are not carried in passenger compartment of vehicle?	X		trunk			
j. Packages are secured against movement in vehicle?	X					
<b>12. Notifications and Reports</b>						
a. Was any radioactive material lost or stolen? Were reports made?		X	N/A			
b. Did any overexposures occur? Were reports made?		X	N/A			
c. If any events occurred, was the root cause determined and corrective actions taken?		X	N/A			
<b>13. Posting and Labeling</b>						
a. "Notice to Workers" posted?	X					
b. Notice posted stating where workers can read a copy of the regulations and license?		X	will do			
<b>14. Summary of Deficiencies Identified During Audit</b> (attach additional sheets as necessary)						
<b>Deficiencies</b> posting about regs + license insufficient testing for dose, leak, etc interview staff about emergency procedures try to complete documentation	<b>Proposed Corrective Actions/Planned Completion Date</b> check postings set up schedule					
<b>15. Other Recommendations for Improvement</b> (attach additional sheets as necessary)						
- schedule small lunch mtg on Nuke gauge shipping + testing protocols. - request missing files from Boston -						

References:

Nureg 1556  
COMAR  
US DOT Website  
NRC Website  
MDE Website  
IATA Website

Authors:

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Revision Log:

April 2004 – Original  
May 2004 – Revision 1  
September 2004 – Revision 2