

Golder Associates Inc.

200 Century Parkway, Suite C
Mt. Laurel, NJ USA 08054
Telephone (856) 793-2005
Fax (856) 793-2006
www.golder.com



November 13, 2008

US Nuclear Regulatory Commission
Washington, DC 20555

Attn: Document Control Desk

RE: REPLY TO A NOTICE OF VIOLATION
DOCKET NO. 03031907
LICENSE NO. 29-28576-01

Gentlemen:

The purpose of this letter is to provide Golder Associates Inc. (Golder's) response to the above referenced US Nuclear Regulatory Commission's (NRC's) Notice of Violation (Notice) dated October 15, 2008 and received on October 17, 2008. The following provides our response as requested:

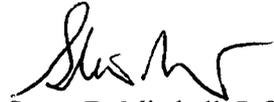
1. Reason for Violation – Annual inspections at each location were not completed in 2003 through 2006 because of changes in both the Operation Manager (OM) and Radiation Safety Officer (RSO) at our Mt. Laurel, New Jersey office during that time. As a result, our operations procedure was not followed out of our lack of understanding, rather than any type of un-willingness to perform them. It was not until the July 17, 2007 NRC audit that we realized we were not in compliance with the inspection requirement.
2. Corrective Steps – Golder has modified our operating procedure so that the RSO from the Mt. Laurel, New Jersey office will perform an annual review of the radiation safety program and an on-site audit at each office location (Mt. Laurel, New Jersey, Lansing, Michigan and Richmond, Virginia). Since that time, the Golder RSO has conducted yearly audits for both 2007 and 2008. Copies of the 2007 audits were provided in a correspondence to the NRC in November 2007 (refer to **Attachment 1**). The audits for 2008 are provided in **Attachment 2**.
3. Compliance Steps – The Golder RSO from the Mt. Laurel, New Jersey office will continue to complete annual reviews and audits at each office location, as required. In addition, an annual review (management review) will be performed to evaluate the radiation safety program effectiveness based on the audit results.
4. Date of Compliance – As demonstrated in **Attachments 1 and 2**, Golder is currently in compliance and has been in compliance since the 2007 NRC audit.

JE07

If you should have any questions or require additional information, please do not hesitate to call the undersigned at 856-793-2005.

Sincerely,

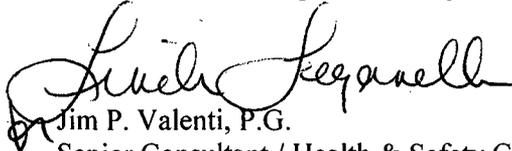
GOLDER ASSOCIATES INC.



Stuart D. Mitchell, P.G.
Associate and Manager, Philadelphia Operations



Kevin T. Dunsmore
Field Equipment Manager and RSO



Jim P. Valenti, P.G.
Senior Consultant / Health & Safety Coordinator

KTD/JPV/SDM:lrl
G:\NRC\FINAL NOV RESPONSE LTR 111308.DOC

Attachments

cc: Paul Sgriccia, P.E., Managing Principal, Great Lakes Operation, Golder
Brent Waters, P.G., Associate and Manager, Richmond Operation, Golder

ATTACHMENT 1

2007 AUDITS

Radiation Safety Program Audit Checklist

Licensee name Golden Associates License No. 29-28576-01
 Auditor's name (print) Kevin Dunsmore Date of Audit 8/28/07
 Auditor's signature *Kevin Dunsmore*

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?		✓	
b. Were previous audits conducted yearly?		✓	
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?			N/A
d. Were corrective actions taken?			N/A
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?	✓		
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?	✓		
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?		✓	RSO CHANGED-
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?		✓	DOT HAZMAT Refresher Needed
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?	✓		
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		
b. Have the instruments been calibrated within the last year?	✓		

c.	Are calibration records maintained?	✓		
d.	Are operation checks performed prior to use?	✓		
5. Gauge Inventory				
a.	Is a record kept showing receipt of each gauge?	✓		
b.	Are all gauges physically inventoried at least every six months?	✓		
c.	Are records of inventories maintained?	✓		
6. Personnel Radiation Protection				
a.	Are ALARA considerations incorporated into the radiation safety program?	✓		
b.	Are all branch office personnel assigned TLD badges?	✓		
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓		
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓		
e.	Are dosimetry reports reviewed by the RSO when received?	✓		
f.	If a worker declared her pregnancy, were the applicable requirements met?		N/A	no pregnancies
g.	Were radiation and contamination surveys in restricted and unrestricted areas performed quarterly?	✓		
h.	Are records of surveys maintained?	✓		
7. Public Dose				
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓		
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)	✓		will FROM Here Forward
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?	✓		
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓		
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓		
f.	Are records maintained?	✓		
8. Operating and Emergency Procedures				
a.	Are current copies of operating and emergency procedures available to each	✓		

Individual

Individual?			
b. Did any emergencies occur? Were they properly handled?		✓	
9. Leak Tests			
a. Was each customer gauge leak tested upon receipt?	✓		
b. Are leak tests performed in accordance with procedures?	✓		
c. Is each gauge in inventory leak tested at least every 6 months?	✓		
d. Are records of leak test results maintained for each gauge?	✓		
e. Were any sources found leaking?		✓	
10. Maintenance of Gauges			
a. Are procedures followed for cleaning and lubrication of gauges?	✓		
b. When the source rod is removed from the gauge is it stored in a shielded pig?		N/A	DO NOT REMOVE SOURCE ROD
c. Do personnel observe good ALARA practices?	✓		
11. Transportation			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b. Is special form source documentation maintained?	✓		
c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide, activity, and hazard class? Cargo only label?	✓		
d. Packages are properly marked?	✓		
e. Packages are inspected prior to shipment?	✓		
f. Packages are sealed (cases locked)?	✓		
g. Shipping papers are properly prepared for all gauges shipped?	✓		Include local contact for Emergency
h. Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i. Packages are not carried in passenger compartment of vehicle?	✓		
j. Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports			
a. Was any radioactive material lost or stolen? Were reports made?		✓	

b.	Did any overexposures occur? Were reports made?		<input checked="" type="checkbox"/>	
c.	If any events occurred, was the root cause determined and corrective actions taken?		N/A	
13. Posting and Labeling				
a.	"Notice to Workers" posted?		<input checked="" type="checkbox"/>	
b.	Notice posted stating where workers can read a copy of the regulations and license?		<input checked="" type="checkbox"/>	Posted After this Audit
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)				
Deficiencies - RSO was changed last year, was not aware of yearly audits will do from this date forward including Lansing & Richmond. - DOT refreshers needed for		Proposed Corrective Actions/Planned Completion Date		
15. Other Recommendations for Improvement (attach additional sheets as necessary)				

- many employees need DOT training. Scheduled for Oct 15th in Plumbly.
- Need to do survey of storage facility for Radiation protection
- Local Emergency Contact information has been made available for travel Paper/pockets.

Radiation Safety Program Audit Checklist

Licensee name Golder Associates License No. 29-28576-01
 Auditor's name (print) Kevin Dunsmore Date of Audit 10/17/07
 Auditor's signature *Kevin Dunsmore*

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?	✓		3/15/02 by Lynn Hustleton
b. Were previous audits conducted yearly?		✓	
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?		✓	
d. Were corrective actions taken?			N/A
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?	✓		
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?	✓		
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?		✓	needs to conduct yearly audits
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?	✓		
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?	✓		Spoke w/ Joe Nunn (Engineer) regarding Emergency Procedures
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		Fed Ex. from Mt Laurel OR Delivery
b. Have the instruments been calibrated within the last year?	✓		

c.	Are calibration records maintained?	✓		
d.	Are operation checks performed prior to use?	✓		
5. Gauge Inventory				
a.	Is a record kept showing receipt of each gauge?		✓	
b.	Are all gauges physically inventoried at least every six months?	✓		When LEAK tested
c.	Are records of inventories maintained?	✓		
6. Personnel Radiation Protection				
a.	Are ALARA considerations incorporated into the radiation safety program?	✓		
b.	Are all branch office personnel assigned TLD badges?		✓	ONLY FIELD STAFF
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓		
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓		
e.	Are dosimetry reports reviewed by the RSO when received?	✓		
f.	If a worker declared her pregnancy, were the applicable requirements met?			never happened.
g.	Were radiation and contamination surveys in restricted and unrestricted areas performed quarterly?		✓	ONLY ON INITIAL CONSTRUCTION OF STORAGE CABINET.
h.	Are records of surveys maintained?		✓	
7. Public Dose				
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓		
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)		✓	
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?		✓	
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓		
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓		
f.	Are records maintained?		✓	
8. Operating and Emergency Procedures				
a.	Are current copies of operating and emergency procedures available to each			

individual?	✓		
b. Did any emergencies occur? Were they properly handled?		✓	
9. Leak Tests			
a. Was each customer gauge leak tested upon receipt?		✓	
b. Are leak tests performed in accordance with procedures?	✓		
c. Is each gauge in inventory leak tested at least every 6 months?	✓		
d. Are records of leak test results maintained for each gauge?	✓		
e. Were any sources found leaking?		✓	
10. Maintenance of Gauges			
a. Are procedures followed for cleaning and lubrication of gauges?	✓		
b. When the source rod is removed from the gauge is it stored in a shielded pig?			N/A (source not removed)
c. Do personnel observe good ALARA practices?	✓		
11. Transportation			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b. Is special form source documentation maintained?	✓		
c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide, activity, and hazard class? Cargo only label?	✓		
d. Packages are properly marked?	✓		
e. Packages are inspected prior to shipment?	✓		
f. Packages are sealed (cases locked)?	✓		
g. Shipping papers are properly prepared for all gauges shipped?	✓		
h. Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i. Packages are not carried in passenger compartment of vehicle?	✓		
j. Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports	✓		
a. Was any radioactive material lost or stolen? Were reports made?		✓	

b.	Did any overexposures occur? Were reports made?		✓
c.	If any events occurred, was the root cause determined and corrective actions taken?		N/A
13. Posting and Labeling			
a.	"Notice to Workers" posted?		✓
b.	Notice posted stating where workers can read a copy of the regulations and license?		✓
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)			
Deficiencies		Proposed Corrective Actions/Planned Completion Date	
Notice to WORKERS Sign		post signs	
notice of where workers can REVIEW REGS & license		post notice	
15. Other Recommendations for Improvement (attach additional sheets as necessary)			

- ① Move Bolt cutters (lock) AWAY FROM TROXLER STORAGE CABINET.
Poss. Lock up Bolt cutters
- ② ON BILL OF LADING TAG, LOCAL Emergency Contact Info of LOCAL RSO. Include OFFICE & cell phone, not just TROXLER Cont. Info.
- ③ produce spread sheet to include gauge locations, leak test dates, SERVICE DATES (CALIBRATION). Do not Delete old RECORDS, just add info on to sheets.
- ④ post "notice to all workers" Sign.
- ⑤ Centralize ALL RADIATION SAFETY PROGRAM files, including Dosimetry, leak test, TRAINING RECORDS, etc., in file room FOR ease OF ACCESS.

Golder Employee
Troxler/ HAZMAT Certifications

<u>Golder Employee (Richmond)</u>	<u>Troxler Trained</u>	<u>HAZMAT Trained</u>	<u>HAZMAT Recertification Data</u>	<u>Comments</u>
Eric Cleaver	4/12/2007	4/12/2007	4/12/2010	
Ed Wilkinson	4/12/2007	4/12/2010	4/12/2010	
Scott L Yates	5/16/2006	5/16/2006	5/16/2009	
Wade M Bowes	2/5/2003	1/18/2007	1/18/2010	
William E Boettger	8/9/2001	8/9/2001	8/9/2001 *	
Scott Sheridan	5/29/2002	N/A		
Gerald Anderson	7/2/1990	1/18/2007	1/18/2010	
Scott Ferguson	8/29/2007	8/29/2007	8/29/2010	
Jon Clary	1/18/2007	1/18/2007	1/18/2010	





LANSING, MI
10/23/07

Radiation Safety Program Audit Checklist

Licensee name Golder Associates License No. 29-28576-01

Auditor's name (print) Kevin Dunsmore Date of Audit 10/23/07

Auditor's signature *Kevin Dunsmore*

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?	✓		3/26/02 by Lynn Hust/efon
b. Were previous audits conducted yearly?		✓	
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?		✓	
d. Were corrective actions taken?			N/A
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?		✓	No changes
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?	✓		
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?		✓	needs to conduct yearly audits
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?	✓		Some need DOT Refresher training
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?			
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		Fed Ex from Mt. Laurel Rental from Gotech Env. (15 minutes from office)
b. Have the instruments been calibrated within the last year?	✓		

c.	Are calibration records maintained?	✓		At Mt. Laurel, or Rental Company
d.	Are operation checks performed prior to use?	✓		
5. Gauge Inventory				
a.	Is a record kept showing receipt of each gauge?		✓	
b.	Are all gauges physically inventoried at least every six months?	✓		
c.	Are records of inventories maintained?	✓		
6. Personnel Radiation Protection				
a.	Are ALARA considerations incorporated into the radiation safety program?	✓		
b.	Are all branch office personnel assigned TLD badges?		✓	Just Field Staff
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓		
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓		through Floxter Electronics.
e.	Are dosimetry reports reviewed by the RSO when received?	✓		
f.	If a worker declared her pregnancy, were the applicable requirements met?	✓		Tiffany Johnson declared pregnancy, did not use gauge after declaration.
g.	Were radiation and contamination surveys in restricted and unrestricted areas performed quarterly?		✓	
h.	Are records of surveys maintained?	✓		From Initial Survey
7. Public Dose				
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓		
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)	✓		Tiffany Johnson provided copy.
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?		✓	
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓		
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓		
f.	Are records maintained?	✓		
8. Operating and Emergency Procedures				
a.	Are current copies of operating and emergency procedures available to each	✓		

	Individual?			
b.	Did any emergencies occur? Were they properly handled?		✓	
9. Leak Tests				
a.	Was each customer gauge leak tested upon receipt?		✓	
b.	Are leak tests performed in accordance with procedures?	✓		
c.	Is each gauge in inventory leak tested at least every 6 months?	✓		
d.	Are records of leak test results maintained for each gauge?	✓		
e.	Were any sources found leaking?		✓	
10. Maintenance of Gauges				
a.	Are procedures followed for cleaning and lubrication of gauges?	✓		
b.	When the source rod is removed from the gauge is it stored in a shielded pig?			N/A Rod never removed.
c.	Do personnel observe good ALARA practices?	✓		
11. Transportation				
a.	Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b.	Is special form source documentation maintained?	✓		
c.	Packages have two labels (e.g. Yellow-II) on opposite sides with T1, nuclide, activity, and hazard class? Cargo only label?	✓		
d.	Packages are properly marked?	✓		
e.	Packages are inspected prior to shipment?	✓		
f.	Packages are sealed (cases locked)?	✓		
g.	Shipping papers are properly prepared for all gauges shipped?	✓		
h.	Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i.	Packages are not carried in passenger compartment of vehicle?	✓		
j.	Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports				
a.	Was any radioactive material lost or stolen? Were reports made?		✓	

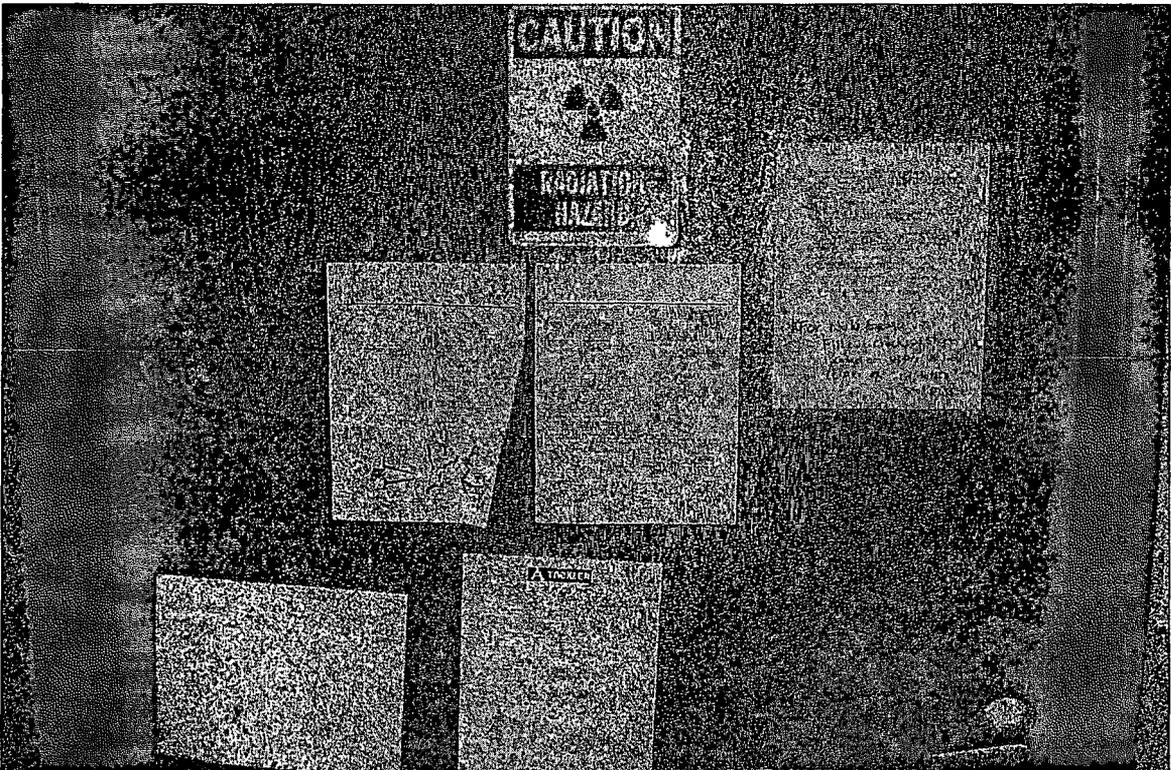
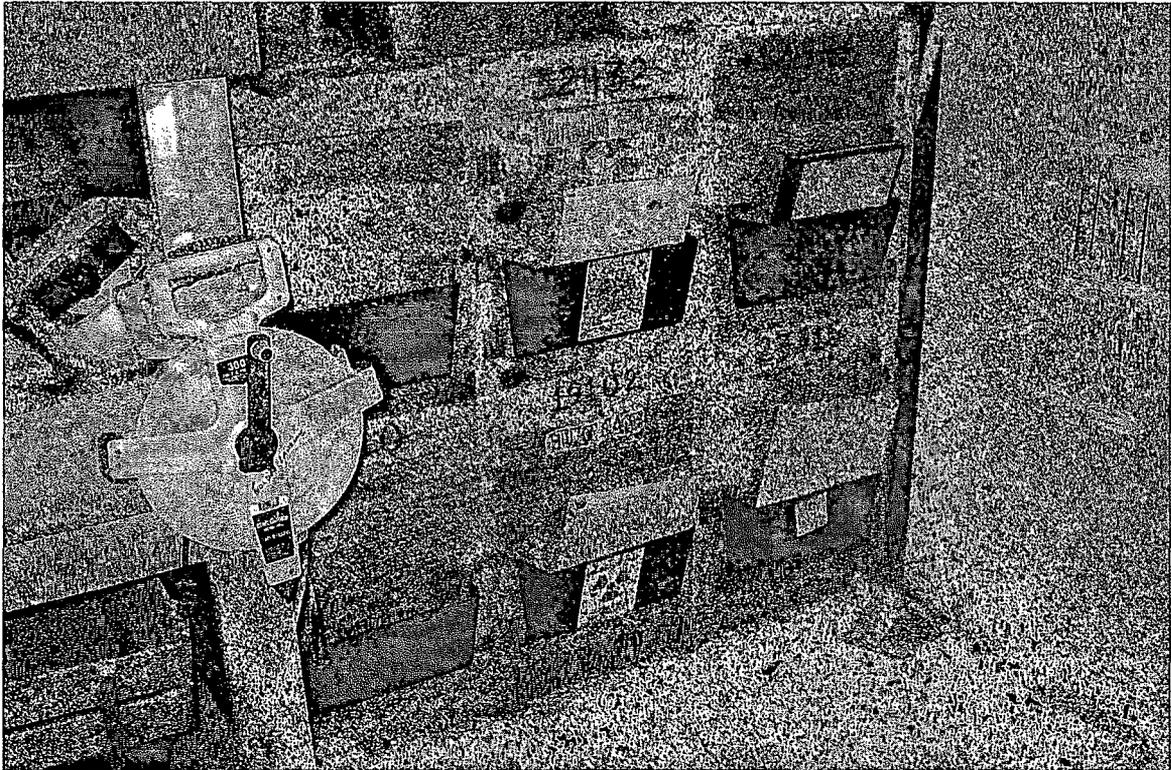
b.	Did any overexposures occur? Were reports made?		✓	
c.	If any events occurred, was the root cause determined and corrective actions taken?			N/A
13. Posting and Labeling				
a.	"Notice to Workers" posted?		✓	
b.	Notice posted stating where workers can read a copy of the regulations and license?		✓	
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)				
Deficiencies		Proposed Corrective Actions/Planned Completion Date		
① DOT Refreshers		① get Refresher training for Delinquents		
② yearly RSO Audits		② conduct yearly Audits		
③ post notice for Reg & License review		③ post needed sign for Reg & License Review.		
15. Other Recommendations for Improvement (attach additional sheets as necessary)				

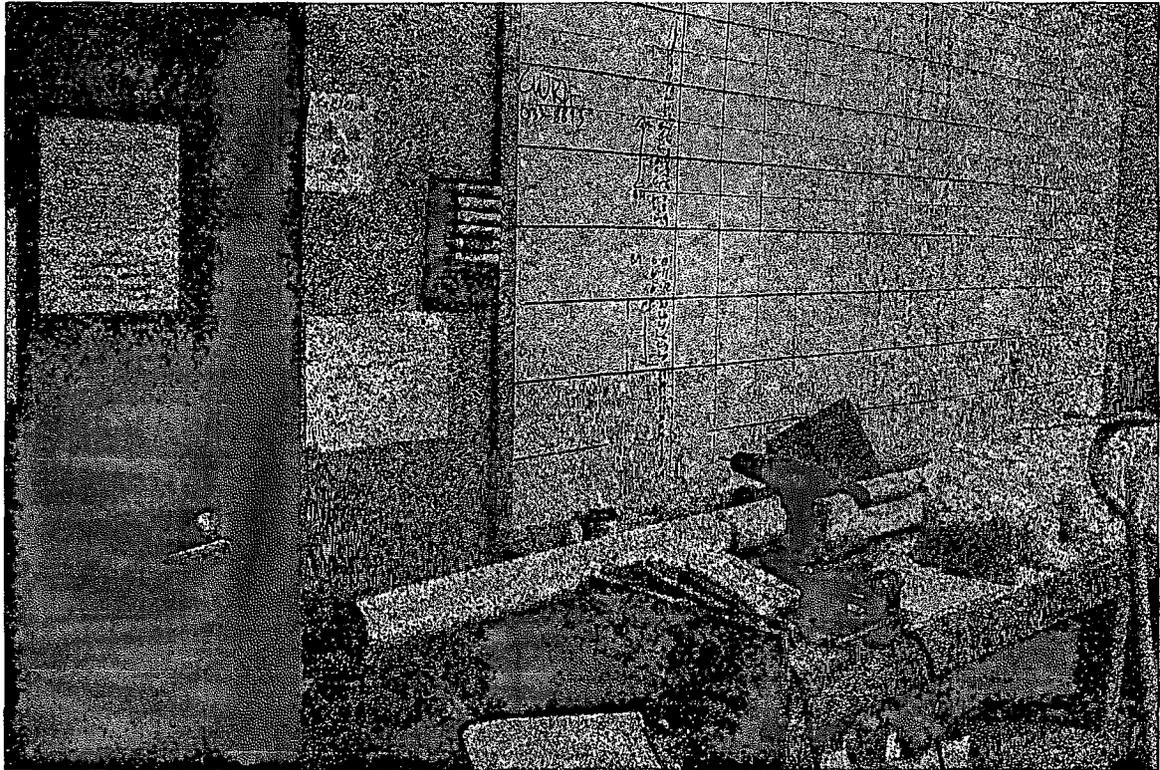
- ① Centralize ALL Files in file room for ease of access.
- ② Create continuous spreadsheet w/ gauge locations, leak test info, service info. Do not delete old info, just add on to previous data.
- ③ Move Bolt cutters to more secure location.

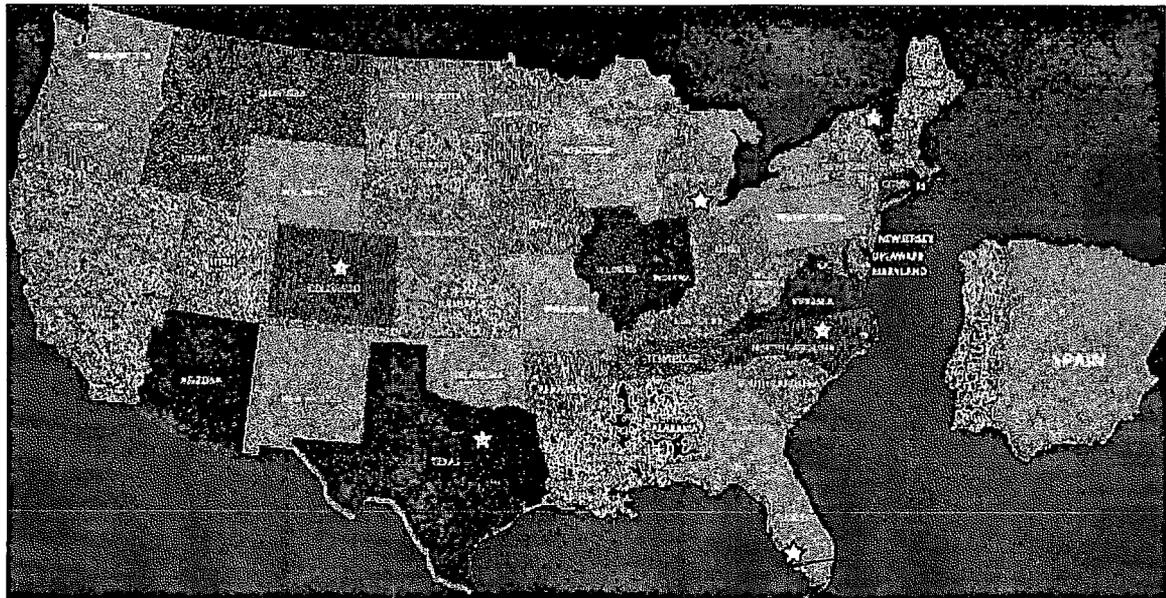
TRAINING LOG
Golder Associates Inc.
Lansing, Michigan

Gauge Users.xls

Name	Radiation Safety Training Date	Who Performed Training?	Certificate of Training Available?	Badge	Notes
Balconi, John	5/21/1988	Troxler	Yes	No	
Bertolini, Emily	10/2/2007	Nuclear Gauge Safety Training Online	Yes	Yes	
Bierlein, Kevin	5/24/2007	Troxler	Yes	Yes	
Evans, Steve	1/17/2007	Troxler	Yes	No	
Funkhouser, Mark	6/17/1985	??	No	No	Certificates of Training lost in Flood in Houston.
Gostlin, Jeff	11/14/2000	Weaver Boos & Gordon	Yes	Yes	
Gulewich, Brian	5/11/2006	Troxler	Yes	Yes	Currently at School (Fall 2007)
Gutierrez, Luiza	5/24/2007	Troxler	Yes	Yes	
Hale, Ben	8/9/2000	Troxler	Yes	Yes	
Johnson, Tiffany	6/13/2001	Troxler	Yes	Yes	RSO
Krueger, Brad	7/14/2004	Troxler	Yes	Yes	
List, David	7/7/1989	CPN Corporation	Yes	No	
Losey, Art	3/9/2004	Troxler	Yes	Yes	
McGowan, Julie	10/22/2007	Nuclear Gauge Safety Training Online	Yes	Yes	
Moran, Anthony	5/16/2003	Troxler	Yes	Yes	
Reese, James	9/13/2007	Nuclear Gauge Safety Training Online	Yes	Yes	
Sanders, Tim	6-Jan	MDOT	Yes	Yes	
Schmuecker, Jason	5/9/2001	Cline's Technical Service (Ohio)	Yes	Yes	
Shereda, George	5/11/2006	Troxler	Yes	Yes	
Shrier, Rob	11/10/2004	Troxler	Yes	Yes	
Valdez, Noah	6/9/2005	Troxler	Yes	Yes	
Wohlfeil, Aaron	5/24/2007	Troxler	Yes	Yes	







HOME OFFICE

2650 East 40th Avenue
 Denver, Colorado 80205
 Phone: 303-320-4764
 Fax: 303-322-7242
 Toll Free: 1-800-833-7958
 E-Mail: sales@geotechenv.com
[pdf Map](#)
[On-line Map](#)

TEXAS SERVICE CENTER

1600 North Interstate 35e, Suite 112
 Carrollton, Texas 75006-3813
 Phone: 972-245-6575
 Fax: 972-245-8889
 Toll Free: 1-800-276-5325
[pdf Map](#)

FLORIDA SERVICE CENTER

12165 Metro Pkwy, Unit #25B
 Ft. Myers, FL 33966
 Phone: 239-476-8891
 Fax: 239-476-8893
 Toll Free: 1-800-304-5325
[pdf Map](#)
[On-line Map](#)

MICHIGAN SERVICE CENTER

1099 E. Grand River Rd. Ste # 6
 Williamston, Michigan 48895-1211
 Phone: 517-655-5616
 Fax: 517-655-1157
 Toll Free: 1-800-275-5325
[pdf Map](#)
[On-line Map](#)

Vermont SERVICE CENTER

15 Tigan Street, Suite 1503
 Winooski, VT 05404
 Phone: 802-651-3050
 Fax: 802-651-3051
 Toll Free: 1-800-558-5325
[On-line Map](#)

Geotech Equipos Ambientales S.L.

Abat Escarré # 12
 Mollet del Valles, Barcelona 08100, Spa
 Telefono: 93 5445937 Fax: 93 570053!
 visit [Geotech Spain website](#)
 E-mail miguel@geotechenv.com
[pdf Map](#)

INTERNATIONAL

USA/CANADA: 1-800-833-7958



Start: 15851 S Us Highway 27
Lansing, MI 48906-5657, US

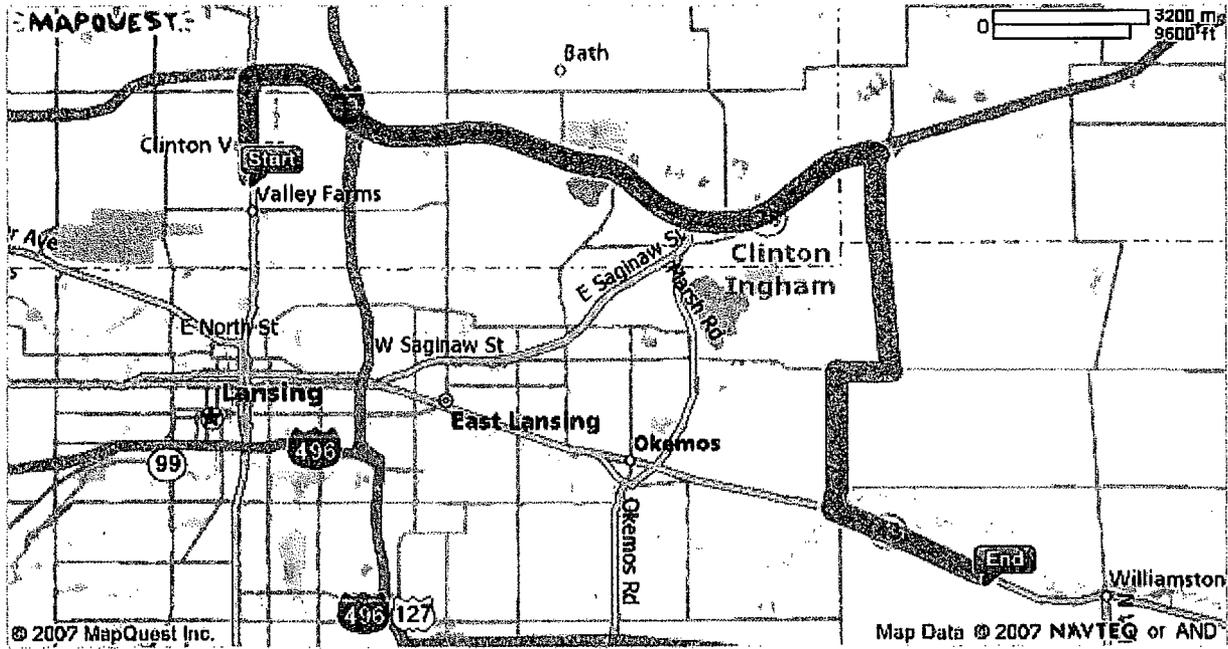
End: 1099 E Grand River Rd
Williamston, MI 48895-9060, US

Notes:

Only text visible within note field will print.

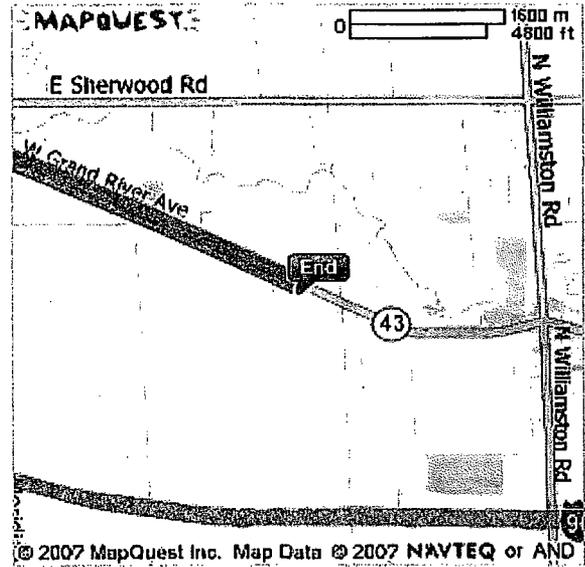
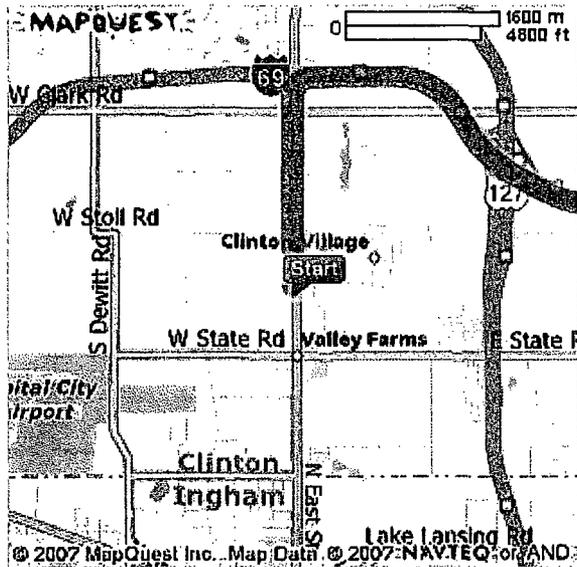


Directions	Distance
Total Est. Time: 26 minutes Total Est. Distance: 22.11 miles	
 1: Start out going NORTH on S OLD US-27 toward NORTHCREST RD.	1.5 miles
 2: Merge onto I-69 E toward US-127 S / FLINT / JACKSON.	10.7 miles
 3: Take the WOODBURY RD exit- EXIT 98- toward LAINGSBURG.	0.2 miles
 4: Turn RIGHT onto WOODBURY RD.	1.5 miles
 5: WOODBURY RD becomes SHOEMAN RD.	2.1 miles
 6: Turn RIGHT onto HASLETT RD.	0.8 miles
 7: Turn LEFT onto MERIDIAN RD.	2.3 miles
 8: Turn LEFT onto W GRAND RIVER AVE / MI-43.	2.5 miles
 9: End at 1099 E Grand River Rd Williamston, MI 48895-9060, US	
Total Est. Time: 26 minutes Total Est. Distance: 22.11 miles	



Start:
15851 S Us Highway 27
Lansing, MI 48906-5657, US

End:
1099 E Grand River Rd
Williamston, MI 48895-9060, US



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ATTACHMENT 2

2008 AUDITS

Radiation Safety Program Audit Checklist

Licensee name Golden Associates License No. 29-28576-01
 Auditor's name (print) Kevin Dunsmore Date of Audit 8/22/08
 Auditor's signature [Signature]

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?	✓		8/28/07
b. Were previous audits conducted yearly?		✓	
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?			DOT Refreshers / Yearly Audits
d. Were corrective actions taken?	✓		
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?			N/A
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?			N/A
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?	✓		
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?	✓		
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?	✓		Spoke w/ Gregg Dehaven (Field Tech 3)
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		
b. Have the instruments been calibrated within the last year?	✓		

c.	Are calibration records maintained?	✓	
d.	Are operation checks performed prior to use?	✓	
5. Gauge Inventory			
a.	Is a record kept showing receipt of each gauge?	✓	
b.	Are all gauges physically inventoried at least every six months?	✓	
c.	Are records of inventories maintained?	✓	
6. Personnel Radiation Protection			
a.	Are ALARA considerations incorporated into the radiation safety program?	✓	
b.	Are all branch office personnel assigned TLD badges?	✓	<i>Just Field Staff</i>
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓	
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓	
e.	Are dosimetry reports reviewed by the RSO when received?	✓	
f.	If a worker declared her pregnancy, were the applicable requirements met?		<i>N/A</i>
g.	Were radiation and contamination surveys in restricted and unrestricted areas performed quarterly?	✓	<i>Just last survey</i>
h.	Are records of surveys maintained?		<i>N/A</i>
7. Public Dose			
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓	
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)	✓	
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?	✓	
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓	
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓	
f.	Are records maintained?	✓	
8. Operating and Emergency Procedures			
a.	Are current copies of operating and emergency procedures available to each	✓	

Individual?	✓		
b. Did any emergencies occur? Were they properly handled?			✓
9. Leak Tests			
a. Was each customer gauge leak tested upon receipt?		✓	
b. Are leak tests performed in accordance with procedures?	✓		
c. Is each gauge in inventory leak tested at least every 6 months?	✓		
d. Are records of leak test results maintained for each gauge?	✓		
e. Were any sources found leaking?		✓	
10. Maintenance of Gauges			
a. Are procedures followed for cleaning and lubrication of gauges?	✓		
b. When the source rod is removed from the gauge is it stored in a shielded pig?			<i>N/A source not removed</i>
c. Do personnel observe good ALARA practices?	✓		
11. Transportation			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b. Is special form source documentation maintained?	✓		
c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide, activity, and hazard class? Cargo only label?	✓		
d. Packages are properly marked?	✓		
e. Packages are inspected prior to shipment?	✓		
f. Packages are sealed (cases locked)?	✓		
g. Shipping papers are properly prepared for all gauges shipped?	✓		
h. Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i. Packages are not carried in passenger compartment of vehicle?	✓		
j. Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports			
a. Was any radioactive material lost or stolen? Were reports made?		✓	

b.	Did any overexposures occur? Were reports made?		✓	
c.	If any events occurred, was the root cause determined and corrective actions taken?			N/A
13. Posting and Labeling				
a.	"Notice to Workers" posted?		✓	
b.	Notice posted stating where workers can read a copy of the regulations and license?		✓	
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)				
Deficiencies		Proposed Corrective Actions/Planned Completion Date		
N/A				
15. Other Recommendations for Improvement (attach additional sheets as necessary)				

Radiation Safety Program Audit Checklist

Licensee name Golden Associates License No. 29-28576-01
 Auditor's name (print) Kevin Dunsmore (RSO) Date of Audit 11/6/08
 Auditor's signature *Kevin Dunsmore*

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?	✓		10/23/08
b. Were previous audits conducted yearly?		✓	NOT thru 2003-2006
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?	✓		DOT Refreshers, Audits, Notices
d. Were corrective actions taken?	✓		
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?			N/A
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?			N/A
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?	✓		
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?	✓		
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?	✓		Spoke w/ Tiffany Johnson
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		FODEX Ekorn Mt Laurel Rental From GeoTech Env. (15 minute drive)
b. Have the instruments been calibrated within the last year?	✓		

c.	Are calibration records maintained?	✓	
d.	Are operation checks performed prior to use?	✓	
5. Gauge Inventory			
a.	Is a record kept showing receipt of each gauge?		✓
b.	Are all gauges physically inventoried at least every six months?	✓	
c.	Are records of inventories maintained?	✓	
6. Personnel Radiation Protection			
a.	Are ALARA considerations incorporated into the radiation safety program?	✓	
b.	Are all branch office personnel assigned TLD badges?		✓ just field staff
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓	
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓	
e.	Are dosimetry reports reviewed by the RSO when received?	✓	
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?	✓	Supplied By Jeffrey Johnson
h.	Are records of surveys maintained?	✓	
7. Public Dose			
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓	
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)	✓	
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?	✓	Have survey results
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓	
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓	
f.	Are records maintained?	✓	
8. Operating and Emergency Procedures			
a.	Are current copies of operating and emergency procedures available to each		

Individual?			
b. Did any emergencies occur? Were they properly handled?		✓	NO EMERGENCIES
9. Leak Tests			
a. Was each customer gauge leak tested upon receipt?	✓		
b. Are leak tests performed in accordance with procedures?	✓		
c. Is each gauge in inventory leak tested at least every 6 months?	✓		
d. Are records of leak test results maintained for each gauge?	✓		
e. Were any sources found leaking?		✓	
10. Maintenance of Gauges			
a. Are procedures followed for cleaning and lubrication of gauges?	✓		
b. When the source rod is removed from the gauge is it stored in a shielded pig?		✓	SOURCE ROD NOT REMOVED
c. Do personnel observe good ALARA practices?	✓		
11. Transportation			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b. Is special form source documentation maintained?	✓		
c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide, activity, and hazard class? Cargo only label?	✓		
d. Packages are properly marked?	✓		
e. Packages are inspected prior to shipment?	✓		
f. Packages are sealed (cases locked)?	✓		
g. Shipping papers are properly prepared for all gauges shipped?	✓		
h. Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i. Packages are not carried in passenger compartment of vehicle?	✓		
j. Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports			
a. Was any radioactive material lost or stolen? Were reports made?		✓	

b.	Did any overexposures occur? Were reports made?		<input checked="" type="checkbox"/>	
c.	If any events occurred, was the root cause determined and corrective actions taken?			N/A
13. Posting and Labeling				
a.	"Notice to Workers" posted?	<input checked="" type="checkbox"/>		
b.	Notice posted stating where workers can read a copy of the regulations and license?	<input checked="" type="checkbox"/>		
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)				
Deficiencies			Proposed Corrective Actions/Planned Completion Date	
Need to keep all shipping paperwork (FedEx) for at least 1 year.			File all shipping paperwork	
15. Other Recommendations for Improvement (attach additional sheets as necessary)				

Radiation Safety Program Audit Checklist

Licensee name Golder Associates License No. 29-28576-01

Auditor's name (print) Kevin Dunsmore Date of Audit 10/30/08

Auditor's signature [Signature]

Audit Item	Yes	No	Comments
1. Audit History			
a. Last audit at this location (date)?	✓		10/17/08
b. Were previous audits conducted yearly?	✓		
c. Were any deficiencies noted during the last two audits? Any deficiencies repeated?	✓		
d. Were corrective actions taken?	✓		Signs posted
2. Organization and Scope of Program			
a. If the mailing address or place of use changed, was the license amended?		✓	
b. If the RSO changed, was the license amended? Does the new RSO meet the training requirements?			N/A
c. Does the license authorize all of the radionuclides in the gauges possessed?	✓		
d. Are the actual uses of gauges consistent with the authorized uses on the license?	✓		
e. Is the RSO fulfilling his/her duties?	✓		
3. Training and Instructions to Workers			
a. Have all workers received initial radiation safety training? Refresher training?	✓		
b. Have all workers received required Hazmat training? Refresher training?	✓		
c. Are training records maintained for each individual?	✓		
d. Did interviews/observations reveal gauge operators know emergency procedures? Leak testing procedures? Service procedures? Transportation procedures?	✓		Spoke w/ Gerry Anderson aware of ALL procedures (Leak, emergency, transportation)
4. Radiation Detection Instruments			
a. Is a survey meter available for radiation measurements? Frisker for contamination measurements?	✓		VIA Fed Ex FROM Mt Laurel office
b. Have the instruments been calibrated within the last year?	✓		@ Mt Laurel

c.	Are calibration records maintained?	✓	
d.	Are operation checks performed prior to use?	✓	
5. Gauge Inventory			
a.	Is a record kept showing receipt of each gauge?		
b.	Are all gauges physically inventoried at least every six months?	✓	
c.	Are records of inventories maintained?	✓	
6. Personnel Radiation Protection			
a.	Are ALARA considerations incorporated into the radiation safety program?	✓	
b.	Are all branch office personnel assigned TLD badges?		No, only gauge used
c.	Do all personnel wear their TLD badges in the restricted area and when handling gauges? Are badges properly stored when not in use?	✓	
d.	Are TLD badges exchanged at least quarterly and processed by a NVLAP accredited organization?	✓	
e.	Are dosimetry reports reviewed by the RSO when received?	✓	
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?	✓	only on INITIAL STORAGE Facility construction.
h.	Are records of surveys maintained?	✓	
7. Public Dose			
a.	Are gauges used and stored in a manner to keep public doses below 100 mrem in a year?	✓	
b.	Has a survey or evaluation been performed to demonstrate public dose limits are met? (indicate the date)		✓
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?		✓
d.	Are unrestricted area radiation levels less than 2 mrem in any one hour?	✓	
e.	Are gauges stored in a manner to prevent unauthorized use or removal?	✓	
f.	Are records maintained?		✓
8. Operating and Emergency Procedures			
a.	Are current copies of operating and emergency procedures available to each	✓	

individual?			
b. Did any emergencies occur? Were they properly handled?		✓	
9. Leak Tests			
a. Was each customer gauge leak tested upon receipt?		✓	no new gauges
b. Are leak tests performed in accordance with procedures?	✓		
c. Is each gauge in inventory leak tested at least every 6 months?	✓		
d. Are records of leak test results maintained for each gauge?	✓		
e. Were any sources found leaking?		✓	
10. Maintenance of Gauges			
a. Are procedures followed for cleaning and lubrication of gauges?	✓		
b. When the source rod is removed from the gauge is it stored in a shielded pig?			N/A source rod not removed
c. Do personnel observe good ALARA practices?	✓		
11. Transportation			
a. Are DOT 7A packages used for transport of gauges? Is documentation of package testing maintained?	✓		
b. Is special form source documentation maintained?	✓		
c. Packages have two labels (e.g. Yellow-II) on opposite sides with TI, nuclide, activity, and hazard class? Cargo only label?	✓		
d. Packages are properly marked?	✓		
e. Packages are inspected prior to shipment?	✓		
f. Packages are sealed (cases locked)?	✓		
g. Shipping papers are properly prepared for all gauges shipped?	✓		
h. Bill of lading (shipping papers) and emergency instructions are within drivers reach during transport?	✓		
i. Packages are not carried in passenger compartment of vehicle?	✓		
j. Packages are secured against movement in vehicle?	✓		
12. Notifications and Reports			
a. Was any radioactive material lost or stolen? Were reports made?		✓	

b.	Did any overexposures occur? Were reports made?		<input checked="" type="checkbox"/>	NO OVEREXPOSURES
c.	If any events occurred, was the root cause determined and corrective actions taken?			N/A
13. Posting and Labeling				
a.	"Notice to Workers" posted?		<input checked="" type="checkbox"/>	
b.	Notice posted stating where workers can read a copy of the regulations and license?		<input checked="" type="checkbox"/>	
14. Summary of Deficiencies Identified During Audit (attach additional sheets as necessary)				
Deficiencies			Proposed Corrective Actions/Planned Completion Date	
15. Other Recommendations for Improvement (attach additional sheets as necessary)				