



UNITED STATES  
**NUCLEAR REGULATORY COMMISSION**  
REGION I  
475 ALLENDALE ROAD  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

July 31, 2008

Docket No. 03034238  
EA-08-200

License No. 06-30338-01

Terence P. Chambers, P.E.  
President  
Soil Technology Associates, Inc.  
P.O. Box 106  
Pomfret Center, CT 06259-0106

**SUBJECT: INSPECTION NO. 03034238/2008001, SOIL TECHNOLOGY ASSOCIATES,  
INC., POMFRET CENTER, CONNECTICUT SITE**

Dear Mr. Chambers:

On June 19-20, 2008, Craig Gordon of this office conducted a safety inspection at the above address of activities authorized by the above listed NRC license. Additional information provided in telephone conversations on June 26, 2008, and July 11, 2008, between you and Mr. Gordon was also examined as part of the inspection. The enclosed report presents the results of this inspection.

This inspection examined your licensed activities as they relate to radiation safety and to compliance with the Commission's regulations and the license conditions. Within these areas, the inspection consisted of a selected examination of procedures and representative records, observations by the inspector and interviews with personnel.

Based on the results of this inspection, one apparent violation was identified and is being considered for escalated enforcement. During the inspection, two portable moisture density gauges were found stored inside locked containers, but the containers were not fixed to a permanent building structure to prevent unauthorized removal. By having only one physical control (the lock), this condition constitutes an apparent violation of 10 CFR 30.34(i), which requires a minimum of two independent physical controls that form tangible barriers to secure each portable gauge containing licensed radioactive material in the form of sealed sources from unauthorized removal. The circumstances surrounding this apparent violation, the significance of the issue, and the need for lasting and effective corrective action were discussed with you at the inspection exit meeting at the conclusion of the inspection on June 26, 2008, and during the final exit telephone call on July 11, 2008. Your corrective actions are adequately described on the docket in the enclosed inspection report. As a result, it may not be necessary to conduct a predecisional enforcement conference (PEC) or receive any additional information from you in order to enable the NRC to make an enforcement decision.

In addition, since your facility has not been the subject of escalated enforcement actions within the last two years and based on our understanding of your corrective action, a civil penalty may not be warranted in accordance with Section VI.C.2 of the Enforcement Policy.

Before the NRC makes its final enforcement decision, however, we offer you an opportunity to either: (1) provide additional information in response to the apparent violation addressed in this inspection report within 30 days of the date of this letter or (2) request a PEC. If a conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. Please contact Marie Miller, Chief, Materials Security and Industrial Branch within seven days of the date of this letter to notify the NRC of your intended response.

If you choose to provide additional information in a written response, it should be clearly marked as a, "Response to An Apparent Violation in Inspection Report No. 03034238/2008001; EA-08-200," and should include the reason for the apparent violation or, if contested, the basis for disputing the apparent violation. You may also provide any additional corrective actions that you may have taken that may not be included in previously docketed correspondence. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. If your response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision.

In addition, please be advised that the number and characterization of the apparent violation described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results for our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at [http://www.nrc.gov/reading\\_rm/adams.html](http://www.nrc.gov/reading_rm/adams.html). To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Medical, Industrial, and Academic Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. The current NRC Enforcement Policy is included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **About NRC; How We Regulate; Enforcement**; then **Enforcement Policy**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Sincerely,

*/RA/*

John D. Kinneman, Director  
Division of Nuclear Materials Safety

Enclosures:

1. Inspection Report No. 03034238/2008001
2. Excerpt from NRC Information Notice 96-28

cc:

State of Connecticut

Before the NRC makes its final enforcement decision, however, we offer you an opportunity to either: (1) provide additional information in response to the apparent violation addressed in this inspection report within 30 days of the date of this letter or (2) request a PEC. If a conference is held, it will be open for public observation. The NRC will also issue a press release to announce the conference. Please contact Marie Miller, Chief, Materials Security and Industrial Branch within seven days of the date of this letter to notify the NRC of your intended response.

If you choose to provide additional information in a written response, it should be clearly marked as a, "Response to An Apparent Violation in Inspection Report No. 03034238/2008001; EA-08-200," and should include the reason for the apparent violation or, if contested, the basis for disputing the apparent violation. You may also provide any additional corrective actions that you may have taken that may not be included in previously docketed correspondence. The guidance in the enclosed excerpt from NRC Information Notice 96-28, "Suggested Guidance Relating to Development and Implementation of Corrective Action," may be helpful. If your response is not received within the time specified or an extension of time has not been granted by the NRC, the NRC will proceed with its enforcement decision.

In addition, please be advised that the number and characterization of the apparent violation described in the enclosed inspection report may change as a result of further NRC review. You will be advised by separate correspondence of the results for our deliberations on this matter.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC document system (ADAMS), accessible from the NRC website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

Current NRC regulations are included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **Nuclear Materials; Medical, Industrial, and Academic Uses of Nuclear Material**; then **Regulations, Guidance, and Communications**. The current NRC Enforcement Policy is included on the NRC's website at [www.nrc.gov](http://www.nrc.gov); select **About NRC; How We Regulate; Enforcement**; then **Enforcement Policy**. You may also obtain these documents by contacting the Government Printing Office (GPO) toll-free at 1-888-293-6498. The GPO is open from 7:00 a.m. to 8:00 p.m. EST, Monday through Friday (except Federal holidays).

Sincerely,

*/RA/*  
John D. Kinneman, Director  
Division of Nuclear Materials Safety

Enclosures:

1. Inspection Report No. 03034238/2008001
2. Excerpt from NRC Information Notice 96-28

cc:  
State of Connecticut

DISTRIBUTION w/encl:

ADAMS (PARS)	T Bloomer, OEDO	S Titherington-Budo, OCFO
SECY	S Williams, OEDO	D Screnci, PAO-RI
(RIDSSECYMAILCENTERRESOURCE)	Enforcement Coordinators	N Sheehan, PAO-RI
CA	RII, RIII, RIV	J Kinneman, RI
OEMAIL	S Magruder, OE	M Miller, RI
B. Borchardt, EDO	N Hasan, OE	K Farrar, RI
M Virgilio, DEDMRT	L Lopez, OE	D Holody, RI
C Carpenter, OE	R Romine, OGC	A. DeFrancisco, RI
S Merchant, OE	C Marco, OGC	R Summers, RI
S. Woods, OE	M Burgess, FSME	C O'Daniell, RI
C Miller, FSME	E Hayden, OPA	S. Villar, RI
G Pangburn, FSME	H Bell, OIG	Region I OE Files (with concurrences)
R Lewis, FSME	G Caputo, OI	
D Rathbun, FSME	M Williams, OCFO	

DOCUMENT NAME: G:\WordDocs\Current\Insp Letter\L06-33038-01.2008001.doc

SUNSI Review Complete: CGordon

After declaring this document "An Official Agency Record" it will be released to the Public.

ADAMS Document Accession No. ML082140092

To receive a copy of this document, indicate in the box: "C" = Copy w/o attach/encl "E" = Copy w/ attach/encl "N" = No copy

OFFICE	DNMS/RI	N	DNMS/RI	DNMS/RI	RI/ORS
NAME	CGordon/tmh CZG**		MMiller/mtm **	JKinneman **	DHolody/aed f/
DATE	7/21/08		7/29/08	7/30/08	7/31/08
OFFICE	DNMS/RI				
NAME	JKinneman/jdk				
DATE	07/31/08				

\*\* see previous concurrence



## **EXECUTIVE SUMMARY**

Soil Technology Associates, Inc.  
NRC Inspection Report No. 03034238/2008001

On June 19-20, 2008, Region I performed an unannounced safety inspection of Soil Technology Associates, Inc., at the licensee's facility located at 250 Killingly Road, Pomfret Center, Connecticut. During a tour of the of the laboratory building, two portable moisture density gauges were found stored inside locked containers but not fixed to a permanent building structure. An apparent violation of 10 CFR 30.34(i) was identified for the licensee's failure to use a minimum of two independent physical controls that form tangible barriers to secure each portable gauge whenever the portable gauges were not under the control and constant surveillance of the licensee.

The licensee's proposed corrective actions for the apparent violation included relocation of both gauges to a locked room within the laboratory building, and assurance by the President, Soil Technology Associates, Inc. that the exterior door to the storage area remained locked when the area was not under direct surveillance by the licensee. During a telephone exit meeting held on June 26, 2008, the licensee stated that the corrective actions had been completed.

## **REPORT DETAILS**

### **I. Organization and Scope of the Program**

#### a. Inspection Scope

The inspection included a review of the licensee's activities, and organizational structure

#### b. Observations and Findings

Soil Technology Associates, Inc. is authorized by License No. 06-30338-01 to use portable gauging devices containing sealed sources of cesium-137 (Cs-137) and americium-241 (Am-241), of which no single source can exceed the maximum activity specified in the certificate of registration issued by the NRC or an Agreement State. The devices may be used only at the licensee's Connecticut site and at temporary job sites where NRC maintains jurisdiction. Most work under this license was performed at local temporary job sites in the Pomfret, Connecticut area. Corporate direction and management oversight of the program was provided by the STAI President, who was also the Radiation Safety Officer, from the licensee's main office.

A laboratory technician was the primary authorized user (AU) with occasional use by the company President, who is also a qualified AU. At the time of the inspection, the licensee maintained one Troxler Model 3450 and one CPN Model MC-3 portable gauges in storage in the laboratory building. This is a separate locked building located adjacent to the licensee's main offices. Access to the building is limited to the two AUs, and selected individuals designated by the President.

#### c. Conclusions

No violations or safety concerns regarding organization and scope of the program were identified.

### **II. Material Receipt, Use, Transfer, and Control**

#### a. Inspection Scope

The inspector toured the licensee's Pomfret, Connecticut facility, and reviewed the program for material receipt, use, transfer, and control related to compliance with 10 CFR 30.34(i).

#### b. Observations and Findings

During a tour of the site, the inspector observed that both portable gauges were stored in the locked laboratory building adjacent to the licensee's office building. Both gauges were locked and stored inside their transport cases, then each gauge was placed inside a separate storage container which was also locked.

The inspector identified a concern with this configuration in that storage containers did not have a second independent physical barrier because they were not fixed to a

permanent structure within the laboratory building. As a result, it was possible for either gauge to be removed from the building during storage if the exterior door (first barrier) was breached.

Interviews with the STAI President indicated that he believed two physical barriers were used. He explained that the laboratory building remained locked unless either AU was present. Each one of the gauge transport containers was always locked while being stored, and by placing the locked transport containers inside another locked container, he believed a second physical barrier was established.

In order to satisfy the two independent physical barrier requirement, the inspector discussed possible changes to the storage arrangement with the STAI President. From the discussion, the licensee President immediately relocated both gauges to a separate locked storage room within the laboratory building.

c. Conclusions

The inspector identified an apparent violation of 10 CFR 30.34(i), in that, the licensee failed to use a minimum of two independent physical controls that form tangible barriers to secure portable gauges whenever the portable gauges are not under the control and constant surveillance of the licensee.

### **III. Exit Meeting**

On June 26, 2008, the inspector contacted the President, STAI by telephone to discuss the initial findings of the inspection, the apparent violation identified and the status of corrective actions. He acknowledged the concerns related to security and control of gauge storage and indicated that the gauges were permanently relocated to the locked room within the laboratory building. On July 11, 2008, a final exit telephone call was made to the licensee to inform the President of the apparent violation and that the corrective actions were considered acceptable.

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee

\*T. Chambers, President and RSO  
J. Brown, Laboratory Technician

\*Denotes attendance at telephone exit meetings on June 26 and July 11, 2008.