



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION I  
2100 RENAISSANCE BLVD., SUITE 100  
KING OF PRUSSIA, PA 19406-2713

June 1, 2016

Docket No. 03038888  
EA-16-045

License No. 38-35284-01

Thomas E. Lent  
President & CEO  
Thielsch Engineering, Inc.  
195 Frances Avenue  
Cranston, RI 02910

SUBJECT: THIELSCH ENGINEERING, INC., NOTICE OF VIOLATION - NRC INSPECTION  
REPORT NO. 03038888/2016001

Dear Mr. Lent:

This letter provides you the U.S. Nuclear Regulatory Commission's (NRC's) enforcement decision for apparent violations identified during a safety inspection conducted on February 10, 2016, with continued in-office review through March 30, 2016, at Thielsch Engineering, Inc. (Thielsch) located in Cranston, RI. The inspection reviewed the circumstances surrounding the failure to properly secure a portable gauge on January 20, 2016, at the U.S. Naval Base located in Newport, Rhode Island. The NRC discussed the apparent violations, which were also described in the subject NRC inspection report, during a telephonic exit meeting with you and Wendy Kerkhoff on March 30, 2016.

In the April 7, 2016, letter transmitting the inspection report, we provided you an opportunity to address the apparent violations by either attending a pre-decisional enforcement conference (PEC) or by providing a written response before we made our final enforcement decision. In the letter, we also informed you that we had sufficient information regarding the apparent violations and Thielsch's corrective actions to make an enforcement decision without the need for a PEC. In a telephone call on April 22, 2016, you informed Ms. Monica Ford, Acting Chief, Commercial, Industrial, R&D, and Academic Branch that Thielsch neither required a PEC nor intended to send a written response.

Based on the information developed during the inspection, the NRC has determined that three NRC requirements were not met. The requirements not met involved Thielsch's failures to: (1) control and maintain constant surveillance of the gauge containing the radioactive sources; (2) use two independent physical controls that form tangible barriers to secure the gauge from unauthorized removal; and (3) maintain a lock on the gauge or to maintain the gauge inside a locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position when not under the direct surveillance of an authorized user.

The failure to control and maintain constant surveillance of a portable gauge and to use two independent physical controls that form tangible barriers to secure the portable gauge from unauthorized removal is of significant concern because the potential existed for the portable gauge to be stolen and to cause significant radiation exposure to the general public. However, in this case, the likelihood of exposure to the general public was limited because the gauge was left unattended for a short period of time on a naval base prior to identification.

Because the requirements not met were related to the same event and causal factors, they have been categorized collectively as a single SL III problem and are cited in the enclosed Notice of Violation. In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$3,500 is considered for a SL III problem. Because your facility has not been the subject of escalated enforcement action within either the last two years or the two most recent inspections, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. The NRC has concluded that credit is warranted for Thielsch's corrective actions. Specifically, Thielsch: (1) re-trained the involved AU on the proper uses of a portable gauge; and (2) conducted in-house training with all portable gauge users to review the severity of the incident and reinstruct the portable gauge users on the importance of properly securing the portable gauge and travel procedures.

Therefore, to encourage prompt and comprehensive correction of violations of NRC requirements, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. Issuance of this SL III problem constitutes an escalated enforcement action that may subject you to increased inspection effort. Additionally, significant violations in the future could result in a civil penalty.

The NRC has concluded that information regarding: (1) the reason for the violations; (2) the actions planned or already taken to correct the violations and prevent recurrence; and, (3) the date when full compliance was achieved, is already adequately addressed on the docket in Inspection Report No. 03038888/2016001 and in this letter. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice of Violation.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (ADAMS), accessible from the NRC Website at <http://www.nrc.gov/reading-rm/adams.html>. To the extent possible, your response, if you choose to provide one, should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld, and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an unwarranted invasion of personal privacy or provide

T. Lent

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the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

The NRC also includes significant enforcement actions on its Web site at (<http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/>).

Sincerely,

**/RA/**

David C. Lew  
Acting Regional Administrator

Enclosure:  
Notice of Violation

cc w/enclosure: Seema Dixit, State of Rhode Island

T. Lent

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the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

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Sincerely,  
**/RA/**  
David C. Lew  
Acting Regional Administrator

ML16152A161  
Enclosure: Notice of Violation  
cc w/enclosure: Seema Dixit, State of Rhode Island  
Distribution: see next page

DOCUMENT NAME: S:\Enf-allg\Enforcement\Proposed-Actions\Region1\Thielsh NOV-III Problem EA-16-045Final.docx

X SUNSI Review/CJC		X Non-Sensitive □ Sensitive		X Publicly Available □ Non-Publicly Available	
OFFICE	RI/ORA	RI/DNMS	RI/ORA	RI/ORA	OE
NAME	C Crisden/CJC*	M Ford/RCR for*	B Klukan/BMK*	B Bickett/BAB*	L Sreenivas via telephone
DATE	5/10/16	5/11/16	5/16/16	5/16/16	5/19/16
OFFICE	RI/DNMS	RI/RA			
NAME	J Trapp/JMT*	D Lew			
DATE	5/23/16	5/27/16			

\*see previous concurrence OFFICIAL RECORD COPY

Letter to Thomas Lent from David Lew dated June 1, 2016

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Enforcement Coordinators

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Region I OE Files (with concurrences)

## NOTICE OF VIOLATION

Thielsch Engineering, Inc.  
Cranston, Rhode Island

Docket No. 03038888  
License No. 38-35284-01  
EA-16-045

During an NRC inspection conducted on February 10, 2016, with continued in-office review through March 30, 2016, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 20.1802 requires that the licensee shall control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage.

10 CFR 30.34(i) requires that each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.

Contrary to the above, on January 20, 2016, Thielsch Engineering, Inc. did not control and maintain constant surveillance of licensed material, a portable gauge, that was in an unrestricted area and that was not in storage, and did not use a minimum of two independent physical controls that form tangible barriers to secure the gauge from unauthorized removal. Specifically, an authorized user left a portable gauge containing approximately 8 millicuries of Cs-137 and 40 millicuries of Am-241, unattended and uncontrolled while working at a temporary jobsite on a U.S. Naval Base in Newport, Rhode Island. The unattended gauge was discovered not properly secured by the safety personnel at the Newport, Rhode Island Naval Base.

- B. License Condition 16 of Nuclear Regulatory Commission License Number 38-35284-01 states, each portable nuclear gauge shall have a lock or outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position. The gauge or its container must be locked when in transport or storage, or when not under the direct surveillance of an authorized user.

Contrary to the above, on January 20, 2016, Thielsch Engineering, Inc. failed to have a lock on a portable gauge or have the gauge contained in an outer locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position when not under the direct surveillance of an authorized user. Specifically on January 20, 2016, an authorized user left a portable gauge unattended and uncontrolled while working at a U.S. Naval Base in Newport, Rhode Island. The unattended gauge was not under the direct surveillance of the authorized user and did not have a lock on the gauge or maintained inside a locked container designed to prevent unauthorized or accidental removal of the sealed source from its shielded position.

This is a SL III problem (Enforcement Policy Sections 6.3 and 6.7).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence and the date when full compliance was achieved is already adequately addressed on the docket in Inspection Report No. 03038888/2016001. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation, (EA-16-045)" and send it to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001, with a copy to the Regional Administrator, U.S., Nuclear Regulatory Commission, Region I, 2100 Renaissance Boulevard, King of Prussia, PA 19406, within 30 days of the date of the letter transmitting this Notice of Violation.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or in the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> . Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the Public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 1<sup>st</sup> day of June, 2016