



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

November 22, 2005

Docket No. 03034284  
EA-05-146

License No. 45-25374-01

Raja S. El-Awar, P.E.  
Vice President  
Foundation Engineering Science, Inc.  
11843-B Canon Boulevard  
Newport News, VA 23606

**SUBJECT:** NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTY -  
\$3,250 (NRC Inspection Report No. 03034284/2004001; and Investigation  
Report No. 2-2005-003)

Dear Mr. El-Awar:

This refers to the NRC inspection conducted between November 18, 2004, and December 22, 2004, at your facility located in Newport News, VA, and a subsequent related investigation completed by our Office of Investigations (OI), on May 19, 2005. During the inspection, the NRC reviewed the circumstances associated with the theft of one of your portable nuclear density gauges from a company vehicle resulting in this gauge being uncontrolled in the public domain for approximately eleven days. You reported this gauge missing to the NRC by telephone on October 25, 2004, seven days following the actual date the gauge was stolen. You recovered the missing gauge on October 29, 2004. The purpose of the OI investigation was to determine if the failure to properly control licensed material in an unrestricted area, and the failure to report the theft of licensed material to the NRC for seven days occurred with the knowledge that these actions were in violation of NRC requirements.

As described in our letter sent to you on August 24, 2005, three apparent violations of NRC requirements were identified involving the loss of licensed material. Our letter also noted that the violations were being considered for escalated enforcement action in accordance with the NRC Enforcement Policy. As noted in the Factual Summary of the OI Investigation Report attached to the letter, the apparent violations were preliminarily determined to be willful. The August 24, 2005 letter also provided you the opportunity to (1) respond in writing to the apparent violations, (2) attend a Predecisional Enforcement Conference (PEC), or (3) request Alternate Dispute Resolution (ADR) to resolve any disagreement related to the NRC findings. In a telephone conversation on September 9, 2005, with Mr. John Kinneman of my staff, Mr. Zulfikhar Ahmed, your Project Manager, indicated that you wished to attend a PEC.

On October 4, 2005, a PEC was conducted in the Region I office with you and Mr. Ahmed to discuss the apparent violations, their significance, their root causes, and your corrective actions. At the conference, you (1) acknowledged the facts surrounding the loss of your nuclear gauge and failure to immediately report the theft to the NRC as described in the subject inspection report, (2) discussed your immediate and long-term corrective actions to ensure that the violations will not recur, and (3) stated that you regretted that this event occurred. A summary of the conference was sent to you on October 19, 2005.

Based on the information developed during the inspection and the investigation, and the information provided by you during the conference, the NRC has determined that two violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) and the circumstances surrounding them are described in the subject inspection report. The first violation involved the deliberate failure of an authorized gauge user to properly secure and lock a nuclear density gauge to the bed of a company vehicle while parked in a public parking lot, and his deliberate failure to maintain constant surveillance of the gauge, contrary to 10 CFR 20.1801, 10 CFR 20.1802 and Condition No. 16 of the license. As a result of this violation, the gauge containing NRC licensed material was stolen and uncontrolled in the public domain for approximately eleven days.

The second violation involved the deliberate failure to immediately report the theft of licensed material to the NRC, contrary to 10 CFR 20.2201(a). In making this determination, the NRC concluded that the separate apparent violations regarding your failure to secure licensed material and failure to lock the gauge box containing licensed material, described in our August 24, 2005, letter and in Inspection Report No. 03034284/2004001, dated August 24, 2005, should be combined as one violation of NRC requirements, as described in the Notice.

Although you determined that the source remained in its shielded position during the time the gauge was in the public domain and, therefore, no member of the public received measurable radiation exposure, these violations are of concern to the NRC because (1) the failure to control radioactive material resulted in the gauge being in the public domain for approximately eleven days; and (2) such sources can result in unintended radiation dose to an individual if the source is removed from the shielded position. Therefore, the two violations associated with your failure to adequately secure and control a portable gauge and your failure to immediately report the theft of the gauge, are categorized collectively as a Severity Level III problem in accordance with the Enforcement Policy.

In accordance with the Enforcement Policy, a base civil penalty in the amount of \$3,250 is considered for a Severity Level III problem involving the loss of control of radioactive material with this level of radioactivity. Although your facility has not been the subject of escalated enforcement actions within the last two inspections, because the violation was willful, the NRC considered whether credit was warranted for *Identification and Corrective Action* in accordance with the civil penalty assessment process in Section VI.C.2 of the Enforcement Policy. Credit for *Identification* is warranted because, although delayed, you exerted noteworthy effort in conducting an investigation which resulted in the identification and recovery of the lost gauge. Credit for *Corrective Action* is warranted because your actions were comprehensive. These corrective actions, which you described during the PEC held on October 4, 2005, included, but were not limited to: (1) immediately retrieving the gauge and securing it in your company's locked storage area; (2) taking disciplinary action against the gauge user responsible for failing to maintain control of the nuclear gauge; (3) briefing all staff members on this event; (4) increasing field audits of gauge users to ensure proper control of licensed material; and, (5) revising procedures to require daily verification of gauge location by management personnel. Since credit is warranted for corrective action, a civil penalty would not normally be issued in this case. However, in accordance with Section VII.A.1(g) of the Enforcement Policy, a case involving the loss, abandonment, or improper transfer or disposal of a sealed source or device is normally assessed a civil penalty of at least the base amount, notwithstanding the outcome of the normal civil penalty assessment process.

Therefore, to emphasize the importance of maintaining security and control of radioactive material, and immediately reporting the theft of licensed material, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the base amount of \$3,250 for this Severity Level III problem. In addition, this Notice constitutes escalated enforcement action that may subject you to increased inspection effort.

The NRC has concluded that information regarding the reasons for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved, has been adequately addressed in this letter, in the inspection report issued on August 24, 2005, and during the PEC held on October 4, 2005. Therefore, you are not required to respond to the Notice or provide additional information regarding your corrective actions 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.

You may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve any disagreement on whether a violation occurred and the appropriate enforcement action. ADR is a general term encompassing various techniques for resolving conflict outside of court using a neutral third party. The technique that the NRC has decided to employ during a pilot program which is now in effect is mediation. Additional information concerning the NRC's pilot program is described in the enclosed brochure (NUREG/BR-0317) and can be obtained at <http://www.nrc.gov/what-we-do/regulatory/enforcement/adr.html>. The Institute on Conflict Resolution (ICR) at Cornell University has agreed to facilitate the NRC's program as a neutral party. You must contact ICR at (877) 733-9415 within 10 days of the date of this letter if you are interested in pursuing resolution of these issues through ADR.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if any, 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 Web site at <http://www.nrc.gov/reading-rm/adams.html>. The NRC also includes significant enforcement actions on its Web site at [www.nrc.gov](http://www.nrc.gov); select **What We Do, Enforcement**, then **Significant Enforcement Actions**.

Sincerely,

*/RA/ Original signed by Marc Dapas for*

Samuel J. Collins  
Regional Administrator

Enclosures:

1. Notice of Violation and Proposed Imposition of Civil Penalty
2. NUREG/BR-0254 Payment Methods (Licensee only)

cc:  
Commonwealth of Virginia

Distribution w/encls:

ADAMS (PARS)  
 SECY  
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 CMiller, OEDO  
 GMorell, NMSS  
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**SISP Review Complete:** JDK (Reviewer's Initials)

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NAME	JWray	JKinneman	GPangburn	EWilson	KFarrar	DHolody/jrw for
DATE	10/04/05	10/20/05	10/24/05	10/25/05	10/28/05	10/28/05
OFFICE	HQ/NMSS	HQ/OGC	HQ/OE	RI/RA		
NAME	GMorell	SHamrick for BJones	CNolan for M Johnson	MDapas for SCollins		
	11/07/2005	11/09/2005	11/15/05	11/17/05		

OFFICIAL RECORD COPY

Enclosure 1

NOTICE OF VIOLATION  
AND  
PROPOSED IMPOSITION OF CIVIL PENALTY

Foundation Engineering Science, Inc.  
Newport News, Virginia

Docket No. 03034284  
License No. 45-25374-01  
EA-05-146

During an NRC inspection conducted between November 18, 2004, and December 22, 2004, as well as a subsequent investigation by the NRC Office of Investigations completed on May 19, 2005, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the NRC proposes to impose a civil penalty pursuant to Section 234 of the Atomic Energy Act of 1954, as amended (Act), 42 U.S.C. 2282, and 10 CFR 2.205. The particular violations and associated civil penalty are set forth below:

- A. 10 CFR 20.1801 requires that the licensee secure from unauthorized removal or access licensed materials that are stored in controlled or unrestricted areas. 10 CFR 20.1802 requires that the licensee control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage. As defined in 10 CFR 20.1003, controlled area means an area, outside of a restricted area but inside the site boundary, access to which can be limited by the licensee for any reason; and unrestricted area means an area, access to which is neither limited nor controlled by the licensee.

Condition No. 16 of License Number 45-25374-01 requires that each portable gauge or gauge container be locked when in transport, storage or when not under the direct surveillance of an authorized user to prevent unauthorized or accidental removal of the source from its shielded position.

Contrary to the above, on October 18, 2005,

1. the licensee did not secure from unauthorized removal or limit access to licensed material contained in a nuclear gauge located in a company vehicle parked in a public parking lot, which is an unrestricted area, nor did the licensee control and maintain constant surveillance of this licensed material. As a result, the nuclear gauge was stolen and uncontrolled in the public domain for approximately eleven days.
2. the licensee did not lock the gauge or gauge container as required to prevent unauthorized or accidental removal of the source from its shielded position.

- B. 10 CFR 20.2201(a)(1)(I) states, in part, that each licensee shall report by telephone immediately after its occurrence becomes known, any lost, stolen, or missing material in an aggregate quantity equal to or greater than 1000 times the quantity listed in Appendix C to Part 20 under such circumstances that it appears to the licensee that an exposure could result to persons in an unrestricted area.

Contrary to the above, the licensee identified that a nuclear gauge containing licensed material in excess of the reporting threshold was stolen from a company vehicle on October 18, 2004, but the theft of the licensed material was not reported to the NRC until October 25, 2004.

This is a Severity Level III problem (Supplement IV).  
Civil Penalty - \$3,250 (EA-05-146)

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, has been adequately addressed in this letter, in Inspection Report No. 03034284/2004001 dated August 24, 2005, and during the PEC held on October 4, 2005. Therefore, you are not required to respond to the provisions of 10 CFR 2.201 unless the descriptions do not accurately reflect your corrective actions or your position. In that case, or if you choose to respond with additional information, clearly mark your response as a "Reply to a Notice of Violation; EA-05-146," and send it to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, with a copy to the Regional Administrator, Region I, within 30 days of the date of the letter transmitting this Notice.

The licensee may pay the civil penalty proposed above in accordance with NUREG/BR-0254 (copy enclosed) and by submitting to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, a letter clearly marked "Statement as to Payment of Civil Penalty" indicating when and by what method payment was made.

The licensee may protest imposition of the civil penalty in whole or in part, by a written answer addressed to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission. Should the licensee fail to answer within 30 days of the date of this Notice of Violation and Proposed Imposition of Civil Penalty, an order imposing the civil penalty will be issued. Should the licensee elect to file an answer in accordance with 10 CFR 2.205 protesting the civil penalty, in whole or in part, such answer should be clearly marked as an "Answer to a Notice of Violation" and may: (1) deny the violations listed in this Notice, in whole or in part, (2) demonstrate extenuating circumstances, (3) show error in this Notice, or (4) show other reasons why the penalty should not be imposed. In addition to protesting the civil penalty in whole or in part, such answer may request remission or mitigation of the penalty.

In requesting mitigation of the proposed penalty, the factors addressed in Section VI.C.2 of the Enforcement Policy should be addressed. Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Notice of Violation and Proposed  
Imposition of Civil Penalty

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Upon failure to pay any civil penalty due which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Atomic Energy Act, 42 U.S.C. 2282c.

The responses noted above (Reply to a Notice of Violation; EA-05-146, Statement as to Payment of Civil Penalty, or Answer to a Notice of Violation) should be addressed to: Michael Johnson, Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region I, 475 Allendale Road, King of Prussia, PA 19406-1415.

Your response 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 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.

Dated this 22nd day of November 2005.