



**NTH Consultants, Ltd.**

Infrastructure Engineering  
and Environmental Services

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United States Nuclear Regulatory Commission  
Materials Inspection Branch  
801 Warrenville Road  
Lisle, Illinois 60532-4351

August 14, 2000  
Project No. 13-K320-00

Attn: Mr. Robert Hayes  
Sr. Radiation Specialist

RE: LICENSE 21-14894-01  
THEFT OF MOISTURE/DENSITY GAUGE NO. 27910

Dear Mr. Jones:

In accordance with 10 CFR 20.2201(b), we are providing a written report regarding the July 23, 2000 theft of our moisture/density gauge. This written report is a following to our Preliminary Notification PNO-III-00-028 and corrects the serial number reported in that notification. As of this writing, the gauge has not been recovered.

**DESCRIPTION OF LICENSED MATERIAL**

The theft involved a Troxler Model 3440 moisture-density gauge (Serial No. 27910) containing two sealed sources. The sources consist of 0.3 GBq (8mCi) of Cesium-137 (Serial No. 750-1800) and 1.48 GBq (40 mCi) of Americium 241:Be (Serial No. 47-24511). Both sources are special form, solid.

**DESCRIPTION OF CIRCUMSTANCES**

Between noon and 3:30 p.m. on July 23, 2000, a company-owned pickup truck was stolen from an employee's residence in Detroit, Michigan. The truck contained a Troxler Model 3440 moisture-density gauge owned by NTH Consultants, Ltd. At the time of the theft, the gauge source handle was locked, the gauge was locked in its transportation case, which was cabled and locked to the bed of the truck inside a locked truck bed cover.

**PROBABLE DISPOSITION OF LICENSED MATERIAL**

As of August 11, 2000, the licensed material has not been recovered.

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## **RADIATION EXPOSURE TO INDIVIDUALS AND EXTENT OF POSSIBLE HAZARD TO PERSONS IN UNRESTRICTED AREAS**

At the time of the theft, the source rod was locked in the safe position and was locked in its transportation case. The transportation index for this gauge and case is 06. Therefore, exposure to persons in unrestricted areas will be minimized.

## **ACTIONS TAKEN TO RECOVER THE MATERIAL**

NTH Consultants, Ltd. made a telephone report of the theft of our licensed material in accordance with 10CFR 20.2201 (a) at 6:00 p.m. EDT on July 23, 2000. The theft was also reported to the Detroit Police Department, and the gauge manufacturer, Troxler Electronic Laboratories, Inc. A news release was made to area television and radio stations, as well as local newspapers on July 23 and 24, 2000. During a follow-up conversation with the NRC, it was indicated that the NRC would make notification to the State of Michigan Radiological Health Department.

On the morning of July 24, 2000, we found that a fax had been sent to our Detroit office at 3:50 p.m. on July 23, 2000 by a resident who reported seeing the stolen vehicle on a side street with the engine running and missing air bags. Recognizing this as a stolen vehicle, the resident called the Detroit Police Department and sent the fax to NTH. Two of our employees immediately went to the reported location (8326 St. Cyril in Detroit), but the vehicle was not found. A resident of the area was interviewed and reported that he had seen the vehicle and that it had been moved between 5:00 p.m. and 6:00 p.m. on July 23. Our findings were reported to the Detroit Police, who responded to the location, but gathered no new information. Our employees searched the area for two blocks in each direction but did not locate the missing gauge.

As a result of extensive media coverage, a viewer of a local television station, WDIV Channel 4, reported the location of the stolen vehicle. The television station initiated an investigation and notification to the Detroit Police Department on the evening of July 24, 2000. This resulted in the recovery of the stripped, stolen vehicle. On the morning of July 25, 2000 two NTH employees went to the location where the vehicle was recovered and searched the surrounding area. The gauge that had been in the vehicle was not located.

Local media coverage continued until at least July 27, 2000 in an attempt to locate the gauge. As of August 11, 2000, no additional information has been received as to the location of the gauge.

## **MEASURES TAKEN TO PREVENT A RECURRENCE OF LOSS OR THEFT**

As part of our initial and refresher training program, we stress security of licensed materials and require at least 3 levels of security for our gauges when transported or in storage. Our employee was in compliance with company policy and had 5 levels of security for the gauge. In order to prevent a recurrence of theft, we will publish the circumstances of this theft in our monthly




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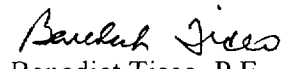
newsletter. Further, the circumstances of the theft will be presented as a case study at future radiation safety training and refresher courses.

If you require further information or have any questions, please feel free to contact us.

Very truly yours,

NTH Consultants, Ltd.

  
James J. Parsons  
Radiation Safety Officer

  
Benedict Tiseo, P.E.  
President and CEO