GEOTECHNICAL, ENVIRONMENTAL AND TESTING ENGINEERS SINCE 1921

December 2, 1993

CORPORATE CENTER 4120 AIRPORT ROAD CINCINNATI, OHIO 45226 (513) 321-5816

Mr. Bill Reichold United States Nuclear Regulatory Commission Region III 799 Roosevelt Road Glen Ellyn, Illinois 60137

> Re: Accident - Nuclear Gauge Troxler Model 34011B Serial No. 17368 H. C. Nutting Company, Owner License No. 34-18882-01

Dear Mr. Reichold:

This letter is to follow up with items discussed by telephone on November 16, 1993, concerning our letter of November 4, 1993, relating to the accident involving the above noted nuclear meter.

We have no more detail to add to our report dated November 4, 1993, concerning the accident. We did erroneously report the accident as happening at the Drug Emporium, Buttermilk Crossing job in Alexandria, Kentucky. It actually happened at the Drug Emporium, Buttermilk Crossing project in Crescent Springs, Kentucky. All other facts were as noted.

Enclosed you will find photographs and a sketch of the bicycle safety flags that we discussed in our letter and how they will attach to the Troxler meter, maintaining the integrity and shielding of the source and electronic components within the meter.

We had a departmental meeting on November 23, 1993, at which time the proper use of the gauge and safety of the gauge was discussed. However, as a further reminder, we are mailing out to all of our field technicians the enclosed interoffice memorandum, as well as

9403010253 940211 PDR ADDCK 03017304 PDR safety procedures which are part of our license, along with a signature sheet which is to be signed, dated and returned to this office by all technicians who use the nuclear moisture density gauge.

Prior to the meter being shipped to Troxler for repair, it was leak tested. The results of the leak test are enclosed. Also, you will find a bill of lading, indicating the date that the meter was shipped to Troxler in North Carolina for repairs.

A Radiation Alert Monitor 4, manufactured by S. E. International Instrument Division, P.O. Box 39, 156 Drakes Lane, Summertown, Tennessee 38483, was used to survey the meter. The University of Cincinnati checked the meter on August 15, 1993, and indicated that it was working properly. However, we understand that they are not certified to calibrate this survey meter. It is our intent to have it calibrated locally by Dosimeter, Inc. in Blue Ash, Ohio, which is a suburb of Cincinnati, and if they are not able to properly calibrate it, we will return it to the manufacturer for calibration.

Should you have any further questions, please do not hesitate to contact us.

Respectfully submitted,

H. C. NUTTING COMPANY

Jerry L/Lindsey

Vice President

Field Services Manager

JLL/ks Attachments H.C. NUTTING CO. 4120 Airport Road CINCINNAT!, OHIO 45226 (513) 321-5816 JOB Safety Flag N.14.

SHEET NO OF

CALCULATED BY DATE 11/30/9.3

CHECKED BY DATE

	SCALE	None	
Moss Manufactured Braycle. Holder - Modified to a Hach Traxler N/M. Guage.	1/19		
Holder - Hodified to attach	10		
Tracker W/M Commo			
The contract of the contract o			
		4	
			10.4
Safety Clag			
		5-0't	
modified Bicycle			
They Have y		1 7'-0' ±	
			100
Nuclear Meter			
1111		2-0"1	
Flog Holder states between Cap Sc	101K3		
Cap Scient Bumper			

Maile to all soplayers 12/21/93

InterOffice Memo

To:

John Enderle, Columbus, OH; Joe Francis, Charleston, WV Field Dirvices
Lerry L. Lindsey

Complexies

From:

Date:

December 17, 1993

Subject:

NRC Physical Audit, December 15, 1993

Please forward to Cincinnati copies of all the information that you have on each of the moisture density gauges in your possession. This includes any information concerning gauges that have been destroyed, traded in for new gauges, etc. We will also need a copy of the 6-month physical inventory as well as leak tests on all gauges. This is from day one that the gauges were in our possession at each of the offices.

This information is needed so that we can become in compliance with regulations set forth in our NRC license. There will be additional information coming to you concerning our recent audit pertaining to a possible Level III violation which could include a fine.

Most information that you read and see concerning nuclear gauges simply states that the gauge shall not be left unattended. Unattended has further been interpreted as being within arm's reach. It is important that you inform all technicians verbally as quickly as possible that they obey this interpretation. The gauge cannot be any farther away from the person using it than arm's reach. When the gauge is not in use, it is to be put back in the shipping container and back into the pickup truck or car. The source rod is to be locked into position at all times that the gauge is not physically in use. Our license does not allow us to remove the source rod from the moisture density gauge. This is a violation and

InterOffice Memo

To: All Fie

All Field Services Personnel

From:

Jerry L. Lindsey

Date:

December 20, 1993/ks

Subject:

Nuclear Moisture Density Gauges

On December 15, 1993, the Nuclear Regulatory Commission audited the H. C. Nutting Company. The reason for the audit was due to losses of gauges by theft and by accidents on the job sites that we have had over the past five years. We recently had a gauge destroyed on a job site when the technician inadvertently moved his automobile to get out of the way of construction equipment and left the gauge sitting on the ground. Previous accidents have been of similar nature where the gauges have been farther away from the technician than they can readily retrieve them.

As you have seen in previous memos to you concerning gauge accidents, we have stated in these memos (You can look at the recent memo you received dated 11-30-93), in Item I we stated the gauges must never be left unattended or out of eye contact. We are changing that sentence to read "The gauge must never be left unattended or out of arm's reach." Arm's reach is no farther than a technician can reach. The U.S. Regulatory Commission, as well as the H. C. Nutting Company, will be making random audits on the projects that we service. If an audit is made on your project and a nuclear gauge is more than arm's reach away from the technician or is being improperly handled or when not in use, the source rod is not locked, the individual to whom that gauge is signed out will be severely reprimanded, which may include a suspension from work without pay or termination of employment.

The H. C. Nutting Company is going to attach to each of the nuclear meters a tag which will have the date that the next leak test is required for that meter. It will be the responsibility of the technician using that meter at that time to make sure that the meter is in to the office and leak tested on or before the date the leak test is required. One to three days before the leak test is required would be reasonable. We are in violation of our license if the leak test is not performed on or before the date that it's due.

Each technician is responsible for seeing that his film badge is back into the office on or before the first day of every month. The badges are received in the office approximately five working days before the first of the month. It is your responsibility to get the badge into the office and get your new one by the first of every month. Furthermore, the company will no longer pay for lost film badges, and if you lose your film badge, the cost of the lost film badge may be deducted from your pay.

As we have noted in previous memos, if the H. C. Nutting Company loses its license to use the nuclear moisture density gauge, there is no question that that would put us out of business. I'm sure that there is no one in field services who wants to bear the burden of the loss of approximately 200 jobs. I believe that you all are responsible enough that there will be no need for us or the Nuclear Regulatory Commission to enforce any possible suspensions. We trust that all of you will make the extra effort that is needed to ensure the safety of yourselves and your fellow employees and their livelihoods.

Thank you so much for your support and cooperation in this matter.