



March 19, 2008

U.S. Nuclear Regulatory Commission
Washington, DC, 20555-001

ATTN: Document Control Desk
Director
Office of Federal and State Materials and
Environmental Management Programs

RE: 30 Day Incident Notification Follow-up Report
Incident #44049
License No. 37-28256-02

Dear NRC Representative:

As required by 10 CFR 30.50 (c)(2) DelVal Soil & Environmental Consultants, Inc. (DelVal) is submitting this follow-up report.

On March 10, 2008, at 13:45 EDT, a Troxler Model 3340 Moisture Density Gauge, Serial # 34338, was run over at a construction site while testing for soil compaction. The gauge contains two source materials: Am-241:Be, 1.48 GBq(8mCi) and a Cs-137, 0.3 GBq (8mCi). The construction site, referred to as the Bodo Tract, is located near the intersection of Station Road and Con-Chester Highway (Route 322) in Concord Township, Delaware County. The Tax Map Parcel # is 13-28-20.

While testing the soil for its compaction the gauge technician heard the dozer backing up towards the gauge. Before the gauge could be removed, the technician moved away from the gauge just prior to the operator backed over it.

The RSO, Michael S. Sowers was contacted at 13:50 and was made aware of the situation. Steven Browne at Troxler was then contacted at approximately 13:52 and Howie Crouch at NRC Operations Center was contacted at approximately 13:55 all on March 10, 2008. The RSO arrived on-site at 15:15. The area of the accident was cordoned off twenty-five feet from the gauge. The operator and the technician were waiting behind the cordoned off area. The RSO took readings at the site using a model 3105 TROXALERT Radiation Monitor. The first reading was conducted at the cordoned off area. The readings at this area measured at normal back round readings. The second reading was conducted two feet from the gauge. This reading measured .12 mrem/h. At

this time an assessment was made of the extent of the gauge damage. Both Steve Browne and Howie Crouch were contacted and made aware of the damage.

The source was pulled back into its safe shielded position and the bottom shield was slid back into place. A third reading was conducted two feet from the gauge with the source in its safe shielded position. This reading measured .12 mrem/h. All measurements taken were consistent standard gauge operating levels. Upon the request of Steve Browne a rag was used to wipe the outside of the shield and then measured for leakage. A reading comparable to back round levels was measured. The gauge was then placed back into its shipping container.

After removal of the gauge, readings were conducted at the accident location and in the hole where the source rod extended into. The levels measured in both locations did not exceed back round levels. Craig Gordon from The Region I Office of the NRC called at approximately 16:45 and was updated on the incident. At approximately 17:55 the RSO contacted Howie Crouch and finalized all the requirements of 10 CFR 30.50(a)(b)

The gauge was then shipped back to our facility and stored in our designated storage area at 18:05. A leak test was performed upon arrival to our office. The leak test was over-nighted on 3-11-08 to Troxler for analysis.

On 3-12-08, the leak test was measured by Troxler Electronic Laboratories. The leak test certificate states that the results were less than 185 Bq (0.005uCi). The Greg Gordon and Randy Ragland of the Region I office of the NRC were immediately contacted with the results. Enclosed is a copy of the leak test results. The gauge was then packaged in its approved shipping container and sent to Troxler for disposal on 3-11-08.

Should there be any questions regarding the incident or this report, please do not hesitate to contact our office.

Sincerely,

**DeVal Soil & Environmental
Consultants, Inc.**



Michael S. Sowers
Soil Scientist, CPSSc, RSO

Enclosure:

Mike S/ incident report gauge 7

CC: U.S. Nuclear Regulatory Commission, Region I, Nuclear Material Section B, 475
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MICHAEL SOWERS
DELVAL SOIL & ENVIRON. CO
4050 SHYRUN DRIVE
SUITE A1
SKY RUN II
DOYLESTOWN, PA 18902

MAR 14 2008

LEAK TEST CERTIFICATE

DEVICE:

Model: 3440 Serial No: 34338

SEALED SOURCES:

Serial No.	Measure Date	Nuclide	GBq	mCi
47-30096	12/03/2001	AM-241:BE	1.48	40
751-380	03/05/2003	CS-137	0.296	8

LEAK TEST ANALYSIS:

Sample collected on: 03/10/2008

Sample analyzed on: 03/12/2008 at 12:20:00 PM

Analyzed by: BARRY M. LEMONS

	ALPHA	BETA-GAMMA
Conversion factor (cpm/Bq)	1.30E+01	2.02E+01
Background measurement (cpm)	1	26
Sample measurement (cpm)	1	25
Activity (Bq)	< MDA	< MDA
Min. Detectable Activity (Bq)	4.6E-01	1.3E+00

This certifies that the leak test results are:

- Less than 185 Bq (0.005 uCi) Greater than 185 Bq (0.005 uCi)