



DEPARTMENT OF THE ARMY  
UNITED STATES ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND  
6301 East 11 Mile Road  
Warren, MI 48397-5000  
August 22, 2007

PLY TO  
ATTENTION OF

US Army TACOM Life Cycle Management Command  
Safety Office

U.S. Nuclear Regulatory Commission  
Document Control Desk  
Washington, DC 20555

Reference: Incident Report Under 10 CFR 30.50, Event Number  
43524, Nuclear Regulatory Commission (NRC) License 21-01222-05

Dear Sir/Madam:

The referenced incident was reported on 26 July 2007 via  
e-mail and phone call to the NRC Operations Center.

The incident involved a Tester, Density and Moisture (Soil  
and Asphalt) Nuclear Method Campbell Pacific Model MC-1 (CCE),  
NSN 6635-01-030-6896, Serial Number M17112090. The tester is  
assigned to the 980<sup>th</sup> Engr Bn at Austin, TX. The MC-1 Tester had  
on manufacture (in 1977) 10 mCi of Cesium 137 and 50 mCi of  
Americium 241/Be. The sources are solid, sealed, and double  
encapsulated. The MC-1 Tester is licensed through an Army NRC  
license 21-01222-05, issued to the US Army TACOM Life Cycle  
Management Command (LCMC), located in Warren, MI.

The tester was used in IRAQ in 2005 and was shipped back to  
the unit location in Texas in 2006. It is unknown, if the  
tester had any mechanical difficulties in IRAQ. The tester had  
received servicing (winter special - where standard wear items  
are replaced such as gaskets and the handle. Also, the  
electronic assembly was bench tested with the two detectors, and  
the body of the tester is cleaned with the guidetube and rod  
assembly cleaned/lubed. The tester was also calibrated and leak  
tested) through CPN International, Inc. on June 19, 2003.

The tester hasn't been used since its use in IRAQ. The  
tester has been in storage with the only interaction being  
physical inventories, radiation surveys of the storage area and  
leak tests of the radioactive sources.

On 24 July 2007, TACOM LCMC received an after-hours e-mail indicating that the referenced tester was inoperable because a handle lock would not engage. The e-mail was asking for disposition of the tester. Confirmation of the information was made by two Army personnel who were visiting the unit doing internal radiation audits of Army radiation programs. The Army personnel were told that because there was difficulty with the locking mechanism of the tester handle, the unit did not lock the handle. Upon confirmation of this information on July 26, 2007, notification of this situation was submitted to the NRC.

The tester is inside its transport case, locked inside of a lead lined box, inside of a locked connex container, which is locked inside a gate at the unit location. The tester sources to include rod remain inside the tester housing and no other apparent tester deficiencies outside the lock mechanism has been observed. The shutter is in place and closed. The tester will not lock in the various positions (i.e. safe, 6 inch, 8 inch and 12 inch). When the lock button is pushed in, it springs out. The lock could not be locked with the key. There are no known personnel exposures. The tester sources were last leak tested on July 2, 2007, which showed no leakage.

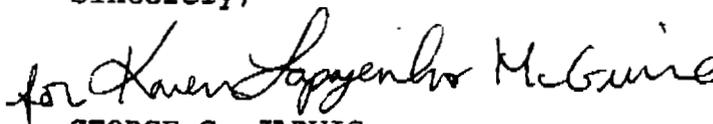
The only personnel having access to the keys and the tester is the LRSO. This ensures that the tester is not used. The transport case containing the tester is also now locked.

It is planned to transport the tester back to the manufacturer for disposition. The tester has been coded as H for unserviceable. Instructions were provided to the unit on July 26, 2007 to perform a wipe test of the shipping container, prepare the tester for shipment and to ship it to the manufacturer. However, this was put on hold, due to the testers losing their special form certification and the shipment now being considered a normal form shipment. The manufacturer, CPN International, has obtained a DOT Special Permit 14329. This permit allows users to ship their testers as special form in their DOT 7A container back to the manufacturer for disposal. As a result, the shipping instructions has been modified to

incorporate the special permit requirements and was reissued to the unit possessing the tester. The same process was done for the 62<sup>nd</sup> Engr Bn at Ft. Hood, TX for event number 43468. It is expected by the week of August 27<sup>th</sup>, 2007, that the two testers for both events 43524 and 43468 will be shipped to CPN International.

A reminder e-mail was sent to the unit and to various Army Commands of the requirement to report tester safety defects immediately to TACOM LCMC Warren, MI. This e-mail was sent again on July 27, 2007 as it was sent out on July 5, 2007. Also, the US Army Engineer School is in the process of phasing out the use of the MC-1 testers Armywide, as a result of the tester failures, age of testers and loss of special form certification. The phasing out of the testers will result in their disposal through the manufacturer and termination of the NRC License. Replacing testers are envisioned as nonradioactive testers. In the interim, application is being made for emergency DOT permit for continued transportation of the testers, until the MC-1 testers are retired. If you have any questions regarding this matter, please contact Mrs. Karen Lapajenko McGuire at (586) 574-7635/6194.

Sincerely,



GEORGE G. JARVIS  
Safety Director, TACOM LCMC

CF:

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