

December 18, 1996

Ms. Betty Peterson  
Dept. of the Army  
Headquarters, U.S. Army Armament  
Munitions and Chemical Command  
ATTN: AMSMC-SFS (385-11m)  
Rock Island, IL 61299-6000

Dear Ms. Peterson:

We have recently become aware that the Army has identified a possible leakage problem with the cell module in the M43A1 Chemical Agent Detectors (CAD). Please provide an analysis of this problem, including cause of failure, rate of failure, how much leakage per cell, and a discussion of any corrective actions taken and proposed corrective actions. Please provide the requested information within thirty (30) days of the date of this letter. If you have any questions, please contact me at (301) 415-5868 or Mr. Steven Baggett at (301) 415-7273.

Sincerely,

Original Signed by

Michele L. Burgess, Mechanical Engineer  
Sealed Source Safety Section  
Medical, Academic, and Commercial  
Use Safety Branch  
Division of Industrial and  
Medical Nuclear Safety  
Office of Nuclear Material Safety  
and Safeguards

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DATE	12/17/96		12/18/96						

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making age. A negative result on a wipe test  
nothing detectable above normal background) says that  
an M8A1 or CAM can be safely handled by  
without unknowingly exposing the  
radiation. A positive wipe test  
disintegrations per minute (dpm)  
for the CAM will cause addition

Steve,  
FYI

MLB

What about Radiation Testing  
(RATTS)? Well the RATTS is  
is simply a recorder of info  
to give us, the licensee, the  
device (radioactive source)  
being wipe tested so that  
door, we can show them that  
control over the sources.  
the subject of controversy  
made that calling an M8A1  
for lack of a wipe test  
is the fault of the RATTS  
offense, but that is non

PLS Draft a Letter to  
US Army Rock Island

- 1 for 10 analysis to Min  
- Problem and course action  
Should we change leak test  
Regarding on it?

If you can document that  
on your M8A1 or CAM as required,  
device regardless of what might be in  
database. Proof can be the maintenance form  
the test and the result received from the laboratory.  
Rock Island Test lab always sends results back to the  
maintenance activity performing the test. If you get  
notices from RATTS that a wipe test is overdue and you  
did the test as required, get this straightened out with the  
reporting activity in the Directorate of Logistics  
(Serialization Officer) of your installation. If you are  
getting overdue wipe test notices for devices you no  
longer have then records of those turn ins have not been  
properly recorded in the RATTS and, again, the  
reporting activity is the proper person to see, along with  
the property book officer.

Look at this  
when we get  
Army's letter

#### VII. M43A1 Chemical Detector Turn In: Know the Code

We have been getting word from item managers for  
some time that M43A1 Chemical Agent Detectors  
(CAD) are being turned in on reports of excess coded H  
(unrepairable). Since the Defense Logistics Agency  
(DLA) has taken over the supply shipping and receiving  
function for all the services, they have established a  
policy that no radioactive commodities will be accepted  
that are in Code H condition. This is to prevent depots  
under DLA control from becoming warehouse sites for  
radioactive waste. Any M43A1 CAD that is unrepairable,  
therefore, must be turned over to the post Radiation  
Protection Officer (RPO) to store for disposal as  
radioactive waste.

We figure there could be several reasons for coding H  
the M43A1 CAD. The first being that it has been run  
over by a vehicle and smashed nearly flat. This would  
generally warrant a Code H but it also means you should  
notify the RPO who should come out and locate the cell  
module, gather up the pieces in a plastic bag and do wipe  
tests to make sure that the source itself was not  
damaged. In ten years we are not aware of one incident  
where a cell module was found to be leaking after getting  
run over.

Another reason might be that since January 1995, we  
have been restricting maintenance to pull and replace of  
major assemblies. This is a safety precaution established  
due to some possible leakage problems detected with the  
cell module. The aim is to prevent exposure of DS  
maintenance personnel to americium-241. People may

Send  
a letter to  
Ellen  
Sturges