



DEPARTMENT OF THE NAVY
OFFICE OF THE CHIEF OF NAVAL OPERATIONS
2000 NAVY PENTAGON
WASHINGTON, DC 20350-2000

IN REPLY REFER TO

5104
Ser N455C/N5U9011372
30 June 2005

U.S. Nuclear Regulatory Commission
Region I
475 Allendale Road
King of Prussia, PA 19406
(Attn: Ms. O. Bailey)

G-7

Ladies and Gentlemen:

03029462

SUBJECT: AMEND CONDITION 17.B OF THE NAVY'S MASTER MATERIALS
LICENSE NO. 45-23645-01NA

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REGION I

We request that you amend Condition 17.B of the Navy's Master Materials License (MML) No. 45-23645-01NA to authorize the physical inventory of Chemical Agent Monitors (CAM) and Automatic Chemical Agent Detector Alarming (ACADA) units every twelve months. License Condition No. 17.B allows physical inventories to be conducted every twelve months versus six months for certain sealed sources and devices and for Depleted Uranium ammunition. The effect of this amendment will be to extend the required inventory of CAMs and ACADAs from six months to twelve months. In addition, we request that leak testing of the CAMs, regardless of manufacturer, if the same source is used, be in accordance with the limitations and considerations of use in the Sealed Source Device Registry, NR-1129-D-103-S. The effect of this request will be that leak testing of the CAMs will be performed when the ion mobility spectroscopy (IMS) cell is removed, reinstalled or replaced, vice the current six-month cycle. The ACADAs are already being leak tested under the above limitation vice the six month cycle.

Naval CAMs and ACADAs are managed under a Naval Radioactive Material Permit (NRMP) No. 13-00164-T1NP issued to the Naval Surface Warfare Center, Crane Division, IN. Marine Corps CAMs and ACADAs are managed under NRMP No. 10-67004-T1NP issued to Marine Corps Logistics Command, Albany GA. The end users, Navy ships and Marine Corps units are not required to hold individual NRMPs for use of the CAMs and ACADAs. Existing security, inventory and reporting procedures for CAMs and ACADAs are in place.

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MASTER MATERIALS-002

The theft or loss of these chemical detectors is immediately reported to the Naval Criminal Investigative Service. The small number of CAMs and ACADAs that are unaccounted during inventory time is because the material is either being prepared for deployment, it is in transit or it is in the theater of operations. These unaccounted CAMs and ACADAs are usually found after they are returned to storage or sent back for maintenance.

The IMS found in the CAMs and ACADAs has a 10 milli-Curie nickel-63 source that is plated on to a brass ring. This source is then housed inside an aluminum-alloy cylinder, which is then included with the electronics into an outer aluminum-alloy case. Because the radiation levels found on the outside of the case are negligible, and the sturdy construction of the CAM and ACADA case and the source housing, it is unlikely that loss of control would risk public health and safety. This statement is reinforced by the risk analysis in NUREG/CR-6642, Risk Analysis and Evaluation of Regulatory Options for Nuclear Byproduct Material Systems, which states in page 4-22 that "accident risks are very low and essentially non-existent for beta gauges... due to the nature of the radiological hazard and/or the source strengths used." Furthermore, as evident in NUREG-1717, Systematic Radiological Assessment of Exemptions for Source and Byproduct Materials, these CAMs and ACADAs are similar to other chemical detectors that have been exempt by the Nuclear Regulatory Commission from the leak test and loss of control requirements imposed on these chemical detectors. The Navy agrees with both of the above references in that the risk associated with loss of control of these commodities would have minimal impact on public health and safety.

The Navy and Marine Corps have always strived and have been largely successful in complying with the conditions of the Master Materials License. However, during Operation Enduring Freedom and Operation Iraqi Freedom it has become apparent that the peacetime conditions of the MML are not suitable for the dynamic and ever-changing situations that our troops and supply systems are being challenged. The physical inventory of CAMs and ACADAs used in over 300 commands worldwide and by troops deployed in over 120 countries is labor intensive, costly, and considering the small risk to public health and safety a six-month inventory is unnecessary.

The Navy and Marine Corps therefore requests your approval to increase the frequency of the physical inventory of CAMs and ACADAs to every 12 months.

Sincerely,



M. S. BOENSEL
Rear Admiral(sel),
United States Navy
Chairman
Naval Radiation Safety Committee

Copy to: NAVSEASYSKOM (04N)
NAVSEADET RASO
HQUSMC (SD)
NSWC Crane Division
MARCORLOGCOM

This is to acknowledge the receipt of your letter/application dated

6/30/2005, and to inform you that the initial processing which includes an administrative review has been performed.

Advised. 45-23645-OINA There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 137304.
When calling to inquire about this action, please refer to this control number.
You may call us on (610) 337-5398, or 337-5260.