



DEPARTMENTS OF THE ARMY AND THE AIR FORCE
MASSACHUSETTS NATIONAL GUARD
OFFICE OF THE ADJUTANT GENERAL
50 MAPLE STREET
MILFORD, MA 01757-3604

REPLY TO
ATTENTION OF:

September 15, 2006

Director, Environmental Affairs

Mr. Deerin Babb-Brott, MEPA Director
Executive Office of Environmental Affairs
MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Mr. Babb-Brott:

The Massachusetts National Guard (MANG) is pleased to present one original and one copy of a Notice of Project Change (NPC) to provide the public, the regulatory community, and other local, state and federal entities with an opportunity to review the process by which the MANG will soon propose a modification to one of its Environmental Performance Standards (EPSs) for the training area at Camp Edwards. The process identified herein is designed to maximize public input and discussion on proposed enhancements to current military training at Camp Edwards, specifically the capability to train our soldiers using lead-bullet ammunition on their required weapons systems in accordance with Department of Defense (DoD) standards so that Massachusetts soldiers can meet military small arms training standards in a manner that protects our natural resources.

Background

The MANG proposed the current prohibition on the use of lead-bullet ammunition at Camp Edwards in the 2001 Final Environmental Impact Report (FEIR.) When the prohibition was originally proposed and adopted as an Environmental Performance Standard (EPS) there were lead-free ammunition alternatives, one of which was tungsten-nylon ammunition. During the Draft Camp Edwards Area Wide EIR process, the MANG had initiated training with tungsten-nylon bullet ammunition, thus limiting the need to evaluate and use lead-bullet ammunition at that time.

The training of soldiers at Camp Edwards to military standards is now significantly limited by the lead-bullet ammunition prohibition because the alternative ammunition (the tungsten-nylon bullet) identified in the FEIR is no longer a viable alternative. In order to train our soldiers to

current military standards now, the MANG needs to use lead-bullet ammunition, which will be done in conjunction with appropriate Small Arms Range (SAR) best management practices (BMPs) which are conceptually described in the enclosed NPC.

In 1999, the Army had recently completed and manufactured its first series of “green” ammunition, the 5.56mm round. This “green” ammunition was a new lead-free combat ammunition and was composed of a tungsten-nylon matrix. Information at that time identified tungsten as insoluble and therefore immobile in soil, and a good substitute for lead with similar ballistic characteristics. The MANG used this ‘green’ ammunition from 1999 to 2006.

Working with the Massachusetts Environmental Management Commission (EMC) the MANG has initiated efforts to review and assess whether the use of tungsten-nylon bullets represented a threat to the environment at Camp Edwards. In 2004, the available research on tungsten was beginning to suggest that tungsten was in fact mobile. The MANG engaged the Army Environmental Center (AEC) to conduct a study at Camp Edwards to assess whether tungsten mobility in the soil and groundwater is a potential issue. In February 2006, after preliminary results of the study detected tungsten migrating to the groundwater, the Governor and the MANG decided to suspend the use of tungsten-nylon ammunition until further information became available.

As described herein, the MANG will soon propose to rescind the lead prohibition in accordance with the process formalized in Chapter 47 of the Acts of 2002. Chapter 47 pertains to the environmental management oversight structure created by the legislature following the MEPA EIR process.

The current Environmental Performance Standards (EPSs) for Camp Edwards, including the prohibition on firing of lead ammunition, were developed during the Area-Wide EIR process in order to provide a common foundation for environmental stewardship that would allow for and sustain compatible military training while protecting the natural resources within the Upper Cape Groundwater Supply Reserve/Training Area (Reserve/Training Area), with special emphasis on protection of the groundwater.

The DoD is actively pursuing alternate non-lead ammunition, however lead-bullet ammunition is currently the only ammunition available for all required weapons systems and doctrinal training requirements. The MANG will continue to monitor the DoD’s progress regarding potential use of non-lead ammunition as research and testing of non-lead bullet ammunition advances. Currently, the MANG trains with plastic bullet ammunition for a subset of the overall small arms training program: weapon familiarization training. Unfortunately however, plastic-bullet ammunition is not a viable alternative for the majority of small arms training program requirements due to its ballistic properties that are substantially different from lead-bullet ammunition employed in combat operations.

Process

In the coming months, the MANG will formally petition the EMC for modification of the lead prohibition EPS, under the process legislated by Chapter 47 of the Acts of 2002. The MANG has consulted with and is currently coordinating with the EMC on this submission process and the EMC has directed the MANG to work with the EMC's two advisory groups, the Scientific Advisory Council (SAC) and Community Advisory Council (CAC), both of which host public meetings. The MANG will explain in detail all aspects, potential impacts, and proposed mitigation of the changes being proposed.

The MANG has also consulted with and is actively coordinating with the US Environmental Protection Agency (USEPA), Region 1, to meet the process and requirements to resume training with lead-bullet ammunition by following the steps outlined in the April 10, 1997 EPA Administrative Order. The MANG has also consulted with and is currently coordinating with the Massachusetts Department of Environmental Protection on these matters.

The MANG will request of the EMC and USEPA that training with lead-bullet ammunition be reinstated in a phased approach on a range-by-range basis as shown below:

Proposed Phasing of Lead-Bullet Ammunition Reinstatement

Phase I	Phase II	Phase III
<ul style="list-style-type: none">• T Range• E Range	<ul style="list-style-type: none">• SE/SW Range• A Range• J Range• K Range	<ul style="list-style-type: none">• KD Range• ISBC Range• Other ranges as training needs are determined

Prior to reinstatement, a draft Small Arms Range Pollution Prevention Plan (SAR P2 Plan) will be prepared and submitted to both the EMC (with its advisory groups), and EPA Region 1 for their input and approval.

The SAR P2 Plan will be range specific and will propose specific BMPs for each SAR. These will be reviewed and approved by the EMC and the USEPA and subsequently implemented prior to requesting the resumption of lead-bullet ammunition training on that range. The selected BMPs for each range will describe maximum feasible use of pollution prevention technologies and management practices in training activities. Development of guidance for the operation and maintenance of the ranges, consistent with the pollution prevention strategies, will be accomplished through the joint coordinated efforts of the EMC, the EMC's two advisory councils, USEPA and MassDEP.

In 2004, the MANG had already started to look at other alternatives to manage the small arms ranges. One aspect of that effort has been the STAPP bullet catch system, which was obtained using Army research funding to conduct a demonstration of this technology (envisioned at the time for Tungsten-nylon bullets) at Camp Edwards and has been placed in the training area at T Range. The STAPP system is now available for immediate use. Since suspending the use of tungsten-nylon ammunition, the MANG has received approval to modify the demonstration such that lead-bullet ammunition may be used on the STAPP system. The STAPP bullet

catching system would be the primary BMP proposed for T range and would be fully integrated into the new Camp Edwards SAR P2 plan.

It is currently envisioned that upon receiving necessary approvals for a return to live fire training with lead ammunition at the identified Phase 1 ranges (See Table 1 above), MANG would commence this small arms training at these ranges in April 2007 (the 2007 annual training cycle). These two ranges and the envisioned BMPs are:

- 1) T Range: a pistol and rifle familiarization and qualification range, where a STAPP bullet catcher has been installed; and
- 2) E Range: a combat pistol qualification range that was described in MANG's February 15, 2006 NPC. As described in more detail in the enclosed NPC, the MANG proposes to layer the target range floor of E Range with approximately 18 inches of processed sand that would be used to capture and contain bullets as they are fired. It is also currently envisioned that a backstop berm would be created at E Range that would capture lead bullets fired on the range. Both the backstop berm and the range floor would then be periodically sifted to remove lead slugs for recycling.

As part of the proposed BMPs, it is also envisioned that both ranges will have additional protection in the form of lysimeters for early warning and a monitoring well as a backup on each range to monitor and measure the associated groundwater and pore-water. These proposed additional BMPs will allow the MANG to closely monitor impacts, if any, of current training, and allow the MANG to adequately conduct a proactive range maintenance program.

Requested Action

This NPC requests the Secretary determine that the lifting of the prohibition of lead bullet ammunition is "insignificant" due to the regulatory process enacted by Chapter 47 of the Acts of 2002, and the anticipated process that the MANG will soon undertake seeking modification of the Camp Edwards Lead Prohibition EPS (with final authorization from the EMC) in accordance with 301 CMR 11.10(6), and the requirements of the USEPA Region 1 April 10, 1997 Administrative Orders. Also, as directed by the previous MEPA certificate, and as mentioned earlier, the MANG is actively working to complete a Pollution Prevention Plan in coordination with the EMC, USEPA Region 1, and MassDEP.

In order to provide sufficient opportunity for the public and regulatory community to comment on this anticipated regulatory process, the MANG hereby requests that the comment period for this NPC be extended until October 30, 2006.

There is nothing the Guard takes more seriously than its mission to maintain a properly trained, equipped and disciplined force for domestic emergencies, or for prompt mobilization for war or national emergencies. Environmental compliance and stewardship are two integral components of this mission, and are essential for success. The Guard understands, after years of working with stakeholders, on Cape Cod and throughout Massachusetts, that its overall success is directly related to fulfilling its environmental stewardship responsibilities

Please note that this NPC is being circulated to public agencies that were copied on the FEIR for this project, and in addition, to the EMC. This document will also be made available to other individuals or organizations upon request. Additional copies of the NPC can be obtained from Mr. Samuel Moffett at URS Corporation by calling (617) 542-4244. Please contact me at (508) 233-6520 with any questions you may have about this filing or the project.

Sincerely,

Shawn C. Cody, REM
Director, Environmental Affairs
Massachusetts National Guard

Enclosure

Copy Furnish: COL FitzPatrick, MANG
S. Moffett, URS Corporation
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