

For Office Use Only Executive Office of Environmental Affairs MEPA Analyst <i>Aisling Eglinton</i> Phone: 617-626-1024

NPC

Notice of Project Change

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name: Final Area-Wide Environmental Impact Report for Massachusetts National Guard Properties at MMR		EOEA #: 5834
Street: The Massachusetts Military Reservation-Camp Edwards		
Municipality: Bourne, Sandwich, Mashpee, Falmouth	Watershed: Cape Cod	
Universal Transverse Mercator Coordinates: 372370E 4619294N	Latitude: 70 Degrees, 32' 5.8" W Longitude: 41 Degrees, 42' 51.9" N	
Status of project construction: 25 %complete		
Proponent: The Massachusetts National Guard		
Street: 50 Maple Street		
Municipality: Milford	State: MA	Zip Code: 01757
Name of Contact Person From Whom Copies of this NPC May Be Obtained: Samuel Moffett, AICP		
Firm/Agency: URS Corporation	Street: 38 Chauncy Street	
Municipality: Boston	State: MA	Zip Code: 02111
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In 25 words or less, what is the project change? The project change involves . . .
 The Massachusetts National Guard proposes to modify an Environmental Performance Standard regarding lead-bullet ammunition at selected small arms firing ranges at Camp Edwards. This filing seeks certification of the anticipated review and approval process for this change (as legislated by the Chapter 47 of the Acts of 2002), which will include public participation and final authorization through the Massachusetts Environmental Management Commission (EMC).
See full project change description beginning on page 3.

Date of ENF filing or publication in the Environmental Monitor:

The ENF was published in the Environmental Monitor on January 10, 1986.

Was an EIR required? Yes No; if yes,
 was a Draft EIR filed? Yes (Date: Environmental Monitor on December 12, 1996) No
 was a Final EIR filed? Yes (Date: Environmental Monitor May 23, 2001) No
 was a Single EIR filed? Yes (Date:) No

Have other NPCs been filed? Yes (Date(s): February 15, 2006) No

If this is a NPC solely for lapse of time (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

No

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all new or modified state permits, financial assistance, or land transfers not previously reviewed:

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6))
 Yes No; if yes, attach justification.

See Project Description and analysis below.

Are you requesting that a Scope in a previously issued Certificate be rescinded?
 Yes No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate? Yes No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed
LAND			
Total site acreage	Approx. 15,000 Acres (the Reserve)	None	Approx. 15,000 Acres (the Reserve)
Acres of land altered	N/A	None	N/A
Acres of impervious area	N/A		N/A
Square feet of bordering vegetated wetlands alteration	N/A	None	N/A
Square feet of other wetland alteration	N/A	None	N/A
Acres of non-water dependent use of tidelands or waterways	N/A	None	N/A
STRUCTURES			
Gross square footage	N/A	Approx. 2,000	N/A
Number of housing units	N/A	None	N/A
Maximum height (in feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	None	N/A
Parking spaces	N/A	None	N/A
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A	None	N/A
GPD water withdrawal	N/A	None	N/A
GPD wastewater generation/ treatment	N/A	None	N/A
Length of water/sewer mains (in miles)	N/A	None	N/A

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? Yes No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction? Yes No

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? Yes No

4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

Yes No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? Yes No

5. impact upon an Area of Critical Environmental Concern? Yes No

If you answered 'Yes' to any of these 5 questions, explain below:

PROJECT CHANGE DESCRIPTION (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed

(b) a description of material changes to the project as previously reviewed,

(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

The Massachusetts National Guard (MANG) presents this 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.

The MANG proposed the current prohibition on the use of lead-bullet ammunition at Camp Edwards in the 2001 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 the use of 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 now train our soldiers to current military standards, 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 herein.

The SAR Pollution Prevention Plan (P2 Plan) supplement will include range-specific management and BMPs that, once implemented, will allow for appropriate lead management at these ranges such that metallic and dissolved lead residue

will not impact the groundwater of Cape Cod. The northern 15,000 acres of Camp Edwards comprises the sole source aquifer that is the source of potable water for Upper Cape, the area now also known as the Upper Cape Water Supply Reserve (the Reserve). This portion of Camp Edwards is identified in Figure 1.

The major elements of the SAR P2 Plan supplement currently under development are presented in Attachment A in order to provide a conceptual basis for reviewers of this NPC to understand the context within which live fire training utilizing lead-bullet ammunition would be managed at Camp Edwards. Specific final elements of the plan will be presented to the Massachusetts Environmental Management Commission (EMC) for consideration in a public forum when the MANG formally petitions for removal of the lead-bullet prohibition. It is currently anticipated that the MANG will submit this petition to the EMC in approximately late winter/early spring of 2007.

The current lead-bullet ammunition prohibition at Camp Edwards arises from two sources: 1) a series of four administrative orders issued by the United States Environmental Protection Agency (USEPA), and 2) the Environmental Performance Standards articulated by the MANG in 2001 and codified in the October 2004 Memorandum of Understanding and the Section 61 Findings developed during the MEPA process in 2001 (see below).

In order to meet its goal of a phased return to training activities involving the firing of lead-bullet ammunition at Camp Edwards, the MANG anticipates it will petition the EPA to remove the suspension of training with lead-based small arms ammunition as envisioned with the requirements of Administrative Order #2 through a public process during the winter 2006-2007 time frame, and will then seek to obtain approval from the EMC of a modification to the Environmental Performance Standard. The anticipated regulatory review process for return to firing of lead-bullet ammunition is presented in Figure 2. With this filing, the MANG seeks certification from the Secretary that the process described in Figure 2 is appropriate, and provides an opportunity for the public and the regulatory community to comment prior to initiation of the process.

Regulatory Oversight of Camp Edwards

All activity at Camp Edwards is conducted under the highest level of environmental oversight by the Commonwealth of Massachusetts to protect the valuable natural resources located in the Reserve/training areas at the base. The military is required to operate in compliance with a number of state, federal, and Department of Defense laws and regulations to protect the environment. At Camp Edwards there is an additional level of environmental protection and oversight in the form of a landmark agreement made between the Commonwealth of Massachusetts and the military. This agreement, and a subsequent state law, created the Environmental Management Commission (EMC), comprised of the heads of three state environmental agencies. The EMC has full time staff at the base, access to all training lands, activities, and related information regarding the Reserve/training area. The EMC has the ability to suspend any training activity in the Reserve/training area they believe is a threat to the environment. This oversight structure has been written into the lease agreement the Army holds with the Commonwealth for the use of Camp Edwards which is located on state owned land. As long as the MANG remains at Camp Edwards, this unparalleled standard of environmental protection will be in place.

In October 2001, the above noted agreement in the form of a Memorandum of Agreement (See Attachment D) was signed establishing a management structure for the northern training area of Camp Edwards, the Reserve, and creating the oversight structure for the Reserve as outlined in the Community Working Group Master Plan Final Report. The MOA was signed by the Governor of Massachusetts for the Commonwealth of Massachusetts and by the Deputy Assistant Secretary of the Army (Environment, Safety & Occupational Health) for the Department of the Army. Other signatories were the Secretary of EOE, NGB, the Adjutant General of the Massachusetts National Guard, the Commissioner of the Massachusetts Department of Fish and Game (MDF&G), the Commissioner of the Massachusetts Department of Conservation and Recreation (DCR), and the Commissioner of the Massachusetts Department of Environmental Protection (MassDEP).

On March 5, 2002, the Governor signed legislation (Chapter 47 of the Acts of 2002) (See Attachment E) codifying into law the MOA ensuring the permanent protection of the drinking water supply and wildlife habitats in the Reserve, while allowing compatible military training. Under the law, the compatibility of training with environmental protection would be verified through independent oversight, monitoring, and evaluation. For this

purpose, the legislation created the EMC, consisting of the Commissioner of MDFG, the Commissioner of MassDEP, and the Commissioner of DCR. The EMC oversees compliance with and enforcement of the EPSs and coordinates the actions of environmental agencies of the Commonwealth in the enforcement of environmental laws and regulations within the Reserve.

The legislation further directed that the EMC be assisted by two advisory councils. The Community Advisory Council (CAC), consisting of 15 members, assists the EMC by providing advice on issues related to the protection of the water supply and wildlife habitat within the Reserve. The Science Advisory Council (SAC), consisting of 9 members, assists the EMC by providing scientific and technical advice relating to the protection of the drinking water supply and wildlife habitat within the Reserve.

Finally, the legislation established a full-time Environmental Officer (EO) for the MMR. The EO in this capacity, provides full-time monitoring of military and civilian activities on and uses of the Reserve and the impact of those activities and uses on the water supply and wildlife habitats. Working directly for the EMC, the EO has unrestricted access to all data and information from the various environmental and management programs. He has full access to all points in the Reserve and conducts inspections at any time in order to monitor, oversee, evaluate, and report to the EMC on the environmental impact of military training and other activities. The EO's on-site monitoring occurs prior to, during and immediately following training and other activities. These monitoring activities include but are not limited to: training sites, pollution prevention, and habitat protection activities for both military and contractors in the Reserve, as well as coordinating with and consulting with the Environmental and Readiness Center (E&RC) on various projects, initiatives and issues including small arms range management. The EO is located full time at Camp Edwards and acts as a liaison between the EMC, SAC, CAC, military, general public, and various state agencies.

The EO also brings to the management of the Reserve/training area additional experience to help manage the natural resources. For example, the current EO, Mr. Mark Begley, has an extensive background in small arms range management and has contributed to numerous best management practice manuals including the Interstate Technology & Regulatory Council's Environmental Management at Operating Outdoor Small Arms Firing Ranges.

Project Change Description

(a) Description of the project as most recently reviewed

MEPA review of activities at the Massachusetts Military Reservation (MMR), including Camp Edwards, began in 1986 and has been extensive. The nature and intensity of training activities at Camp Edwards were reviewed and certified in the Secretary's Certificate on the MMR Final Area-Wide FEIR in July 2001. That certificate (presented in Attachment B) created certain obligations for the MANG, including adoption and implementation of Environmental Performance Standards (EPSs) and the filing of an annual State of the Reservation Report. The MANG has complied, and continues to comply, with these obligations.

(b) Description of material changes to the project as previously reviewed

As discussed above, the material change contemplated in this NPC is modification of the Environmental Performance Standards established in 2001 (at this time, specifically the prohibition on the firing of lead-bullet ammunition at Camp Edwards).

To facilitate modification of the lead-bullet ammunition prohibition, it is expected that the MANG will petition the EMC, which is empowered to approve EPS modifications under Chapter 47 of the Acts of 2002 with regulatory oversight of environmental matters at Camp Edwards.

Lifting of the lead-bullet prohibition by the EMC would be requested by the MANG on an iterative basis as specific small arms ranges at Camp Edwards are upgraded to allow implementation Best Management Practices. 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:

Table 1 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

At this time, the MANG anticipates that it will seek authorization from the EMC to commence firing of lead-bullet ammunition at two ranges in April 2007. These ranges are T and E, proposed and/or already completed upgrades to these ranges are described briefly below.

T Range

As a component of its SAR P2 plan for T Range, the MANG has emplaced a STAPP bullet catcher system (which had been anticipated to be placed at B Range and was described as such in the MANG's February 15, 2006 NPC). Information describing the STAPP system and a photograph depicting its installation at T Range is presented in Figure 3.

Also as a component of its T Range upgrade, the MANG plans to construct a pavilion and bleacher enclosure that will provide protection from the elements for soldiers using the range. The exact location and design of this pavilion and bleacher enclosure has not yet been determined, but at a conceptual level, they total approximately 2,000 square feet. It is anticipated that they will be located in the area behind the T Range firing line and exceed the 750 square foot MEPA review threshold established in 2001. Figure 3 depicts T Range and the conceptual location of the pavilion and associated bleacher enclosure (which will be similar to the ones previously certified in the MANG's February 15, 2006 NPC.) In addition, the MANG will install one monitoring well and several lysimeters to measure groundwater and pore-water, respectively, for current and future training.

Ongoing live fire weapons training activities at T Range would include a pistol and rifle and familiarization and qualification training, and would be managed through the proper use of the STAPP system.

Please see Attachment A for a description of the major program elements (including those elements pertinent to T Range) of the SAR P2 to the existing Camp Edwards Pollution Prevention Plan, currently under development and anticipated to be complete in November 2006.

E Range

E Range is an electronically controlled Combat Pistol Qualification Course. The proposed BMP/upgrade of E Range will include replacement and upgrade of the range computer operating system and all associated targets. E Range has 15 lanes with 7 targets per lane. The MANG is currently in the process of upgrading E Range to meet US Army standards for training of soldiers. The upgrade includes construction of a bleacher enclosure consisting of a concrete slab upon which bleachers will be placed (as described in detail in the February 15, 2006 NPC and previously certified by the Secretary on March 24, 2006).

Proposed additional upgrades now contemplated in the context of the SAR P2 is to layer the target range floor with approximately 18 inches of processed sand that would be used to capture and contain the bullets once they are fired, and a horizontal berm that would contain the lead and periodically sifted to remove the lead slugs for recycling. As with T Range, E Range will be installed with one monitoring well and several lysimeters to measure groundwater and pore-water, respectively, for current and future training.

Please see Attachment A for a description of the major program elements (including those elements pertinent to E Range) of the SAR P2 to the existing Camp Edwards Pollution Prevention Plan, currently under development and anticipated to be complete in November 2006.

(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6)

This NPC requests that the Secretary determine the anticipated process that the MANG will soon undertake seeking modification of the Camp Edwards Lead Prohibition EPS (with final authorization from the EMC) is "insignificant" in accordance with 301 CMR 11.10(6) due to several factors, the first being the regulatory process enacted by Chapter 47 of the Acts of 2002, 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.

- (a) The proposed EPS review and modification process does not represent an "expansion" of training activities at Camp Edwards. There is nothing the MANG 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 MANG 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.
- (b) The proposed EPS review and modification process will not "generate further impacts" because the proposed return to lead-bullet ammunition will take place within the footprints of existing firing range complex area and will not change either the original nature or intensity of training activities.
- (c) The proposed EPS review and modification process does not create a situation where the "expected date for commencement of project, commencement of construction, completion date of the project, or schedule for the project" have been changed, because no such dates were established in the Secretary's Certificate for EOE #5834.
- (d) The "project site" has not changed.
- (e) No new application for a permit or new request for financial assistance or land transfer is required for approval of the EPS review and modification process.
- (f) The proposed EPS review and modification process will not "prevent or materially delay" the realization of the net benefits to environmental quality resulting from the EPS's crafted after the Secretary certified EOE #5834 in July 2001.
- (g) There have not been significant "lapse of time, changes in the ambient environment, or information concerning the ambient environment"

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts.

The proposed lifting of the prohibition on the use of lead firing will require a modification of the Section 61 Findings document developed by the MANG, which was submitted to MEPA on February 4, 2003. On Page 3 of that document the following language is included:

"...live weapon (small arms) fire is not allowed outside of the established ranges and cannot be performed anywhere with lead-bullet ammunition."

The MANG proposes to change this language to read as follows:

"...live weapon (small arms) fire is not allowed outside of established ranges and cannot be performed anywhere with lead bullet ammunition *except when prior authorization has been granted by the Massachusetts Environmental Management Commission in accordance with Chapter 47 of the Acts of 2002.*"

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 as identified in EPA's Administrative Orders.

Working with the 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.

The next steps the MANG is undertaking is to manage the small arms ranges through best management practices (BMP) and the use of containment systems. The containment systems will vary from earthen berms to mechanical capture systems, systems and management techniques designed to minimize the bullets potential for remaining in the environment and affecting the water supplies. The MANG will focus on "green" ranges versus "green" bullets.

The return to improved training with lead-bullet ammunition at the Camp Edwards small arms firing ranges will take place only with the authorization and approval of the EMC and EPA. Both actions will be predicated upon the implementation of management and BMPs at the selected ranges as described in the SAR P2, which is currently under development. It is expected that authorization for a return to lead live fire training will begin with a petition to train at two ranges T and E during training year 2007, with additional authorizations sought for other existing small arms ranges as Camp Edwards continues to upgrade ranges to improved training standards .

Authorization for T and E Range would be sought to allow live fire activities in April 2007. Measures anticipated to be taken to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts will include use of bullet catcher technology (T Range), placement and ongoing monitoring of shallow lysimeters and placement of appropriate material to facilitate management of lead and prevent migration of lead to groundwater (E and T Range), and regular management/lead harvest/application of maectite or similar material to earthen backstop berms to avoid migration of lead to groundwater.

ATTACHMENTS & SIGNATURES

Attachments:

- 1. Secretary's most recent Certificate on this project
- 2. Plan showing most recent previously-reviewed proposed build condition
- 3. Plan showing currently proposed build condition
- 4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
- 5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

<u>15 SEPT 06</u>	<u><i>Shawn C. Cody</i></u>	<u>15/sep/06</u>	<u><i>[Signature]</i></u>
Date	Signature of Responsible Officer or Proponent	Date	Signature of person preparing NPC (if different from above)

<u>Mr. Shawn Cody, Dir. of Environ. Affairs</u>	<u>Samuel Moffett, AICP</u>
Name (print or type)	Name (print or type)

<u>Massachusetts National Guard</u>	<u>URS Corporation</u>
Firm/Agency	Firm/Agency

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