

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460



SDMS DocID 448100

MAY 16 1997

OFFICE OF
THE ADMINISTRATOR

Edward D. Baca
Lieutenant General, U. S. Army
Chief, National Guard Bureau
2500 Army Pentagon
Washington, DC 20310-2500

Dear General Baca:

This letter conveys my decision on the National Guard Bureau's (NGB's) dispute with EPA Region I's April 10, 1997 order requiring, among other things, pollution prevention measures to protect Cape Cod's sole source aquifer from the potential for further contamination associated with training activities at the Massachusetts Military Reservation.

This decision is based on a careful consideration of the information presented to me by Region I and the NGB. The NGB information specifically includes the May 7, 1997 written response to the order as well as the May 8, 1997 presentation by Deputy Under Secretary Sherri Wasserman Goodman, Major General Russell Davis, and other representatives from the Department of Defense and the NGB. In my review I have focused on the five issues Ms. Goodman and General Davis identified as their core concerns: EPA's use of RCRA as a basis for issuing the order; the impact of the order on training and military readiness; the absence of a formal dispute resolution provision in the order; the need for clarification of the air monitoring provision; and the need for clarification of the provision pertaining to unexploded ordnance. Attachment 1 to this letter addresses in detail the issues raised by the NGB in its April 18, 1997 letter.

Based on the information presented, I believe that Region I correctly determined that an imminent and substantial endangerment to human health may exist as a result of past and current activities at MMR. Both the scientific and legal arguments upon which EPA's order is based are very strong. The evidence cited in the order and additional DOD studies identified by our New England office since issuing the order support EPA's preventative approach to protecting the sole source aquifer from further degradation. In view of the paramount importance of Cape Cod's sole source of drinking water and EPA's obligation to prevent any further activities that experience and available data suggest could contaminate the aquifer, I believe that Regional



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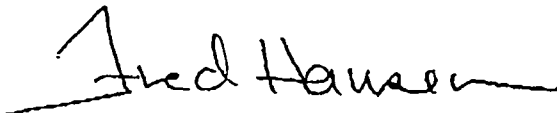
Administrator John DeVillars acted appropriately and responsibly in his issuance of the order. Therefore, I hereby uphold the order with these technical modifications identified in Attachment 2. It will become effective May 19, 1997.

In upholding this order, I am directing the Region to make the technical modifications in order to clarify its provisions relating to RCRA jurisdiction, air monitoring, and unexploded ordnance. These revisions are recommended by Regional Administrator DeVillars and are the result of good faith negotiations between EPA Region I and the NGB.

In reaching this decision, I am mindful of the difficulty of rescheduling to other bases those units which are presently scheduled to train at MMR in the immediate near term. I have supported Regional Administrator DeVillars' efforts to be responsive to this concern for those troops which cannot be rescheduled in the very near term and which would otherwise lose their combat readiness status. I know he has had extensive discussions with the NGB and DOD on this topic since the issue was first raised to him on April 14. I have encouraged Mr. DeVillars to continue discussions on this issue if the NGB so desires. I want to reiterate my and his position that this should only be in instances in the very near term where a compelling national security interest warrants such an exception to the order and only upon demonstration that all reasonable steps have been taken to make training available elsewhere.

I am also requesting Regional Administrator DeVillars to continue his discussions with the NGB and DOD to develop a process for resolving disputes that may arise under the order. It is my understanding that these discussions have been constructive, and it is my expectation that they will reach a successful resolution.

Sincerely,

A handwritten signature in dark ink, appearing to read "Fred Hansen", with a stylized, sweeping underline.

Fred Hansen
Deputy Administrator

cc: Deputy Under Secretary
Sherri Wasserman Goodman

Attachments

Attachment 1

U.S. ENVIRONMENTAL PROTECTION AGENCY

MASSACHUSETTS MILITARY RESERVATION
DOCKET NO. SDWA I-97-1030/RCRA I-97-1031
RESPONSES TO ISSUES RAISED BY NATIONAL GUARD BUREAU

This memorandum presents EPA's responses to the issues raised by the National Guard Bureau (NGB) in its April 18, 1997 request for an opportunity to confer with the EPA Administrator.

Issues:

a. Whether EPA Region I has failed to follow EPA's own policy regarding deadlines and efforts at resolution as presented in EPA's Federal Facilities Compliance Strategy. Moreover, NGB questions the appropriateness of issuing the MMR AO, given NGB's compliance with the first Order issued by EPA Region I on February 27, 1997.

The Federal Facilities Compliance Strategy is a non-binding general compliance process document issued by EPA in 1988. For several reasons, the Strategy does not govern this action.

First, both statutes underlying the Order have more explicit instructions than the general processes described in the Strategy. For RCRA purposes, the Region believes the Strategy, to the extent it could be viewed as something more than a general outline of potential processes, was superseded by the 1992 Federal Facilities Compliance Act, Pub.L. 102-386 ("the FFCA").

Regarding the Safe Drinking Water Act, EPA's view, as expressed in the February 4, 1997 Draft Guidance on EPA's New Penalty Order Authority Against Federal Facilities Under the Safe Drinking Water Act Amendments (SDWA) of 1996, is to provide the head of the federal agency an opportunity to confer with the Administrator within 30 days after the order is issued before the order becomes final. The Region has provided that opportunity in the Order. In addition, this Order is premised not on penalties, but on endangerment. In such a potential endangerment situation, one cannot assert that even more of an opportunity to confer is required.

Second, I believe that even if the processes the Strategy was meant to describe were still in effect, those processes certainly would not have been meant to apply to a situation that may present an imminent and substantial endangerment.

Third, as a practical matter, the Order provides NGB with considerable process to make their case, process that is consistent with the Strategy while more focused on the Order's statutory bases. Not only does the Order afford the NGB the opportunity to confer with the Administrator, but also Paragraph

135 also provides an opportunity for the NGB to state its case to EPA as to necessity of particular requirements of the Statement of Work. That "safety valve" provision acts to mitigate any requirements which might be later found inappropriate or unnecessary.

I believe issuing this Administrative Order ("AO") is appropriate, even despite the NGB's compliance with the first AO. The NGB has so far met the deadlines set by the first AO, and while EPA does not agree completely with their groundwater study work plan, it is a reasonable first step. However, the first AO does not cover specifically all the facets of this Order, such as the lead removal from impact berms, and the suspension of use of propellants and pyrotechnics. Moreover, even though Respondent Massachusetts National Guard had announced a voluntary suspension of some practices without an Order, the Region would not be able to provide effective oversight of those agreements, nor could EPA ensure that the suspensions lasted for the time needed.

b. Whether the restrictions on training imposed in the MMR AO are necessary.

It is important to note, as General Baca does in the attachment to his April 18, 1997 letter, that not all training activities at MMR are suspended by the order. Furthermore, Respondents NGB and Massachusetts National Guard have not objected to the suspension of some training activities under this Order, such as the use of explosive artillery and mortar shells and the use of lead bullets in small arms.

The NGB has, however, objected to the restrictions on the use of propellants and pyrotechnics. Given the information on hand, I find that the restrictions on use of propellants and pyrotechnics are reasonable and necessary. In the limited sampling in the area where propellants were used, hazardous constituents and byproducts of propellants in soils (2,4-DNT, dibutylphthalate, and n-nitrosodiphenylamine) and groundwater (2,4-DNT) have been found.

At the one gun position which has been sampled, DNT was found in the soil in 15 of 18 locations. Also, although contaminants from propellants have not yet been found in groundwater at levels that exceed drinking water standards, 2,4-DNT was found in soil at the gun position at 17,000 ppb, a level that could leach to groundwater in amounts that may present a threat. Another constituent of propellants used at MMR, dibutylphthalate, was found in soils at the same gun position at levels up to 16,000 ppb. N-nitroso-diphenylamine, a compound formed during firing of three types of propellants used at MMR, was found in at 930 ppb in soil at the same gun position. This compound was also found in soil in the impact area at .38 ppm. N-nitrosodiphenylamine is classified by EPA as a probable human carcinogen. Moreover, the

distribution of DNT over a fairly broad area at the gun position suggest an association with routine use of propellants, rather than disposal.

The soils and groundwater in the Training Range and Impact Area to date have not been analyzed for the full range of constituents found in pyrotechnics. However, limited sampling does show the presence of some hazardous constituents of pyrotechnics (TNT, acetone) in soil and groundwater at MMR. Their presence indicates a potential connection between pyrotechnic use and soil and groundwater contamination.

Furthermore, many pyrotechnics of the types used in the past and in the present at MMR may cause "widespread and uncontrollable pollution of the environment" where they are deployed, according to a 1978 U. S. Army Medical Research and Development Command study. The study also reported that the aquifer under and river next to Pine Bluff Arsenal in Arkansas (where pyrotechnics are manufactured and field tested) are polluted by residues of pyrotechnics. The 1978 study recommends further testing to evaluate in more detail the health effects of using the pyrotechnics studies. Some of the conclusions in the 1978 study relate directly to pyrotechnics used in the past and present at MMR:

- HC AN-M8 smoke grenades have been used and continue to be used at MMR. They contain hexachloroethane (HCE), a chlorine carrier for screening smokes and a possible human carcinogen. HCE inhibits functions of the central nervous system, and can be absorbed through the gastrointestinal tract, lungs, and skin. EPA's lifetime Health Advisory is 1 ppb. The report notes that, "[t]his compound is discharged into the environment during deployment of these smoke canisters" and that "[d]eployment of smoke canisters can lead to widespread pollution of this chemical and possible human exposure."
- M18 yellow and green smoke grenades used in the past and the present at MMR contain benzanthrone, a dye highly toxic to the blood and liver in subacute or chronic doses. The 1978 report states that, "[d]ischarge of this dye during use of the smoke canisters is widespread and uncontrollable."
- M18 green smoke grenades used at MMR also contain 1,4-bis(p-toluidino)anthraquinone, a green dye. The 1978 report states that "[U]ncontrolled pollution results from the Army use of this material.... Use of smoke canisters leads to uncontrolled human and environmental contamination from this compound... This type of pollution is sporadic and uncontrollable and can lead to significant human exposure."

- M18 violet smoke grenades used in the past and present at MMR contain 1-4-diamnio-2,3-dihydranthraquinone, a violet dye. According to the 1978 report, "Environmental discharges [of this substance] could lead to significant human exposure." "Uncontrolled discharge into the environment occurs during use of these smoke grenades."

Given the findings of constituents of some pyrotechnics, and the Army studies which indicate that the use of pyrotechnics may lead to uncontrolled contamination, it is appropriate to suspend the use of these materials. The order explicitly provides in Paragraph 135 a mechanism for the NGB to seek a review of EPA's suspension of the use of pyrotechnics and propellants, among other things, if the NGB can demonstrate that the threat of harm resulting from the use of these materials is so limited that the suspension is not warranted.

c. Whether EPA Region I's characterization of certain RCRA and SDWA legal requirements is correct, and whether it is consistent with EPA Headquarters' position.

In the May 8, 1997 conference, Respondent has specified its concern with RCRA jurisdiction in this action, in light of the Military Munitions Rule, 62 Fed. Reg. 6622 et seq. (February 12, 1997).

The Munitions Rule does not eliminate RCRA jurisdiction in this matter. Contamination from past practices has shown up in limited groundwater sampling off-range (detection of TNT in groundwater downgradient of the Impact Area). I believe that constitutes a statutory solid waste under the Munitions Rule, thereby providing RCRA jurisdiction.

Respondent asserts that two particular activities under the Order -- the "sweeps" of unexploded ordnance (UXO) and the lead removal actions -- are beyond the scope of the Munitions Rule. However, RCRA § 7003 jurisdiction is premised first on the endangerment shown, and these activities are rightfully viewed as necessary to abate that endangerment. Moreover, given the Order's dual jurisdiction, even if such actions were beyond RCRA's scope, they are necessary to address the endangerment caused by contaminants under SDWA § 1431.

I see no inconsistencies between the Region's Order and EPA Headquarters' policy. As I stated at our May 8 conference, I stand firmly behind the Region's use of RCRA jurisdiction in this matter.

Nevertheless, because the order as modified does not permit the use of propellants and pyrotechnics, there is no need for air monitoring at this time and RCRA jurisdiction is not required to ensure that air is monitored. That being the case, in an effort

to resolve this matter, I am directing the Region to modify the Order to proceed solely pursuant to the Safe Drinking Water Act. The removal of RCRA § 7003 from this Order is without prejudice to EPA's ability to assert RCRA § 7003 jurisdiction at MMR or other military ranges under appropriate circumstances in the future.

d. Whether EPA Region I's finding of the alleged existence of an imminent and substantial endangerment to the environment and public health is correct.

The Order is fully justified under the law of endangerment under either statute. The statutory standard under SDWA § 1431 and RCRA § 7003 is the same: "may present and imminent and substantial endangerment". This statutory threshold is reinforced by the legislative history of § 1431, and judicial case law regarding endangerment. The circumstances of this Order, namely the data points demonstrating soil and groundwater contamination of contaminants used in ongoing activities at MMR, directly above the sole source aquifer, in an area where very little sampling has been undertaken, plainly exceeds the threshold for action.

e. Whether certain requirements in EPA Region I's application of the MMR AO may actually be potentially harmful to human health, and whether they are cost effective.

This concern appears to pertain to UXO. In the Order, EPA requires the Guard to undertake periodic UXO sweeps, based on statements by the Guard to the Region during its information gathering that UXO is of concern for leaking into the soil and groundwater when it remains in place for a considerable period of time.

Since issuance of the Order, the Department of Defense has provided information to the contrary -- that UXO does not deteriorate over time, and that in fact a greater public safety issue could be created by attempting to detonate UXO. I have directed the Region to modify the Order to reflect that UXO sweeps are to be conducted under the Order for the purpose of addressing the safety of workers only.

Although cost-effectiveness is not a formal finding necessary for the Order, the Agency has carefully considered costs and benefits in both issuance of the Order and in subsequent proposals to address NGB concerns. Moreover, while the Agency recognizes the costs associated with redirecting training away from MMR, any cost-effectiveness analysis should also consider the costs associated with contamination of the sole source aquifer.

Attachment 2

The Regional Administrator's Order of April 10, 1997 is upheld, as modified by the provisions listed below. A revised order reflecting the following modifications will be provided to the National Guard Bureau and Massachusetts National Guard.

1. Due to the suspension of training activities referenced in Section II.A. of the Scope of Work, activities necessitating the air monitoring required by the Scope of Work are currently not being undertaken. Therefore, EPA is removing Section 7003 of the Resource Conservation and Recovery Act (RCRA) as a basis for jurisdiction to require the actions in the Statement of Work. Although the basis for RCRA jurisdiction over the activities at the MMR Training Range and Impact Area is clear, the imminent and substantial endangerment provision of Section 1431 of the Safe Drinking Water Act alone provides jurisdiction for the actions required in the Order as modified. The removal of RCRA § 7003 from this Order is without prejudice to EPA's ability to assert RCRA § 7003 jurisdiction at MMR or other military ranges under appropriate circumstances in the future.
2. Respondent NGB has recently provided documentation which indicates that unexploded ordnance does not deteriorate or leak into the environment, contrary to its earlier statements. Therefore, Section II.D. of the Scope of Work is modified by deleting the words "to reduce the potential for UXO to deteriorate or leak into the environment." At the beginning of Section II.D., the words, "Within those areas necessary to ensure safe access for personnel performing the soil and groundwater sampling required by the February 27, 1997 Order, Respondents shall..." are added.
3. Section II.F. of the SOW is deleted. In the event that any training activities suspended under this order are allowed to resume at MMR, it is EPA's expectation that appropriate air monitoring of those activities will be undertaken. EPA will use its full legal authority, including, if necessary, the Resource Conservation and Recovery Act, to insure that appropriate air monitoring is undertaken.

**DEPARTMENTS OF THE ARMY AND THE AIR FORCE**

NATIONAL GUARD BUREAU
WASHINGTON, D.C. 20310-2500



May 16, 1997

Office of the Vice Chief

Mr. Fred Hansen
Deputy Administrator
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Dear Mr. Hansen,

This letter presents a summary of our efforts at reaching an agreement with EPA Region I concerning Administrative Order - EPA Docket No.'s RCRA 1-97-1031 and SDWA 1-97-1030. Also, our Supplemental Response presents additional reasons for why we continue to assert that the Order is without merit.

We have achieved significant common ground in our discussions with EPA Region I. The areas where we have reached agreement with EPA Region I include the following: the appropriate level of sweeps for unexploded ordnance (UXO), air monitoring, and training with small arms. We are very near agreement on a dispute resolution clause that will apply to both the above-mentioned Order and the earlier Order issued in this matter. We have also had significant discussion and some progress without complete resolution on how to train units that need to be combat ready and simultaneously be in compliance with the Order. Should you affirm the Order, we request that the agreements reached be included as part of your decision, even though Region I views the agreements as being operative only in the event full resolution of the issues is achieved. To that end, please see the enclosure respecting the issues we have discussed and their present status.

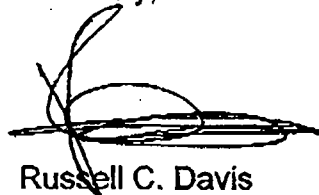
Notwithstanding concerted efforts in cooperation with EPA Region I, we have not been able to resolve the extremely significant issue of training for those military units that will drop below acceptable readiness levels absent such training at MMR. This area is of vital importance in our mission to defend the nation and in carrying out our responsibility to the members of the military and their families to adequately prepare these soldiers for their wartime tasks. We are equally cognizant of our environmental responsibilities and our important mission to act as stewards of the environment. It is our firm belief that training of these soldiers will not and would not be to the detriment of the environment or the residents of Cape Cod.

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I also request that you consider the Supplemental Brief, in addition to our original Response and Brief, in your deliberations regarding this matter, and ask again that those matters mutually agreed upon be included in any order that you decide to ratify. Additionally, we have included a summary list of the items discussed during numerous meetings over the past week and their status. We join in Secretary Goodman's request for a two week delay in your decision because we intend to remain in dialogue with Region I, in a fervent attempt to resolve these key issues.

Thank you for your positive approach in working with Region I EPA and DoD in order to allow the respective priorities of National Security and a clean and safe environment to coexist.

Sincerely,

A handwritten signature in black ink, appearing to read 'Russell C. Davis', with a horizontal line drawn through the middle of the signature.

Russell C. Davis
Major General, U.S. Air Force
Vice Chief, National Guard Bureau

Enclosures

Copies Furnished:

U.S. EPA (Mr. DeVillars)
DUSD(ES) (Ms. Wasserman-Goodman)
DoD General Counsel
Army General Counsel
Air Force General Counsel

KEY ISSUES UNDER DISCUSSION AND RESOLUTION STATUS

1. Dispute Resolution - Near Resolution
2. Air Monitoring - Agreement Reached. Some perimeter and site monitoring for HCE constituents.
3. Removal of UXO - Agreement Reached. Will sweep for UXO near the monitoring wells in the impact area.
4. Use of pyrotechnics (smoke (colored) and related materials - Status Unknown. DoD has provided sufficient technical data that it should be apparent that the limited pyrotechnics used in training do not have a significant impact warranting an injunction on their use. Waiting for EPA technical review.
5. Paragraph 135 of the Order (Modification of the Statement of Work) - Not Near Resolution.
6. Use of propellants to fire "green ammunition" - Status Unknown. DoD has provided sufficient technical data that it should be apparent that the limited propellants used in training do not have a significant impact warranting an injunction on their use. Waiting for EPA technical review.
7. Small arms training - Agreement Reached.
8. Need for continued combat readiness training - Not Near Resolution. This may, however, be resolved if EPA allows the continued use of pyrotechnics and propellants. The fact that DoD voluntarily suspended the use of High Explosives, TNT, and the firing of lead rounds, will already have a detrimental impact on readiness. It is believed, however, that through the limited use of propellants and pyrotechnics requested by DoD, units trained at MMR will be minimally capable of entering into combat.
9. Immediate training requirements - Not Near Resolution. It is not acceptable for EPA to dictate to DoD what units should or should not be trained. Moreover DoD cannot reschedule units this fiscal year without significant adverse impact on their readiness.
10. Exclusion RCRA provisions concerning ground contamination - Not Near Resolution.
11. Challenge the basis of the entire Order - It is still DoD's contention that current training activities are not contributing to groundwater contamination. We are still waiting for a response from Region I on the written point-by-point Response to the Administrative Order and supporting legal brief. EPA Region I has suggested that their response will be in the form of an Order from US EPA.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

In the Matter of:	)	EPA Region I
	)	EPA Docket No.s:
	)	RCRA I-97-1031
Training Range and Impact Area,	)	SDWA I-97-1030
Massachusetts Military Reservation	)	
	)	
	)	
National Guard Bureau	)	
and	)	SUPPLEMENTAL BRIEF IN
Massachusetts National Guard,	)	SUPPORT OF RESPONSE
	)	TO ADMINISTRATIVE
Respondents.	)	ORDER FOR RESPONSE
	)	ACTION
Proceeding under Section 7003(a) of the	)	
Resource Conservation and Recovery Act	)	
of 1976 as amended, 42 USC § 6973(a),	)	
and Section 1431(a) of the Safe	)	
Drinking Water Act, 42 USC § 300i (a)	)	

Respondent National Guard Bureau (NGB) files this Supplemental Brief in Support of its Response to EPA Administrative Order No.s RCRA I-97-1031 and SDWA I-97-1030 dated 10 April 1997 (Order), contesting both the factual and legal conclusions raised in said Order. Respondent's Response to the Administrative Order and the Brief in Support of the Response were filed with United States Environmental Protection Agency (US EPA) on 8 May 1997. The Supplemental Brief raises additional issues in support of the original Response.

INTRODUCTION AND SUMMARY OF ISSUES:

a. Whether uniquely military activities fall outside the statutory or regulatory definition of a "solid waste" in light of *Barcelo v. Brown*, 478 F. Supp. 646, 669 (D.P.R. 1979), *rev'd in part on other grounds*, 643 F.2d 835 (1st Cir. 1981), *rev'd sub nom Weinberg v. Romero-Barcelo*, 456 U.S. 305 (1982).

(1) The definition of a solid waste covers "garbage, refuse, sludge . . . and other discarded material . . . resulting from industrial, commercial, mining, and agricultural activities, and from community activities. . . . 42 USC §6903(27). The court in *Barcelo* found that the firing of military munitions into an impact area as

part of military training was a uniquely military activity and not an industrial, commercial, mining, agricultural, or community activity, and thus RCRA did not apply.

(2) Furthermore, the firing of military munitions is use of a product (or products) as intended, not the discarding of material and therefore not waste generation. EPA has taken a similar position with respect to lead shot and clay targets in its *Amicus Curiae* briefs filed in *Connecticut Coastal Fishermen's Association (Connecticut Coastal)*, 989 F.2d 1305 (2d Cir. 1993), and *Long Island Soundkeeper Fund et al. v. New York Athletic Club*, 42 ERC 1421 (S.D.N.Y. 1996).

b. Whether EPA Region I has the authority to disregard the provisions of CERCLA and a signed Federal Facility Agreement (FFA) and fashion a remedy under other environmental statutes.

(1) The Massachusetts Military Reservation (MMR) was placed on the National Priority List (NPL) on 21 November 1989. An FFA between NGB and EPA Region I was signed on 17 July 1991. The FFA addresses releases of hazardous substances into the environment from past and present activities at MMR. The FFA also includes emergency provisions for actual or threatened releases.

(2) EPA Region I's failure to follow the FFA is particularly disturbing in relation to the contamination alleged at specific sites CS-18 and CS-19. These two sites are specifically addressed in the FFA. Sampling at these two sites comprise the principal basis for EPA's Order. EPA Region I should not be allowed to follow the FFA only when it is convenient to do so.

c. Whether EPA Region I's unprecedented order to shut down all training at a military post, resulting in the nondeployability of certain National Guard units, through what amounts to an essentially limitless expansion of RCRA 7003 and SDWA 1431, is an abuse of discretion.

(1) The Order directing the halt of the use of propellants and pyrotechnics based primarily on the monitoring results at CS-18 and CS-19 is an unprecedented expansion of the use of RCRA 7003 and SDWA 1431. EPA Region I is directing the halt of the use of a product for its intended purpose because it cannot rule out with certainty the possibility of any contribution to that contamination from the product use.

(2) The injunction on the use of propellants and pyrotechnics is particularly disturbing in that the firing of a projectile (use of a propellant) and the release of smoke in training (use of a pyrotechnics) are the intended use of these products. Furthermore, not only is there NO evidence that the product use is responsible for the condition of the endangerment, there is strong evidence that it is not.

I. Discharge of military munitions is not generation of a solid waste under the Resource and Recovery Act (RCRA) statutory or regulatory definitions of "solid waste."

a. EPA Region I's Order is in part predicated on authority pursuant to RCRA §7003. Whether RCRA, however, applies depends on whether a RCRA solid waste exists. The statutory definition of "solid waste" is set forth in section 1004, 42 USC §6903(27). For purposes of the regulatory program, EPA defines "solid waste" at 40 CFR 261.2.¹ RCRA §7003 authority is predicated upon the statutory definition of solid or hazardous waste.²

The statute defines solid waste as:

any garbage, refuse, sludge . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities

42 USC §6903(27).

b. Under §7003, EPA may address an "imminent and substantial endangerment to health or the environment" with respect to the "handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste." While EPA's authority is broad, is not without limits. In short, the plain reading of the statute suggests that EPA may exercise this authority only with respect to certain activities involving wastes³ and only with respect to situations involving "imminent and substantial endangerment." The issue is whether the use of military munitions as intended is waste generation subject to §7003 authority.

c. In *Barcelo v. Brown*, a federal district court declined to extend the statutory definition of "solid waste" to include "uniquely military activities." The district court stated that "the

¹ In relevant part, EPA defines "solid waste" for purposes of RCRA regulation as "any discarded material." 40 CFR 261.2(a)(1). "Discarded material" is defined as including materials that are "abandoned." EPA has consistently stated that use of a product for its intended purpose, including deposit of the product on the land during its ordinary manner of use, does not trigger regulatory jurisdiction under RCRA. EPA reiterated this long-standing position and codified it in the Military Munitions Rule (62 Fed. Reg. 6621, 6630 (Preamble) and 6655 (40 CFR §266.202(a)(1))).

² A hazardous waste must first be a solid waste. Thus, this discussion is limited to the issue of whether military munitions, used as intended, are solid wastes under RCRA and whether the air emissions resulting from the use of military munitions for their intended purpose are solid wastes.

³ The Administrator may restrain an individual who handles, stores, treats, transports, or disposes of solid or hazardous waste that may present an imminent and substantial endangerment to health or the environment, or take such other action as may be necessary, or both. 42 USC §6973.

scope of this definition . . . excludes military hazardous wastes from its coverage." Specifically, the district court stated that:

Defendant Navy's military activities [regarding the firing of ordnance and the dropping of bombs], although causing the incidental depositing of debris, are not the discarding of material nor are they the result of an industrial, commercial, mining or agricultural operation.

Barcelo v. Brown, 478 F. Supp. 646, 669 (D.P.R. 1979), *rev'd in part on other grounds*, 643 F.2d 835 (1st Cir. 1981), *rev'd sub nom Weinberger v. Romero-Barcelo*, 456 U.S. 305 (1982).

d. Because "uniquely military" activities, such as target practice at bombing ranges, do not fall within any of the activities enumerated in the statutory definition of "solid waste," the court concluded that such uniquely military activities were not subject to RCRA.⁴ EPA has continued to acknowledge the continuing vitality of the *Barcelo* court's refusal to extend RCRA's statutory definition of solid waste to include "uniquely military activities." See Corrective Action for Solid Waste Management Units at Hazardous Waste Management Facilities (CAMU Rule) (55 Fed. Reg. 30798, 30809, July 27, 1990);⁵ Military Munitions Proposed Rule (60 Fed. Reg. 56468, 56477, November 8, 1995).⁶ Like the *Barcelo* court, EPA has characterized the firing of military munitions as a "uniquely military" activity that is engaged in by no other party. See Military Munitions Proposed Rule at 56477; see also CAMU Rule at 30809;.

e. When asked to apply *Barcelo*, the district court in *Connecticut Coastal* left undisturbed the *Barcelo* court's holding that "military operations are specifically not covered by RCRA." Likewise, EPA stated in its Amicus Curiae brief to the appellate court in the *Connecticut Coastal* case:

EPA also does not view RCRA regulatory or statutory authorities as applying to use and deposition of ordnance by the military. EPA accepts the view of the

⁴ Even if activities that have been characterized as "uniquely military" were not specifically exempted from RCRA, the materials deposited by the activities that the EPA seeks to halt at Camp Edwards would not be "solid waste" as that term is defined in RCRA. EPA interpretations of that definition must be "reasonable and consistent with the statutory purpose." *American Petroleum Institute v. EPA*, 906 F.2d 729 (D.C. Cir. 1990) (emphasis in original). The unreasonableness of the order is discussed in III, *infra*.

⁵ "In addition, a U.S. District Court decision (*Barcello (sic) v. Brown*, 478 F. Supp. 646, 668-669 (D. P. R. 1979), has suggested that materials resulting from uniquely military activities engaged in by no other parties fall outside the definition of solid waste, and thus would not be subject to section 3004(u) corrective action."

⁶ "Thus, the *Barcelo* decision provides a rationale for excluding munitions remaining at firing ranges from the RCRA definition of solid waste. EPA, however, recognizes that the lines between "uniquely military" range activities and other activities (for example, target practice at small arms ranges) are not always clear. Therefore, EPA seeks comment on what sorts of range activities are properly considered uniquely military."

district court in *Barcelo v. Brown*, 478 F. Supp. at 669, that RCRA does not apply to specifically military activities like discharging ordnance. (emphasis added)

Id. at 25-6, fn 10.

f. Consistent with the reasoning in this line of cases, EPA has also taken the position that the firing of military munitions is use of a product (or products) as intended, not discarding of a material, and therefore not waste generation. 40 CFR 266.202(a)(1).⁷ EPA has taken a similar position with respect to lead shot and clay targets in its Amicus Curiae briefs filed in *Connecticut Coastal Fishermen's Association (Connecticut Coastal)*, 989 F.2d 1305 (2d Cir. 1993), and *Long Island Soundkeeper Fund et al. v. New York Athletic Club*, 42 ERC 1421 (S.D.N.Y. 1996). Furthermore, the court in *Connecticut Coastal* adds a temporal test to the criteria ("long enough to be considered solid waste"). The court did not propose a bright-line test for passage of time required to convert debris from use of a product for its intended purpose into solid waste and there was the added element of no reasonable expectation that the generator of the debris would ever gather up and recycle or dispose of the materials. The EPA Region I Order goes far beyond the *Connecticut Coastal* criteria to deem debris solid waste immediately upon deposition.

g. The use of propellant to propel the munition to its intended target is even more clearly the use of a product (the propellant) for its intended purpose (to propel), and certainly does not involve the disposal, storage, or other handling of a solid waste. The gases formed by the ignition of the propellant is what provides the active force to the munition. Those gases are a product used for its intended purpose, and therefore are not a solid waste. In addition, the statutory definition of a solid waste does not include any uncontained gaseous material. See 42 USC §6903(27).

h. Similarly, the gases released as a result of the ignition of pyrotechnics are, typically, the product itself. A green smoke flare, for example, is a product that has as its purpose the production of green smoke, and the green smoke produced is a product being used for its intended purpose of signaling. In addition, the gases produced by a pyrotechnic device cannot be a solid waste because they are uncontained gaseous material, and are outside the scope of the statutory definition of a solid waste.

i. RCRA's regulatory and statutory requirements apply only to those items that are a solid waste or hazardous waste, as those terms are defined in the regulation and statute. As previously noted, the firing of military munitions is a "uniquely military" activity that is outside the scope of RCRA's statutory definition of solid waste, a prerequisite for application of RCRA's §7003 remedial authority. Accordingly, EPA Region I may not

⁷ Section 266.202(a)(1) codifies EPA's long-standing position that use of a product for its intended purpose is exempt from RCRA regulation. Section 266.202 is part of the Military Munitions Rule and is effective on 12 August 1997.

curtail the firing of military munitions at the Massachusetts Military Reservation under the authority of RCRA §7003.

j. EPA Region I has attempted to encompass air emissions from the use of mortar and artillery propellant for their intended purpose, and air emissions from pyrotechnics for their intended purpose, within the scope of the "handling, storage, treatment, transportation or disposal" of a solid waste (RCRA §7003).⁸ In *Chemical Weapons Working Group, Inc v. Department of Army*,⁹ the court rejected allegations that Clean Water Act § 301(f)¹⁰ applied to air emissions from chemical weapons incineration because Congressional intent obviously was to control air emissions under the Clean Air Act and not the Clean Water Act, and a contrary interpretation would lead "to irrational results":¹¹

Plaintiffs' broad construction of the phrase "discharge . . . into the navigable waters" under [Clean Water Act] § 301(f) would necessarily result in regulation under [Clean Water Act] § 301(a) of any air emission that might possibly result in atmospheric deposition into navigable waters. While Plaintiffs argue that the Environmental Protection Agency could issue a nationwide permit "for sources of water pollution of cars and chimneys" to the extent § 301(a) would apply, the very thought of regulating car emissions under the Clean Water Act exposes the absurdity of their position.¹²

II. EPA Region I is failing to abide by the Federal Facility Agreement it entered into with NGB concerning the Massachusetts Military Reservation (MMR).

a. MMR was listed on the National Priority List (NPL) on 21 November 1989 and "is therefore subject to the special provisions for Federal Facility NPL sites in CERCLA Section 120" (FFA para 5.17). The FFA was entered into on 17 July 1991 and was

⁸ Of course, air emissions that result from a hazardous waste disposal activity, such as from an incinerator, are subject to RCRA as well as to the Clean Air Act, but as pointed out above, the use of propellant and pyrotechnics for their intended purpose do not constitute a hazardous waste management activity.

⁹ *Chemical Weapons Working Group, Inc. (CWWG) v. Department of Army* (10th Cir. 1997) (D.C. No. 96-CV-425, Apr. 22, 1997).

¹⁰ Plaintiffs claimed that the § 301(f)'s ban on the discharge of chemical warfare agent into navigable waters must apply to emissions from stacks at Tooele Chemical Agent Disposal Facility, because the text of the provision placed no limitation on the form of chemical agent discharged or on the manner in which it entered navigable waters. *Id.*, page 9.

¹¹ *Id.*, page 10.

¹² *Id.* (emphasis in original).

amended in May of 1996 and again in April of 1997. In the FFA, EPA Region I and NGB agreed to a number of conditions:

(1) "Ensure that the environmental impacts associated with the past and present activities at the Site are thoroughly investigated and to ensure that the appropriate Response Action is taken as necessary to protect the public health, welfare, and the environment," (FFA para 1.1(a)).

(2) "Ensure compliance, through this Agreement, with RCRA and other Federal and State hazardous waste laws and regulations for matters covered herein," (FFA para 1.2(d)).

(3) "Identify Removal Actions which are appropriate for the Site in accordance with the terms of this Agreement and provide timely notice to the other Parties of such proposed actions." (FFA para 1.2(h)).

(4) "'Site' shall encompass land owned, operated, controlled, leased, licensed or used by right of easement by any department or agency of the United States Government in the past and at the present time at the Federal Facility know as the Massachusetts Military Reservation or any area off the Federal Facility to or under which a release of Hazardous Substances has migrated, or threatens to migrate, from a source on or at Massachusetts Military Reservation." (FFA para 3.1(f,f)).

(5) "Any location on the Site which is identified by a Party pursuant to this Agreement and the Comprehensive Plan as a Study Area or AOC after the Effective Date of this Agreement shall be added to the list of Study Areas and AOC in Paragraph 5.24 as an additional Study Area or Area of Contamination to be investigated and remediated pursuant to the requirements pertaining to Study Areas or AOC under this Agreement and the Comprehensive Plan." (FFA para 6.6).

(6) "If the EPA determines that there may be a threat to the public health, welfare or the environment because of an actual or threatened release of a Hazardous Substance, the EPA may request the NGB perform a Removal Site Evaluation as required by Section 300.405(f)(1) and Section 300.410 of the NCP. This evaluation shall investigate the source and nature of the release, the magnitude of the threat, and shall include an evaluation of factors necessary to make a determination of whether a Removal is necessary," (FFA para 12.3(c)).

b. The FFA was designed to be the instrument that would address all aspects of environmental remediation at MMR. This is evident from the very beginning of the document in its statement of purpose. In paragraph 1.1(a), the FFA states that one of the general purposes of this document is to address "environmental impacts associated with the past and present activities at the Site. . . ." (Emphasis added). In paragraph 1.2(d) of the FFA, one of the specific purposes of this FFA was to ensure compliance with RCRA

and other hazardous waste laws.¹³ In the instant case, EPA Region I claims that the purpose of its Order is to abate the threat to public health and the environment presented by the past and present contamination from training activities associated with the Training Range and Impact Area (para 7 of the Order).

c. The Order specifically cites RCRA as one the authorities. Yet, according to paragraph 1.2(d) of the FFA, compliance with RCRA is already being addressed through the FFA. In addition, the Order requires corrective action in that NGB "shall remove lead munitions from all berms at all small arms ranges in the Training Range and Impact Area" and "initiate and complete periodic 'sweeps' of the portions of the Training Range and Impact Area with the objective of clearance of UXO to reduce the potential for UXO to deteriorate or leak into the environment" (Appendix A, Section II, paragraphs C and D). This corrective action requirement is a direct challenge to the Department of Defense's CERCLA authority under Executive Order 12580, the National Contingency Plan, and the requirements of the FFA itself.¹⁴ In paragraph 1.2(h), one of the specific purposes of the FFA was to "Identify Removal Actions. . . ." Removal Actions and corrective action are identical in this context. If EPA Region I was concerned that the lead and UXO should be removed, the removal should have been addressed through the Installation Restoration Program (IRP) process as EPA Region I agreed to when it signed the FFA.

d. The FFA also allowed EPA Region I to add additional sites to the IRP through paragraph 3.1(f,f). If EPA Region I had a reasonable belief that contamination from the Training Range and Impact Area needed to be studied and remediated, it was required to make such a proposal under the IRP. This is particularly true in that the definition of "Site" in the FFA is all of MMR, to include contamination which migrates off of MMR.

e. Finally, the FFA contains a procedure to address Emergency Actions under Section XII. Under this Section, EPA Region I has the authority to seek a Removal Site Evaluation to determine whether there may be a threat to the public or environment from an actual or threatened release. EPA Region I's Order alleges that there is or may be an imminent threat to the public health (SDWA and/or RCRA) or the environment (RCRA) from an actual or threatened release. Since the FFA already has a mechanism to address such imminent threats as found in the Order, the use of unilateral orders is overreaching and an abuse of EPA Region I's discretion.

¹³ While the SDWA, unlike RCRA, is not specifically listed, we believe that it is included within the scope of "other hazardous waste laws." Furthermore, because the FFA addresses the "release or threatened release of Hazardous Substances, pollutants or contaminants" (para 1.2(a) of the FFA), and DOD is required to follow all substantive applicable or relevant and appropriate requirements (ARARs) (which would mean that all SDWA standards must be complied with), there is more than an adequate mechanism through the FFA to ensure that any and all SDWA requirements are addressed.

¹⁴ The preamble to both the NCP (55 FR 30802) and the repropoed Corrective Action preamble (61 FR 19432) state that RCRA corrective action is a substantive CERCLA ARAR.

f. EPA Region I's failure to follow the FFA is particularly disturbing in relation to CS-18 and CS-19:

(1) Three of the five samples allegedly indicating groundwater contamination (lead, RDX, 2,4-DNT, acetone, and TNT) are located at CS-19 (RDX, 2,4-DNT, and acetone). The other two allegations of contamination in the groundwater, TNT and lead, were either from suspect samples or were to be viewed with caution due to amounts too low to verify.

(2) Three of the four allegations of surface contamination (lead, RDX, 2,4-DNT, and Di-n-butylphthalate) are located at sites CS-18 and CS-19. The other allegation of surface contamination, lead, is an expected and intended consequence of using a range/impact area for its intended purpose.

The EPA Region I Order directs a response at these two sites in circumvention of the FFA since contamination at these two sites is already being addressed under the IRP and were specifically identified as such in the FFA. Moreover, aside from the results these two sites, which clearly must be addressed (if necessary) through the FFA, there is absolutely no evidence of an imminent and substantial endangerment.

g. Since the FFA already has a mechanism to handle the issues presented in EPA Region I's Order, it would be reasonable for EPA Region I to follow the procedures it has already agreed to. The Order issued by Region I should be revoked and the Region directed to comply with its obligations under the FFA. Any action found to be necessary and appropriate at the site should be pursued consistent with the procedures and standards established in the FFA.

III. Abuse of Discretion by EPA Region I

a. Even if Region I had the authority to issue the Order, it should not have done so. The Order, if legal at all, is unprecedented and raises grave issues concerning the relationship between EPA and the Department of Defense, and it raises the prospect of an essentially limitless expansion of RCRA 7003 authority, and enormous expansion of SDWA 1431 authority.

b. The Department of Defense has been an active partner with EPA in the protection of the environment, and the leader, along with the Department of Interior, in environmental stewardship of the Nation's resources. Here, EPA Region I has moved from partnership to adversariness, and it has directed that adversariness at a uniquely military activity critical to the ability of the Department of Defense to carry out its mission of national defense, and to protect the lives of its members.¹⁵

¹⁵ In addition to the constitutional questions regarding whether one agency of the Executive Branch has the power to suspend the mission of a sister agency, it should be noted that there are procedures for resolution

c. The order directing the halt of the use of propellant and pyrotechnic based on the monitoring results at CS-19 is an unprecedented expansion of the use of RCRA 7003 and SDWA 1431. EPA Region I is directing the halt of the use of a product for its intended purpose because it cannot rule out with certainty the possibility of any contribution to that contamination from the product use. We know of no other order that halts product use on such a basis. It would be like halting a manufacturing activity using a hazardous substance found in groundwater beneath an adjacent waste disposal site — not because there is direct evidence that the manufacturing itself is causing an endangerment, but because some contribution to the endangerment cannot be totally ruled out.

d. In this case, there is groundwater contamination at a former disposal site, and there is no groundwater contamination detected beyond the immediate vicinity of the disposal site in the area subject to the same influence from the product use. Thus, in this case, there is not only NO evidence that the product use is responsible for the condition of the endangerment, there is strong evidence that it is not.

e. Despite the evidence, then, Region I has opted to direct the halt of product use merely because the product contains some of the same constituents detected in groundwater.¹⁶ Under this "standard," manufacturing and other product use would have to be halted wherever any of the hazardous substances contained in the product are found in groundwater with the potential to be used as drinking water. Moreover, to be consistent and "protective" to the same degree, all household use of products containing hazardous substances should stop as well.

f. Region I would carry the prohibition of product use even further; even if a product contains no quantity of a hazardous substance detected in groundwater at the CS-19 disposal site, the Region would continue to prohibit its use if it contained any hazardous substance. Under this standard, no manufacturing could occur because virtually all manufacturing depends on the use of some hazardous substances, and it is even difficult to imagine how households could function without household products that contain hazardous substances as key constituents.

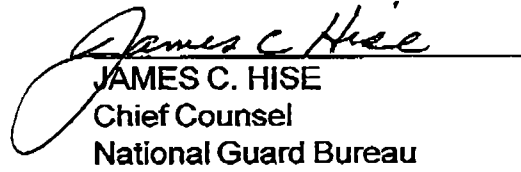
of interagency legal disputes that EPA chose not to follow, e.g., 28 U.S.C. § 512, which allows the head of an executive department to require the opinion of the Attorney General on questions of law arising in the administration of his department, and Executive Order 12146, "Management of Federal Legal Resources" (Jul. 18, 1979) which encourages agencies to submit legal disputes to the Attorney General, and requires such submission prior to proceeding in any court.

¹⁶ It is ironic, however, that EPA Region I has said that hunters at MMR can continue to hunt using lead munitions. The Order is being discriminatorily applied to the military.

IV. Relief requested as stated in the Brief in Support.

FOR THE CHIEF, NATIONAL GUARD BUREAU:

Dated May 16, 1997


JAMES C. HISE
Chief Counsel
National Guard Bureau

RESPONSE TO ADMINISTRATIVE ORDER

Respondent National Guard Bureau (NGB) responds to this Administrative Order (Order) by addressing each paragraph of said Order as follows:

I. JURISDICTION

1. Respondent NGB contests EPA Region I's jurisdiction under § 7003(a) of the Solid Waste Disposal Act, commonly referred to as the Resource Conservation and Recovery Act (RCRA). EPA Region I claims jurisdiction under RCRA § 7003 based on allegations that residues from the firing of small arms and indirect fire munitions are hazardous wastes "disposed of" in accordance with RCRA § 7003 (a). Munitions at an active range or impact area are not a solid waste because an active range or impact area is a facility being used for its intended purpose. EPA's authority under RCRA § 7003 applies when EPA receives evidence that past or present "handling, storage, treatment, transportation or disposal of any solid waste or hazardous waste may present an imminent and substantial endangerment to health or the environment..." Munitions at active ranges or impact areas are neither solid nor hazardous waste because the active ranges, impact areas, and munitions are being used for their intended purpose. EPA has recognized that munitions are neither solid nor hazardous wastes in its Military Munitions Rule, 62 FR 6621, 6628 (Feb. 12, 1997) ("In EPA's view, the training of munitions is a legitimate use that lies outside the scope of RCRA.") Additionally, the site conditions do not present an imminent and substantial endangerment to human health or the environment, as demonstrated by the available evidence and explained in this Response. Additionally, the relief sought by EPA Region I is not rationally related to the alleged harm, in that there is no proof that training exercises on the range have not resulted in the contamination alleged in the Order. Finally, the requirements, restrictions, and limitations which EPA Region I seeks to impose relating to air emissions and training exceed the scope and authority of RCRA.

2. Respondent NGB contests EPA Region I's jurisdiction under Section 1431(a) of the Safe Drinking Water Act (SDWA), 42 USC § 300i(a). SDWA § 1431(a) provides EPA with emergency powers "upon receipt of information that a contaminant which is present in or is likely to enter . . . an underground source of drinking water may present an imminent and substantial endangerment to the health of persons." Technical studies do not indicate that site conditions present an imminent and substantial endangerment to the health of persons, as explained in this Response. The relief sought by EPA Region I is not rationally related to the alleged harm, in that there is no proof that training exercises have resulted in the contamination of the groundwater alleged in the Order. Additionally, portions of the relief sought by EPA Region I in the Scope of Work attached to the Order exceed the scope and authority of SDWA, in that SDWA is not a

remedial statute. Finally, the requirements, restrictions, and limitations which EPA Region I seeks to impose relating to air emissions and training exceed the scope and authority of SDWA.

3. Respondent NGB contests the authority of EPA Region I to order Respondent NGB to undertake the actions required by the Order, as more fully set forth in this Response.

II. STATE COORDINATION

4. - 5. No response required.

III. PARTIES BOUND

6. Respondent NGB contests the authority of EPA Region I to order Respondent NGB to undertake the actions required by the Order, as more fully set forth above in paragraph I, and below in this Response.

IV. PURPOSE

7. No response required. However, Respondent NGB previously agreed to take the steps to implement certain pollution prevention measures at MMR required by EPA Region I by agreeing to fully comply with the terms of the Order issued by EPA Region I on February 27, 1997 (the First Order). There is no evidence to support the contention that the use of propellants or pyrotechnics at MMR are contributing or will contribute to groundwater contamination. This Order does not require Respondent NGB to perform tasks not already enumerated in the First Order. Furthermore, the suspension of training without evidence of an environmental threat caused by training activity seriously threatens the readiness of the U.S. military.

V. DEFINITIONS

8. No response required.

VI. FINDINGS OF FACT

9. Concur.

10. Concur. Although one of their state missions is to aid in domestic emergencies, the Massachusetts Air and Army National Guards also must be ready to respond to augment the active force in case of war or national emergency. They answer to the Governor in peacetime but are available to the Federal Government in time of war or national emergency, when the President is their commander. As such, State National Guard units train to the same standards as active units, and the Federal Government furnishes the equipment and materiel used for that training.

11. Concur.

12. Concur, except that the burning of excess propellant took place only at artillery and mortar firing points and not on the firing ranges. Furthermore, since 1992, excess artillery propellant bags were not burned during training, but instead were returned to the manufacturer, pursuant to order of Major General Vezina, The Adjutant General of Massachusetts.

13. Concur, except that in 1994 1,777,358 small arms rounds were fired. Current usage has dropped to approximately 1,100,000 rounds (projected usage for 1997). These rounds include 5.56mm, 7.62mm, .50 caliber, 9mm and .45 caliber rounds.

14. No response required.

15. Concur, except that EPA Region I was advised that NGB's consultant, Mark Bricka, has stated that the 12,000 lbs per range estimate is a conservatively high number used in the modeling effort to predict lead migration. This number [12,000 lbs per year] was based on maximum use (based on 104 days, i.e., training on weekends) of the ranges. The actual amount of lead being placed into the berms annually is much lower. Based on 1996 usage, a more accurate estimate of the amount of lead that could accumulate on a single small-arms range in a year is 520 pounds.

Based on 1996 data:

- 536,874 5.56 mm rounds were primarily fired on 9 ranges. This equates to approximately 273 pounds of lead per M-16 range.

- 151,459 7.62 mm rounds were primarily fired on 4 ranges. This equates to approximately 611 pounds of lead per M-60 range.

- 24,294 .50 caliber rounds were primarily fired on 1 range. This equates to approximately 40 pounds of lead per 50 cal range.

- 552,115 other rounds, primarily 9mm and .45 cal, were primarily fired on 11 pistol ranges. This equates to approximately 73 pounds of lead per pistol range.

This totals an average load for 1996 of approximately 520 pounds of lead per range.

16. - 17. Concur.

18. - 20. Concur, except that the Order refers to propellants and high explosives used in firing exercises at MMR. The Order's discussion of these activities implies that present activities are similar to past activities and that contamination is still occurring. The U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM) studies indicate that contaminants detected in the soils at Chemical Spill (CS) -18 were

the result of on-the-ground propellant burning behind the gun positions at the close of the firing exercise. Burning of excess artillery propellant on the ground behind a firing position was standard practice by gun crews training at MMR, but the practice was discontinued in 1992 by order of Major General Vezina. The source of contamination at CS-19 was not conclusively determined, but CS-19 was a suspected ordnance disposal site, with burn pits. CS-19 was also the site of suspected fuels dumping. The present day activities, which include firing exercises, do not involve burning of propellants or explosives into or on the ground.

21. Concur as to the first two sentences, except that pyrotechnics are used in some, not all, training at MMR. Nonconcur as to the last sentence. The Order does not specifically list which pyrotechnic constituents have been detected, or in what quantity. Analysis of the available data does not indicate that any pyrotechnic-specific constituents have been detected in the groundwater or soil at MMR. Some of the contaminants found at the CS-18 and CS-19 Installation Restoration Program (IRP) sites as a result of the past practices that occurred there, may happen to also be chemicals common to pyrotechnics/delivery systems. The available data do not indicate that any of the contamination found at MMR is the result of pyrotechnics training activities.

22. Concur as to the first three sentences, but the next to last sentence is inaccurate in that when HCE burns, it is a relatively efficient process. Studies report that between 89% and 99% of the HCE is consumed when smoke devices are activated. The 104 smoke grenades used in 1996 amount to about 49 pounds of HCE (a grenade contains between 1 and 1.3 pounds of material depending on type, of which 47% is HCE). Each unit has approximately 1 to 1.3 lbs of fill material. Approximately 7.5 to 9 oz are HCE. For 104 grenades that equates to between 49 and 58 pounds. Between 1% and 11% of the HCE can be released to the environment as HCE (0.09 to 1 oz) (USACHPPM estimated an average of 0.33 oz based on 95% combustion). For 104 grenades, this equates to between 9.3 oz to 6.5 lbs. (USACHPPM estimates 2.5 lbs based on 95% combustion). Approximately 10% of the smoke composition may be chlorinated vapors including hydrogen chloride (HCl). Under normal conditions HCl is absorbed from the vapor phase into $ZnCl_2$ and water aerosol particles. The grenades were used over the course of the entire year and at many different locations around the training area. This means that the amount of HCE entering the environment at any particular time and place is very small.

23. Concur; however, this is irrelevant because this smoke grenade is only used in an open environment, whereas the discussion pertains to the hazard in a closed environment. Military operating procedures provide for the safety of both military and civilian personnel.

24. Pyrotechnics and smoke devices do not typically contain TNT. The smoke hand grenades referenced in paragraph 23 of the Order do not contain TNT. Acetone was

deleted in June 1995 by EPA from the list of toxic chemicals under § 313 of the Emergency Community Planning and Right to Know Act (EPCRA).

26. Concur.

28. Concur, noting that the munition casing which contains the solid high explosive generally remains intact after the item has been fired. If the fuze does not function. Artillery and mortar ammunition is designed to sustain the force generated by the firing process. If the firing system does not function as designed, the item becomes an unexploded ordnance (UXO). The incidence of intact UXO "deteriorating" or cracking open and "leaking" or leaching solid explosives is negligible.

27. - 28. No response required.

29. According to the current groundwater model, the impact area is not at the apex of the aquifer, and the flow is not 360 degrees but is approximately 120 degrees from west-southwest to north-northeast.

30. Concur, noting that the training ranges and the impact area lie directly above segments of several "zone II" wellhead protection areas. The "zone II" wellhead protection area is a legal definition describing a conceptual zone of contribution, without regard to time. Only zoning restrictions can be imposed on activities within a "zone II."

31. Concur.

32. As stated, this paragraph is not scientifically correct for several reasons. It is unclear how a quantity of contaminated ground water was derived from a flow rate. The EPA statement implies that the contaminated ground water is originating from the Range and Impact Area. Identified public health hazards at MMR relate to past industrial activities, such as vehicle and aircraft maintenance, storage, transfer and disposal of materials, and operation of various shops.

33. Concur, noting that in July of 1996, the Deputy Under Secretary of Defense for Environmental Security directed the Army National Guard (ARNG) to complete a comprehensive study of the potential effects of military operation on the groundwater beneath the impact area and training ranges. From August 1996 through December 1996, the ARNG worked with experts, both in the federal government and private industry, to draft an action plan for this study. A rough draft was released for comments to EPA Region I, the Massachusetts Department of Environmental Protection, and the Long Range Water Supply Action Team, which includes members from the surrounding water districts and the general public in December 1996. Their comments were addressed and incorporated into the action plan March 14, 1997. The ARNG restated its commitment to complete a thorough, scientifically sound study of the groundwater

beneath the impact area during the summer of 1997 in a variety of public forums, newsletters, and press releases.

34. In 1994, RDX at concentrations of 8 and 22 parts per billion (ppb) was detected at Monitoring Wells (MW) 1 and 2 of CS-19, respectively, and in 1995, RDX at concentrations of 5.4 and 19 ppb was detected at the same wells. These hits of RDX contamination in the groundwater are at very low concentrations and are expected to be attributable to the CS-19 IRP site (rocket motor disposal site) and not to training range activities. These results are from groundwater sampling that was accomplished by USACHPPM. The Order fails to mention that the study found the estimated risk to public health from RDX at this site to be within ranges considered acceptable by the EPA.

35. In March 1997, RDX was detected at a concentration of 0.86 ppb at MW # 6 of CS-19. The detection limit for RDX in water is 0.84 ppb. The 0.86 ppb is well below EPA's health advisory level of 10 ppb. The discussion regarding whether well #6 is upgradient of the CS-19 site is speculative because IRP site investigation activities are still ongoing. Given the lack of data regarding the groundwater and the scope and location of the activities at the CS-19 site, the presence of RDX in Monitor Well #6 may very well be attributable to CS-19 activities.

36. In March 1997, RDX was detected at a concentration of 16 ppb in MW # 9 at CS-19. This report of RDX contamination is only based on a DTECH amino-assay field screening result. This has not been confirmed in a laboratory analysis. The DTECH field screening test is subject to cross-reactivity with HMX and false positives are possible. Additionally, MW#9 is downgradient from CS-19, and it appears that this contamination is attributable to previous activities at this IRP site and not to training range activities.

37. A detection of acetone at 17 ppb in groundwater was identified during the CS-19 IRP site investigation and is consistent with previous ordnance disposal activities that occurred at that site. The Order refers to the results from groundwater sampling that was accomplished by USACHPPM but fails to mention that the study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

38. In 1995, 2,4 DNT was detected at an estimated concentration of 0.26 ppb at CS-19. This detection of 2,4-DNT is below the reported detection limits for the analytical method (one ppb) and is only an estimate. Additionally, if 2,4-DNT exists at that CS-19 IRP site location, it would likely be directly attributable to CS-19 activities and not to training range activities. The Order fails to mention that the study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

39. In July 1996, TNT was detected at a concentration of 0.27 ppb (Site #2, Long Range Water Supply Investigation.) This "detection" of TNT was a one time hit and has not been able to be duplicated even qualitatively. The amount of TNT reported (0.27

ppb) is only 0.01 ppb above the detection limit for this material and should be considered reporting of non-conclusive laboratory data. Surrogate recovery for this sample in the laboratory was less than 1 percent. The lab reported that *"Since the matrix of client sample 9806151-OIL apparently prevents acceptable 4-nitroaniline surrogate recoveries by conventional Method 8330 extraction and analysis, the results obtained should be used with appropriate caution."* Subsequent sampling at that location has failed to identify even the slightest presence of explosives. It should also be noted that the EPA Health Advisory for TNT is 2 ppb, which is ten times greater than the detection limit.

40. This paragraph refers to a one-time detection of lead in a monitoring well. Lead was detected at a concentration of 17 ppb at site number 8 of the Long Range Water Supply Investigation. The contractor responsible for identifying this hit reported "detection of lead was in all likelihood due to silts, clays, and colloids at the base of the aquifer and not from transport from the impact/range area." This suggests that the initial lead detection resulted from a failure to adequately clear the well of bore material prior to taking the sample, and therefore is not a true detection of lead in ground water. Subsequent resampling of this well has failed to detect even the slightest presence of lead.

41. In 1992, lead was detected at a concentration of 1,830 ppm in soil at CS-19. The 1992 IRP study was for the assessment of the CS-19 site, not the Impact area. The contaminants found there, and alluded to by the Order (including lead in soil at 1,830 ppm), were the result of the past activities at CS-19 and not the result of training range activities. The CS-19 site happens to be located within the impact area, but the implication that conditions there are indicative of the rest of the impact area is unsubstantiated. Additionally, the 1,830 ppm of lead was the maximum concentration found at CS-19 in the top 3 feet of soil. The maximum concentration of lead found at depths of 3 to 6 feet was only 18 ppm, indicating an exceptionally low rate of vertical migration and a negligible threat to groundwater.

42. The Order misrepresents the results of the CS-18 study, otherwise known as Gun Position 9 (GP9). GP9 was chosen for study because it represented a worst case scenario and not a typical firing point; it was one of the most used sites at MMR due to its close proximity to the cantonment area, and it was the most used site during the fifteen months before the study. The 2,4-DNT levels in soil there were the result of propellant bag burning procedures which ceased in 1992. Explosives were detected in the shallow soils, but there were no human health risks associated with the detected levels. The highest levels of explosives contamination were detected in the most shallow soil samples, the 0 - 1 foot depth. Generally, detected levels of explosives were less in the deeper soil samples. Additionally, the Order refers to the results of USACHPPM soils sampling but does not mention that groundwater sampling performed at CS-18 as part of that study did not detect any explosives (including 2,4-DNT) or any other contaminants. The Order's assertion that the 2,4-DNT levels in soil present a risk of leaching to groundwater is in contradiction to what the data indicate. The data

indicate that negligible transport has occurred, and the report concludes that there is no risk of groundwater contamination at this site. EPA Region I did not contest this conclusion in its most recent response to comments dated 13 January 1997.

43. This paragraph refers to an Aberdeen Proving Ground (APG) study. Groundwater and soil conditions at APG are not similar to those at MMR. Groundwater at APG is much closer to the surface and the soils at APG have higher silt and clay content. Most of the firing at APG has been for munitions and artillery testing as compared to training exercises at MMR. Testing ranges have a much higher volume and wider range of munitions fired than training ranges. These are very different operations and can be expected to have different effects on the environment.

44. - 45. Concur.

46. Concur with the first sentence, noting that the Pollution Prevention Plan listed proposed items to be considered for implementation at MMR. The final provisions of the plan were to be determined after scientific information was available to adequately determine which items represented the best available technology to obtain the goal of preventing migration of lead from the small arms ranges. As to the remainder of the paragraph, the additional pollution prevention measures proposed were not required by the First Order, but were good faith efforts of Respondent NGB and the Massachusetts National Guard (MA NG) to alleviate public concern until the groundwater study determines the effects of such training. For example, because the primary concerns from military activity involve lead and explosives, training activities associated with lead and explosives were voluntarily suspended.

47. Concur, noting that the activities listed in this paragraph do not use lead or explosives. Because the primary concerns from military activity involve lead and explosives, training activities associated with lead and explosives were voluntarily suspended.

48. Concur. Furthermore, during the public meeting on March 20, 1997, the EPA Region I Administrator publicly stated that the NGB and the MA NG had presented a good plan and that they were working with EPA to provide all information required.

VII. ENDANGERMENT AND RESPONSE

49. Nonconcur. The data do not indicate that training range activities caused the release of contaminants to the groundwater. The contaminants that have been detected in the groundwater are for the most part directly attributable to industrial operations and IRP sites. Additionally, as previously discussed in this response, NGB questions whether TNT and DNT have been quantifiably detected in the groundwater at MMR.

50. Concur, noting further that USACHPPM investigations at the various sites where

contamination was discovered concluded that the contaminants in question usually were within the health advisory set by EPA and that estimated risk to public health was within ranges considered acceptable by the EPA.

51. Concur, noting further that Health Advisories for both RDX and TNT are 2 ppb in drinking water.

52. Concur, noting further that these effects have been seen primarily in workers manufacturing RDX, and all workers exhibited complete recovery. It is unrealistic to expect these kinds of reactions with the levels of RDX that are detected at MMR. Furthermore, concerning the 1984 study which reported liver tumors in female mice: this single study was used by EPA to develop a cancer slope factor for RDX. The particular hepatocellular adenomas and carcinomas these mice produced are known to be poor predictors for malignancy in other species. No other type of tumor achieved statistical significance in that study. There are also two studies conducted with rats which found no carcinogenic effect from chronic exposure to RDX.

53. Concur.

54. Concur.

55. - 57. Concur, noting further that the chronic exposure to TNT referred to in these paragraphs is to occupational concentrations, not environmental concentrations. Furthermore, most of the studies of occupational effects caused by TNT relate to working conditions that existed in World War I (WWI) (when very few precautions were taken to prevent worker exposure) and in World War II (WWII). Using occupational health effects to imply health effects from environmental exposure is very difficult with the best of data and near pointless with the sorts of occupational exposures common in wartime.

58. - 61. As noted previously in this Response, the analysis of the data does not indicate that training range activities caused the release of DNT to the groundwater. Additionally, as previously discussed in this Response, Respondent NGB questions whether DNT has been quantifiably detected in the groundwater at MMR. The chronic exposure to 2,4 DNT referred to in paragraph 58 is to occupational concentrations, not environmental concentrations. The referenced studies relate to working conditions that occurred during WWI and WWII at munitions factories, not training ranges. Furthermore, the ATSDR Toxicological Profile for 2,4 DNT and 2,6 DNT states: "the manufacturing conditions studied by McGee et. al (1942), Perkins (1919) and Floret (1929) probably contributed to higher exposures to DNT than would be likely in modern facilities. As a result, toxicity would be more likely to occur in pre-1950 workers." It is important to note that no health effects have been observed in the studies conducted at or below the current Time Weighted Average (TWA) for DNT. In addition, the TWA is significantly higher than any potential environmental exposure. ATSDR has established

a Minimal Risk Level (MRL) for oral exposure to 2, 4 DNT. The MRL for 2,4 DNT is 0.1 ppm, roughly three orders of magnitude higher than the amount reported at MMR. If a person is exposed to concentrations below the MRL, the ATSDR study concluded that it is not expected that harmful health effects will occur.

62. - 64. Concur.

65. - 68. Concur, noting, however, that dibutylphthalate, hexachloroethane, thiocyanate, nitroglycerine and diphenylamine have not been detected in any groundwater samples at MMR.

69. Nonconcur. As explained in this Response, the data do not indicate that training range activities have caused the release of contaminants to the groundwater. The contaminants that have been detected in the groundwater are for the most part directly attributable to industrial operations and IRP sites. Specifically:

a. The 1994 and 1995 RDX detections in MWs 1 and 2 at CS-19 at very low concentrations (paragraph 34 of the Order) are from groundwater sampling that was accomplished by USACHPPM. They are due to past disposal activities conducted at CS-19 and not training range activities. Furthermore, the CS-19 site is being addressed under the Installation Restoration Program (IRP) as a CERCLA site; it is not related to training range activities. The USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

b. The 0.86 ppb detection of RDX at MW 6 at CS-19 (paragraph 35 of the Order) was at an extremely low concentration nearing the analytical detection limit. The detection limit for RDX in water is 0.84 ppb. The 0.86 ppb is well below the health advisory level of 10 ppb. The discussion regarding whether well #6 is upgradient is speculative because IRP site investigation activities are still ongoing. Given the lack of data regarding the groundwater and the scope and location of the activities at the CS-19 site, the presence of RDX in Monitor Well #6 may very well be attributable to CS-19 activities.

c. The detection of RDX at MW 9 (paragraph 36 of the Order) is only based on a DTECH amino-assay field screening result. This has not been confirmed in laboratory analysis. The DTECH field screening test is subject to cross-reactivity with HMX and false positives are possible. Even if this concentration of RDX is confirmed, it is at an extremely low level. Most importantly, this contamination is attributable to previous activities at the CS-19 IRP site and not to training range activities.

d. The detection of acetone at CS-19 (paragraph 37 of the Order) was identified during the CS-19 IRP site investigation and is consistent with previous ordnance disposal activities that occurred at that site. This contaminant cannot in any way be attributed to training range activities. The Order refers to the results from ground water sampling that was accomplished by USACHPPM. The Order fails to mention that the

study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

e. The detection of 2,4-DNT at CS-19 (paragraph 38 of the Order) is below the reported detection limits for the analytical method. This concentration of 2,4-DNT is an estimate. Additionally, if 2,4-DNT did exist at that CS-19 IRP site location, it would likely be directly attributable to CS-19 activities and not to training range activities. Finally, the Order fails to mention that the study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

f. The one-time "detection" of TNT at Site 2 of the Long Range Water Supply (paragraph 39 of the Order) has not been able to be duplicated even qualitatively.* The amount of TNT reported (0.27 ppb) is only 0.01 ppb above the detection limit for this material and should be considered unreliable reporting of non-conclusive laboratory data. Subsequent sampling at that location has failed to identify even the slightest presence of explosives. Finally, the EPA Health Advisory for TNT is 2 ppb, which is seven times greater than the detection limit.

g. The one-time detection of lead at a concentration of 17 ppb at site number 8 of the Long Range Water Supply Investigation (paragraph 40 of the Order): the contractor responsible for identifying this hit reported "detection of lead was in all likelihood due to silts, clays, and colloids at the base of the aquifer and not from transport from the impact/range area." This indicates that the initial lead detection resulted from a failure to adequately clear the well of bore material prior to taking the sample, and therefore is not a true detection of lead in ground water. Subsequent resampling of this well has failed to detect even the slightest presence of lead.

h. The 1992 report of lead at a concentration of 1,830 ppm in soil (CS-19) (paragraph 41 of the Order): because this contamination is incident to training at an active range and is on-site and has not migrated to groundwater, it does not fall within the purview of RCRA or SDWA. The 1992 IRP study was for the assessment of the CS-19 site, not the impact area. The contaminants found there were the result of the past activities at CS-19 and not the result of training range activities. The CS-19 site happens to be located within the impact area, but the implication that conditions there are indicative of the rest of the impact area is unsubstantiated. Additionally, the 1,830 ppm of lead was the maximum concentration found at CS-19 in the top 3 feet of soil. The maximum concentration of lead found at depths of 3 to 6 feet was only 18 ppm, indicating an exceptionally low rate of vertical migration and a negligible threat to groundwater.

* "Quantitative" sample means that the contaminant in question has been detected at some verifiable amount, i.e., resampling verifies the existence of the contaminant in question in the amount in question. "Qualitative" means that the contaminant in question has been detected but the amount is not verifiable, i.e., the test indicates that the contaminant is present but the amount of the contaminant cannot be determined.

i. In addition, the Order misrepresented the results of the CS-18 study, otherwise known as Gun Position 9 (GP9) (paragraph 42 of the Order). GP9 was chosen for study because it represented one of the most heavily used firing points at MMR due to its proximity to the cantonment area and therefore is not a typical firing point. The DNT levels in soil there were the result of propellant bag burning procedures that ceased in 1992. Explosives were detected in the shallow soils, but there were no human health risks associated with the detected levels. The highest levels of explosives contamination were detected in the most shallow soil samples, and the depth, with detected levels of explosives generally less in the deeper samples. Additionally, the Order refers to the results of USACHPPM soil sampling and mentions that groundwater sampling performed at CS-18 as part of that study failed to detect any explosives (including 2,4-DNT) or any other contaminants. This is an assertion that the 2,4-DNT levels in soil present a risk of leaching to groundwater is in contradiction to what the data indicate. The data indicate that negligible transport has occurred, and the report concludes that there is no risk of groundwater contamination at this site. EPA Region I did not contest this conclusion in its most recent response to comments dated January 13, 1997.

70. Nonconcur. The work specified in the Statement of Work (SOW) appended to the Order is not necessary to prevent, minimize, and/or mitigate the threat of an imminent and substantial endangerment to health and or the environment posed by the actual or potential releases of lead, RDX, TNT, DNT and other unspecified contaminants into the soils and groundwater at and emanating from the Training Range and Impact Area, for the reasons set forth previously in this Response.

VIII. CONCLUSIONS OF LAW

71. - 72. Concur.

73. - 76. Nonconcur. Respondent NGB disputes EPA Region I's authority under § 7003 of RCRA, 42 U.S.C. § 300f (12) and §1431(a) of SDWA, 42 U.S.C. § 300 l(a). See paragraphs 1 and 2 of this Response. There is no evidence to support the allegations that training activities at MMR caused contamination of groundwater.

77. - 78. Nonconcur. As stated previously, Respondent NGB disputes the allegations that TNT and DNT have been quantifiably detected in the groundwater at MMR. Contaminants that were detected in groundwater appear attributable to industrial operations, IRP sites, and naturally occurring background contaminants.

79. Concur.

80. - 81. Nonconcur. See paragraphs 1 and 2 of this Response.

82. - 83. The Order fails to support the finding of "imminent and substantial endangerment" as summarized below.

a. In 1994 - RDX at concentrations of 6 and 22 ppb at MW 1 and 2, (CS-19) respectively: The Orders fail to mention that the USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

b. In 1995 - RDX at concentrations of 5.4 and 19 ppb at MW 1 and 2, (CS-19) respectively: The Order fails to mention that the USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

c. In March 1997, RDX at a concentration of 0.86 ppb (MW #6): This appears to be a confirmed hit for RDX; however, at an extremely low concentration nearing the analytical detection limit at a site where IRP site investigations are still ongoing. The detection limit for RDX in water is 0.84 ppb. The 0.86 ppb is well below the health advisory level of 10 ppb.

d. In March 1997, RDX at a concentration of 16 ppb (Well #9 at CS-19): This report of RDX contamination is only based on a DTECH amino-assay field screening result. This has not been confirmed in a laboratory analysis. In addition, the USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

e. During the IRP investigation of CS-19, 17 ppb of acetone in groundwater at CS-19: The Order fails to mention that the USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

f. In 1995, 2,4-DNT at a concentration of 0.26 ppb (CS-19): This detection of 2,4-DNT is below the reported detection limits for the analytical method. In addition, the USACHPPM study found the estimated risk to public health to be within ranges considered acceptable by the EPA.

g. July 1996, TNT at a concentration of 0.27 ppb (Site #2, Long Range Water Supply Investigation). This "detection" of TNT was a one time hit and has not been able to be duplicated even qualitatively. The amount of TNT reported (0.27 ppb) is only 0.01 ppb above the detection limit for this material. The EPA Health Advisory for TNT is 2 ppb.

h. Lead was detected at a concentration of 17 ppb at site number 8 of the Long Range Water Supply Investigation. The contractor responsible for identifying this hit reported "detection of lead was in all likelihood due to silts, clays, and colloids at the base of the aquifer and not from transport from the impact/range area." This indicates that the initial lead detection resulted from a failure to adequately clear the well of bore material prior to taking the sample, and therefore is not a true detection of lead in ground water. Subsequent resampling of this well has failed to detect even the slightest

presence of lead.

84. No response required.

85. Nonconcur. The Order does not establish the existence or threat of imminent and substantial endangerment. In addition, Respondents NGB and MA ARNG previously agreed to suspend activities which may contribute to public concern regarding the use of lead and explosives, and also agreed to fully comply with the First Order with regard to certain pollution prevention measures and conducting a thorough, scientific study of the groundwater beneath the training ranges and impact area. This Order does not accomplish the goals set forth by this paragraph.

X. ORDER

86. Respondent NGB disputes EPA Region I's authority to undertake the actions required by the Order, as more fully set forth below in this Response.

87. - 91. Respondent NGB has complied with the requirements of these paragraphs, which were requirements of the First Order. However, EPA Region I delayed Respondent NGB's work under the First Order by failing to promptly approve Respondent NGB's proposed Supervising Contractor in writing until April 25, 1997.

92. - 93. No response required.

94. - 95. Respondent NGB has agreed to comply with the requirements of these paragraphs, which were requirements of the First Order.

96. - 98. No response required.

99. - 123. Respondent NGB has agreed to comply with the requirements of these paragraphs, which were requirements of the First Order, except as to references to RCRA. However, EPA Region I delayed Respondent NGB's work under the First Order by failing to promptly review and comment on Respondent NGB's groundwater study plan. EPA Region I's comments were not delivered to Respondent NGB until April 22, 1997, five weeks after Respondent NGB submitted its plan.

124. - 125. No response required; the conference referred to was held on April 14, 1997.

126. Respondent NGB has requested a conference with the EPA Administrator to discuss the Order.

127. - 128. Respondent NGB has agreed to comply with the requirements of these paragraphs, which were requirements of the First Order.

129. By requesting the conference with the EPA Administrator, the effective date of this Order has been tolled, in accordance with paragraph 126 of the Order, until such time as the EPA Administrator issues her written decision.

130. - 132. Respondent NGB has agreed to comply with the requirements of these paragraphs, which were requirements of the First Order.

133. - 134. No response required.