

**WEEKLY PROGRESS UPDATE
FOR DECEMBER 19 - DECEMBER 30, 1997**

**EPA REGION I ADMINISTRATIVE ORDER SDWA I-97-1019
MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from December 19 to December 30, 1997.

1. SUMMARY OF ACTIONS TAKEN

UXO Surveys

No UXO surveys were performed during this period.

Drilling

An intermediate depth well was installed at MW-1 on December 19. The well is screened at 220-225 feet bgs based on groundwater profiling data for the deep boring at MW-1.

Samples

No samples were collected during this period.

Water Level Measurements

A third round of water level measurements was collected on December 30. A water level contour map will be prepared based on these measurements and presented in a future Weekly Progress Report.

Plans and Reports

NGB is preparing letters resolving EPA and MADEP comments on the Draft Gun/Mortar Position FSP and the Draft Surface Water/Sediment FSP. NGB received letters from EPA approving the resolution of comments letters for the Final Background FSP and the Draft Area 5 FSP, and final versions of these documents are being prepared. NGB awaits EPA comments on the Draft Storm Water FSP.

Meetings

No technical meetings with EPA and MADEP were convened during the reporting period. The next IAGS Review Team meeting is scheduled for January 28 at 6:00 pm (location to be confirmed), with a pre-meeting for citizen members of the Review Team at 5:30 pm to discuss risk assessment consulting.

2. SUMMARY OF DATA RECEIVED

Preliminary non-validated (except as indicated below) *data* that were received during the reporting period for explosives analyses are summarized in Table 1 for water samples, and in Table 2 for soil samples.

Table 1 indicates several detections of explosives in water samples, as follows:

RDX and picric acid were detected in MW-16S. These sample results have been validated. RDX was detected at levels below the EPA Health Advisory for drinking water. There are no drinking water standards available for picric acid.

HMX and 4-amino-2,6-dinitrotoluene (DNT) were detected in MW-30S. These sample results have been validated. HMX was detected at a level below the EPA Health Advisory for drinking water. There are no drinking water standards available for DNT.

Table 2 indicates several detections of explosives in soil samples, as follows:

The CRREL screening method for trinitrotoluene or dinitrotoluene (TNT/DNT) detected explosives in a soil sample collected from Area 4.

The CRREL screen for TNT/DNT also detected explosives in a soil sample collected from 1.5-2.0 feet below ground surface at MW-8 and 0-0.5 feet below ground surface at MW-13. A duplicate sample collected from 0-0.5 feet bgs at MW-13 did not detect any explosive compounds by the CRREL method.

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period included the following:

Weekly Progress Update (November 21 - December 18)

December 19, 1997

4. SCHEDULED ACTIONS

During the next week, well drilling and installation will continue at monitoring wells MW-2M1, and MW-2M2. Monitoring well development will continue at MW-1M2, MW-2S, MW-5S and MW-5D. Groundwater sampling will continue at background monitoring well locations. Soil sampling will continue at grid locations in Area 1, 3, 4, and 5.

Table 1. Preliminary (non-validated) Results for Explosives in Water Samples				
Sample ID	Location	Screen Depth (feet bgs)	Method	Compound
W02DDA	Well MW-2D groundwater	355-360	8330	none detected
W06SSA	Well MW-6S groundwater	106-116	8330	none detected
W06SSD	Well MW-6S groundwater Dup	106-116	8330	none detected
W07SSA	Well MW-7S groundwater	103-113	8330	none detected
W07DDA	Well MW-7D groundwater	332-342	8330	none detected
W10DDA	Well MW-10D groundwater	351-361	8330	none detected
W14SSA	Well MW-14S groundwater	96-106	8330	none detected
W16SSA*	Well MW-16S groundwater	125-135	8330	RDX (<HA), Picric Acid (NS)
W16DDA	Well MW-16D groundwater	355-360	8330	none detected
W21SSA	Well MW-21S groundwater	164-174	8330	none detected
W24SSA	Well MW-24S groundwater	6-16	8330	none detected
W27SSA	Well MW-27S groundwater	117-127	8330	none detected
W28SSA	Well MW-28S groundwater	95-105	8330	none detected
W29SSA	Well MW-29S groundwater	99-109	8330	none detected
W30SSA*	Well MW-30S groundwater	26-36	8330	HMX (<HA), DNT (NS)
WL23XA	Well LRWS 2-3 groundwater	147-157	8330	none detected
WL61XA	Well LRWS 6-1 groundwater	111-126	8330	none detected
WL71XA	Well LRWS 7-1 groundwater	112-127	8330	none detected
WL101A	Well LRWS 10-1 groundwater	113-128	8330	none detected
W9701A	Well Bourne 97-1 groundwater	83-93	8330	none detected
W9701D	Well Bourne 97-1 groundwater Duplicate	83-93	8330	none detected
W9702A	Well Bourne 97-2 groundwater	75-85	8330	none detected
W9703A	Well Bourne 97-3 groundwater	75-85	8330	none detected
W9705A	Well Bourne 97-5 groundwater	84-94	8330	none detected

Table 1 Acronyms & Abbreviations:

HMX = Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

RDX = Hexahydro-1,3,5-trinitro-1,3,5-triazine

DNT = 4-Amino-2,6-dinitrotoluene
 NS = No Standard
 HA = EPA Health Advisory for Drinking Water
 * = Test Results have been validated

Table 2. Preliminary (non-validated) Results for Explosives in Soil Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
B01EBA	Area 1 grid E	1.5-2.0	8330	none detected
B01FBA	Area 1 grid F	1.5-2.0	8330	none detected
B01GBA	Area 1 grid G	1.5-2.0	8330	none detected
BO4GAA	Area 4 grid G	0.0-0.5	CRREL	TNT/DNT
B09CBA	Area 9 grid C	1.5-2.0	8330	none detected
S08DBA	Boring MW-8	1.5-2.0	8330	none detected
S13DAA	Boring MW-13	0.0-0.5	8330	none detected
S01DBA	Boring MW-1	1.5-2.0	CRREL	none detected
S05DBA	Boring MW-5	1.5-2.0	CRREL	none detected
S06DBA	Boring MW-6	1.5-2.0	CRREL	none detected
S07DBA	Boring MW-7	1.5-2.0	CRREL	none detected
S08DBA	Boring MW-8	1.5-2.0	CRREL	TNT/DNT
S09DBA	Boring MW-9	1.5-2.0	CRREL	none detected
S12DBA	Boring MW-12	1.5-2.0	CRREL	none detected
S13DAA	Boring MW-13	0.0-0.5	CRREL	TNT/DNT
S13DAD	Boring MW-13 Dup	0.0-0.5	CRREL	none detected
S13DBA	Boring MW-13	1.5-2.0	CRREL	none detected
S14DBA	Boring MW-14	1.5-2.0	CRREL	none detected
S15DBA	Boring MW-15	1.5-2.0	CRREL	none detected
S25DBA	Boring MW-25	1.5-2.0	CRREL	none detected
S27DBA	Boring MW-27	1.5-2.0	CRREL	none detected
S29DBA	Boring MW-29	1.5-2.0	CRREL	none detected

Table 2 Acronyms & Abbreviations:

CRREL = Cold Regions Research Engineering Laboratory colorimetric method