

**WEEKLY PROGRESS UPDATE  
FOR MAY 17-MAY 21, 1999**

**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 for May 17 – May 21, 1999.

**1. SUMMARY OF ACTIONS TAKEN**

Development and sampling of new wells continued during the week. Surface soil sampling was completed at the KD (Area 44) and U (Area 45) Ranges. Samples collected during the week are summarized in Table 1.

The Guard, EPA, and MADEP met on May 20 to discuss technical issues, including the following:

- ◆ A letter from Ogden to the EPA was distributed with Ogden's draft response to EPA comments on the QA/QC Plan. Ogden expects to complete a change document for EPA approval and a revised plan when the changes have been approved.
- ◆ Ogden noted that no results were available yet for the repeat analysis of the MW-59 profile samples, nor on the repeat sampling of MW-59. The slight delay on the groundwater analysis is due to the priority rush placed on the Demo 1 shallow soil samples.
- ◆ A handout was distributed containing results for the 1999 UXO survey of the MW-59 drill pad and the 1997 UXO survey of MW-26 drill pad. It was noted that the 1997 UXO survey found a 155mm low-order detonation round that had HE visible inside the shell.
- ◆ Ogden reported that they had not found any details concerning the extent of groundwater contamination at OB/OD sites, in the review of the fate and transport information. Mr. Gonsler will obtain a list of OB/OD sites for which such information might be obtained.
- ◆ Recent arrangements to discuss locations of far field monitoring wells with the towns were discussed. EPA will contact Sandwich Water District to determine their availability to discuss these wells. A meeting with Bourne is scheduled for 5/20. Information on the monitoring wells around the J Well has been obtained from 102<sup>nd</sup> FW and will be reviewed.
- ◆ Ogden summarized the results of its review of EPA Method 5035 for preservation of VOCs in soil samples. AFCEE appears to be complying with MADEP Policy #WSC99-415 through the use of EnCore™ samplers with lab preservation within 48 hours. Ogden would recommend a similar method be used for the IAGS if one is adopted. The regulatory agencies will review whether this change is appropriate.
- ◆ A handout was provided containing the cumulative IAGS explosive results for groundwater. The recent detections at MW-50M1 were discussed.
- ◆ Ogden discussed progress in arranging a demonstration of direct push technologies. Several companies have expressed interest. Ogden will try to schedule this for the week of June 14.

- ◆ A handout of detection maps and tables was provided that will be given out at the IART meeting (5/20). These maps and tables contain the latest available groundwater data, organized by analyte group.
- ◆ Ogden will check on the changes made to validation procedures based on the comments on the draft CWT and subsequent responses. Ogden will also check on the Bourne wells that are being sampled for explosives under the Phase I Workplan.
- ◆ The Guard indicated that due to funding for berm maintenance and other projects, the IAGS funding expected to be available within the next week was \$1.6M. The Guard was still pursuing additional funding of \$3M from the Army.

## 2. SUMMARY OF DATA RECEIVED

Preliminary non-validated detections of explosive are summarized in Table 2 for samples collected during the preceding three-week period. The status of the detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 2. Where the PDA status is "YES" in Table 2, the detected compound has been confirmed to be present in the sample. Where the status is "NO", the identification of an explosive has been confirmed to be a false positive. Where the status is blank, PDA has not yet been used to evaluate the detection.

RDX was detected in a groundwater sample at MW-38M3. This Phase II (a) well was installed downgradient from MW-1, which had detections of RDX at several depths in Phase I of the IAGS. The detection of RDX at the water table at MW-1S was projected to move downward in the aquifer as it migrated to the west. The detection of RDX at 53-63 feet below the water table at MW-38 appears likely to be related to the detection at MW-1S, based on the USGS groundwater model.

RDX, HMX, and several TNT breakdown products were detected in soil samples from Demo Area 1. Samples were collected from 3-16 feet below ground surface in accordance with the Workplan for Completion of Phase I Activities. Results will be discussed with the regulatory agencies to determine locations for deeper soil sampling.

## 3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

Draft Response Plan for Demo Area 1	May 17, 1999
Weekly Progress Report (May 10 – May 14)	May 18, 1999
Draft Phase II(b) Workplan	May 18, 1999
Draft Evaluation of Remedial Technologies for Demo Area 1	May 18, 1999

## 4. SCHEDULED ACTIONS

Scheduled actions for the week of May 24 are completion of groundwater sampling for Phase IIa and far field monitoring wells, preparation of workplans and progress reports, discussion of interim results with the regulatory agencies, and continuation of data validation.

TABLE 1  
SAMPLING PROGRESS  
5/17-5/21

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
HC45D1CAE	FIELDQC	5/17/1999	FIELDQC	0	0
HC45D1CAT	FIELDQC	5/17/1999	FIELDQC	0	0
W17M1T	FIELDQC	5/18/1999	FIELDQC	0	0
W17M2T	FIELDQC	5/19/1999	FIELDQC	0	0
W39SST	FIELDQC	5/20/1999	FIELDQC	0	0
W39SST	FIELDQC	5/21/1999	FIELDQC	0	0
W55SST	FIELDQC	5/17/1999	FIELDQC	0	0
W17M1A	MW-17	5/18/1999	GROUNDWATER	97	107
W17M2A	MW-17	5/19/1999	GROUNDWATER	67	77
W17M3A	MW-17	5/19/1999	GROUNDWATER	37	47
W39M1A	MW-39	5/20/1999	GROUNDWATER	87	97
W39M2A	MW-39	5/20/1999	GROUNDWATER	42	52
W39SSA	MW-39	5/21/1999	GROUNDWATER	0	10
W39SSD	MW-39	5/21/1999	GROUNDWATER	0	10
W55SSA	MW-55	5/17/1999	GROUNDWATER	0	10
DW4017	GAC WATER	5/17/1999	IDW	0	0
DW4617	GAC WATER	5/17/1999	IDW	0	0
GAC008	GAC WATER	5/20/1999	IDW	0	0
GAC009	GAC WATER	5/20/1999	IDW	0	0
GAC010	GAC WATER	5/20/1999	IDW	0	0
SC7201	SOIL CUTTINGS	5/17/1999	IDW	0	0
SC7202	SOIL CUTTINGS	5/17/1999	IDW	0	0
HC45D1AAA	45D	5/17/1999	SOIL GRID	0	.25
HC45D1BAA	45D	5/17/1999	SOIL GRID	.25	.5
HC45D1CAA	45D	5/17/1999	SOIL GRID	.5	1
HC45E1AAA	45E	5/17/1999	SOIL GRID	0	.25
HC45E1AAD	45E	5/17/1999	SOIL GRID	0	.25
HC45E1BAA	45E	5/17/1999	SOIL GRID	.25	.5
HC45E1CAA	45E	5/17/1999	SOIL GRID	.5	1
HD45D1AAA	45D	5/17/1999	SOIL GRID	0	.25
HD45D1AAD	45D	5/17/1999	SOIL GRID	0	.25
HD45D1BAA	45D	5/17/1999	SOIL GRID	.25	.5
HD45D1CAA	45D	5/17/1999	SOIL GRID	.5	1
HD45D2AAA	45D	5/17/1999	SOIL GRID	0	.25
HD45D2AAD	45D	5/17/1999	SOIL GRID	0	.25
HD45D2BAA	45D	5/17/1999	SOIL GRID	.25	.5
HD45D2CAA	45D	5/17/1999	SOIL GRID	.5	1
HD45D3AAA	45D	5/17/1999	SOIL GRID	0	.25
HD45D3AAD	45D	5/17/1999	SOIL GRID	0	.25
HD45D3BAA	45D	5/17/1999	SOIL GRID	.25	.5
HD45D3CAA	45D	5/17/1999	SOIL GRID	.5	1
HD45D4AAA	45D	5/17/1999	SOIL GRID	0	.25

Profiling methods include: Volatiles and Explosives

Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs for profile and soil boring, and feet below water table for groundwater

SED = Sample End Depth, measured in feet bgs for profile and soil boring, and feet below water table for groundwater

TABLE 1  
SAMPLING PROGRESS  
5/17-5/21

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
HD45D4BAA	45D	5/17/1999	SOIL GRID	.25	.5
HD45D4CAA	45D	5/17/1999	SOIL GRID	.5	1
HD45D5AAA	45D	5/17/1999	SOIL GRID	0	.25
HD45D5BAA	45D	5/17/1999	SOIL GRID	.25	.5
HD45D5CAA	45D	5/17/1999	SOIL GRID	.5	1

Profiling methods include: Volatiles and Explosives

Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs for profile and soil boring, and feet below water table for groundwater

SED = Sample End Depth, measured in feet bgs for profile and soil boring, and feet below water table for groundwater

TABLE 2  
DETECTED COMPOUNDS-UNVALIDATED  
SAMPLES COLLECTED 5/2/99-5/21/99

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
W38M3A	MW-38	5/6/1999	GROUNDWATER	53	63	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	
ABB001AAA	B-1	5/5/1999	SOIL BORING	3	4	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB001AAA	B-1	5/5/1999	SOIL BORING	3	4	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB001EAA	B-1	5/5/1999	SOIL BORING	7	8	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB001EAA	B-1	5/5/1999	SOIL BORING	7	8	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB001EAA	B-1	5/5/1999	SOIL BORING	7	8	8330N	PICRIC ACID	NO
ABB002CAA	B-2	5/5/1999	SOIL BORING	5	6	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
ABB003AAA	B-3	5/6/1999	SOIL BORING	3	4	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB003IAA	B-3	5/6/1999	SOIL BORING	11	12	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB003IAA	B-3	5/6/1999	SOIL BORING	11	12	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB004MAA	B-4	5/6/1999	SOIL BORING	15	16	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
ABB006AAA	B-6	5/6/1999	SOIL BORING	3	4	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB006AAA	B-6	5/6/1999	SOIL BORING	3	4	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB006BAA	B-6	5/5/1999	SOIL BORING	4	5	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB006BAD	B-6	5/5/1999	SOIL BORING	4	5	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
ABB006BAD	B-6	5/5/1999	SOIL BORING	4	5	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
ABB006BAD	B-6	5/5/1999	SOIL BORING	4	5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB006BAD	B-6	5/5/1999	SOIL BORING	4	5	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
ABB006CAA	B-6	5/5/1999	SOIL BORING	5	6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB006EAA	B-6	5/5/1999	SOIL BORING	7	8	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB006EAA	B-6	5/5/1999	SOIL BORING	7	8	8330N	NITROGLYCERIN	YES
ABB006GAA	B-6	5/5/1999	SOIL BORING	9	10	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES
ABB006MAA	B-6	5/6/1999	SOIL BORING	15	16	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZ	YES

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.  
SBD = SAMPLE COLLECTION BEGIN DEPTH (FEET BGS FOR SOILS AND PROFILE, FEET BELOW WATER TABLE FOR GROUNDWATER)  
SED = SAMPLE COLLECTION END DEPTH (FEET BGS FOR SOILS AND PROFILE, FEET BELOW WATER TABLE FOR GROUNDWATER)  
PDA/YES = Photo Diode Array, Detect Confirmed  
PDA/NO = Photo Diode Array, Detect Not Confirmed