WEEKLY PROGRESS UPDATE
FOR MAY 24-MAY 28, 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 24 – May 28, 1999.

1. SUMMARY OF ACTIONS TAKEN

Sampling of new wells (far field and Phase IIa) was completed during the week. Split samples were received from AFCEE for residential wells that were sampled in the Arnold Road/Raccoon Lane/Old Snake Pond Road neighborhoods.

The Guard, EPA, and MADEP had a conference call on May 27 to discuss technical issues, including the following:

- A discussion of the explosive results for Demo Area 1 soil samples. RDX, HMX, nitroglycerin and several TNT breakdown products were confirmed in samples from five of the nine borings from depths of 3 to 16 feet. It was agreed to extend B-3, B-4, B-6, and B-9 to the water table for additional soil sampling in accordance with the Workplan for Completion of Phase I Activities.

- Comments on the draft Response Plan for Demo Area 1 were discussed. It was agreed that the additional soil sampling to define the surficial extent of contamination would be added to this plan. EPA recommended adding an additional water table well downgradient of MW-19 in conjunction with the deep soil sampling being done in this area. It was agreed to use the results of MW-73 through MW-77 to evaluate the need for additional wells south of MW-35. EPA asked Ogden to check on whether profile samples were collected for MW-31. EPA asked for PDA spectra for profile samples from MW-35 through MW-36.

- EPA is accepting comments from the IART on EPA's 2-page fact sheet and the proposed 10-page summary until Tuesday June 1, 1999. EPA and the Guard will coordinate on the preparation of the 10-page summary early next week.

- EPA has not been able to contact Sandwich Water District personnel concerning the far field monitoring wells due to vacation schedules. Ogden has received the Bourne supply well Zone IIs from Haley and Ward and is working with USGS to establish the vertical extent of the ZOCs and travel time from Route 28 to the pumping wells.

- There was a discussion of preliminary results from the repeat analysis of the first profile sample at MW-59 and the repeat sample of MW-59S. Both samples contained low levels of RDX similar to the first sample from MW-59S but no TNT. Ogden explained that the "film" described for the profile samples was actually a thin film of precipitate, but not enough to sample as a separate phase. There was a discussion of the sampling protocol for the Phase II (a) borings which did not include soil samples. EPA asked that the Phase I soil sampling protocol be adopted for future borings in the Impact Area.

- A fax summarizing documents that are currently being review or prepared was discussed.

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 and HMX were detected in a repeat groundwater sample from MW-59S. The results, which were lower than the EPA Health Advisories for drinking water for these compounds, appear to confirm previous detections of these compounds in this well, pending validation.

Nitroglycerin (NG), RDX, HMX, and several TNT breakdown products were detected in soil samples from the KD Range. NG was detected at several firing positions and at the primary target, and was detected at all three depth intervals. The other explosive compounds were detected only at the primary target for the KD Range, but were detected at all three depth intervals. No explosives were detected at the control grid on the south end of the KD Range, or at the suspected former target in the middle of the range. Explosive results were not yet available for soil samples at the secondary target at the north end of the KD Range. No explosives were detected at the five soil sampling grids located at the U Range, although results were not yet available for discrete samples from grid 45C.

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

Weekly Progress Report (May 17 – May 21) May 28, 1999

4. SCHEDULED ACTIONS

Scheduled actions for the week of June 1 are completion of split sampling with AFCEE in the Arnold Road residential area, and mobilization for subsurface soil sampling in Demo Area 1.

TABLE 1
SAMPLING PROGRESS
5/24-5/28

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
W42M1T	FIELDQC	5/24/1999	FIELDQC	0	0
W45M2T	FIELDQC	5/25/1999	FIELDQC	0	0
W45SST	FIELDQC	5/26/1999	FIELDQC	0	0
W51SST	FIELDQC	5/27/1999	FIELDQC	0	0
W42M1A	MW-42	5/24/1999	GROUNDWATER	139	149
W42M2A	MW-42	5/24/1999	GROUNDWATER	119	129
W42M3A	MW-42	5/25/1999	GROUNDWATER	99	109
W43M1A	MW-43	5/26/1999	GROUNDWATER	93	103
W43M2A	MW-43	5/26/1999	GROUNDWATER	70	80
W43SSA	MW-43	5/25/1999	GROUNDWATER	0	10
W45M1A	MW-45	5/24/1999	GROUNDWATER	98	108
W45M2A	MW-45	5/25/1999	GROUNDWATER	18	28
W45M2D	MW-45	5/25/1999	GROUNDWATER	18	28
W45SSA	MW-45	5/26/1999	GROUNDWATER	0	10
W51SSA	MW-51	5/27/1999	GROUNDWATER	0	10
W72SSA	MW-72	5/27/1999	GROUNDWATER	0	10
RS0003ARND	3 Arnold Rd.	5/25/1999	OTHER	0	0
RS0003RACC	3 Raccoon Lane	5/25/1999	OTHER	0	0
RS0004OSNK	4 Old Snake Pond Rd.	5/25/1999	OTHER	0	0
RS0006OSNK	6 Old Snake Pond Rd.	5/25/1999	OTHER	0	0
RS0010ARND	10 Arnold Rd.	5/25/1999	OTHER	0	0
RS0011OSNK	11 Old Snake Pond Rd.	5/25/1999	OTHER	0	0
RS0012OSNK	12 Old Snake Pond Rd.	5/25/1999	OTHER	0	0
RS0014ARND	14 Arnold Rd.	5/25/1999	OTHER	0	0
RS0015ARND	15 Arnold Rd.	5/25/1999	OTHER	0	0
RS0018OSNK	18 Old Snake Pond Rd.	5/25/1999	OTHER	0	0
RS0024ARND	24 Arnold Rd.	5/25/1999	OTHER	0	0
RS0033ARND	33 Arnold Rd.	5/25/1999	OTHER	0	0
RS0034ARND	34 Arnold Rd.	5/25/1999	OTHER	0	0
RS0036ARND	36 Arnold Rd.	5/25/1999	OTHER	0	0
RS0039ARND	39 Arnold Rd.	5/25/1999	OTHER	0	0

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 5/9/99-5/28/99

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
W59SSA	WL59S	5/10/1999	GROUNDWATE	0	10	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	
W59SSA	WL59S	5/10/1999	GROUNDWATE	0	10	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	
HC44B1AAA	44B	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HC44C1AAA	44C	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HC44D1AAA	44D	5/10/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HC44E1AAA	44E	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HC44E1AAD	44E	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HC44E1CAA	44E	5/10/1999	SOIL GRID	0.5	1	8330N	NITROGLYCERIN	
HC44F1AAA	44F	5/11/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HC44G1AAA	44G	5/11/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HC44M1AAA	44M	5/12/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HC44N1AAA	44N	5/12/1999	SOIL GRID	0	.25	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	
HC44T1AAA	44T	5/11/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HC44U1BAA	44U	5/11/1999	SOIL GRID	.25	.5	8330N	NITROGLYCERIN	
HD44B3AAA	44B	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HD44C3AAA	44C	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HD44C3CAA	44C	5/10/1999	SOIL GRID	0.5	1	8330N	NITROGLYCERIN	
HD44D3AAA	44D	5/10/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HD44D3BAA	44D	5/10/1999	SOIL GRID	.25	.5	8330N	NITROGLYCERIN	
HD44E3AAA	44E	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HD44E3AAD	44E	5/10/1999	SOIL GRID	0	0.25	8330N	NITROGLYCERIN	
HD44E3BAA	44E	5/10/1999	SOIL GRID	0.25	0.5	8330N	NITROGLYCERIN	
HD44G3AAA	44G	5/11/1999	SOIL GRID	0	.25	8330N	NITROGLYCERIN	
HD44L1AAD	44L	5/12/1999	SOIL GRID	0	.25	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	
HD44L1CAA	44L	5/12/1999	SOIL GRID	.5	1	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	

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

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HD44L5BAA	44L	5/12/1999	SOIL GRID	.25	.5	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	
HD44N4BAA	44N	5/12/1999	SOIL GRID	.25	.5	8330N	2-AMINO-4,6-DINITROTOLUENE	
HD44N4CAA	44N	5/12/1999	SOIL GRID	.5	1	8330N	2-AMINO-4,6-DINITROTOLUENE	
HD44N4CAA	44N	5/12/1999	SOIL GRID	.5	1	8330N	4-AMINO-2,6-DINITROTOLUENE	
HD44N4CAA	44N	5/12/1999	SOIL GRID	.5	1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	
HD44N4CAA	44N	5/12/1999	SOIL GRID	.5	1	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	

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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