WEEKLY PROGRESS UPDATE
FOR JULY 12-JULY 16, 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 July 12 to July 16, 1999.

1. SUMMARY OF ACTIONS TAKEN

Drilling continued on MW-63 during this reporting period. The first boring (MW-63a) was completed at a total depth of 385 ft below ground surface, and depth below water table of 231 feet. Two monitoring wells were installed in MW-63a at depths of 153'-163' and 192'-192' below ground surface. Drilling started on MW-63b and achieved a total depth of 155 feet below ground surface at the end of the week. Samples collected during the reporting period are summarized in Table 1. Profile samples were collected from MW-63a and groundwater samples were collected from four on base water supply wells. A synoptic water level round was performed on July 12, 1999. A map will be provided at a later date.

The Guard, EPA, and MADEP had a meeting on July 15 to discuss technical issues, including the following:

- A discussion took place on next week's DOD UXO visit. The team will start looking at sites on 7/20, continue on 7/21, and have a discussion of options on 7/22. The Guard provided a sampling plan to EPA and MADEP to review in the event the UXO is blown in place. The Guard asked for EPA's and MADEP's comments by the 7/22 technical meeting. The Guard will look into the need for civilians present during the UXO visit to sign a liability waiver form.

- A discussion took place on the elevated dieldrin levels seen in soil that exceed MCP notification guidelines. The Guard asked MADEP to look into whether notification is necessary for unvalidated data or if notification can wait until the data is validated.

- The Drive Point split sample results from AFCEE were received just prior to the meeting and handed out. The only confirmed explosive detects by PDA were in DP-8 and DP-9. Three samples exceeded the RDX HA. The EPA asked the Guard to look at the chromatograms for these samples to see if there are any interference issues. Ogden will have the USGS run forward and reverse particle tracks for these detects and take a closer look in relation to other detects in this area. The EPA wanted to know when the DP-11 results would available. Subsequent to the meeting it was determined that the DP-11 results should be available next week. EPA also wanted to know if groundwater samples at DP-9 were collected down to 95 feet. Ogden will provide an answer at the 7/22 meeting.

- EPA asked the Guard to develop a plan for delineating RDX at the 44N KD Range location, where concentrations were highest and provide this at the 7/22 Technical meeting. Also to be included in the plan is a groundwater investigation at a KD Range firing position, based on the nitroglycerin detections. Some discussion took place about shifting the well from the secondary target to the firing position. Although the Guard could propose it EPA wants an additional well. EPA asked that the soil borings for the KD Range wells include soil sampling for explosives at the same depth intervals employed in Phase I and is incorporated in this plan. Ogden will get with the Guard to incorporate this scope change. Ogden provided a handout of KD Range data missing from the previous 7/8 handout. The cause of the error was discussed at the meeting and was believed to have been the result of a data loading problem. After the meeting Ogden determined that the network disk drive

became full, and the database was unable to complete storage of this incoming electronic data deliverable (EDD) and replace the existing incomplete dataset. A test was performed re-loading the EDD into a copy of the database, and the software performed correctly. A corrective action has begun and includes freeing at least one gigabyte of disk space for the MMR project and running inventories at the end of each day where data is loaded into the MMR database. A handout was also provided of the munition debris found at the KD Range. The debris found was consistent with the range use allowed.

- A handout was provided showing the locations of 4 versus 6 wells placed in the Bourne ZOC. It was noted that the 6 well configuration results in the wells being located for the most part on the edge of the ZOC whereas the 4 well configuration results in each well being located in the center of each ZOC. Bourne has reportedly approved the placement of the 4 well configuration. One well location was found that is common to both well configurations. All agreed that after drilling at MW-63 is complete this will be the next well drilled. The EPA asked the Guard to develop a ZOC map for the Sandwich area and pick locations for far-field wells.

- EPA described the following agenda topics for the 7/19/99 IART meeting: Update on Textron; Update on Review Team Grants; NGB Budget; Investigation Update; Munitions Surveys; DU Survey; and review of Szostak draft.

- The Guard asked the EPA for the status of their reviews on the PEP and ASR reports and position on the regulatory framework under which remediation activities would take place. The EPA indicated PEP comments should be coming next week. EPA will check on when ASR comments will be available. EPA will talk internally about the regulatory framework under which remediation would occur.

- Ogden asked the EPA about modeling being conducted. EPA provided a handout of preliminary results. Ogden will follow up next week with EPA to discuss technical aspects of the model.

- A handout was provided of the biweekly update on groundwater results. Three wells 90LWA0007, 90MW0005, and 90WT0015 indicated the possible presence of explosives. However, after review of PDA spectra it was determined that no explosives are present and the detects are false positives.

- EPA inquired about the status of the Pave Paws wells to be sampled. Ogden indicated only two wells have been found. EPA asked Ogden to again talk with knowledgeable personnel about any additional wells. There has been some delay in being given access to sample the second well although the well is scheduled to be sampled next week.

- EPA asked the Guard to provide the Response Plan to evaluate RDX exceedance in the Impact Area to determine lateral extent by 7/19.

- A brief discussion took place on the planned cleanup of scrap material at the APC. This activity is planned to begin on 7/20.

- A brief discussion took place about visiting the J-3 Wetland next week to look for stressed vegetation. The Guard has arranged for an ecologist to go out to the site next week. The Guard will coordinate with EPA and MADEP on the visit to the J-3 Wetland.

2. SUMMARY OF DATA RECEIVED

Preliminary non-validated detections of explosive and volatile organic compounds (VOCs) are summarized in Table 2 for samples collected during the preceding five-week period. The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is also indicated in this table. 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, or PDA is not applicable because the analyte is a VOC.

Some of the detections in Table 2 were discussed in last week's progress report. The range of sample dates included in Table 2 overlaps from week-to-week due to the method of reporting and extracting these data. New detections in Table 2 that were not discussed in last week's report include:

- RDX, HMX, and a TNT breakdown product in groundwater at MW-73, which is installed downgradient from MW-19S within Demo Area 1; and

- Chloroform and TCE in profile samples from MW-63, which is a far field monitoring well in the ZOC for proposed water supply well LRWS-12.

Also, PDA spectra are now available for the picric acid detections at DP-11 in the Raccoon Lane Investigation, and the detections were determined to be false positives.

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

Revised Response Plan for Demo Area 1 July 15, 1999

4. SCHEDULED ACTIONS

Scheduled actions for the week of July 19 include continued drilling of MW-63b, commence drilling of well MW-60 (KD primary target), commence road building for one of the Bourne far field wells, groundwater sample second PAVE PAWS monitoring well, and continued sampling of water supply wells.

TABLE 1
SAMPLING PROGRESS
7/12-7/16

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
CEMETERY2T	FIELDQC	7/14/1999	FIELDQC	0	0
G63DUT	FIELDQC	7/13/1999	FIELDQC	0	0
G63DVE	FIELDQC	7/13/1999	FIELDQC	0	0
G63DWT	FIELDQC	7/14/1999	FIELDQC	0	0
G63DXE	FIELDQC	7/14/1999	FIELDQC	0	0
G63DXT	FIELDQC	7/14/1999	FIELDQC	0	0
WELLBT	FIELDQC	7/15/1999	FIELDQC	0	0
CEMETERY1	CEMETERY1	7/14/1999	GROUNDWATER		
CEMETERY2	CEMETERY2	7/14/1999	GROUNDWATER		
RANGECON	RANGECON	7/15/1999	GROUNDWATER		
RANGECOND	RANGECOND	7/15/1999	GROUNDWATER		
WELLB	WELLB	7/15/1999	GROUNDWATER		
DW6313	GAC WATER	7/13/1999	IDW	0	0
DW6313A	GAC WATER	7/13/1999	IDW	0	0
DW6314	GAC WATER	7/14/1999	IDW	0	0
G63DUA	MW-63	7/13/1999	PROFILE	350	355
G63DVA	MW-63	7/13/1999	PROFILE	360	365
G63DWA	MW-63	7/14/1999	PROFILE	370	375
G63DXA	MW-63	7/14/1999	PROFILE	380	385

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 6/27/99-7/16/99

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G63DRE	FIELDQC	7/9/1999	FIELDQC	0	0	OC21V	ACETONE	
G63DXE	FIELDQC	7/14/1999	FIELDQC	0	0	8330N	1,3-DINITROBENZENE	
G63DXE	FIELDQC	7/14/1999	FIELDQC	0	0	OC21V	ACETONE	
G63DXE	FIELDQC	7/14/1999	FIELDQC	0	0	OC21V	METHYL ETHYL KETONE (2-BUTANONE)	
G63DXE	FIELDQC	7/14/1999	FIELDQC	0	0	OC21V	TOLUENE	
OT-Y011009F	FIELDQC	6/25/1999	FIELDQC	0	0	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y016801F	FIELDQC	7/6/1999	FIELDQC	0	0	8330N	1,3,5-TRINITROBENZENE	
OT-Y016801F	FIELDQC	7/6/1999	FIELDQC	0	0	8330N	PICRIC ACID	
W73SSA	MW-73	7/9/1999	GROUNDWATE	0	10	8330N	4-AMINO-2,6-DINITROTOLUENE	
W73SSA	MW-73	7/9/1999	GROUNDWATE	0	10	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	
W73SSA	MW-73	7/9/1999	GROUNDWATE	0	10	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	
G63DAA	MW-63	7/1/1999	PROFILE	150	155	8330N	1,3,5-TRINITROBENZENE	NO
G63DAA	MW-63	7/1/1999	PROFILE	150	155	8330N	1,3-DINITROBENZENE	NO
G63DAA	MW-63	7/1/1999	PROFILE	150	155	8330N	3-NITROTOLUENE	NO
G63DAA	MW-63	7/1/1999	PROFILE	150	155	8330N	NITROBENZENE	NO
G63DAA	MW-63	7/1/1999	PROFILE	150	155	8330N	NITROGLYCERIN	NO
G63DUA	MW-63	7/13/1999	PROFILE	350	355	OC21V	CHLOROFORM	
G63DVA	MW-63	7/13/1999	PROFILE	360	365	OC21V	CHLOROFORM	
G63DXA	MW-63	7/14/1999	PROFILE	380	385	OC21V	TRICHLOROETHYLENE (TCE)	
OT-Y011301F	DP-4	6/25/1999	PROFILE	85	90	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y011305F	DP-4	6/25/1999	PROFILE	95	100	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y011501	DP-9	6/25/1999	PROFILE	10	15	8330N	NITROGLYCERIN	NO
OT-Y011501	DP-9	6/25/1999	PROFILE	10	15	8330N	PICRIC ACID	NO
OT-Y011501F	DP-9	6/25/1999	PROFILE	10	15	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y011501F	DP-9	6/25/1999	PROFILE	10	15	8330N	NITROGLYCERIN	NO
OT-Y011501F	DP-9	6/25/1999	PROFILE	10	15	8330N	PICRIC ACID	NO

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

TABLE 2
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 6/27/99-7/16/99

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
OT-Y011801	DP-9	6/25/1999	PROFILE	60	65	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y011801D	DP-9	6/25/1999	PROFILE	60	65	8330N	NITROGLYCERIN	NO
OT-Y011801D	DP-9	6/25/1999	PROFILE	60	65	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y011801D	DP-9	6/25/1999	PROFILE	60	65	8330N	NITROGLYCERIN	NO
OT-Y011801D	DP-9	6/25/1999	PROFILE	60	65	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y011801F	DP-9	6/25/1999	PROFILE	60	65	8330N	NITROGLYCERIN	NO
OT-Y011801F	DP-9	6/25/1999	PROFILE	60	65	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y011805	DP-9	6/25/1999	PROFILE	70	75	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	YES
OT-Y011805	DP-9	6/25/1999	PROFILE	70	75	8330N	NITROGLYCERIN	NO
OT-Y011805	DP-9	6/25/1999	PROFILE	70	75	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y011805F	DP-9	6/25/1999	PROFILE	70	75	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y011805F	DP-9	6/25/1999	PROFILE	70	75	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZI	YES
OT-Y011805F	DP-9	6/25/1999	PROFILE	70	75	8330N	NITROGLYCERIN	NO
OT-Y011805F	DP-9	6/25/1999	PROFILE	70	75	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
OT-Y013307F	DP-2	6/28/1999	PROFILE	65	70	8330N	1,3,5-TRINITROBENZENE	NO
OT-Y016301	DP-11	7/6/1999	PROFILE	27	32	8330N	PICRIC ACID	NO
OT-Y016301F	DP-11	7/6/1999	PROFILE	27	32	8330N	PICRIC ACID	NO

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