WEEKLY PROGRESS UPDATE
FOR AUGUST 11 – AUGUST 15, 2003

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from August 11 through August 15, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 15 is summarized in Table 1.

Table 1. Drilling progress as of August 15, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-283	Northwest Corner (NWP-5)	30		
MW-284	Northwest Corner (NWP-7)	20		

bgs = below ground surface
bwt = below water table

Commenced drilling of MW-283 (NWP-5) and MW-284 (NWP-7). Test pits were drilled in Demo Area 1. Well development continued for recently installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, a formerly dry well as part of the Site-Wide Perchlorate Characterization, and as part of the April round of the Draft 2003 Long-Term Groundwater Monitoring Plan. Investigation-derived waste (IDW) samples were collected from the Granular Activated Carbon (GAC) treatment system.

The following are the notes from the August 14, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gonser (IAGWSPO)
Bill Gallagher (IAGWSPO)
LTC Will Tyminski (E&RC)
Jane Dolan (EPA)
Mark Panni (MADEP)
Darrell Deleppo (ACE)
Rob Foti (ACE)
Nick Iaiennaro (ACE)
Larry Pannell (Jacobs-phone)
Ben Gregson (IAGWSPO)
Dave Hill (IAGWSPO)
Meghan Cassidy (EPA)
Jim Murphy (EPA)
Dave Williams (MDPH)
Heather Sullivan (ACE)
John McPherson (ACE)
Darrin Smith (ACE)
Kevin Hood (UConn)
Tina Dolen (IAGWSPO)
Paul Nixon (IAGWSPO)
Desiree Moyer (EPA)
Len Pinaud (MADEP)
Gina Kaso (ACE)
Dave Margolis (ACE)
Ed Wise (ACE)
Kim Harriz (AMEC)

Punchlist Items

#1 Provide update for sampling PZ211 (ACE). The Army Corps will provide a written description to the property owners of what needs to be done to remove a log pile from peizometer location. Work tentatively scheduled to commence the week of 8/25.

#6 Provide update on Army Corps permit approval for contingency monitoring well locations near the Cape Cod Canal. (ACE) Permit to drill was issued July 30.

#8 Provide MORs for J-2 and L Ranges (ACE). MORs were provided in accordance with scheduled submittal dates.

#9 Provide dates in Combined Schedule for submittals of Rev. J-1 and L Ranges Supplemental Soil Workplans. Dates were provided in schedule. Heather Sullivan to confirm dates that Southeast Ranges deliverables will be submitted to the agencies.

July Archive Search Report Update

Ed Wise (ACE) provided information on ASR activities for the month of July, distributing a one-page summary of activities.

- Additional interviews are being scheduled by the private investigator.
- Tetra Tech contract will terminate at the beginning of October.
- ASR data has been transferred to AMEC to upload to the EDMS site.

Fieldwork Update

Rob Foti (ACE) provided an update on the IAGWSP fieldwork.

Southeast Ranges

- J1P-19 Location: UXO clearance will be completed today. Road building to commence next week. This well to be prioritized in the drilling schedule per EPA's request.
- J-1 Range Peizometers 61-70 completed.
- J2P-20. Drilling started yesterday, 8/13.
- J2P-21/22. Walk-thru for natural/cultural resources issues scheduled for 8/15.
- SE Ranges synoptic water level round, encompassing 129 wells, was conducted on 8/11-8/12.
- J-3 Range Barrage/Hillside sites. Intrusive investigation of Schonstedt and EM61 anomalies are scheduled to be started next week.
- Project Note for Barrage site will be emailed today at the request of EPA.

ROA Status/Drilling Schedule

Heather Sullivan (ACE) provided an update on the ROA status and drilling schedule, distributing a 1-page drilling schedule; the ROA status table had been sent out via email.

- AMEC is overseeing drilling by three rigs located at the BWD monitoring wells (WS4P-5/6); NWP-7 and NWP-5.
- ECC is overseeing one rig at J2P-20.
- A line item has been added to the drilling schedule to show upcoming wells, which may not have final approved locations, but are expected to be drilled in the next coming months.
- ROA Status table reflects that ROAs for J1P-21, 22; J3P32, 33; NWP-6 are being prepared for submittal shortly. All other ROAs that have been submitted have been approved.
- To Jane Dolan's (EPA) inquiry, Ms. Sullivan confirmed the GPR survey for L Range was to be added as a line item on the ROA status table.
- To Desiree Moyer's (EPA) inquiry, Ms. Sullivan indicated the Army Corps was working on contracting anomaly excavations at GP-16.

Northwest Corner of Camp Edwards

Bill Gallagher (IAGWSPO) provided an update on the Northwest Corner investigation.

- Final approval of NWP-5 and NWP-7 drilling locations was received. Drilling of NWP-7 (MW-284) commenced today.
- Figure was distributed showing a revised drilling location for NWP-6. This drilling location to be discussed further with the agencies in an after meeting.
- Four of 17 soil sampling grids originally proposed to be sampled at GP-19 were relocated to a former cleared area southwest of GP-16, as requested by the EPA. This revision to the sampling scope will be reflected in the revised Project Note expected to be provided today to the agencies.
- Groundwater sampling at RSNW03, 4036011 and 4036009DC will be conducted on 8/22.
- An updated table showing all explosives and perchlorate data from wells in the Northwest Corner was distributed. These results include the unvalidated perchlorate results for MW-278S (19.3 ppb) and MW-279S (16.7 ppb).
- Water Table contour map based on the recent synoptic water level round should be available soon.
- Forward and backward particle tracks from MW-277, MW-278 and MW-279 have been generated based on survey data and plotted on the plan view map that shows the cross section lines. Forward particle tracks were generated from the center of the S and M1 screens for each of these wells and are plotted in profile on cross section D-D', E-E' and F-F'. The plan view map and cross sections were distributed at the Tech meeting.
- The property owner of Foretop Residential well RSNW02 responded yesterday to a mailer (offering monthly sampling of his residential well) that was left on his doorstep. The property owner expressed his opinion that yearly sampling was sufficient. Desiree Moyer (EPA) requested Mr. Gallagher call the property owner back and provide information on the perchlorate detections in the upgradient wells. Copy of mailer to be provided to the agencies.
- Terry Martin (MADEP Water Supply Division) sent a letter to the Schooner Pass Condominium Community regarding the Army/NGB's offer to sample their supply well monthly for perchlorate and explosives. DEP suggested the IAGWSP consider following up the letter with a phone call.
- All parties agreed to discuss EPA comments on the Project Note in an After Meeting, today.
- Len Pinaud (MADEP) and Desiree Moyer (EPA) requested the IAGWSPO prepare a plume map for the Northwest Corner.

Documents and Schedules

Heather Sullivan (ACE) reviewed document and scheduling issues.

- Demo Area 1 documents are the Army/NGB's highest priority.
- 1st priority is the Demo 1 Soil RCL. The treatment technology plan will be coming out in the next month.
- Comments were received on the Demo 1 Sampling and Analysis Plan RCL.
- Meghan Cassidy (EPA) indicated it would be difficult to resolve comments on the Demo 1 documents without the treatment technology plan. To date, the submittals have been piecemeal; whereas the approach to document approval needs to be comprehensive. For example, the identification of the new treatment technology will necessitate an addendum to the Sampling and Analysis Plan.

Demo Area 1 Anomaly Removal

John McPherson (ACE) provided a summary of progress on the Demo 1 Anomaly Removal.

- Currently crews are working in grids C2 and B3, still along the perimeter of the demolition area.

- To date, 5000 anomalies have been removed, representing about 25% of the work to be conducted. Most of the material removed is scrap; there have also been items sent to the CDC and a few BIPs.

Miscellaneous

- Gina Kaso (ACE) indicated demolition of ordnance in the CDC was continuing. As EPA requested, A cost analysis of shipping for offsite disposal versus CDC destruction of the 20MM rounds will be emailed to the agencies as soon as email at the IAGWSPO is back up and running.
- Desiree Moyer (EPA) indicated the web site did not show the most recent updated plume maps.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. Perchlorate and explosive analyses for monitoring wells, and perchlorate, explosive and volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 3 summarizes only detects, and does not show samples with non-detects.

The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 3. PDA is a procedure that has been implemented for the explosive analysis, to reduce the likelihood of false positive identifications. Where the PDA status is "YES" in Table 3, the detected compound is verified as properly identified. Where the status is "NO", the identification of an explosive has been determined 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 or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

Table 3 includes detections from the following areas:

Bourne Area

- Groundwater samples from 02-13M2, MW-80M1, M2 and duplicate had detections of perchlorate. The results were similar to the previous sampling rounds.

Northwest Corner

- Groundwater samples from RSNW06 had a detection of RDX that was confirmed by PDA spectra. The result was similar to the previous sampling rounds.

DELIVERABLES SUBMITTED

Draft J-1 Range Supplemental Groundwater Workplan	08/12/2003
Revised Draft L Range Supplemental Soil Workplan	08/13/2003
Weekly Progress Update for August 4 – August 8, 2003	08/15/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of August 18 include continue drilling at NWP-5 and complete drilling at NWP-7. Groundwater sampling at Bourne water supply and monitoring wells and recently installed wells will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The Groundwater Report Addendum for the Demo 1 Groundwater Operable Unit was submitted to EPA and DEP. Modeling activities in support of the Feasibility Study (FS) are currently underway. A Revised Groundwater RRA Plan is under review by EPA and DEP. Geophysical anomaly excavation and removal continues. Test pits were drilled to collect information for the foundation of the proposed Demo Area 1 Pew Road Treatment system.

TABLE 2
SAMPLING PROGRESS
08/10/2003 - 08/16/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	08/11/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	08/11/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	08/11/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	08/11/2003	GROUNDWATER	108	128	6	12
97-2F-A	97-2	08/15/2003	GROUNDWATER		120	76.7	76.7
TW1-88B-A	1-88	08/12/2003	GROUNDWATER			69.6	69.6
W02-01M1A	02-01	08/14/2003	GROUNDWATER	95	105	42.9	52.9
W02-01M2A	02-01	08/14/2003	GROUNDWATER	83	93	30.9	40.9
W02-01M2D	02-01	08/14/2003	GROUNDWATER	83	93	30.9	40.9
W02-02M1A	02-02	08/14/2003	GROUNDWATER	114.5	124.5	63.5	73.5
W02-02M2A	02-02	08/14/2003	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02SSA	02-02	08/14/2003	GROUNDWATER	49.5	59.5	0	10
W02-03M1A	02-03	08/13/2003	GROUNDWATER	130	140	86.1	96.1
W02-03M2A	02-03	08/13/2003	GROUNDWATER	92	102	48.15	58.15
W02-03M2D	02-03	08/13/2003	GROUNDWATER	92	102	48.15	58.15
W02-03M3A	02-03	08/14/2003	GROUNDWATER	75	85	31.05	41.05
W02-08M1A	02-08	08/14/2003	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	08/14/2003	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	08/14/2003	GROUNDWATER	62	67	40.58	45.58
W02-09M1A	02-09	08/13/2003	GROUNDWATER	74	84	65.26	75.26
W02-09M2A	02-09	08/13/2003	GROUNDWATER	59	69	50.3	60.3
W02-09M2D	02-09	08/13/2003	GROUNDWATER	59	69	50.3	60.3
W02-09SSA	02-09	08/13/2003	GROUNDWATER	7	17	0	10
W02-10M1A	02-10	08/15/2003	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	08/15/2003	GROUNDWATER	110	120	68.61	78.61
W02-10M2D	02-10	08/15/2003	GROUNDWATER	110	120	68.61	78.61
W02-12M1A	02-12	08/11/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	08/11/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	08/11/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	08/11/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	08/11/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	08/11/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	08/11/2003	GROUNDWATER	68	78	28.3	38.3
W196M1A	MW-196	08/11/2003	GROUNDWATER	45	50	12	17
W196M1A	MW-196	08/11/2003	GROUNDWATER	45	50	12	17
W196SSA	MW-196	08/12/2003	GROUNDWATER	32	37	0	5
W213M1A	MW-213	08/14/2003	GROUNDWATER	133	143	85.01	95.01
W213M2A	MW-213	08/15/2003	GROUNDWATER	89	99	41.15	51.15
W213M3A	MW-213	08/15/2003	GROUNDWATER	77	82	29.38	34.38
W229M1A	MW-229	08/13/2003	GROUNDWATER	286	296	173.27	183.27

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
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 2
SAMPLING PROGRESS
08/10/2003 - 08/16/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W229M2A	MW-229	08/13/2003	GROUNDWATER	206	216	93.28	103.28
W229M3A	MW-229	08/13/2003	GROUNDWATER	141	151	28.27	38.27
W230M1A	MW-230	08/11/2003	GROUNDWATER	130	140	23.82	33.82
W230M2A	MW-230	08/13/2003	GROUNDWATER	110	120	3.76	13.76
W240M1A	MW-240	08/12/2003	GROUNDWATER	198	208	100	110
W240M1A	MW-240	08/12/2003	GROUNDWATER	198	208	100	110
W259M1A	MW-259	08/13/2003	GROUNDWATER	189	199	7.62	17.62
W260M1A	MW-260	08/13/2003	GROUNDWATER	171	181	1.55	11.55
W260M1D	MW-260	08/13/2003	GROUNDWATER	171	181	1.55	11.55
W261M1A	MW-261	08/12/2003	GROUNDWATER	210	220	49.37	59.37
W261M2A	MW-261	08/12/2003	GROUNDWATER	170	180	9.47	19.47
W262M1A	MW-262	08/12/2003	GROUNDWATER	226	236	9.42	19.42
W262M1A	MW-262	08/12/2003	GROUNDWATER	226	236	9.42	19.42
W262M1D	MW-262	08/12/2003	GROUNDWATER	226	236	9.42	19.42
W262M1D	MW-262	08/12/2003	GROUNDWATER	226	236	9.42	19.42
W53SSA	MW-53	08/12/2003	GROUNDWATER	121.15	131.2	0	10
W80SSA	MW-80	08/11/2003	GROUNDWATER	43	53	0	10
W81DDA	MW-81	08/15/2003	GROUNDWATER	184	194	156	166
W81M1A	MW-81	08/15/2003	GROUNDWATER	128	138	100	110
W81M2A	MW-81	08/15/2003	GROUNDWATER	83	93	55	65
W81M3A	MW-81	08/15/2003	GROUNDWATER	53	58	25	30
W81SSA	MW-81	08/15/2003	GROUNDWATER	25	35	0	10
DW081103-NV	GAC WATER	08/11/2003	IDW	0	0		
DW081203-NV	GAC WATER	08/12/2003	IDW	0	0		
DW081503-NV	GAC WATER	08/15/2003	IDW	0	0		

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
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SBD = Sample Begin Depth, measured in feet bgs
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BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 07/18/03 - 08/16/03

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
RSNW06-A	RSNW06	08/06/2003	GROUNDWATER	0	0			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W02-13M2A	02-13	08/11/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W80M1A	MW-80	08/08/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M2A	MW-80	08/08/2003	GROUNDWATER	100	110	56	66	E314.0	PERCHLORATE	
W80M2D	MW-80	08/08/2003	GROUNDWATER	100	110	56	66	E314.0	PERCHLORATE	

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
PDA/YES = Photo Diode Array, Detect Confirmed
PDA/NO = Photo Diode Array, Detect Not Confirmed
*** = Interference in sample**
+ = PDAs are not good matches