

**WEEKLY PROGRESS UPDATE
FOR JULY 11-17, 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 July 11 to July 17, 1997.

1. SUMMARY OF ACTIONS TAKEN

UXO Survey

Ogden and CMS Environmental (the UXO contractor) continued UXO Survey work on the site during the week of July 14. A safety separation distance of 1200 feet is being used between CMS personnel engaged in UXO investigation/removal and other personnel in the Impact Area. The following areas have been cleared by UXO removal to date:

- Wheelock Road, from the entrance to the Impact Area east to Chadwick Road.
- A drilling decontamination pad at the corner of Wheelock and Turpentine.
- Turpentine Road, from Wheelock Road to Area 3 ("Site 1 Target Area")
- Drilling location for MW-1 with a vehicle turnaround at Area 3.
- Chadwick Road, from Turpentine Road north to Barlow Road.
- the east end of Tank Alley, from Chadwick to Area 4 ("Mounds").
- Barlow Road, from Chadwick Road north to Wood Road.
- Wood Road, from Barlow Road west to Area 1 ("Valley").
- Spruce Swamp Road, from Wheelock Road to Pocasset-Sandwich Road.
- Pocasset-Sandwich Road, from Spruce Swamp Road north to Five Corners.
- Knot Hollow Road, from Five Corners north to Jefferson Road.
- portions of Jefferson Road, east and west from Knot Hollow Road.
- Gravel staging area at Five Corners.
- Turpentine Road, from Five Corners south to Area 2 ("Site 3/Target Area").

Surface clearance activities have also been completed at eight drilling locations in the Impact Area, including MW-4, MW-5, MW-11, MW-12, MW-14, MW-15, MW-26, and MW-28. UXO recovered during clearance activities are summarized in Table 1. In addition, the following areas were flagged for UXO avoidance without clearing (prior to June 25):

- Drilling location for MW-3 at Area 1.
- Access road from Wood Road to MW-3 drilling location.
- Area 8 (Succonsette Pond).
- Access path from Spruce Swamp Road to Area 8.
- Tank Alley from Turpentine Road to near Area 4 ("Mounds")
- Part of Demo Area 1

Some flags have been removed or have fallen over around Succonsette Pond. Many fresh deer tracks

are visible around the pond. Portions of this area may have to be reflagged or cleared prior to sampling.

Drilling

D.L. Maher (the drilling subcontractor) and Baleri Construction (Maher's roadbuilding subcontractor) mobilized to the site on July 14. TRC (EPA's oversight contractor) mobilized to the site on July 15. Work during the week focussed on roadbuilding to permit drilling equipment to access the proposed locations for monitoring wells. The decontamination pad location was cleared to permit laying an asphalt base.

Plans and Reports

NGB submitted the Draft Human Health Risk Assessment Work Plan to EPA for review on July 11, 1997. This document describes procedures for preliminary risk evaluations and risk assessments. The document includes Tier I and Tier II screening criteria for use in determining the need for further study and to identify immediate hazards based on the analytical results to be obtained during the study.

NGB received comments from EPA concerning the Draft Field Sampling Plans on July 15, 1997. These documents are currently being revised in accordance with these comments.

NGB submitted the Draft Range Use History Report and the Draft Chemical Composition of Munitions Report to EPA for review on July 16, 1997. These two documents provide results of the Archive Search for munitions composition and known activities that occurred in the Training Ranges and Impact Area. Requests for further information relating to range use are continuing at this time.

NGB is preparing additional copies of the Final Action Plan, including the appendices. These copies are being accumulated at the UEPO and will be available during the Open House scheduled for July 24, 1997.

NGB is preparing Field Sampling Plans for the remaining areas identified in the Action Plan. These areas and the status of plans are summarized in Table 2.

2. SUMMARY OF DATA RECEIVED

Daily reports of UXO survey results were received by Ogden on July 17 and are summarized in section 1 above. Table 1 provides a summary of potential UXO discovered to date.

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period included the following:

Weekly Progress Update (July 4-10)	July 11, 1997
Draft Human Health Risk Assessment Work Plan	July 11, 1997
Draft Range Use History Report	July 16, 1997
Draft Chemical Composition of Munitions Report	July 16, 1997

4. SCHEDULED ACTIONS

EOD is scheduled to demolish UXO on Spruce Swamp Road and on Sandwich Road on July 18, 1997 in order to allow access for drilling equipment on these two roads. UXO Surveys will continue with UXO removal from drilling locations. Roadbuilding will continue in areas requiring drill rig access. The auger drill rig is expected to mobilize to the site to begin drilling the 10-foot deep holes for UXO clearance on July 18, 1997. One Barber drill rig and one sonic drill rig are expected to mobilize to the site on July 21, 1997 to begin drilling and sampling the deep borings (MW-1 and a boring to be named based on access issues). A second Barber rig is expected to mobilize to the site during the week of July 21, 1997 to begin another deep boring (MW-14).

**Table 1
Potential Explosive Ordnance Discovery
Through July 17, 1997**

Location	Object Found	Depth (inches)	Disposition
Succonsette Pond, Area 8	2.36" rocket HEAT	surface	left in place
	81mm mortar HE	4	relocated
	60mm mortar HE	6	relocated
	60mm mortar HE	5	relocated
	81mm mortar HE	18	relocated
Turpentine Road			
MW-1 (Area 3)	105mm projectile HE	12	relocated
	105mm projectile HE	14	relocated
Spruce Swamp Road	2" HE mortar	0.5	relocated
	2" HE mortar	1.5	relocated
	2" HE mortar	2	relocated
	2" HE mortar	8	left in place
Sandwich Road	105mm projectile WP 6"		left in place
MW-26 (Area 2, east side)	105mm projectile HE		relocated
	155mm projectile HE		relocated
Demo Area 1 (surface only; no intrusive clearance to date)	30mm projectile HE	surface	left in place
	30mm projectile HE	surface	left in place
	30mm projectile HE	surface	left in place
	3.5" rocket HEAT	surface	left in place

Table 2
Summary of Sampling Areas and Field Sampling Plan Status
As of July 17, 1997

Area^a	Well No. (depth)	LocationName/Description in Action Plan	Sample methods/media	FSP status
1	3 (S/I/D)	Area of Depression w/ Ground Scar	barber rig (soil) hand auger (soil) groundwater	draft 7/10
2	2 (S/I/D), 26 (S)	Site 3/Target Area/Burn Area	barber rig (soil) hand auger (soil) groundwater	draft 7/10 draft 7/10
3	1(S/I/D)	Site 1 Target Area	barber rig (soil) hand auger (soil) groundwater	draft 7/10 draft 7/10
4	27 (S)	Site 4 Mounds	barber rig (soil) hand auger (soil) groundwater	draft 7/10
5		Site 5	hand auger (soil)	
6	7 (S/I/D)	Burn Area (southeast of Turpentine)	barber rig (soil) hand auger (soil) groundwater	draft 7/10
7	8(S)	Burn Areas (southwest of Turpentine)	barber rig (soil) hand auger (soil) groundwater	draft 7/10
8		Succonsette Pond	sediment/surface water	
9	4 (S)	(well on Pocasset Road north of Five Corners)	barber rig (soil) hand auger (soil: control area) groundwater	draft 7/10
10	5 (S/I/D)	(well north of Wood Road)	barber rig (soil) hand auger (soil: control area) groundwater	draft 7/10
11	25 (S)	(well southeast of CS-19)	barber rig (soil) hand auger (soil: control area) groundwater	draft 7/10
	6 (S)	(well north of Area 5)	barber rig (soil) groundwater	draft 7/10

Table 2
Summary of Sampling Areas and Field Sampling Plan Status
As of July 17, 1997

Area^a	Well No. (depth)	LocationName/Description in Action Plan	Sample methods/media	FSP status
12	19 (S/D)	Demo Area 1	barber rig (soil) hand auger (soil) groundwater	draft 7/10
13	16 (S/D)	Demo Area 2	barber rig (soil) hand auger (soil) groundwater	draft 7/10
14		(access road to MW-7)	hand auger (soil: control area)	
	9 (S/I/D)	none (well southwest of CS-19)	barber rig (soil) groundwater	draft 7/10
	10 (S)	none (well on west Jefferson Road)	rotosonic rig (soil) groundwater	draft 7/10
	11 (S)	none (well midway along Jefferson)	barber rig (soil) groundwater	draft 7/10
	12 (S)	none (well on Barlow south of Wood)	barber rig (soil) groundwater	draft 7/10
	13 (S/D)	none (well near J-3 range south of Chadwick)	barber rig (soil) groundwater	draft 7/10
	14 (S)	none (well at the corner of Wheelock and Turpentine)	barber rig (soil) groundwater	draft 7/10
	15 (S/D)	none (well at the corner of Spruce Swamp and Sandwich)	barber rig (soil) groundwater	draft 7/10
15		Site 6	hand auger (soil)	
	28 (S)	none (well at corner of Wheelock and Chadwick)	barber rig (soil) groundwater	draft 7/10
	29 (S)	none (well at the corner of Barlow and Chadwick)	barber rig (soil) groundwater	draft 7/10
	17 (S/D)	none (well southeast of Demo-2)	rotosonic rig (soil) groundwater	draft 7/10
	18 (S/I/D)	none (well on east end of Gibbs)	rotosonic rig (soil) groundwater	draft 7/10
	20 (S)	none (well on west end of Pocasset Forestdale)	rotosonic rig (soil) groundwater	draft 7/10

Table 2
Summary of Sampling Areas and Field Sampling Plan Status
As of July 17, 1997

Area^a	Well No. (depth)	LocationName/Description in Action Plan	Sample methods/media	FSP status
	21 (S/D)	none (well on south end of Burgoyne)	rotosonic rig (soil) groundwater	draft 7/10
	22 (S)	none (well midway on Burgoyne)	rotosonic rig (soil) groundwater	draft 7/10
	23 (S/I/D)	none (well north end of Burgoyne)	rotosonic rig (soil) groundwater	draft 7/10
	24 (S)	none (well near Rod & Gun Club)	rotosonic rig (soil) groundwater	draft 7/10
16		GP-9 (High-use gun position)	hand auger (soil)	
17		Mixed-use gun position	hand auger (soil)	
18		Low-use gun position	hand auger (soil)	
19		High-use mortar position	hand auger (soil)	
20		Mixed-use mortar position	hand auger (soil)	
21		Low-use mortar position	hand auger (soil)	
22		Control area near mortar positions	hand auger (soil: control)	
23		Drainage swale (north of Snake Pond)	hand auger (soil)	
24		Drainage swale (northwest of Snake Pond)	hand auger (soil)	
25		Rod & Gun Club pond	sediment/surface water	
26		Deep Bottom Pond	sediment/surface water	
27		Round Swamp	sediment/surface water	
28		Grassy Pond	sediment/surface water	
29		Ox Pond	sediment/surface water	
30		Donnelly Pond	sediment/surface water	
31		Little Halfway Pond	sediment/surface water	
32		Raccoon Swamp	sediment/surface water (control)	
33		Donnelly Pond	sediment/surface water	
34		Bailey's Pond	sediment/surface water	

Table 2
Summary of Sampling Areas and Field Sampling Plan Status
As of July 17, 1997

Area^a	Well No. (depth)	LocationName/Description in Action Plan	Sample methods/media	FSP status
35		Gibbs Pond	sediment/surface water	
36		Opening Pond	sediment/surface water	
37		Bypass Bog	sediment/surface water	
38		Control area near gun positions	hand auger (soil: control)	

Notes: (a) Boring sampling locations do not have unique area numbers