

U.S. Army Garrison Fort Monmouth
Restoration Advisory Board (RAB)
April 2, 2008 ~ 7:00 p.m.

AGENDA

1. Call meeting to order: Colonel Stephen Christian
2. Comments old business.
 - Approve January 8, 2008 RAB Meeting Minutes.
3. ECP Phase II Approach: Shaw Environmental and Infrastructure, Inc.
No Findings - Why + Where Field Invest. conducted
4. ECP Phase II Geophysical Survey Process: Enviroscan, Inc.
*Methods EM-electromagnetic survey (detect buried metallic material)
GPR-ground penetrating radar (characterizing anomalies)*
5. Discuss February 20, 2008 Terrain Tour of FM Landfill Sites, conducted for the FMERPA Environmental Committee
*- Questions from Ed @ cost for shoring up LF stream bank
@ capping LF cost*
6. Approval of RAB Operating Procedures.
7. Discuss scheduling of next meeting.
8. Questions and Answers.
9. Meeting adjourned.

22 Parcels

- 24 suspected USTs

14(1), 28(1), 51(11), 76(7), 79(4)

- # 28 suspected septic tank

no precedence w/ sanitary sewer

CW Parcels

13 - housing

14 - housing/wash rack

15 - lab

27 - multi use area

28 - lab, battery test, Motor f.

34 - ops station

MP Parcels

38

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43

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51

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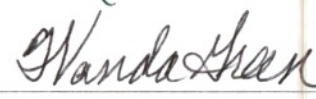
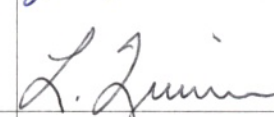
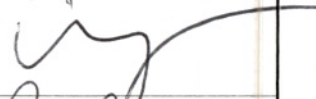
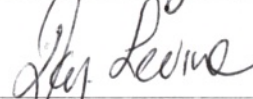
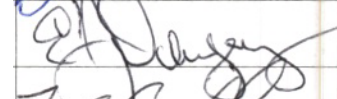
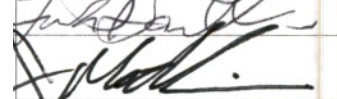
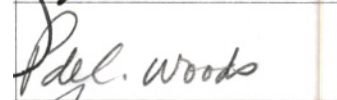
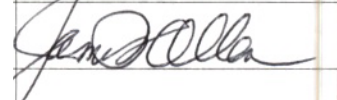
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2008 Fort Monmouth Restoration Advisory Board

Date ~~January 8, 2008~~
April 2, 2008

NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL	SIGNATURE
Col. Stephen Christian	U.S. Army Fort Monmouth	U.S. Army Fort Monmouth ATTN: IMNNE-MON-ZA Fort Monmouth, NJ 07703	W - 732-532-9504	stephen.christian@us.army.mil	
Wanda Green	U.S. Army Fort Monmouth	Directorate of Public Works 173 Riverside Drive Fort Monmouth, NJ 07703	W - 732-532-8341	wanda.green1@us.army.mil	
Joe Fallon	U.S. Army Fort Monmouth	Directorate of Public Works 173 Riverside Drive Fort Monmouth, NJ 07703	W - 732-532-6223	joseph.m.fallon@us.army.mil	
Larry Quinn	NJDEP Division of Publicly Funded Site Remediation	NJDEP Div. of Publicly Funded Site Remediation 401 E. State St., CN 413 Trenton, NJ 08625	W - 609-633-0766	larry.quinn@dep.state.nj.us	
William Simmons	Monmouth Co. Dept. of Health	Monmouth County DOH 3435 Hwy 9 Freehold, NJ 07728	732-431-7456	wsimmons@co.monmouth.nj.us	
Dan Levine	Little Silver Business - Little Silver Community Hardware	44 Church St. Little Silver, NJ 07739	H-732-747-2212 W-732-747-2133 F-732-747-5420	'hardwaredan@verizon.net'	
Brain Charnick	Resident - Eatontown	Redacted - Privacy Act	H- Redacted - Privacy Act W- Redacted - Privacy Information C- Redacted - Privacy Act	Redacted - Privacy Act	
Edward J. Dlugosz	Resident - Eatontown	Redacted - Privacy Act	H- Redacted - Privacy Act W- Redacted - Privacy Information	Redacted - Privacy Act	
Frank Barricelli	Resident - Oceanport	Redacted - Privacy Act	H- Redacted - Privacy Act H- Redacted - Privacy Act	Redacted - Privacy Act	
Jim Modlin	Resident - Oceanport	Redacted - Privacy Act	H- Redacted - Privacy Act W- Redacted - Privacy Information H- Redacted - Privacy Act	Redacted - Privacy Act	
Pippa Woods	Resident - Tinton Falls	Redacted - Privacy Act	H- Redacted - Privacy Act W- Redacted - Privacy Information C- Redacted - Privacy Act	Redacted - Privacy Act	
James Allen	Resident - Tinton Falls	Redacted - Privacy Act	H- Redacted - Privacy Act	Redacted - Privacy Act	
Dianne M. Crilly	Resident - Shrewsbury	Redacted - Privacy Act	H- Redacted - Privacy Act H- Redacted - Privacy Act	Redacted - Privacy Act	
Rosemary Brewer	Resident - Little Silver	Redacted - Privacy Act	H- Redacted - Privacy Act W- Redacted - Privacy Information C- Redacted - Privacy Act	Redacted - Privacy Act	
Tim Rider	U.S. Army Fort Monmouth	Media Relations, Bldg 1207 Fort Monmouth, NJ 07703	W - 732-532-1409	timothy.rider@us.army.mil	

2005 BRAC
 Fort Monmouth Environmental Condition of Property
 Assessment
 Phase II Site Investigation Work Plan
 April 2, 2008



1

Shaw Shaw Environmental & Infrastructure, Inc.

Overview

- Recap of the Environmental Condition of Property (ECP) Process
- Phase II Site Investigation Work Plan for the Fort Monmouth ECP
- Path Forward

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BRAC 2005 ECP Process Review

- Programmatic Environmental Review
 - Completed in 2005
- ECP Assessment
 - Completed January 2007
- CERFA Letter Report
 - Summary letter/map of the Phase I ECP Report
 - Submitted to Regulators January 2007
- Site Investigation Sampling Recommendations
 - Work Plan Completed September 2007
- Site Investigation / Field Sampling
 - Sampling conducted Sept 2007 – January 2008

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ECP Phase I Process

- Historical Records Review
- Aerial Photography Analysis
- Visual Site Inspection
- Interviews
- Write ECP Phase I Report/Develop Parcels

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ECP Parcel Categories

- **Category 1** - Areas where **no release or disposal** of hazardous or petroleum products has occurred
- **Category 2** - Areas where **only release or disposal of petroleum products** has occurred
- **Category 3** - Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal **below action levels**
- **Category 4** - Areas where release, disposal, and/or migration of hazardous substances has occurred and all necessary removal and/or response **actions have been taken**
- **Category 5** - Areas of known contamination where release, disposal, and/or migration of hazardous substances has occurred and removal and/or response **actions are underway**
- **Category 6** - Areas of known contamination where required response **actions have not been taken**
- **Category 7** - Areas that are not evaluated or require further evaluation

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Charles Wood Area (CWA) Parcels

LEGEND

Installation Boundary

ECP PARCEL CATEGORY DEFINITIONS

Areas where no release or disposal of hazardous substances or petroleum products has occurred, including the migration of these substances from adjacent areas.

Areas where only release or disposal of petroleum products has occurred.

Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

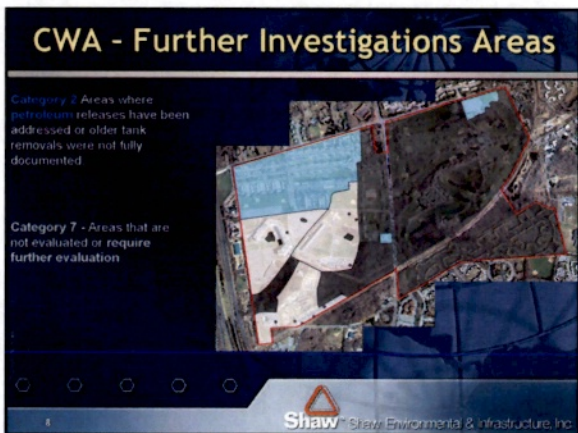
Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required response actions have not yet been taken.

Areas that are not evaluated or require additional evaluation.

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Site Investigation / Phase II

- **Site Investigation**
 - Fill data gaps identified in the Phase I ECP
 - Absence/presence of constituents of concern
 - Investigate likely release locations
- **Work Plan Prepared**
 - 21 parcels investigated
 - Areas not addressed under the IRP
- **Field Sampling**
 - September 2007 – January 2008
 - Geophysical surveys
 - Surface and subsurface soil
 - Groundwater
 - Sediment
 - Indoor air/soil gas

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Site Investigation Field Methodologies

- **NJDEP Field Sampling Protocols**
 - NJDEP Field Sampling Procedures Manual
 - N.J.A.C.
 - Chapter 26E - Technical Requirements for Site Remediation
 - Chapter 14B – Underground Storage Tanks
 - NJDEP Vapor Intrusion Guidance
- **Reviewed and approved by the NJDEP**

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Geophysical Surveys

- **Non-intrusive investigative tool for evaluating subsurface features / conditions**
- **Former USTs**
- **Former Septic Tanks**



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Surface and Subsurface Soil Sampling

- **Rationale**
- **Equipment Utilized**
 - Direct Push Technology (DPT)
 - Hand auger
 - Test pits
- **Field implementation**
 - Locations
 - Spacing
 - Depths



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Groundwater Sampling

- **Rationale**
- **Equipment Utilized**
 - DPT
 - Existing monitoring wells
- **Field implementation**
 - Locations
 - Spacing
 - Depths – shallow groundwater



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Sediment Sampling

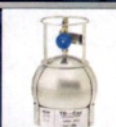
- **Rationale**
- **Equipment Utilized**
- **Field implementation**
 - Locations
 - Potential discharge locations
 - Down gradient
 - Depths
 - Surface
 - Subsurface (~ 2 ft bgs)



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Soil Gas and Indoor Air

- Rationale
- Equipment Utilized
- Field implementation
 - Locations – potential migration pathways
 - Sumps
 - Floors drains
 - Floor cracks
 - Depths
 - Soil gas – vadose zone
 - Indoor air – breathing zone or lower




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Evaluation of Groundwater Data

- Compare groundwater constituents to NJDEP screening criteria
- Evaluate proximity to buildings
 - 100' – Volatile organic compounds (VOCs)
 - 30' – Petroleum hydrocarbons (fuel related)

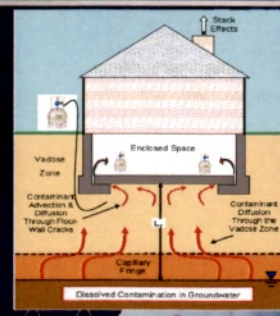
GW Detections above GWSL Critical Distance 100' CI-HCs; 30' HCs



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Development of Sampling Plan



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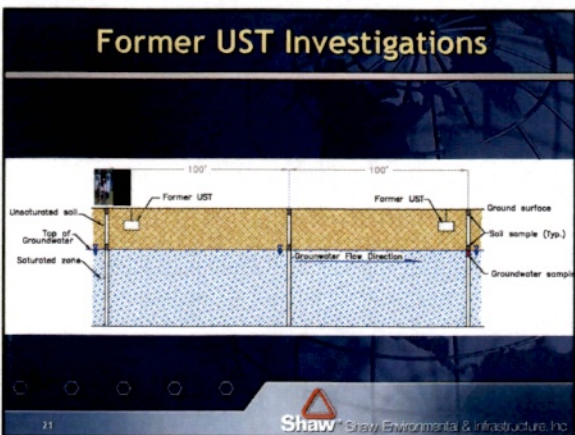
Shaw Shaw Environmental & Infrastructure, Inc.



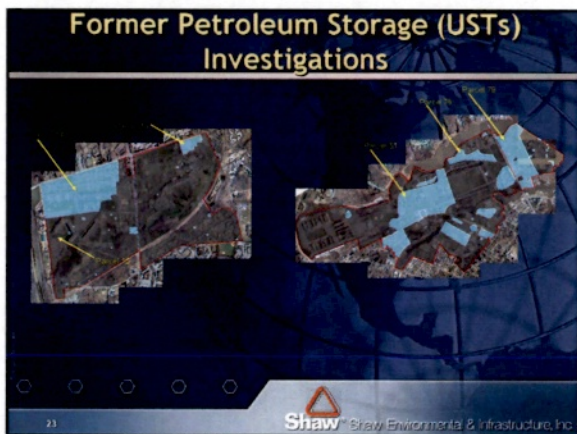
Petroleum Related Investigations (Category 2)

- **Former USTs**
- **Field Sampling Summary**
 - Locations and media (geophysical surveys, soil, groundwater)
 - Field Screening
- **Analytical Program Summary**
 - Analytes tested

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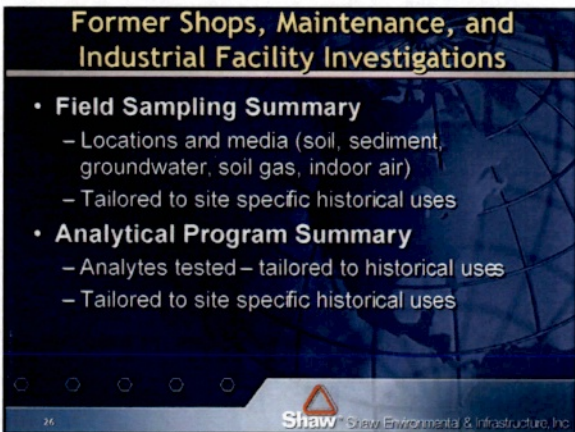






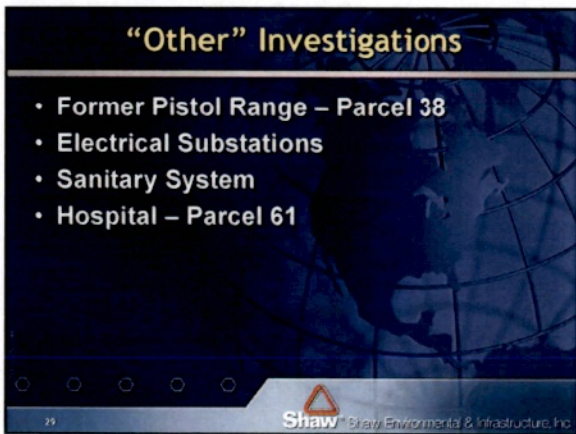














**Path Forward -
Analysis and Reporting**

- **Sample analysis**
 - NJDEP certified laboratory
 - Completed in January 2008
- **Site Investigation Report – ongoing**
 - Data Evaluation
 - Parcel by parcel evaluation/summary
 - Summary and Recommendations
 - Submittal to NJDEP Summer 2008

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 Shaw Environmental & Infrastructure, Inc.

operating Procedures - avail

Env. Lab used?

Will you investigate the golf course,

Homeland Security don't have to follow
environment