U.S. Army Garrison Fort Monmouth Restoration Advisory Board (RAB) October 21, 2010 ~ 7:00 p.m.

AGENDA

- 1. Call meeting to order James Allen
- 2. Comments old business James Allen
 - > Approval of the July 8, 2010 Meeting Minutes.

Frank move 2 nd

- 3. Discuss the status of:
- Installation Restoration Program (IRP) Reports Wanda Green 4. Discuss Site Injection Plan – John Montgomery from Tecom-Vinnell Services
- Explained hand-out

5. Discuss Unregulated Heating Oil Tank (UHOT) removals - Harold Hornung from Tecom-Vinnell Services

Building 812, FTMM-64 additional clean-up.

6. Discuss RAB members review of Department of Health questions submitted by Bill Simmons at the April 8th meeting. – James Allen

7. Round table discussion - James Allen

8. Discuss 2011 meeting schedule.

Tentative Date – Thursday, January 6, 2011, Gibbs Hall, 7:00 pm

9. Public comments/questions.

10. Meeting adjourned.

Date: October 21, 2010

2010 Fort Monmouth Restoration Advisory Board

NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL	SIGNATURE
George Fitzmaier	U.S. Army Fort Monmonuth	U.S. Army Fort Monmouth ATTN: IMNNE-MON-ZA Fort Monmouth, NJ 07703	W - 732-532-9504	george.fitzmaier@us.army.mil	
		Directorate of Public Works 173 Riverside Drive			Noth no M
Wanda Green	U.S. Army Fort Monmonuth		W - 732-532-8341	wanda.green1@us.army.mil	PRALEM
Joe Fallon	U.S. Army Fort Monmonuth	Directorate of Public Works 173 Riverside Drive Fort Monmouth, NJ 07703	W - 732-532-6223	joseph.m.fallon@us.army.mil	
Larry Quinn	NJDEP Publicly Funded Remediation Element	NJDEP Publicly Funded Remediation Element 401 E. State St., P.O. Box 413 Trenton, NJ 08625	W - 609-633-0766	larry.quinn@dep.state.nj.us	L. Luin
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- ^{'Redacted - Privacy Act} W-732-747-2133 F-732-747-5420	'hardwaredan@verizon.net'	255.
			Redacted - Privacy Act R	edacted - Privacy Information	0
Brain Charnick	Resident - Eatontown	Redacted - Privacy Act	W- ^{Redacted - Privacy Information} C- 'Redacted - Privacy Act H-Redacted - Privacy Act		Bun Chumde
Edward J. Dlugosz	Resident - Eatontown		W-Redacted - Privacy Information		Still 5
Frank Barricelli	Resident - Oceanport		H-Redacted - Privacy Act		Ast shall
Jim Modlin	Resident - Oceanport		W-Redacted - Privacy Information		
James Allen	Resident - Tinton Falls		H- Redacted - Privacy Act		Jones allan
Dianne M. Crilly	Resident - Shrewsbury		H-Redacted - Privacy Act Redacted - Privacy Act	(Donne as
Rosemary Brewer	Resident - Little Silver		H- W - Redacted - Privacy Information C-	Redacted - Privacy Act	Rosen Bleve
Robyn Bennet	U.S. Army Fort Monmonuth	Media Relations, Bldg 1207 Fort Monmouth, NJ 07703	W - 732-532-1409	robyn.bennett@us.army.mil	, ,

FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING

October 21, 2010 ~ 7:00 PM

SIGN-IN SHEET

PRINT NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL
He rold Horning	TIS		×22577	
			X27272	
John Mortgomery Geography Barster	Shan	Trandon NJ	600 644 4 943	
FRANK COSENT.NO	FMERA	7-12 Corbett EATINTION		
DATE CANTERAM	· · ·	6 N		
Paul Maak		Redacted - P	rivacy Act	t
Jill gwydir	Shrewissing Environmental Commission	Redacted - Privacy Ac		
TOM MENRARCE	SHREWSBURY COUNCIL	74 ROBINSON PL. SHIRPENSBURY	732-741-5512	
BEN FOREY	NJCIEARWATER NJEC	PO BOT 303 RED BANK	732.581,0197	
Lake Heller	FINEKA	2-12 Corbett Way		

FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING

October 21, 2010 ~ 7:00 PM

SIGN-IN SHEET

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FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING October 21, 2010 ~ 7:00 PM

REQUEST TO ASK QUESTIONS

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PRINT NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL
Harold Homony	TUS		X22577	
Jill guydir BEN Focebyt	Environmental CommShrewsbury			
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FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING October 21, 2010 ~ 7:00 PM REQUEST TO ASK QUESTIONS

FORT MONMOUTH RESTORATION ADVISORY BOARD (RAB) MEETING

October 21, 2010 ~ 7:00 PM

REQUEST TO ASK QUESTIONS

PRINT NAME	ORGANIZATION	ADDRESS	TELEPHONE	EMAIL
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Notes and Reference Material Regarding the Discussion about Legacy Sediment Testing for the RAB Meeting on 7-8-10

Will the Army Commit to Funding Comparatively Increased Costs for Testing and Disposal of Sediment, Should Extensive Grid Sampling in the Future Reveal Historic Contamination of the Sediments in Parkers Creek, Oceanport Creek, and Wampum Lake?

Limited sampling required by the DEP of the sediment immediately downstream of the 9 landfills and 3 sewage treatment plants indicates that no major sediment contamination exists.

The number of sediment samples for hazardous chemicals that were taken during IRP, ECP and BEE investigations in Parkers Creek, for example, in the area around a former STP, is much fewer than would be required during the mandated grid sampling that would precede dredging Parkers Creek.

During an evaluation of this sewer plant in 1971, a thick black sewage sludge layer was found in the sediments near the plant. It is doubtful that this layer, which has since dispersed and may be buried under more recent sediment layers, was sampled for hazardous chemicals, since this event predates most environmental legislation.

The contamination of sediments in Wampum Lake with metals, that was investigated by the MCHD, Dr. Dorfman of Monmouth University, the EPA and the DEP, may be related to a privately owned metallurgical company's STP as well as the Fort's STP that had discharged into Wampum Lake.

MONMOUTH COUNTY HEALTH DEPT, 6-29-10b

By; Bill Simmons

Most Pollutants Remain In Estuaries

Freshwater colloidal fines, along with the adsorbed bacteria and pollutants, clump together into aggregates, self compact, sink, and accumulate in estuaries. It has been estimated that up to 80% of freshwater pollutants accumulate in estuaries. "Probably less than 5% of the sediment reaching the coastal zone in the Atlantic seaboard of the U.S. is transferred to the continental shelf or to the deep sea" – Meade (1982) in Riverine Transfer of Particulate Matter to Ocean Systems (Depetris, Pedro).

Mud Holds More Pollutants Than Sand

"It is widely recognized that sediments less than 63 um in size are the most important fraction for contaminant adsorption and transport, due to their relatively large surface area and geochemical composition" (Stone and Droppo 1994 quoted in Wood and Armitage.1997. Biological Effects of Fine Sediment in the Lotic Environment. Env.Manage. V.21, N.2, pp.203-217).

Sand	Silt	Clay
2000 - >62 microns (um)	<62 - 4 um	<4 um24 um

"Distribution and partitioning of heavy metals in estuarine sediment cores and implications for the use of sediment quality standards."

... regulatory authorities should examine vertical metal profiles, particularly in estuaries that are experiencing low sediment accumulation rates where historically contaminated sediments are in the shallow sub-surface zone and where erosion or dredging activities may take place...

... many metals e.g. Pb associate readily with particulates and become adsorbed or co-precipitated with carbonates, oxyhydroxides, sulphides and clay minerals. Consequently, sediments accumulate contaminants and may act as long-term stores for metals in the environment.

K.L. Spencer and C.L. MacLeod. 2002. Distribution and partitioning of heavy metals in estuarine sediment cores and implications for the use of sediment quality standards. Hydrology and Earth System Sciences, 6(6), 989-998. http://www.hydrol-earth-syst-sci.net/6/989/2002/hess-6-989-2002.pdf

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)

"If the Army has left waste in place it is responsible under "CERCLA warranty" as long as the problem is caused by the Army" Quoted from notes. Neil D. Robison BRAC NEPA Support Team USACE <u>neil.d.robison@usace.army.mil</u> 5/19/10 7PM. FMERPA "Fort Monmouth, NJ BRAC 05 NEPA Review"

OVERVIEW OF CERCLA

B.Elements of a claim under section 107(a)(4)(B).

1. There is or has been a "release" or "threatened release" of a hazardous substance.

a.Broad definition of "release" in CERCLA ¤ 101(22): "spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers and other closed receptacles containing any hazardous substance or pollutant or contaminant)."

b."Release" construed broadly to include mere presence of hazardous substances in soil and groundwater.

http://taberlaw.wordpress.com/united-states-environmental-law-at-a-glance/comprehensive-environmental-responsecompensation-and-liability-act-cercla/

CERCLA Warranty-"any additional remedial action found to be necessary after the date of...transfer shall be conducted by the United States." <u>http://www.nga.org/Files/pdf/0807GSASTEINBERG.PDF</u>

"Based on the historical assessments of MP surface water discussed above and recent surface water monitoring data, the most severe impacts to surface water were the result of historical discharge from industrial sites upstream of FTMM." U.S. Army BRAC 2005 Environmental Condition of Property Report Fort Monmouth Monmouth County, New Jersey Final 29-January-2007. p. 4-48 <u>http://www.monmouth.army.mil/C4ISR/ecp/FortMonmouthECPJan-07Final.pdf</u>

CERCLA warranty has not been established for downstream watershed sediments.

Historical and Baseline Ecological Evaluation investigations of sewers and landfills have been permitted by the DEP to be restricted to areas adjacent to source instead of downstream. After decades since operations ceased, contamination in sediments proximate to these sites have bled out, moved with currents to deposition areas in the watershed, and have been buried by subsequent sedimentation over the decades.

3.0 Sediment Screening Values for Use in the Baseline Ecological Evaluation

"Further remedial investigations/actions need not be triggered by BEE screening exceedences if sediments proximal to the site display contaminant concentration ranges similar to upgradient sediments, which may be impacted by other sources, diffuse anthropogenic contamination, etc. However, upgradient sediment data must not be used to eliminate contaminants of concern until the BEE has been completed."<u>http://www.nj.gov/dep/srp/regs/sediment/03_screen.htm</u>

TYPE	SITE	ID	YRS OP	ACRES	VOLUME	STREAM	WATERSHED	RESP COMP
LF	MP	FTMM02	1964-1968	6.5		MILL/WAMPUM	PARKERS CREEK	
LF	MP	FTMM03	1959-1964	5.9		LAFAETRAS	PARKERS CREEK	
LF	MP	FTMM05	1952-1959	3.2		MILL/WAMPUM	PARKERS CREEK	
LF	MP	FTMM08	1962-1981	7.2		NA	PARKERS CREEK	
LF	MP	FTMM12	UNKNOWN	1.4		HUSKY	OCEANPORT CREEK	
LF/TRAIN	MP	FTMM18	UNKNOWN	4.1		NA	PARKERS CREEK	
LF	MP	FTMM04	1955-1956	1.4		MILL/WAMPUM	PARKERS CREEK	Y
LF	MP	FTMM14	1965-1966	6.9		HUSKY	OCEANPORT CREEK	Y
LF	CW	FTMM25	UNKNOWN	UNK		MILL-WAMPUM LAKE	PARKERS CREEK	Y
STP	MP	FTMM19	1941-1975		700,000 GPD	NA	PARKERS CREEK	Y
STP	MP	FTMM20	<1941-1941*		UNKNOWN	NA	PARKERS CREEK	Y
STP	CW	FTMM27	1942-1975		800,000 GPD	WAMPUM BROOK TO LAKE	PARKERS CREEK	Y
*MP DATE	S FR	OM 1917						

FM LANDFILLS AND SEWERS

FMERPA EA meeting 6-15-10. Joe Fallon: groundwater quality in the monitoring wells at some landfills has improved since sampling began in the 1990's to the point that some landfills may be close to the end of required monitoring.

Evaluators Are To Use Best Professional Judgment Based On USEPA Guidance

An ecological risk assessment is a process through which the person responsible for conducting the remediation evaluates the likelihood that adverse ecological effects to natural resources have occurred, are occurring or may occur, as a result of a discharge. In cases where the environmental risk assessment does not provide sufficient information to develop appropriate restoration, the Department will work with the person conducting the remediation to collect necessary additional data to do so. http://www.nj.gov/dep/nrr/about/faq.htm#19

N.J.S.A. 58:10B directs that the Department shall determine the need for and application of remediation standards to protect the environment on a case-by-case basis in accordance with USEPA regulations and guidances ...

While a BEE must be performed, evaluators are to use best professional judgment based on USEPA guidance... The objective of the Baseline Ecological Evaluation is to examine the site for the co-occurrence of (1) contaminants of potential ecological concern, (2) environmentally sensitive areas, and (3) a chemical migration pathway to these sensitive areas...

b. Sediment

"Guidelines for the protection and management of aquatic sediment quality in Ontario," Ontario Ministry of the Environment, ISBN 0-7729-9248-7, 1993, Persaud, D., R. Jaagumagi, and A. Hayton. (Fresh water sediments)

"Incidence of adverse biological effects within ranges of chemical concentrations in marine and estuarine sediments,&qyuot; Environmental Management 19:81-97, 1995, Long, E.R., D.D. MacDonald, S.I. Smith, and F.D. Calder. (Estuarine and marine sediments)

"Briefing Report to the EPA Science Advisory Board on the Equilibrium Partitioning Approach to Generate Sediment Quality Criteria," EPA 440/5-89-002.

3. Contaminant Migration Pathways to Environmentally Sensitive Areas

The potential for contaminants to migrate from the source to receptors must be evaluated during a site visit and documented in the BEE report. The text should include a description of potential chemical migration pathways...In summary, the BEE is a streamlined evaluation conducted with limited data using conservative assumptions for parameters where site-specific data are lacking http://www.state.nj.us/dep/srp/news/1997/9701_05.htm

The DEP Office of Dredging and Sediment Technology (Brownfields Remediation and Reuse) has more rigorous requirements for sediment analyses performed for dredging than the DEP Office of Site Remediation for the site investigations at Fort Monmouth.

The DEP dredge manual is at http://www.njstatelib.org/digit/r588/dredgingActivities/Full.pdf

Chapter 3, "A-Background Information", beginning on page 5 (pdf page 18), gives and overview of the pre-application process and procedures to for the DEP to evaluate the proposed testing plan

This is followed with meetings with Suzanne Dietrick (<u>sdietrick@dep.state.nj.us</u>) to finalize sampling areas near hotspots and determine what tests to conduct, such as grain size, bulk chemistry, elutriate testing.

For example, in Monmouth (Region 2), a maximum volume of 8000 cubic yards can be represented by a sediment sampling core, with a maximum of 3 cores per composite sample.

For the area between the 2 bridges on Parkers Creek, a rough guess of \$25-30000 cost for sampling.

This data must be applied to the dredging project in timely manner, which is determined case-by-case.

If too much time elapses, the data is invalidated and the area would have to be resampled.

Two Rivers Dredging Group

Coincidentally, some preliminary work (depth soundings) may begin this fall related to a project to remedy the River's current shoaling problems with maintenance dredging

The U.S. Army Corps of Engineers has begun surveying the main channels in preparation of an anticipated federal maintenance dredging project, should funding be made available.

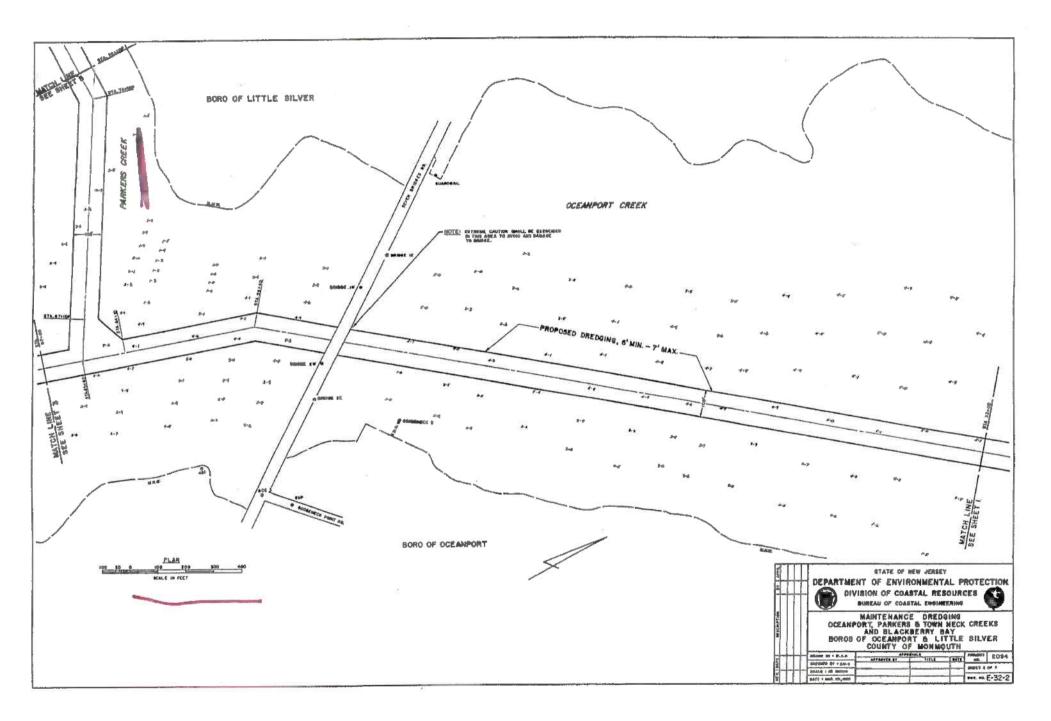
This development provides a unique opportunity for local communities to develop a holistic (rather than piecemeal) plan to conduct maintenance dredging in other reaches of the Rivers.

To this end, municipalities bordering the two Rivers have established a Two Rivers Dredging Group, with representatives preparing to work cooperatively to ensure that secondary channels are dredged, along with the federal channels, in an efficient manner.

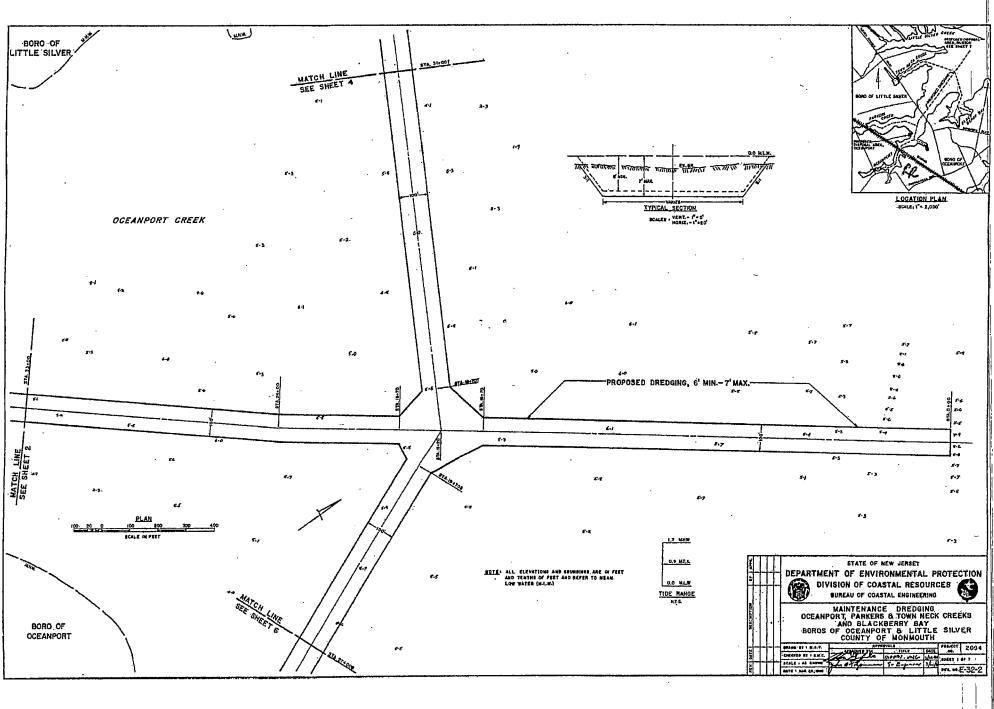
The project manager is Joseph DiLorenzo of Najarian Associates at 732-389-0220.

The summary document is at http://www.najarian.com/pdfs/IBoatNavesinkplan.pdf .

The following are maps of the navigable channels in Parkers and Oceanport Creeks that are under consideration.

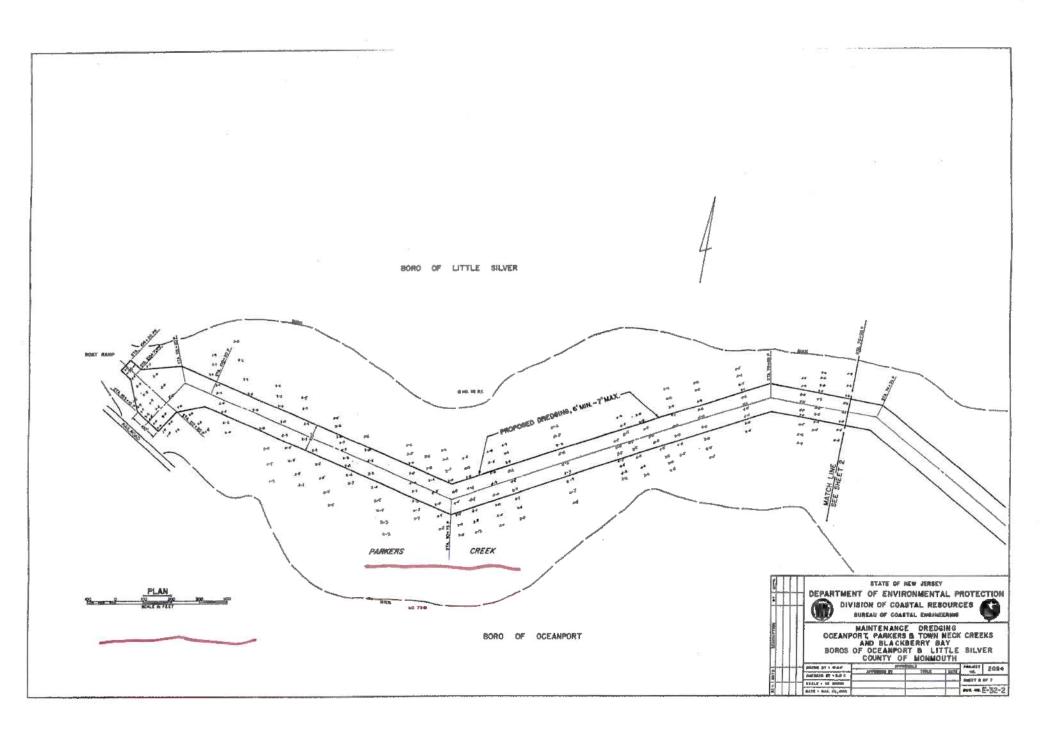


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If the State of NJ does not require FM to evaluate the legacy sediment issues, will the TAPP grant pay for this new data?

Technical assistance does not include those activities prohibited under Section 203.11 of this part, such as litigation or underwriting legal actions; political activity; generation of new primary data such as well drilling and testing, including split sampling; reopening final DoD decisions or conducting disputes with the Department of Defense; or epidemiological or health studies, such as blood or urine testing. <u>http://ecfr.gpoaccess.gov/cgi/t/text/text-</u> idx?c=ecfr&sid=71e3f17fa015081b21603fa7d554bed6&rgn=div5&view=text&node=32:2.1.1.1.10&idno=32

Technical Assistance for Public Participation (TAPP) in Defense Environmental Restoration Activities

C. Eligible Activities

The generation of new data is the responsibility of the lead agency--in this case the Department of Defense. Furthermore, the Department of Defense works closely with the regulatory agencies to develop investigation strategies to ensure potential hazards are adequately characterized. This consultation and coordination is an important part of the partnership the Department of Defense maintains with regulatory agencies as cleanup proceeds. If the RAB identifies a circumstance where additional data collection may be necessary, these concerns should be communicated to the Department of Defense, where the final decisions on the restoration program reside, or to the appropriate regulatory agencies if the Department of Defense is not responsive.

Sec. 203.11 Ineligible activities.

(d) Generation of new primary data, such as well drilling and testing, including split sampling.

(e) Reopening final DoD decisions, such as the Records of Decision (see limitations on judicial review of remedial actions under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Section 113(h)) or conducting disputes with the Department of Defense). <u>http://www.epa.gov/EPA-GENERAL/1998/February/Day-02/g2394.htm</u>

Remedial Action (Short-term Remedies)

Sites targeted for treatment in an effort to accelerate the reduction of contaminants of concern identified in groundwater:

- M-2 Landfill (benzene, chlorobenzene)*
- M-5 Landfill (DCE, PCE, TCE)*
- M-22: Wastewater Treatment Lime Pit (CW-1) (TCE)
- M-61: Former USTs (Site 283) (benzene)*
- M-58: Former USTs (Site 2567) (*tert*-butyl alcohol)
- M-64: Former USTs (Site 812) (benzene, vinyl chloride)*

*Injections were previously conducted at these sites using ORC and HRC at various times from 2000 through 2009

Remediation Products

Q. What is Oxygen Release Compound (ORC[®])?

A. ORC is a proprietary formulation of magnesium peroxide that, when hydrated, produces a controlled release of oxygen for periods of up to 12 months on a single application. The increased oxygen promotes naturally occurring aerobic microbes to degrade hydrocarbons into CO_2 and water.

Q. What is Hydrogen Release Compound (HRC[®])?

A. HRC is a solution that releases lactic acid when hydrated. Naturally occurring anaerobic microbes uses the lactic acid as a source of hydrogen to degrade chlorinated organic compounds into harmless end products.

Remediation Products

Q. What is RegenOx®?

A. RegenOx is a two-part solution that when mixed, forms a reactive oxidizer complex (hydrogen peroxide) that chemically reacts (oxidizes) with non- and chlorinated hydrocarbons to harmless end products.

ORC, HRC and RegenOx are introduced into subsurface soils and/or groundwater by pressure injection using soil borings emplaced in excavations via pumps. Regardless of method, NJDEP approval is required prior to application.

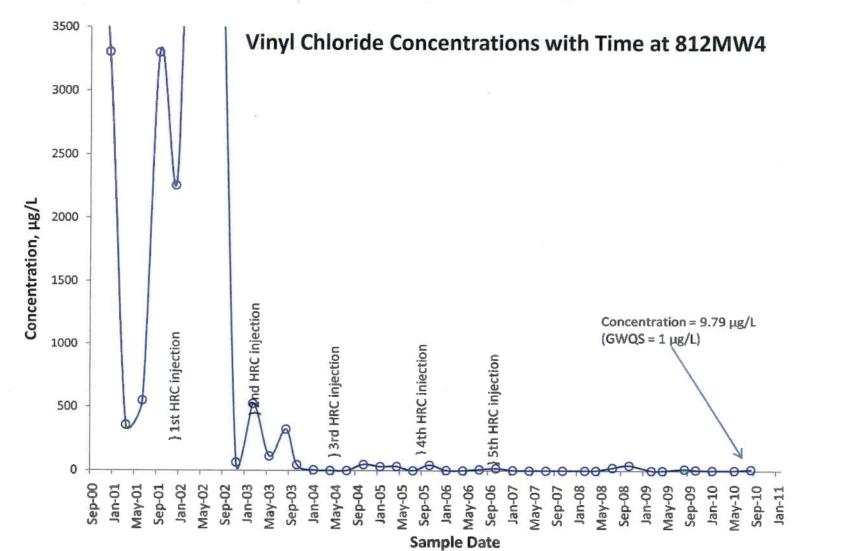
Obtaining NJDEP Approval for Injection

- Submit Discharge to Groundwater Proposal [Permit by Rule (PBR)] with draft Public Notice
- Obtain NJDEP approval of PBR and Public Notice
- Publish approved Public Notice of the DGW in two daily or weekly newspapers in the vicinity of the contaminated site, at least 35 days prior to the proposed startup date of the groundwater discharge; and
- Submit to NJDEP proof of publication for the public notice within 15 days after the notice is published, and provide names and addresses of everyone that was sent a copy of the public notice and DGW proposal.
- Provide minimum 2-week notification to NJDEP prior to initiating each injection event.

Public Notice

- Brief description of the proposed discharge: [Include a description of the site including the remedial action, type of discharge (e.g., treated ground water or in situ bioremediation), discharge unit (e.g., injection well, overland flow, lagoon, etc.) and treatment proposed and the name and description of the formation receiving the discharger]. A copy of this public notice have been sent to the Municipal Clerk and designated local health official for [Municipality, County or region].
- A copy of the DGW proposal is available from the person responsible for conducting the remediation [include the name and address of the person conducting the remediation], or as part of the administrative record which is on file at the offices of the Department, Site Remediation Program, located at 401 East State Street, Trenton, Mercer County, New Jersey [or add alternate location]. The file may be reviewed under the New Jersey Open Public Records Act ("OPRA"), N.J.S.A. 47:1A-1 et seq. Information regarding the OPRA procedures is available at http://www.state.nj.us/dep/opra/oprainfo.html.
- Interested persons may submit written comments regarding the DGW proposal to the Department at the address listed below and to the owner or operator of the facility at [name and address of person/contact submitting DGW proposal]. All comments shall be submitted within 30 calendar days of the date of this public notice. All persons who believe that the DGW proposal is inappropriate, must raise all reasonably ascertainable issues and submit in writing to the Department all reasonably available arguments and factual grounds supporting their position, including all supporting material, by the close of the public comment period. All comments submitted by interested persons that relate to the DGW proposal will be considered by the Department, provided that the Department receives the comments by the close of the public comment period. After the close of the public comment period, the Department will render a decision regarding the proposed discharge. The Department will respond to all significant and timely comments with its decision regarding the DGW proposal. Each person who has submitted written comments will receive notice of the Department's decision.
- Any interested person may request in writing that the Department hold a non-adversarial public hearing on the DGW proposal. This request shall state the nature of the issues to be raised in the proposed hearing and shall be submitted within 30 calendar days of the date of this public notice to the address cited below. A public hearing will be conducted whenever the Department determines that there is a significant degree of public interest in the discharge to ground water decision. If a public hearing is held, the public comment period in this notice shall automatically be extended to the close of the public hearing.
- Comments and written requests for a non-adversarial public hearing shall be sent to:
- ATTN: DGW proposal
- Site Remediation Program
- NJ Department of Environmental Protection
- [Name of Department contact]
- [Address of Department contact]

M-64 (Site 812)



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Site Name	M-2 FTMM-02 Closed Solid Waste Landfill	M-3 FTMM-03 Closed Solid Waste Landfill	M-4 FTMM-04 Closed Solid Waste Landfill
	> RAPR	> RAPR	> RIRA/RAWP
	2Q 00 thru 3Q 02 (04/04 S)	2Q 00 thru 3Q 02 (05/04 S)	2Q 01 thru 3Q 10 (01/11 T)
	4Q 02 thru 3Q 03 (10/05 S)	4Q 02 thru 4Q 08 (03/10 S)	> RIR (05/05 S)
	4Q 03 thru 3Q 05 (01/09 S)	1Q 09 thru 3Q 10 (01/11 T)	CEA Biennial Certification (DRP)
	4Q 05 thru 3Q 06 (03/09 S)	> RAWP (10/00 S)	
	4Q 06 thru 4Q 08 (DRP)	> SIR (12/95 S)	
Denet Tree Deneties	1Q 09 thru 3Q 10 (01/11 T)	CEA Biennial Certification (DRP)	
Report Type, Reporting Period and (Submission	> CEA Biennial Certification (09/07 S)		
Date)	> RIR/RAWP (02/01 S)		

Site Name	M-5 FTMM-05 Closed Solid Waste Landfill	M-8 FTMM-08 Closed Solid Waste Landfill	M-12 FTMM-12 Closed Solid Waste Landfill
Report Type, Reporting Period and (Submission Date)	 RAPR 4Q 99 thru 3Q 02 (09/03 S) 4Q 02 thru 3Q 03 (10/05 S) 4Q 03 thru 3Q 05 (05/09 S) 4Q 05 thru 3Q 06 (06/09 S) 4Q 06 thru 4Q 08 (DRP) 1Q 09 thru 3Q 10 (01/11 T) RIR Sediment Quality (02/04 S) RAWP (03/00 S) CEA Biennial Certification (DRP) 	 RAPR 2Q 00 thru 3Q 02 (06/04 S) 4Q 04 thru 3Q 05 (11/09 S) 4Q 05 thru 3Q 06 (DRP) 4Q 06 thru 4Q 08 (DRP) 1Q 09 thru 3Q 10 (01/11 T) RAWP (10/00 S) CEA Biennial Certification (DRP) 	 > RIRA/RAWP 3Q 03 thru 3Q 10 (01/11 T) > CEA Biennial Certification (DRP)
Legend			
B CEA DRP	Building Classification Exemption Area Draft Report Pending by Contractor	RAR RAWA RAWP	Remedial Action Report Remedial Action Work Plan Addendum Remedial Action Work Plan
DPW	Directorate of Public Works	RIR	Remedial Investigation Report
F	Final Report	S	Report Submitted by DEP to NJDEP
NJDEP	New Jersey Department of Environmental	SIR	Site Investigation Report
Q	Quarter	т	Tentative Date for Contractor to Submit
RAPR	Remedial Action Progress Report	UST	Underground Storage Tank
		1	10/21/20

100.00

Site Name	M-14 FTMM-14 Closed Solid Waste Landfill	M-18 FTMM-18 Former Training Area	M-22 FTMM-22 (CW1) Wastewater Treatment Lime Pit
	 RIRA/RAWP 2Q 01 thru 3Q 10 (01/11 T) RIR (10/05 S) CEA Biennial Certification (DRP) 	 RIRA/RAWP 2Q 01 thru 3Q 10 (01/11 T) CEA Biennial Certification (DRP) 	> RAPR 2Q 98 thru 1Q 99 (10/99 S) 2Q 99 thru 3Q 99 (08/00 S) 4Q 99 thru 1Q 00 (12/00 S) 2Q 00 thru 3Q 00 (03/01 S) 4Q 00 thru 1Q 01 (01/02 S) 2Q 01 thru 3Q 01 (09/02 S) 4Q 01 thru 1Q 02 (02/04 S) 2Q 02 thru 1Q 03 (12/04 S) 2Q 03 thru 3Q 04 (02/05 S) 4Q 04 thru 3Q 05 (06/07 S) 4Q 05 thru 3Q 06 (12/08 S)
Report Type, Reporting Period and (Submission Date)			4Q 06 thru 4Q 08 (06/10 S) 1Q 09 thru 3Q 10 (01/11 T) ➤ Supplemental Investigation Report (04/01 S) ➤ CEA Biennial Certification (DRP) ➤ RAWP (06/97 S)

Legend			a Company of the	
В	Building	RAR		Remedial Action Report
CEA	Classification Exemption Area	RAWA		Remedial Action Work Plan Addendum
DRP	Draft Report Pending by Contractor	RAWP		Remedial Action Work Plan
DPW	Directorate of Public Works	RIR		Remedial Investigation Report
F	Final Report	S		Report Submitted by DEP to NJDEP
NJDEP	New Jersey Department of Environmental	SIR		Site Investigation Report
Q	Quarter	т		Tentative Date for Contractor to Submit
RAPR	Remedial Action Progress Report	UST	P	Underground Storage Tank

Site Name	M-25 FTMM-25 (CW-3A) Landfill	M-28 FTMM-28 (CW-6) Former Pesticide Storage	M-53 FTMM-53 (B-699) Gasoline Storage	
	> RIRA/RAWP	> RIRA/RAWP	> RAPR	
	2Q 01 thru 3Q 10 (01/11 T)	2Q 01 thru 3Q 10 (01/11 T)	2Q 01 thru 1Q 02 (10/04 S)	
	> RIR (05/05 S)	➢ RIR (05/05 S)	2Q 02 thru 3Q 04 (05/05 S)	
	CEA Biennial Certification (DRP)	CEA Biennial Certification (DRP)	4Q 04 thru 3Q 05 (06/07 S)	
			4Q 05 thru 3Q 06 (10/08 S)	
			4Q 06 thru 4Q 08 (06/10 S)	
			1Q 09 thru 3Q 10 (01/11 T)	
Report Type, Reporting			> CEA Biennial Certification (DRP)	
Period and (Submission Date)			> RAWA (06/99 S)	
	M-54	M-55	M-56	
Site Name	FTMM-54 (B-296)	FTMM-55 (B-290)	FTMM-56 (B-80)	

Site Name	FTMM-54 (B-296)	FTMM-55 (B-290)	FTMM-56 (B-80)
	Gasoline Storage	Gasoline UST	Petroleum Release
Report Type, Reporting Period and (Submission Date)	 RIRA/RAWP 4Q 00 thru 3Q 10 (01/11 T) CEA Biennial Certification (DRP) 	 RIRA/RAWP 1Q 94 thru 3Q 10 (01/11 T) UST/SIR (05/00 F, 10/93 S) CEA Biennial Certification (DRP) 	 RIRA/RAWP 2Q 01 thru 3Q 10 (01/11 T) RIR (05/05 S) CEA Biennial Certification (DRP)

Legend	Several to the set of the second of the		
В	Building	RAR	Remedial Action Report
CEA	Classification Exemption Area	RAWA	Remedial Action Work Plan Addendum
DRP	Draft Report Pending by Contractor	RAWP	Remedial Action Work Plan
DPW	Directorate of Public Works	RIR	Remedial Investigation Report
F	Final Report	S	Report Submitted by DEP to NJDEP
NJDEP	New Jersey Department of Environmental	SIR	Site Investigation Report
Q	Quarter	т	Tentative Date for Contractor to Submit
RAPR	Remedial Action Progress Report	UST	Underground Storage Tank

Site Name	M-57	M-58	M-59	
	FTMM-57 (B-108)	FTMM-58 (B-2567)	FTMM-59 (B-1122)	
	Gasoline Release	Gasoline Release	Unknown Discharge	
Report Type, Reporting Period and (Submission Date)	 RIRA/RAWP 2Q 01 thru 3Q 10 (01/11 T) RIR (11/04 S) CEA Biennial Certification (DRP) 	 RAPR 2Q 04 thru 4Q 08 (06/10 S) 1Q 09 thru 3Q 10 (01/11 T) CEA Biennial Certification (DRP) RIR/RAWP (02/06 S) 	 RAPR 2Q 04 thru 4Q 08 (06/10 S) 1Q 09 thru 3Q 10 (01/11 T) CEA Biennial Certification (DRP) UST/SIR (10/93 S) 	

Site Name	M-61 FTMM-61 (B-283) Leaking UST	M-64 FTMM-64 (B-812) Gasoline UST	M-66 FTMM-66 (B-886) Former AST
1 1	> RAPR	> RAPR	> RAPR
	1Q 09 thru 3Q 10 (01/11 T)	3Q 00 thru 3Q 02 (12/03 S)	1Q 09 thru 3Q 10 (01/11 T)
	RIR/RAWP (02/06 S)	4Q 02 thru 3Q 03 (10/05 S)	CEA Biennial Certification (DRP)
	> CEA Biennial Certification (DRP)	1Q 09 thru 3Q 10 (01/11 T)	
Denot Trans Denotice		> RIR/RAWP (06/01 S)	
Report Type, Reporting Period and (Submission		> UST/SIR (09/98 SMC)	
Date)		CEA Biennial Certification (DRP)	

Site Name	707, 745, 750	1104
	> RIRA/RAWP	> RIRA/RAWP
Report Type, Reporting Period and (Submission Date)	3Q 93 thru 3Q 10 (01/11 T)	3Q 10 (01/11 T)

Legend		to the track set of	
В	Building	RAR	Remedial Action Report
CEA	Classification Exemption Area	RAWA	Remedial Action Work Plan Addendum
DRP	Draft Report Pending by Contractor	RAWP	Remedial Action Work Plan
DPW	Directorate of Public Works	RIR	Remedial Investigation Report
F	Final Report	S	Report Submitted by DEP to NJDEP
NJDEP	New Jersey Department of Environmental	SIR	Site Investigation Report
Q	Quarter	т	Tentative Date for Contractor to Submit
RAPR	Remedial Action Progress Report	UST	Underground Storage Tank