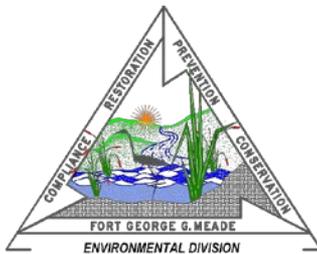




Fort George G. Meade

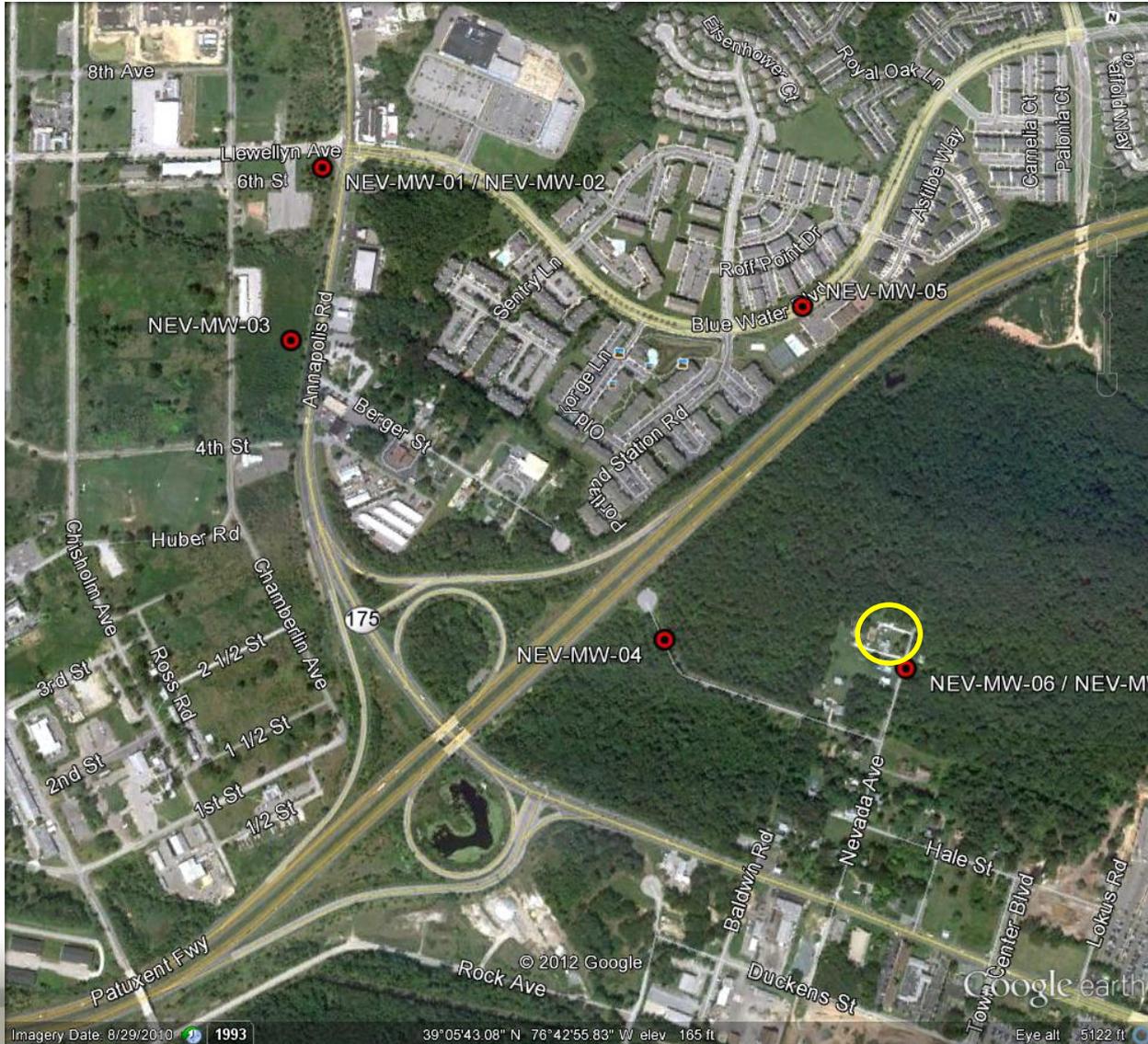
Nevada Avenue Off-Post Groundwater Investigation Update

Restoration Advisory Board Meeting May 21, 2015





Nevada Avenue Investigation





Nevada Avenue Monthly Sampling - Interim Results

(last 12 months)



Month	<i>Dichloroethene</i> (MCL - 70 µg/L)		<i>Tetrachloroethene</i> (MCL - 5 µg/L)		<i>Trichloroethene</i> (MCL - 5 µg/L)	
	Detections / Samples	Range (µg/L)	Detections / Samples	Range (µg/L)	Detections / Samples	Range (µg/L)
May 14	0/3	ND	3/3	1.4 – 2.1	0/3	ND
Jun 14	0/3	ND	3/3	1.3 – 2.2	0/3	ND
Jul 14	3/3	0.36J-0.59J	3/3	1.3 – 2.2	0/3	ND
Aug 14	2/3	0.45J – 0.59J	3/3	1.3 – 2.0	0/3	ND
Sept 14	3/3	0.33J – 0.53J	3/3	1.1 – 1.7	0/3	ND
Oct 14	0/3	ND	3/3	1.2 – 1.6	0/3	ND
Nov 14	0/3	ND	3/3	1.1 – 1.4	0/3	ND
Dec 14	0/3	ND	3/3	1.3 – 2.2	0/3	ND
Jan 15	0/3	ND	3/3	1UL – 1.3	0/3	ND
Feb 15	3/3	0.35J – 0.5J	3/3	1.1 – 1.4	0/3	ND
Mar 15	2/3	0.43J - 0.44J	3/3	1.0 – 1.3	0/3	ND
Apr 15	2/2	0.38J – 0.47J	2/2	1.2 – 1.5	0/3	ND

MCL = Maximum Contaminant Level

µg/L = micrograms per liter

ND = Indicates contaminant not detected above the MDL

Data Qualifiers: **J**= estimated concentration below the method detection limit (MDL)

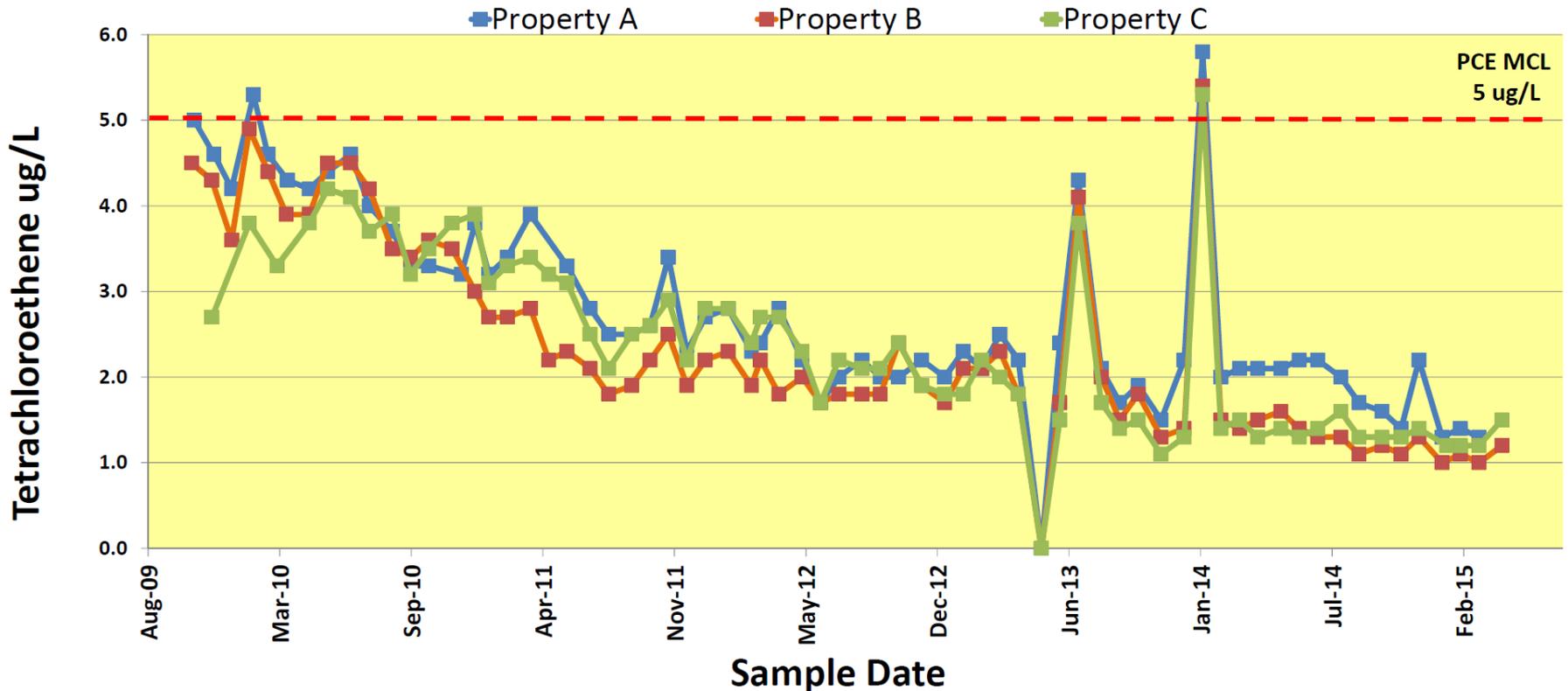
***Data not validated**

BOLD SHADED = MCL exceeded





Summary of Nevada Avenue Monthly Sampling Results – Tetrachloroethene (PCE)





Fact Sheet



IMCOM
SOLDIERS • FAMILIES • CIVILIANS

- Summarizes Report findings, conclusion, and recommendations
- Will be available on-line and provided to:
 - Residents in sampling program
 - Adjacent residents (including western Berger Street)
 - Local community association (Seven Oaks)
 - Day Care Center on Blue Water Blvd



FACT SHEET

**Fort George G. Meade, Maryland
Off-Post Groundwater Investigation
Nevada Avenue Area
May 2013**



Overview

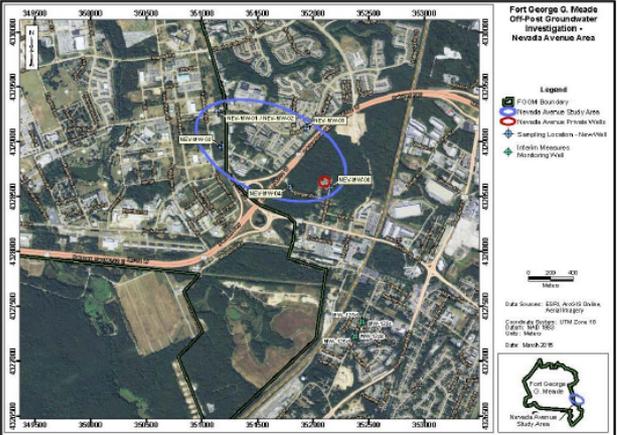
The U.S. Army at Fort George G. Meade recently finished an investigation of groundwater in the Nevada Avenue area of Odenton. This fact sheet provides background information on the groundwater investigation and summarizes the work performed and the conclusions of the report. The Army will continue to sample private wells, provide bottled water, and conduct further investigation.

Investigation Background

The Army, the U.S. Environmental Protection Agency (EPA), Maryland Department of the Environment (MDE), and Anne Arundel County Department of Health, have been conducting an investigation of groundwater in the Nevada Avenue area of Odenton, just east of Fort Meade.

The Army initially detected groundwater contamination in two monitoring wells on Fort Meade's southeastern boundary. The Army tested private drinking water wells in Odenton starting in 2009. During the 2009 testing, tetrachloroethene (PCE) was detected in three private drinking water wells on Nevada Avenue at concentrations near or just exceeding the EPA drinking water standard or maximum contaminant level (MCL). Other compounds were detected at levels below EPA's standards.

The goal of the Army's most recent investigation was to determine if Fort Meade is the source of the PCE found in the three private wells. Homes and businesses receiving their water from the public water supply (Anne Arundel County) are not impacted by the solvents found in the private wells.



**Fort George G. Meade
Off-Post Groundwater
Investigation -
Nevada Avenue Area**

Legend

- Fort Meade Boundary
- Nevada Avenue Study Area
- Nevada Avenue Traffic Wells
- Sampling Location - Home/Well
- Monitoring Well
- Monitoring Well

Scale: 0 20 40 Feet

Data Source: ESRI, Aerial Data
2008/08/07

Coordinate System: UTM Zone 18
Datum: NAD 83
Date: March 2013







Investigation Next Steps



- Monthly Army sampling of Nevada Ave private wells continues
 - Collected 12 May 2015
 - Scheduled 9 June 2015
- Property A not sampled in Apr 2015 due to spigot malfunction. May 2015 sample collected; however, conditions for future sampling under evaluation.
- Bottled water under contract, one year with two option years.
- Additional investigations recommended to determine if FGGM is source of Nevada Ave COCs. Upgradient potential source areas included in upcoming contracts.





Points of Contact



U.S. Army Garrison Fort George G. Meade
Directorate of Public Works-Environmental Division
4216 Roberts Ave, Suite 5115
Fort Meade, Maryland 20755-7068

- George Knight, PG
 - Installation Restoration Manager
 - 301-677-7999
 - george.b.knight7.civ@mail.mil
- Denise Tegtmeyer, PE (Sundance Consulting, Inc.)
 - Senior Project Manager
 - 301-677-9559
 - denise.a.tegtmeyer.ctr@mail.mil



Back-up Slides





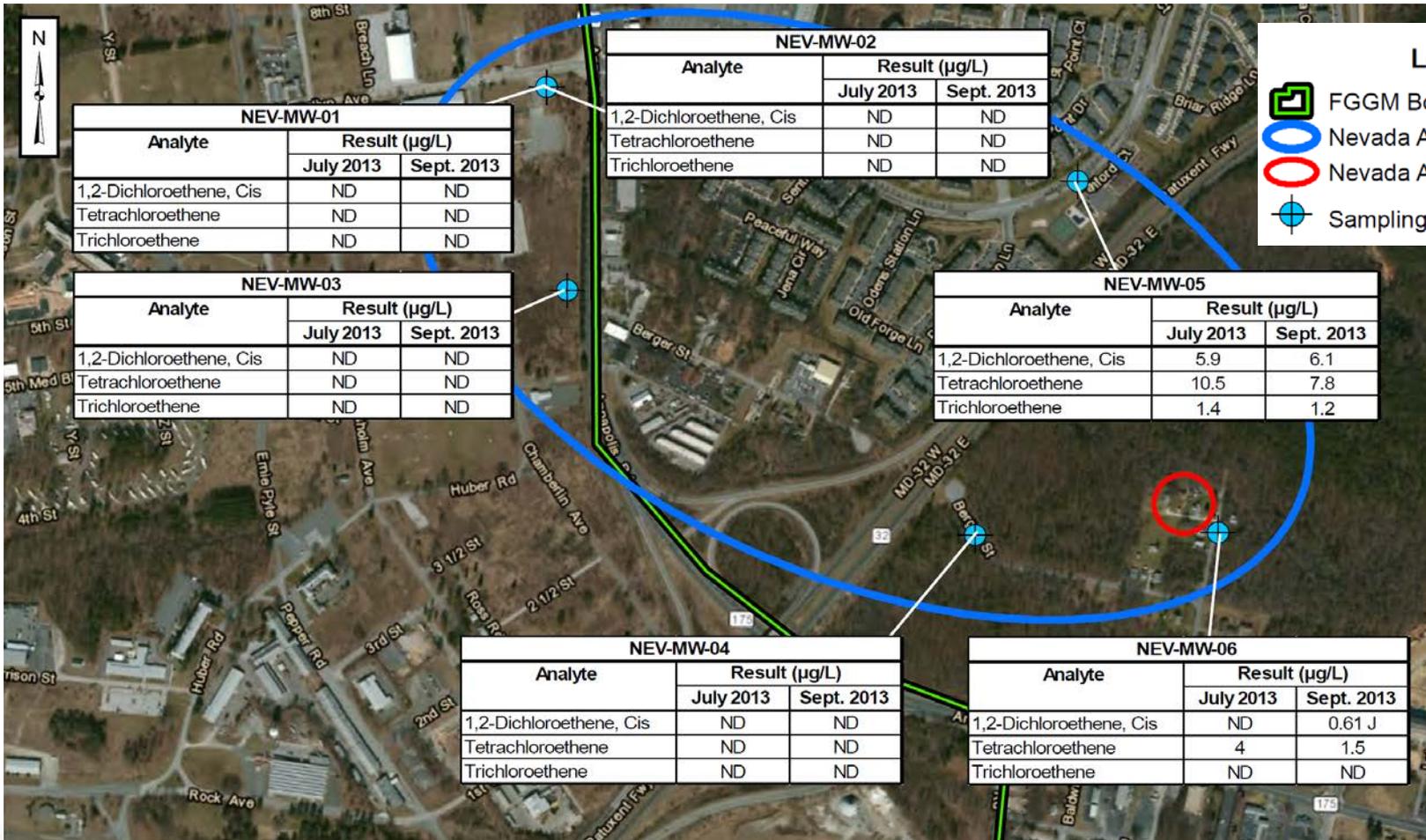
Investigation Conclusion



- Final submitted 13 Mar 2015
 - **Conclusion:** PCE source is originating from a location NNW of the Nevada Ave wells, not the investigated area on FGGM
 - **Summary:**
 - SE groundwater flow puts NEV-05 upgradient of Nevada Ave private wells
 - PCE in NEV-05 exceeds private wells and NEV-06
 - No PCE in new monitoring wells on FGGM (NEV-01, -02, -03)
 - Current and historical dry cleaners upgradient of private wells
 - **Recommendation:** Additional investigations recommended to determine if FGGM is source of Nevada Ave COCs.



Results



Legend

- FGGM Boundary
- Nevada Avenue Study Area
- Nevada Avenue Private Wells
- Sampling Location - New Well

NEV-MW-01

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	ND	ND
Tetrachloroethene	ND	ND
Trichloroethene	ND	ND

NEV-MW-02

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	ND	ND
Tetrachloroethene	ND	ND
Trichloroethene	ND	ND

NEV-MW-03

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	ND	ND
Tetrachloroethene	ND	ND
Trichloroethene	ND	ND

NEV-MW-05

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	5.9	6.1
Tetrachloroethene	10.5	7.8
Trichloroethene	1.4	1.2

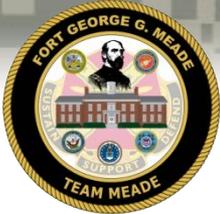
NEV-MW-04

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	ND	ND
Tetrachloroethene	ND	ND
Trichloroethene	ND	ND

NEV-MW-06

Analyte	Result (µg/L)	
	July 2013	Sept. 2013
1,2-Dichloroethene, Cis	ND	0.61 J
Tetrachloroethene	4	1.5
Trichloroethene	ND	ND





Report Conclusions



IMCOM
SOLDIERS • FAMILIES • CIVILIANS



Legend

- FGGM Boundary
- Nevada Avenue Study Area
- Nevada Avenue Private Wells
- Sampling Location - New Well
- Dry Cleaner
- Lower Patapsco Aquifer
Water Table Elevation Contours
(Sept. 2013)**
- Known
- Inferred
- Groundwater Flow Direction

