

NOR-02928

July 27, 2022

Mr. Jason Pelton Section Chief, Remedial Bureau D, Section B New York State Department of Environmental Conservation Division of Environmental Remediation Remedial Bureau A, 12<sup>th</sup> Floor 625 Broadway Albany, New York 12233-7015

Reference: CLEAN Contract No. N6247016D9008

Contract Task Order WE13

Subject: June 2022 Reporting Period

Groundwater Discharge Monitoring Report RE-137 Area, Drainage Basin 17, Nassau

County Basin #305

NYSDEC Site No. 130003B, NWIRP Bethpage

Dear Mr. Pelton:

Tetra Tech (Tt) is providing this monthly monitoring report for the groundwater discharge at the RE137 Area Groundwater Treatment System (GWTS) located near the Former Naval Weapons Industrial Reserve Plant (NWIRP), Bethpage. This report was prepared in accordance with New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) Permit Equivalent dated February 16, 2022.

This document is the third monthly report for this system. Full time operation of the RE-137 GWTS began on May 2, 2022 at a nominal flowrate of 100 gallons per minute (GPM). On June 6, 2022, the flow rate was increased to 200 gpm. This rate was maintained through June 2022. During the month of June 2022, the RE-137 GWTS operated for approximately 692.5 hours (uptime of 96 percent) and extracted, treated, and discharged a total of 8,063,093 gallons of groundwater. To date, the system has treated 13,268,197 gallons of groundwater and removed 153 pounds of volatile organic compounds.

One set of water samples was collected during each week of operation. These are Weeks 8 through 12 of the required 12 weekly sampling periods. As indicated in Attachment A, all constituents are within the SPDES parameters during this period. Going forward, samples will be collected on a monthly basis.

If you have any questions, please contact me at david.brayack@tetratech.com or 757-466-4909.

Sincerely,

David Brayack

David Brayack, P.E.

Project Manager

Attachment A: Discharge Monitoring Report, June 2022

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J. Pilewski, NYSDEC - Region 1 cc:

K. Granzen, NYSDEC M. Travis, NYSDEC

G. Ennis, Nassau County Department of Public Works S. Sokolowski, NAVFAC Mid-Atlantic

L. Donston, Tetra Tech

V. Varricchio, NWIRP Bethpage Facilities Management

#### ATTACHMENT A DISCHARGE MONITORING REPORT, JUNE 2022

## Attachment A-8 - Groundwater Sampling Results for Discharge Monitoring Report RE-137 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant – Bethpage, NY May 30 to June 3, 2022

SPDES Parameters			Week 8: May 30 to June 3, 2022			
Process Stream	Daily Treated Effluent Maximum	Units	RE-137 Influent (SP-100)	AOP Effluent (SP-201)	Treated Effluent (SP-303)	
Well Depth	N/A	ft bgs	750	N/A	N/A	
Screened Interval	N/A	ft bgs	630-745	N/A	N/A	
Sampling Date	N/A	N/A	06/03/22			
System Flowrate	400	GPM	N/A	N/A	200	
Total Flow <sup>1</sup>	N/A	Gallons	N/A	N/A	1,488,179	
pH	4.0-8.5	SU	NR	NR	5.9	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	ug/L	26.5 J	28.0	ND (0.75)	
1,1,2-Trichloroethane	1	ug/L	ND (37.5)	0.50 J	ND (0.75)	
1,1-Dichloroethane	5	ug/L	ND (37.5)	0.52 J	ND (0.75)	
1,1-Dichloroethene	5	ug/L	ND (37.5)	ND (0.75)	ND (0.75)	
1,4-Dioxane (via 8270 SIM)	0.35	ug/L	3.50	ND (0.20)	ND (0.20)	
Bis(2-Ethylhexyl) phthalate	7.5	ug/L	NS	NS	ND (4.00)	
Carbon Tetrachloride	5	ug/L	ND (37.5)	2.5	ND (0.75)	
Chloroform	7	ug/L	ND (37.5)	0.99 J	ND (0.75)	
cis 1,2-Dichloroethene	5	ug/L	ND (37.5)	ND (0.75)	ND (0.75)	
Tetrachloroethene	5	ug/L	ND (37.5)	ND (0.75)	ND (0.75)	
Trichloroethene	5	ug/L	1,640	0.93 J	ND (0.75)	

Ft bgs- feet below ground surface.

GPM- gallons per minute.

J – Estimated result between laboratory method detection limit and reporting limit.

ND – Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.

NR - Not recorded.

N/A - Not Applicable.

NS - Not sampled.

ug/L- micrograms per liter.

### Attachment A-9 - Groundwater Sampling Results for Discharge Monitoring Report RE-137 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant – Bethpage, NY June 4 to June 10, 2022

SPDES Parameters			Week 9: June 4 to June 10, 2022			
Process Stream	Daily Treated Effluent Maximum	Units	RE-137 Influent (SP-100)	AOP Effluent (SP-201)	Treated Effluent (SP-303)	
Well Depth	N/A	ft bgs	750	N/A	N/A	
Screened Interval	N/A	ft bgs	630-745	N/A	N/A	
Sampling Date	N/A	N/A	06/10/22			
System Flowrate	400	GPM	N/A	N/A	200	
Total Flow <sup>1</sup>	N/A	Gallons	N/A	N/A	1,961,874	
pH	4.0-8.5	SU	NR	NR	6.0	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	ug/L	19.9	20.0	ND (0.75)	
1,1,2-Trichloroethane	1	ug/L	0.75 J	0.41 J	ND (0.75)	
1,1-Dichloroethane	5	ug/L	0.80 J	0.40 J	ND (0.75)	
1,1-Dichloroethene	5	ug/L	5.1	ND (0.75)	ND (0.75)	
1,4-Dioxane (via 8270 SIM)	0.35	ug/L	4.4	ND (0.20)	ND (0.20)	
Bis(2-Ethylhexyl) phthalate	7.5	ug/L	NS	NS	ND (4.00)	
Carbon Tetrachloride	5	ug/L	1.8	1.90	ND (0.75)	
Chloroform	7	ug/L	1.0	0.85 J	ND (0.75)	
cis 1,2-Dichloroethene	5	ug/L	3.2	ND (0.75)	ND (0.75)	
Tetrachloroethene	5	ug/L	4.9	ND (0.75)	ND (0.75)	
Trichloroethene	5	ug/L	1,340	ND (0.75)	ND (0.75)	

Ft bgs- feet below ground surface.

GPM- gallons per minute.

J – Estimated result between laboratory method detection limit and reporting limit.

ND – Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.

NR - Not recorded.

N/A - Not Applicable.

NS - Not sampled.

ug/L- micrograms per liter.

### Attachment A-10 - Groundwater Sampling Results for Discharge Monitoring Report RE-137 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant – Bethpage, NY June 11 to June 17, 2022

SPDES Parameters			Week 10: June 11 to June 17, 2022			
Process Stream	Daily Treated Effluent Maximum	Units	RE-137 Influent (SP-100)	AOP Effluent (SP-201)	Treated Effluent (SP-303)	
Well Depth	N/A	ft bgs	750	N/A	N/A	
Screened Interval	N/A	ft bgs	630-745	N/A	N/A	
Sampling Date	N/A	N/A	06/17/22			
System Flowrate	400	GPM	N/A	N/A	200	
Total Flow <sup>1</sup>	N/A	Gallons	N/A	N/A	1,862,018	
pH	4.0-8.5	SU	NR	NR	5.7	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	ug/L	21.4	20.0	ND (0.75)	
1,1,2-Trichloroethane	1	ug/L	0.73 J	0.39 J	ND (0.75)	
1,1-Dichloroethane	5	ug/L	0.85 J	ND (0.75)	ND (0.75)	
1,1-Dichloroethene	5	ug/L	5.4	ND (0.75)	ND (0.75)	
1,4-Dioxane (via 8270 SIM)	0.35	ug/L	4.8	ND (0.20)	ND (0.20)	
Bis(2-Ethylhexyl) phthalate	7.5	ug/L	NS	NS	ND (4.00)	
Carbon Tetrachloride	5	ug/L	1.9	2.1	ND (0.75)	
Chloroform	7	ug/L	1.1	0.86 J	ND (0.75)	
cis 1,2-Dichloroethene	5	ug/L	3.2	ND (0.75)	ND (0.75)	
Tetrachloroethene	5	ug/L	4.7	ND (0.75)	ND (0.75)	
Trichloroethene	5	ug/L	1,550	ND (0.75)	ND (0.75)	

Ft bgs- feet below ground surface.

GPM- gallons per minute.

J – Estimated result between laboratory method detection limit and reporting limit.

ND – Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.

NR - Not recorded.

N/A - Not Applicable.

NS - Not sampled.

ug/L- micrograms per liter.

# Attachment A-11 - Groundwater Sampling Results for Discharge Monitoring Report RE-137 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant – Bethpage, NY June 18 to June 24, 2022

SPDES Parameters			Week 11: June 18 to June 24, 2022			
Process Stream	Daily Treated Effluent Maximum	Units	RE-137 Influent (SP-100)	AOP Effluent (SP-201)	Treated Effluent (SP-303)	
Well Depth	N/A	ft bgs	750	N/A	N/A	
Screened Interval	N/A	ft bgs	630-745	N/A	N/A	
Sampling Date	N/A	N/A	06/24/22			
System Flowrate	400	GPM	N/A	N/A	200	
Total Flow <sup>1</sup>	N/A	Gallons	N/A	N/A	1,822,724	
pH	4.0-8.5	SU	NR	5.8	NR	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	ug/L	18.4	17.5	ND (0.75)	
1,1,2-Trichloroethane	1	ug/L	0.63 J	0.40 J	ND (0.75)	
1,1-Dichloroethane	5	ug/L	0.76 J	0.38 J	ND (0.75)	
1,1-Dichloroethene	5	ug/L	4.6	ND (0.75)	ND (0.75)	
1,4-Dioxane (via 8270 SIM)	0.35	ug/L	4.0	ND (0.20)	ND (0.20)	
Bis(2-Ethylhexyl) phthalate	7.5	ug/L	NS	NS	ND (4.00)	
Carbon Tetrachloride	5	ug/L	1.9	1.8	ND (0.75)	
Chloroform	7	ug/L	0.95 J	0.78 J	ND (0.75)	
cis 1,2-Dichloroethene	5	ug/L	3.0	ND (0.75)	ND (0.75)	
Tetrachloroethene	5	ug/L	4.3	ND (0.75)	ND (0.75)	
Trichloroethene	5	ug/L	1,300	0.54 J	ND (0.75)	

Ft bgs- feet below ground surface.

GPM- gallons per minute.

J – Estimated result between laboratory method detection limit and reporting limit.

ND – Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.

NR - Not recorded.

N/A - Not Applicable.

NS - Not sampled.

ug/L- micrograms per liter.

# Attachment A-12 - Groundwater Sampling Results for Discharge Monitoring Report RE-137 Area Groundwater Remediation Groundwater Treatment Plant Naval Weapons Industrial Reserve Plant – Bethpage, NY June 25 to June 30, 2022

SPDES Parameters			Week 12: June 25 to June 30, 2022			
Process Stream	Daily Treated Effluent Maximum	Units	RE-137 Influent (SP-100)	AOP Effluent (SP-201)	Treated Effluent (SP-303)	
Well Depth	N/A	ft bgs	750	N/A	N/A	
Screened Interval	N/A	ft bgs	630-745	N/A	N/A	
Sampling Date	N/A	N/A	06/30/22			
System Flowrate	400	GPM	N/A	N/A	200	
Total Flow <sup>1</sup>	N/A	Gallons	N/A	N/A	928,298	
pH	4.0-8.5	SU	NR	NR	5.9	
1,1,2-Trichloro-1,2,2-Trifluoroethane	5	ug/L	17.6	16.8	ND (0.75)	
1,1,2-Trichloroethane	1	ug/L	0.70 J	ND (0.75)	ND (0.75)	
1,1-Dichloroethane	5	ug/L	0.81 J	ND (0.75)	ND (0.75)	
1,1-Dichloroethene	5	ug/L	5.0	ND (0.75)	ND (0.75)	
1,4-Dioxane (via 8270 SIM)	0.35	ug/L	4.6	ND (0.20)	ND (0.20)	
Bis(2-Ethylhexyl) phthalate	7.5	ug/L	NS	NS	ND (4.00)	
Carbon Tetrachloride	5	ug/L	1.9	1.9	ND (0.75)	
Chloroform	7	ug/L	1.0	0.76 J	ND (0.75)	
cis 1,2-Dichloroethene	5	ug/L	3.3	ND (0.75)	ND (0.75)	
Tetrachloroethene	5	ug/L	4.0	ND (0.75)	ND (0.75)	
Trichloroethene	5	ug/L	1,270	ND (0.75)	ND (0.75)	

Ft bgs- feet below ground surface.

GPM- gallons per minute.

J – Estimated result between laboratory method detection limit and reporting limit.

ND – Not detected above laboratory method detection limit. Limit of Detection (LOD) given in parentheses.

NR - Not recorded.

N/A - Not Applicable.

NS - Not sampled.

ug/L- micrograms per liter.