



PEER

PUBLIC EMPLOYEES FOR ENVIRONMENTAL RESPONSIBILITY

962 Wayne Ave • Suite 610 • Silver Spring, MD 20910

March 13, 2020

Commissioner Basil Seggos
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

cc: Sean Mahar
Chief of Staff
Department of Environmental Conservation
625 Broadway
Albany, New York 12233-0001

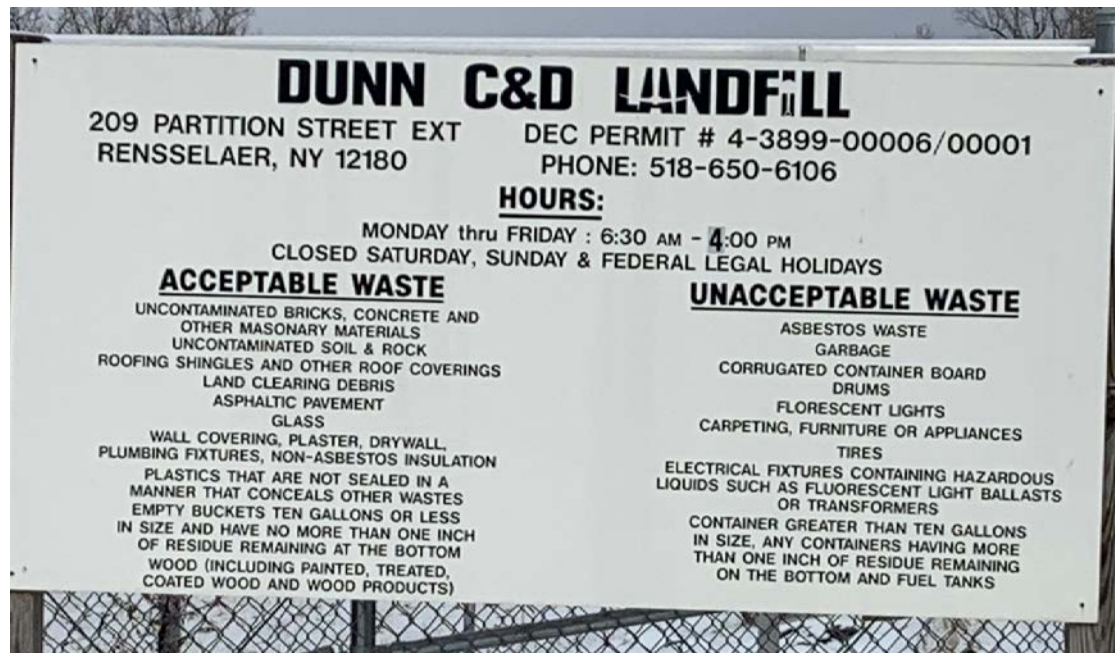
ENCLOSURES

Dear Commissioner Seggos,

Public Employees for Environmental Responsibility (PEER) is writing to urge the Department of Environmental Conservation (DEC) to close the Dunn Landfill in Rensselaer, New York. As you are aware, the Dunn Landfill – which is located roughly 200 feet from a K-12 public school housing pre-school through 12th grade – has been plagued with issues for years: the truck traffic, odors, dust, and leachate is of grave concern to the residents of Rensselaer.

The Dunn Landfill is a C& D landfill that claims it does not accept “carpeting,” or “furniture” (see Figure 1, below) (or, presumably, things like children’s car seats). Despite this policy, PEER has evidence that material appearing to be rolled up carpets and children’s car seats are being accepted at the landfill.

Figure 1: Sign at Dunn C&D Landfill explaining “acceptable waste” versus “unacceptable waste”



PEER was concerned that these “unacceptable” items might be causing per- and polyfluoroalkyl substances (PFAS) to leach off the landfill into nearby waterways. Therefore, we tested the Quackenderry Creek and two tributaries which run along the edge of the Dunn site, all of which flow into the Hudson, for PFAS.¹

We tested for 36 PFAS (the maximum number of PFAS that can be tested for) and found 11 PFAS at three different sites along the Quackenderry near Dunn. Specifically, we found more than 21 ppt of nine PFAS at one site; just under 70 ppt of 10 PFAS at a second site; and just under 30 ppt of nine PFAS at a third site. The fact that this many PFAS were found in the creek adjacent to the landfill indicates that:

- 1) there must be significantly more PFAS in the leachate from the landfill; and
- 2) chemicals are escaping from the landfill and getting into the environment.

Of particular concern is the fact that this leachate is trucked to the Albany County wastewater treatment plant (WWTP). In 2015, 1,554,078 gallons of leachate was “treated” at the WWTP and then discharged into the Hudson River; in 2016, 1,299,495 gallons was discharged; and in 2017, 2,511,772 gallons was discharged. Research has shown that WWTPs do not remove PFAS; indeed, in many instances, there is more PFAS in the effluent than in the influent. Moreover, since there are over 5,000 PFAS, and we only tested for 36, it is likely that there is much more in the leachate trucked to the WWTP.

¹ PEER also tested for Endosulfan I, an off-patent organochlorine insecticide and acaricide, which had been detected in prior testing by a third party, however PEER’s testing did not detect this substance.

While PFAS contamination above a certain level is not specifically regulated in New York, the New York State Department of Health has recommended a maximum contaminant level for two PFAS chemicals, PFOA and PFOS, of 10 parts per trillion to protect public health, which serves as a helpful reference for environmental protection.² The detection of the levels of contamination seen in the Quackenderry suggests more extensive contamination from chemicals running off into the environment via the landfill, although it is also possible that the contamination has spread to the nearby water through the air. The latter possibility is even more concerning, as the landfill is near enough to a K-12 public school that the school baseball team could hit a ball over its fence.

Between the possibility of an airborne threat and the near-certainty that the millions of gallons of leachate from the landfill likely contains significantly more PFAS contamination, action by the DEC is necessary. The leachate for this landfill must be tested and an examination should be conducted to ensure that prohibited items are not being disposed of within it.

It is inexcusable that the Dunn landfill is accepting waste that it is not supposed to be accepting, and that this waste is contaminating a creek that is a tributary to the Hudson River. Seven communities get their drinking water from the Hudson, and PFAS is a carcinogen. We therefore urge the DEC to:

- 1) test the leachate from the Dunn landfill for PFAS;
- 2) ensure that the landfill is not accepting waste containing PFAS, such as carpets and car seats;
- 3) test the effluent from the Albany County WWTP for PFAS; and
- 4) take enforcement action against the landfill, and consider closing it once and for all.

The Dunn Landfill is a habitual offender in violation of New York's environmental laws, as evidenced by the numerous enforcement actions DEC has taken. The people of Rensselaer deserve protection from this incessant recidivism, and the DEC should take this opportunity to demonstrate its commitment to upholding environmental standards to rekindle the rapidly deteriorating popular faith in state public health protections. The PFAS contamination found by PEER is the last straw.

Enclosed please find a summary of the results and the original report prepared by Eurofins, who performed the testing. Please feel free to contact us if you have any questions.

Sincerely,



² N.Y.S. DEP'T OF HEALTH, DRINKING WATER QUALITY COUNCIL RECOMMENDS NATION'S MOST PROTECTIVE MAXIMUM CONTAMINANT LEVELS FOR THREE UNREGULATED CONTAMINANTS IN DRINKING WATER (December 2018), https://www.health.ny.gov/press/releases/2018/2018-12-18_drinking_water_quality_council_recommendations.htm.

Kyla Bennett
Science Director
Public Employees for Environmental
Responsibility

Kevin H. Bell
Staff Counsel
Public Employees for Environmental
Responsibility

ENCLOSURES

Attachment A: Test Summary

Dunn Landfill PFAS results (in ppt)

	Site A	Site B	Site C
PFBS (Perfluorobutanesulfonic acid)	1.4 J	2.0	0.47 J
PFBA (Perfluorobutanoic acid)	3.4 J	8.2	7.4
PFHpA (Perfluoroheptanoic acid)	1.5 J	8.0	2.5
PFHxS (Perfluorohexanesulfonic acid)	0.93 J	6.4	ND
PFHxA (Perfluorohexanoic acid)	2.8	10	5.0
PFNA (Perfluorononanoic acid)	0.45 J	1.2 J	0.51 J
PFOS (Perfluorooctanesulfonic acid)	4.0	9.1	1.1 J
PFOA (Perfluorooctanoic acid)	3.7	12	3.6
PFPeA (Perfluoropentanoic acid)	3.0	12	8.6
PFPeS (Perfluoropentanesulfonate)	ND	0.88 J	ND
HFPODA	ND	ND	0.64 J
TOTAL	21.18	69.78	29.82

Attachment B: Eurofins Report



ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

PEER
962 Wayne Avenue
Suite 610
Silver Spring MD 20910

Report Date: March 05, 2020 19:15

Project: Dunn Landfill

Account #: 45197
Group Number: 2089694
State of Sample Origin: NY

Electronic Copy To PEER
Electronic Copy To PEER

Attn: Tim Whitehouse
Attn: Kyla Bennett

Respectfully Submitted,



Mary Kate Izzo
Project Manager

(717) 556-4656

To view our laboratory's current scopes of accreditation please go to <https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/> . Historical copies may be requested through your project manager.



SAMPLE INFORMATION

<u>Client Sample Description</u>	<u>Sample Collection</u> <u>Date/Time</u>	<u>ELLE#</u>
Site A Sample 1 Grab Water	02/26/2020 15:40	1268021
Site B Sample 1 Grab Water	02/26/2020 16:08	1268023
Site C Sample 1 Grab Water	02/26/2020 16:25	1268025
Blank Water	02/26/2020 15:05	1268027

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Sample Description: Site A Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268021
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53

Collection Date/Time: 02/26/2020 15:40

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Pesticides						
10589	Endosulfan I	959-98-8	N.D. D2	0.0044 ug/l	0.010 ug/l	1
LC/MS/MS Miscellaneous						
	EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	9CI-PF3ONS ¹	756426-58-1	N.D.	0.42	1.7	1
	9CI-PF3ONS is the acronym for Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid					
14473	11CI-PF3OUdS ¹	763051-92-9	N.D.	0.42	1.7	1
	11CI-PF3OUdS is the acronym for 11-Chloroeicosadecafluoro-3-oxaundecane-1-sulfonic acid					
14473	DONA ¹	919005-14-4	N.D.	0.42	1.7	1
	DONA is the acronym for 4,8-dioxo-3H-perfluorononanoic acid, the free acid form of ADONA.					
14473	10:2Fluorotelomersulfonic acid ¹	120226-60-0	N.D.	0.83	4.2	1
14473	4:2-Fluorotelomersulfonic acid ¹	757124-72-4	N.D.	0.42	1.7	1
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	N.D.	1.7	4.2	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	N.D.	0.83	2.5	1
14473	HFPODA ¹	13252-13-6	N.D.	0.42	2.5	1
	HFPODA is the acronym for 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid					
14473	NEtFOSAA ¹	2991-50-6	N.D.	0.42	2.5	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NEtPFOSA ¹	4151-50-2	N.D.	0.83	4.2	1
	NEtPFOSA is the acronym for N-ethylperfluoro-1-octanesulfonamide					
14473	NEtPFOSAE ¹	1691-99-2	N.D.	0.83	2.5	1
	NEtPFOSAE is the acronym for 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol					
14473	NMeFOSAA ¹	2355-31-9	N.D.	0.50	1.7	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMePFOSA ¹	31506-32-8	N.D.	0.83	2.5	1
	NMePFOSA is the acronym for N-methylperfluoro-1-octanesulfonamide					
14473	NMePFOSAE ¹	24448-09-7	N.D.	0.83	2.5	1
	NMePFOSAE is the acronym for 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol					
14473	Perfluorobutanesulfonic acid ¹	375-73-5	1.4 J	0.42	1.7	1
14473	Perfluorobutanoic acid ¹	375-22-4	3.4 J	1.7	4.2	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	N.D.	0.42	1.7	1
14473	Perfluorodecanoic acid ¹	335-76-2	N.D.	0.42	1.7	1
14473	Perfluorododecanesulfonic acid ¹	79780-39-5	N.D.	0.42	2.5	1
14473	Perfluorododecanoic acid ¹	307-55-1	N.D.	0.42	1.7	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	N.D.	0.42	1.7	1
14473	Perfluoroheptanoic acid ¹	375-85-9	1.5 J	0.42	1.7	1
14473	Perfluorohexadecanoic acid ¹	67905-19-5	N.D.	0.83	2.5	1
14473	Perfluorohexanesulfonic acid ¹	355-46-4	0.93 J	0.42	1.7	1

*=This limit was used in the evaluation of the final result

Sample Description: Site A Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268021
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 15:40

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	Perfluorohexanoic acid ¹	307-24-4	2.8	0.42	1.7	1
14473	Perfluorononanesulfonic acid ¹	68259-12-1	N.D.	0.42	1.7	1
14473	Perfluorononanoic acid ¹	375-95-1	0.45 J	0.42	1.7	1
14473	Perfluorooctadecanoic acid ¹	16517-11-6	N.D.	0.83	2.5	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	N.D.	0.42	1.7	1
14473	Perfluorooctanesulfonic acid ¹	1763-23-1	4.0	0.42	1.7	1
14473	Perfluorooctanoic acid ¹	335-67-1	3.7	0.42	1.7	1
14473	Perfluoropentanesulfonate ¹	2706-91-4	N.D.	0.42	1.7	1
14473	Perfluoropentanoic acid ¹	2706-90-3	3.0	0.42	1.7	1
14473	Perfluorotetradecanoic acid ¹	376-06-7	N.D.	0.42	1.7	1
14473	Perfluorotridecanoic acid ¹	72629-94-8	N.D.	0.42	1.7	1
14473	Perfluoroundecanoic acid ¹	2058-94-8	N.D.	0.42	1.7	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10589	Endosulfan I	SW-846 8081B	1	200620021A	03/04/2020 23:58	Dylan Schreiner	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	200620021A	03/03/2020 08:00	David S Schrum	1
14473	36 PFAS CpdS	EPA 537 Version 1.1 Modified	1	20059011	03/03/2020 05:37	Katie Renfro	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20059011	02/28/2020 10:56	Broch Clinton	1

*=This limit was used in the evaluation of the final result

Sample Description: Site B Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268023
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 16:08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Pesticides						
10589	Endosulfan I	959-98-8	N.D. D2	0.0045 ug/l	0.010 ug/l	1
LC/MS/MS Miscellaneous						
	EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	9CI-PF3ONS ¹	756426-58-1	N.D.	0.40	1.6	1
	9CI-PF3ONS is the acronym for Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid					
14473	11CI-PF3OUdS ¹	763051-92-9	N.D.	0.40	1.6	1
	11CI-PF3OUdS is the acronym for 11-Chloroeicosadecafluoro-3-oxaundecane-1-sulfonic acid					
14473	DONA ¹	919005-14-4	N.D.	0.40	1.6	1
	DONA is the acronym for 4,8-dioxo-3H-perfluorononanoic acid, the free acid form of ADONA.					
14473	10:2Fluorotelomersulfonic acid ¹	120226-60-0	N.D.	0.80	4.0	1
14473	4:2-Fluorotelomersulfonic acid ¹	757124-72-4	N.D.	0.40	1.6	1
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	N.D.	1.6	4.0	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	N.D.	0.80	2.4	1
14473	HFPODA ¹	13252-13-6	N.D.	0.40	2.4	1
	HFPODA is the acronym for 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid					
14473	NEtFOSAA ¹	2991-50-6	N.D.	0.40	2.4	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NEtPFOSA ¹	4151-50-2	N.D.	0.80	4.0	1
	NEtPFOSA is the acronym for N-ethylperfluoro-1-octanesulfonamide					
14473	NEtPFOSAE ¹	1691-99-2	N.D.	0.80	2.4	1
	NEtPFOSAE is the acronym for 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol					
14473	NMeFOSAA ¹	2355-31-9	N.D.	0.48	1.6	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMePFOSA ¹	31506-32-8	N.D.	0.80	2.4	1
	NMePFOSA is the acronym for N-methylperfluoro-1-octanesulfonamide					
14473	NMePFOSAE ¹	24448-09-7	N.D.	0.80	2.4	1
	NMePFOSAE is the acronym for 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol					
14473	Perfluorobutanesulfonic acid ¹	375-73-5	2.0	0.40	1.6	1
14473	Perfluorobutanoic acid ¹	375-22-4	8.2	1.6	4.0	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	N.D.	0.40	1.6	1
14473	Perfluorodecanoic acid ¹	335-76-2	N.D.	0.40	1.6	1
14473	Perfluorododecanesulfonic acid ¹	79780-39-5	N.D.	0.40	2.4	1
14473	Perfluorododecanoic acid ¹	307-55-1	N.D.	0.40	1.6	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	N.D.	0.40	1.6	1
14473	Perfluoroheptanoic acid ¹	375-85-9	8.0	0.40	1.6	1
14473	Perfluorohexadecanoic acid ¹	67905-19-5	N.D.	0.80	2.4	1
14473	Perfluorohexanesulfonic acid ¹	355-46-4	6.4	0.40	1.6	1

*=This limit was used in the evaluation of the final result

Sample Description: Site B Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268023
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 16:08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
LC/MS/MS Miscellaneous		EPA 537 Version 1.1 Modified	ng/l	ng/l	ng/l	
14473	Perfluorohexanoic acid ¹	307-24-4	10	0.40	1.6	1
14473	Perfluorononanesulfonic acid ¹	68259-12-1	N.D.	0.40	1.6	1
14473	Perfluorononanoic acid ¹	375-95-1	1.2 J	0.40	1.6	1
14473	Perfluorooctadecanoic acid ¹	16517-11-6	N.D.	0.80	2.4	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	N.D.	0.40	1.6	1
14473	Perfluorooctanesulfonic acid ¹	1763-23-1	9.1	0.40	1.6	1
14473	Perfluorooctanoic acid ¹	335-67-1	12	0.40	1.6	1
14473	Perfluoropentanesulfonate ¹	2706-91-4	0.88 J	0.40	1.6	1
14473	Perfluoropentanoic acid ¹	2706-90-3	12	0.40	1.6	1
14473	Perfluorotetradecanoic acid ¹	376-06-7	N.D.	0.40	1.6	1
14473	Perfluorotridecanoic acid ¹	72629-94-8	N.D.	0.40	1.6	1
14473	Perfluoroundecanoic acid ¹	2058-94-8	N.D.	0.40	1.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10589	Endosulfan I	SW-846 8081B	1	200620021A	03/05/2020 00:09	Dylan Schreiner	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	200620021A	03/03/2020 08:00	David S Schrum	1
14473	36 PFAS CpdS	EPA 537 Version 1.1 Modified	1	20059011	03/03/2020 05:46	Katie Renfro	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20059011	02/28/2020 10:56	Broch Clinton	1

*=This limit was used in the evaluation of the final result

Sample Description: Site C Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268025
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 16:25

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Pesticides						
10589	Endosulfan I	959-98-8	N.D. D2	0.0060 ug/l	0.014 ug/l	1
LC/MS/MS Miscellaneous						
	EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	9CI-PF3ONS ¹	756426-58-1	N.D.	0.47	1.9	1
	9CI-PF3ONS is the acronym for Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid					
14473	11CI-PF3OUdS ¹	763051-92-9	N.D.	0.47	1.9	1
	11CI-PF3OUdS is the acronym for 11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid					
14473	DONA ¹	919005-14-4	N.D.	0.47	1.9	1
	DONA is the acronym for 4,8-dioxa-3H-perfluorononanoic acid, the free acid form of ADONA.					
14473	10:2Fluorotelomersulfonic acid ¹	120226-60-0	N.D.	0.94	4.7	1
14473	4:2-Fluorotelomersulfonic acid ¹	757124-72-4	N.D.	0.47	1.9	1
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	N.D.	1.9	4.7	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	N.D.	0.94	2.8	1
14473	HFPODA ¹	13252-13-6	0.64 J	0.47	2.8	1
	HFPODA is the acronym for 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid					
14473	NEtFOSAA ¹	2991-50-6	N.D.	0.47	2.8	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NEtPFOSA ¹	4151-50-2	N.D.	0.94	4.7	1
	NEtPFOSA is the acronym for N-ethylperfluoro-1-octanesulfonamide					
14473	NEtPFOSAE ¹	1691-99-2	N.D.	0.94	2.8	1
	NEtPFOSAE is the acronym for 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol					
14473	NMeFOSAA ¹	2355-31-9	N.D.	0.56	1.9	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMePFOSA ¹	31506-32-8	N.D.	0.94	2.8	1
	NMePFOSA is the acronym for N-methylperfluoro-1-octanesulfonamide					
14473	NMePFOSAE ¹	24448-09-7	N.D.	0.94	2.8	1
	NMePFOSAE is the acronym for 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol					
14473	Perfluorobutanesulfonic acid ¹	375-73-5	0.47 J	0.47	1.9	1
14473	Perfluorobutanoic acid ¹	375-22-4	7.4	1.9	4.7	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	N.D.	0.47	1.9	1
14473	Perfluorodecanoic acid ¹	335-76-2	N.D.	0.47	1.9	1
14473	Perfluorododecanesulfonic acid ¹	79780-39-5	N.D.	0.47	2.8	1
14473	Perfluorododecanoic acid ¹	307-55-1	N.D.	0.47	1.9	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	N.D.	0.47	1.9	1
14473	Perfluoroheptanoic acid ¹	375-85-9	2.5	0.47	1.9	1
14473	Perfluorohexadecanoic acid ¹	67905-19-5	N.D.	0.94	2.8	1
14473	Perfluorohexanesulfonic acid ¹	355-46-4	N.D.	0.47	1.9	1

*=This limit was used in the evaluation of the final result

Sample Description: Site C Sample 1 Grab Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268025
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 16:25

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	Perfluorohexanoic acid ¹	307-24-4	5.0	0.47	1.9	1
14473	Perfluorononanesulfonic acid ¹	68259-12-1	N.D.	0.47	1.9	1
14473	Perfluorononanoic acid ¹	375-95-1	0.51 J	0.47	1.9	1
14473	Perfluorooctadecanoic acid ¹	16517-11-6	N.D.	0.94	2.8	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	N.D.	0.47	1.9	1
14473	Perfluorooctanesulfonic acid ¹	1763-23-1	1.1 J	0.47	1.9	1
14473	Perfluorooctanoic acid ¹	335-67-1	3.6	0.47	1.9	1
14473	Perfluoropentanesulfonate ¹	2706-91-4	N.D.	0.47	1.9	1
14473	Perfluoropentanoic acid ¹	2706-90-3	8.6	0.47	1.9	1
14473	Perfluorotetradecanoic acid ¹	376-06-7	N.D.	0.47	1.9	1
14473	Perfluorotridecanoic acid ¹	72629-94-8	N.D.	0.47	1.9	1
14473	Perfluoroundecanoic acid ¹	2058-94-8	N.D.	0.47	1.9	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10589	Endosulfan I	SW-846 8081B	1	200620021A	03/05/2020 00:19	Dylan Schreiner	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	200620021A	03/03/2020 08:00	David S Schrum	1
14473	36 PFAS Cpd	EPA 537 Version 1.1 Modified	1	20059011	03/03/2020 05:55	Katie Renfro	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20059011	02/28/2020 10:56	Broch Clinton	1

*=This limit was used in the evaluation of the final result

Sample Description: Blank Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268027
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 15:05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
Pesticides						
10589	Endosulfan I	959-98-8	N.D. D1	0.0044 ug/l	0.010 ug/l	1
LC/MS/MS Miscellaneous						
	EPA 537 Version 1.1 Modified					
14473	9CI-PF3ONS ¹	756426-58-1	N.D.	0.40 ng/l	1.6 ng/l	1
	9CI-PF3ONS is the acronym for Potassium 9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid					
14473	11CI-PF3OUdS ¹	763051-92-9	N.D.	0.40 ng/l	1.6 ng/l	1
	11CI-PF3OUdS is the acronym for 11-Chloroeicosadecafluoro-3-oxaundecane-1-sulfonic acid					
14473	DONA ¹	919005-14-4	N.D.	0.40 ng/l	1.6 ng/l	1
	DONA is the acronym for 4,8-dioxo-3H-perfluorononanoic acid, the free acid form of ADONA.					
14473	10:2Fluorotelomersulfonic acid ¹	120226-60-0	N.D.	0.80 ng/l	4.0 ng/l	1
14473	4:2-Fluorotelomersulfonic acid ¹	757124-72-4	N.D.	0.40 ng/l	1.6 ng/l	1
14473	6:2-Fluorotelomersulfonic acid ¹	27619-97-2	N.D.	1.6 ng/l	4.0 ng/l	1
14473	8:2-Fluorotelomersulfonic acid ¹	39108-34-4	N.D.	0.80 ng/l	2.4 ng/l	1
14473	HFPODA ¹	13252-13-6	N.D.	0.40 ng/l	2.4 ng/l	1
	HFPODA is the acronym for 2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-propanoic acid					
14473	NEtFOSAA ¹	2991-50-6	N.D.	0.40 ng/l	2.4 ng/l	1
	NEtFOSAA is the acronym for N-ethyl perfluorooctanesulfonamidoacetic Acid.					
14473	NEtPFOSA ¹	4151-50-2	N.D.	0.80 ng/l	4.0 ng/l	1
	NEtPFOSA is the acronym for N-ethylperfluoro-1-octanesulfonamide					
14473	NEtPFOSAE ¹	1691-99-2	N.D.	0.80 ng/l	2.4 ng/l	1
	NEtPFOSAE is the acronym for 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol					
14473	NMeFOSAA ¹	2355-31-9	N.D.	0.48 ng/l	1.6 ng/l	1
	NMeFOSAA is the acronym for N-methyl perfluorooctanesulfonamidoacetic Acid.					
14473	NMePFOSA ¹	31506-32-8	N.D.	0.80 ng/l	2.4 ng/l	1
	NMePFOSA is the acronym for N-methylperfluoro-1-octanesulfonamide					
14473	NMePFOSAE ¹	24448-09-7	N.D.	0.80 ng/l	2.4 ng/l	1
	NMePFOSAE is the acronym for 2-(N-methylperfluoro-1-octanesulfonamido)-ethanol					
14473	Perfluorobutanesulfonic acid ¹	375-73-5	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluorobutanoic acid ¹	375-22-4	N.D.	1.6 ng/l	4.0 ng/l	1
14473	Perfluorodecanesulfonic acid ¹	335-77-3	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluorodecanoic acid ¹	335-76-2	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluorododecanesulfonic acid ¹	79780-39-5	N.D.	0.40 ng/l	2.4 ng/l	1
14473	Perfluorododecanoic acid ¹	307-55-1	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluoroheptanesulfonic acid ¹	375-92-8	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluoroheptanoic acid ¹	375-85-9	N.D.	0.40 ng/l	1.6 ng/l	1
14473	Perfluorohexadecanoic acid ¹	67905-19-5	N.D.	0.80 ng/l	2.4 ng/l	1
14473	Perfluorohexanesulfonic acid ¹	355-46-4	N.D.	0.40 ng/l	1.6 ng/l	1

*=This limit was used in the evaluation of the final result

Sample Description: Blank Water
Dunn Landfill

PEER
ELLE Sample #: WW 1268027
ELLE Group #: 2089694
Matrix: Water

Project Name: Dunn Landfill

Submittal Date/Time: 02/27/2020 09:53
Collection Date/Time: 02/26/2020 15:05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
	LC/MS/MS Miscellaneous EPA 537 Version 1.1 Modified		ng/l	ng/l	ng/l	
14473	Perfluorohexanoic acid ¹	307-24-4	N.D.	0.40	1.6	1
14473	Perfluorononanesulfonic acid ¹	68259-12-1	N.D.	0.40	1.6	1
14473	Perfluorononanoic acid ¹	375-95-1	N.D.	0.40	1.6	1
14473	Perfluorooctadecanoic acid ¹	16517-11-6	N.D.	0.80	2.4	1
14473	Perfluorooctanesulfonamide ¹	754-91-6	N.D.	0.40	1.6	1
14473	Perfluorooctanesulfonic acid ¹	1763-23-1	N.D.	0.40	1.6	1
14473	Perfluorooctanoic acid ¹	335-67-1	N.D.	0.40	1.6	1
14473	Perfluoropentanesulfonate ¹	2706-91-4	N.D.	0.40	1.6	1
14473	Perfluoropentanoic acid ¹	2706-90-3	N.D.	0.40	1.6	1
14473	Perfluorotetradecanoic acid ¹	376-06-7	N.D.	0.40	1.6	1
14473	Perfluorotridecanoic acid ¹	72629-94-8	N.D.	0.40	1.6	1
14473	Perfluoroundecanoic acid ¹	2058-94-8	N.D.	0.40	1.6	1

Sample Comments

State of New York Certification No. 10670

¹ = This analyte was not on the laboratory's NYSDOH Scope of Accreditation at the time of analysis.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10589	Endosulfan I	SW-846 8081B	1	200620021A	03/05/2020 00:30	Dylan Schreiner	1
11120	Pesticide Waters Update IV Ext	SW-846 3510C	1	200620021A	03/03/2020 08:00	David S Schrum	1
14473	36 PFAS Cpd	EPA 537 Version 1.1 Modified	1	20059011	03/03/2020 06:05	Katie Renfro	1
14091	PFAS Water Prep	EPA 537 Version 1.1 Modified	1	20059011	02/28/2020 10:56	Broch Clinton	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: PEER
Reported: 03/05/2020 19:15

Group Number: 2089694

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: 200620021A	Sample number(s): 1268021,1268023,1268025,1268027		
Endosulfan I	N.D.	0.0043	0.010
	ng/l	ng/l	ng/l
Batch number: 20059011	Sample number(s): 1268021,1268023,1268025,1268027		
9CI-PF3ONS	N.D.	0.50	2.0
11CI-PF3OUdS	N.D.	0.50	2.0
DONA	N.D.	0.50	2.0
10:2-Fluorotelomersulfonic acid	N.D.	1.0	5.0
4:2-Fluorotelomersulfonic acid	N.D.	0.50	2.0
6:2-Fluorotelomersulfonic acid	N.D.	2.0	5.0
8:2-Fluorotelomersulfonic acid	N.D.	1.0	3.0
HFPODA	N.D.	0.50	3.0
NEtFOSAA	N.D.	0.50	3.0
NEtPFOSA	N.D.	1.0	5.0
NEtPFOSAE	N.D.	1.0	3.0
NMeFOSAA	N.D.	0.60	2.0
NMePFOSA	N.D.	1.0	3.0
NMePFOSAE	N.D.	1.0	3.0
Perfluorobutanesulfonic acid	N.D.	0.50	2.0
Perfluorobutanoic acid	N.D.	2.0	5.0
Perfluorodecanesulfonic acid	N.D.	0.50	2.0
Perfluorodecanoic acid	N.D.	0.50	2.0
Perfluorododecanesulfonic acid	N.D.	0.50	3.0
Perfluorododecanoic acid	N.D.	0.50	2.0
Perfluoroheptanesulfonic acid	N.D.	0.50	2.0
Perfluoroheptanoic acid	N.D.	0.50	2.0
Perfluorohexadecanoic acid	N.D.	1.0	3.0
Perfluorohexanesulfonic acid	N.D.	0.50	2.0
Perfluorohexanoic acid	N.D.	0.50	2.0
Perfluorononanesulfonic acid	N.D.	0.50	2.0
Perfluorononanoic acid	N.D.	0.50	2.0
Perfluorooctadecanoic acid	N.D.	1.0	3.0
Perfluorooctanesulfonamide	N.D.	0.50	2.0
Perfluorooctanesulfonic acid	N.D.	0.50	2.0
Perfluorooctanoic acid	N.D.	0.50	2.0
Perfluoropentanesulfonate	N.D.	0.50	2.0
Perfluoropentanoic acid	N.D.	0.50	2.0
Perfluorotetradecanoic acid	N.D.	0.50	2.0
Perfluorotridecanoic acid	N.D.	0.50	2.0

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: PEER
Reported: 03/05/2020 19:15

Group Number: 2089694

Method Blank (continued)

Analysis Name	Result	MDL**	LOQ
	ng/l	ng/l	ng/l
Perfluoroundecanoic acid	N.D.	0.50	2.0

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 200620021A Endosulfan I	Sample number(s): 1268021,1268023,1268025,1268027 0.100	0.102	0.100	0.105	102	105	40-138	2	30
	ng/l	ng/l	ng/l	ng/l					
Batch number: 20059011 9CI-PF3ONS	Sample number(s): 1268021,1268023,1268025,1268027 23.84	19.82	23.84	22.85	83	96	52-147	14	30
11CI-PF3OUdS	24.12	18.99	24.12	23.44	79	97	47-145	21	30
DONA	24.12	21.8	24.12	24.75	90	103	52-160	13	30
10:2Fluorotelomersulfonic acid	24.68	24.68	24.68	24.93	100	101	45-143	1	30
4:2-Fluorotelomersulfonic acid	23.92	22.41	23.92	25.78	94	108	61-131	14	30
6:2-Fluorotelomersulfonic acid	24.28	24.6	24.28	25.58	101	105	56-140	4	30
8:2-Fluorotelomersulfonic acid	24.52	24.08	24.52	24.16	98	99	58-143	0	30
HFPODA	25.6	18.89	25.6	29.65	74	116	38-151	44*	30
NEtFOSAA	25.6	22.36	25.6	26.37	87	103	53-140	16	30
NEtPFOSA	25.6	22.76	25.6	26.42	89	103	56-136	15	30
NEtPFOSAE	25.6	21.54	25.6	23.92	84	93	56-130	10	30
NMeFOSAA	25.6	24.46	25.6	27.22	96	106	59-141	11	30
NMePFOSA	25.6	23.77	25.6	27.22	93	106	49-134	14	30
NMePFOSAE	25.6	23.08	25.6	27.46	90	107	61-133	17	30
Perfluorobutanesulfonic acid	22.64	19.95	22.64	22.5	88	99	67-135	12	30
Perfluorobutanoic acid	25.6	25.72	25.6	27.89	100	109	63-160	8	30
Perfluorodecanesulfonic acid	24.64	22.97	24.64	25.3	93	103	62-135	10	30
Perfluorodecanoic acid	25.6	23.27	25.6	22.3	91	87	66-141	4	30
Perfluorododecanesulfonic acid	24.8	21.78	24.8	25.06	88	101	57-134	14	30
Perfluorododecanoic acid	25.6	22.14	25.6	26.28	86	103	65-143	17	30
Perfluoroheptanesulfonic acid	24.36	21.24	24.36	22.15	87	91	67-138	4	30
Perfluoroheptanoic acid	25.6	23.51	25.6	26.22	92	102	69-144	11	30
Perfluorohexadecanoic acid	25.6	21.56	25.6	24.29	84	95	60-148	12	30
Perfluorohexanesulfonic acid	24.2	20.76	24.2	23.45	86	97	63-132	12	30
Perfluorohexanoic acid	25.6	22.3	25.6	27.87	87	109	69-139	22	30
Perfluorononanesulfonic acid	24.56	23.83	24.56	25.44	97	104	70-137	7	30
Perfluorononanoic acid	25.6	21.32	25.6	29.21	83	114	66-144	31*	30
Perfluorooctadecanoic acid	25.6	21.85	25.6	23.04	85	90	47-159	5	30
Perfluorooctanesulfonamide	25.6	26	25.6	27.08	102	106	67-126	4	30
Perfluorooctanesulfonic acid	24.48	18.98	24.48	22.88	78	93	53-129	19	30

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: PEER
Reported: 03/05/2020 19:15

Group Number: 2089694

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ng/l	LCS Conc ng/l	LCSD Spike Added ng/l	LCSD Conc ng/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Perfluorooctanoic acid	25.6	22.61	25.6	23.43	88	92	67-139	4	30
Perfluoropentanesulfonate	24	21.9	24	26	91	108	73-134	17	30
Perfluoropentanoic acid	25.6	23.94	25.6	27.36	94	107	73-135	13	30
Perfluorotetradecanoic acid	25.6	21.92	25.6	25.21	86	98	69-141	14	30
Perfluorotridecanoic acid	25.6	23.09	25.6	28.67	90	112	66-146	22	30
Perfluoroundecanoic acid	25.6	21.78	25.6	25.31	85	99	66-140	15	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Endosulfan I
Batch number: 200620021A

	Tetrachloro-m-xylene-D1	Decachlorobiphenyl-D1	Tetrachloro-m-xylene-D2	Decachlorobiphenyl-D2
1268021	74	84	71	82
1268023	75	78	71	77
1268025	71	88	68	85
1268027	72	47	67	46
Blank	53	97	51	94
LCS	73	64	69	63
LCSD	71	80	69	77
Limits:	29-129	32-149	29-129	32-149

Analysis Name: 36 PFAS Cpd
Batch number: 20059011

	13C4-PFBA	13C5-PFPeA	13C3-PFBS	13C2-4:2-FTS	13C5-PFHxA	13C3-PFHxS
1268021	79	96	95	104	74	78
1268023	81	110	124	110	70	75
1268025	78	98	100	94	70	73
1268027	79	82	72	73	78	80
Blank	88	92	77	82	87	89
LCS	85	84	78	76	84	86
LCSD	76	74	68	63	71	77
Limits:	43-130	38-150	23-175	22-169	36-137	35-143
	13C4-PFHpA	13C2-6:2-FTS	13C8-PFOA	13C8-PFOS	13C9-PFNA	13C6-PFDA
1268021	82	103	78	77	81	79
1268023	85	117	77	77	88	72
1268025	75	97	74	79	82	79

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: PEER
Reported: 03/05/2020 19:15

Group Number: 2089694

Labeled Isotope Quality Control (continued)

Labeled isotope recoveries which are outside of the QC window are confirmed unless otherwise noted on the analysis report.

Analysis Name: 36 PFAS Cpds
Batch number: 20059011

	13C4-PFHpA	13C2-6:2-FTS	13C8-PFOA	13C8-PFOS	13C9-PFNA	13C6-PFDA
1268027	73	83	76	77	75	83
Blank	89	92	95	89	88	92
LCS	85	78	82	83	85	81
LCSD	74	74	75	73	71	83
Limits:	33-140	29-182	52-124	52-121	48-130	50-124
	13C2-8:2-FTS	d3-NMeFOSAA	13C7-PFUnDA	d5-NEiFOSAA	13C2-PFDoDA	13C2-PFTeDA
1268021	90	79	74	85	65	29
1268023	95	70	72	86	64	31
1268025	95	82	75	95	73	53
1268027	88	92	82	97	80	70
Blank	92	102	94	117	93	82
LCS	81	101	88	104	90	79
LCSD	82	84	76	90	77	70
Limits:	37-169	36-143	44-128	42-149	36-127	21-134
	13C8-PFOSA	d7-NMePFOSAE	d3-NMePFOSA	d9-NEiPFOSAE	d5-NEiPFOSA	13C3-HFPODA
1268021	50	31	11	28	10	70
1268023	57	41	14	37	14	67
1268025	64	51	19	51	21	54
1268027	76	70	41	72	41	70
Blank	86	84	59	89	58	95
LCS	75	75	38	74	41	88
LCSD	70	64	36	66	35	58
Limits:	10-134	10-137	10-107	10-135	10-107	24-147

*- Outside of specification

** - This limit was used in the evaluation of the final result for the blank

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 45107 Group # 208964 Sample # 1268021-27

COC # 601755

Client Information				Matrix				Analysis Requested												For Lab Use Only													
Client: <u>PEEC</u>		Acct. #:		<input type="checkbox"/> Tissue <input type="checkbox"/> Sediment <input type="checkbox"/> Potable <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> NPDES <input type="checkbox"/> Other:		Preservation and Filtration Codes <table border="1" style="width:100%; height: 100px;"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																										FSC: <u>255970</u>	
Project Name/ #: <u>Dunn Landfill</u>		PWSID #:														SCR#: <u>255970</u>																	
Project Manager:		P.O. #:														Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other																	
Sampler: <u>Loe Sebastia</u>		Quote #:														Remarks																	
State where samples were collected: <u>NY</u>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Grab	Composite																												
Sample Identification		Collected																															
		Date	Time																														
Site A Sample 1		2/26	3:40 PM																														
Site A Sample 2		2/26	3:40 PM																														
Site B Sample 1		2/26	4:08 PM																														
Site B Sample 2		2/26	4:08 PM																														
Site B Sample 1		2/26	4:15 PM																														
Site C Sample 2		2/26	4:15 PM																														
Blank 1		2/26	3 PM																														
Blank 2		2/26	3 PM																														
Blank 3		2/26	3 PM																														
Blank 4		2/26	3 PM																														

Turnaround Time (TAT) Requested (please circle) Standard Rush (Rush TAT is subject to laboratory approval and surcharge.)				Relinquished by <u>Edwin Hernandez</u> Date <u>2/20/20</u> Time <u>11:30</u>		Received by <u>Judith C Stasach</u> Date <u>2/24/20</u> Time <u>4:15 PM</u>	
Requested TAT in business days: _____				Relinquished by <u>Judith C Stasach</u> Date <u>2/25/20</u> Time <u>12:45 PM</u>		Received by <u>Loe Sebastia</u> Date <u>2/25/20</u> Time <u>12:45 PM</u>	
				Relinquished by <u>Loe Sebastia</u> Date <u>2/26/20</u> Time <u>5:25 PM</u>		Received by _____ Date _____ Time _____	
E-mail address: _____				Relinquished by _____ Date _____ Time _____		Received by _____ Date _____ Time _____	
				Relinquished by _____ Date _____ Time _____		Received by <u>Damara Lyamb</u> Date <u>2/27/20</u> Time <u>9:53</u>	

Data Package Options (circle if required) Type I (EPA Level 3) Type VI (Raw Data Only) Equivalent/non-CLP Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP				EDD Required? Yes No If yes, format: _____		Relinquished by Commercial Carrier: UPS <input checked="" type="checkbox"/> FedEx _____ Other _____	
				Site-Specific QC (MS/MSD/Dup)? Yes No (If yes, indicate QC sample and submit triplicate sample volume.)		Temperature upon receipt <u>0.7</u> °C	

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

For Eurofins Lancaster Laboratories Environmental use only

Acct. # 45197 Group # 2881094 Sample # 1268021-27

COC # 601961

Client Information				Matrix		Analysis Requested										For Lab Use Only	
Client: <u>PEER</u>		Acct. #:		<input type="checkbox"/> Tissue <input type="checkbox"/> Ground <input type="checkbox"/> Surface <input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Other:	Total # of Containers	Preservation and Filtration Codes										FSC:	SCR#:
Project Name/ID: <u>Dunn Landfill</u>		PWSID #:															<u>255982</u>
Project Manager:		P.O. #:														Preservation Codes H=HCl T=Thiosulfate N=HNO ₃ B=NaOH S=H ₂ SO ₄ P=H ₃ PO ₄ F=Field Filtered O=Other	
Sampler: <u>Lou Schesta</u>		Quote #:														Remarks	
State where samples were collected: <u>Ny</u>		For Compliance: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Grab	Composite												
Sample Identification		Collected															
		Date	Time														
Site A Sample 1		2/26	3:40 PM														
Site A Sample 2		2/26	3:40 PM														
Site B Sample 1		2/26	4:08 PM														
Site B Sample 2		2/26	4:08 PM														
Site C Sample 1		2/26	4:25 PM														
Site C Sample 2		2/26	4:25 PM														
Blank 1		2/26	3:05 PM														
Blank 2		2/26	3:05 PM														
Blank 3		2/26	3:05 PM														
Blank 4		2/26	3:05 PM														

Turnaround Time (TAT) Requested (please circle) Standard Rush (Rush TAT is subject to laboratory approval and surcharge.)				Relinquished by: <u>Lou Schesta</u>		Date: <u>2-20-20</u>	Time: <u>1100</u>	Received by: <u>Julia Stasach</u>	Date: <u>2/24/20</u>	Time: <u>4:15pm</u>
Requested TAT in business days: _____				Relinquished by: <u>Julia Stasach</u>		Date: <u>2/25/20</u>	Time: <u>12:45pm</u>	Received by: <u>Lou Schesta</u>	Date: <u>2/25/20</u>	Time: <u>12:45 PM</u>
				Relinquished by: <u>Lou Schesta</u>		Date: <u>2/26/20</u>	Time: <u>5:25 PM</u>	Received by:	Date:	Time:
				Relinquished by:		Date:	Time:	Received by:	Date:	Time:
				Relinquished by:		Date:	Time:	Received by:	Date:	Time:
Data Package Options (circle if required) Type I (EPA Level 3 Equivalent/non-CLP) Type VI (Raw Data Only) Type III (Reduced non-CLP) NJ DKQP TX TRRP-13 NYSDEC Category A or B MA MCP CT RCP				Relinquished by:		Date:	Time:	Received by:	Date:	Time:
EDD Required? Yes No If yes, format: _____ Site-Specific QC (MS/MSD/Dup)? Yes No (If yes, indicate QC sample and submit triplicate sample volume.)				Relinquished by Commercial Carrier:		UPS _____ FedEx _____ Other _____		Temperature upon receipt <u>5.2</u> °C		



Group Number(s):

Client: Peer

2089694

Delivery and Receipt Information

Delivery Method:	<u>UPS</u>	Arrival Date:	<u>02/27/2020</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>NY</u>		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	No
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	Total Trip Blank Qty:	0
Samples Chilled:	Yes	Air Quality Samples Present:	No
Paperwork Enclosed:	Yes		
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Tamara Lugardo***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	46730061WS	0.7	IR	Wet	Y	Bagged	N

Sample ID Discrepancy Details

<u>Sample ID on COC</u>	<u>Sample ID on Label</u>	<u>Comments</u>
Blank 1	Blank	
Blank 2	Blank	
Blank 3	Blank	
Blank 4	Blank	
Blank 4	Blank	③ mkl 30410 2/27/2020

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mL	milliliter(s)
C	degrees Celsius	MPN	Most Probable Number
cfu	colony forming units	N.D.	non-detect
CP Units	cobalt-chloroplatinate units	ng	nanogram(s)
F	degrees Fahrenheit	NTU	nephelometric turbidity units
g	gram(s)	pg/L	picogram/liter
IU	International Units	RL	Reporting Limit
kg	kilogram(s)	TNTC	Too Numerous To Count
L	liter(s)	µg	microgram(s)
lb.	pound(s)	µL	microliter(s)
m3	cubic meter(s)	umhos/cm	micromhos/cm
meq	milliequivalents	MCL	Maximum Contamination Limit
mg	milligram(s)		
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
P^	Concentration difference between the primary and confirmation column $>40\%$. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.

Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.