

August 8, 2018

Mr. Gary Priscott, P.G.
Project Manager
Division of Environmental Remediation
New York State Department of Environmental Conservation
1679 NYS Route 11
Kirkwood, NY 13795

**Subject:** Emerging Contaminants Groundwater Sampling Work Plan

Carrier-Dewitt Landfill (AOC G)

United Technologies Corporation / Carrier Corporation

Thompson Road Facility, Syracuse, New York Corrective Action Order — Index CO 7-20051118-4

Site Registry No.: 734043

Dear Mr. Priscott:

On behalf of United Technologies Corporation (UTC), AECOM Technical Services, Inc. (AECOM) has prepared this Emerging Contaminants Groundwater Sampling Work Plan (Work Plan) for the former Carrier-Dewitt Landfill (AOC G) located in Syracuse, New York (Figure 1). This Work Plan has been prepared in response your letter request of May 10, 2018, directing emerging contaminants groundwater sampling at AOC G. In the letter, you requested that the planned Supplemental Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) at AOC G include sampling for 1,4-dioxane and perand polyfluoroalkyl substances (PFAS) at the following wells: TR-16, TR-18, TR-19, TR-21, TR-23, TR-24, TR-13D, TR-25D, TR-26D, and TR-27D (Figure 2).

#### Scope of Work

To meet New York State Department of Environmental Conservation (NYSDEC) requirement to evaluate for the presence of 1,4-dioxane and PFAS at the site, groundwater samples will be collected from the ten specified monitoring wells. The samples will be collected and analyzed in accordance with the following guidance you provided:

- Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol Revision 1.2 (June 29, 2016); and,
- Groundwater Sampling for Emerging Contaminants (April 2018).

This guidance is provided as Attachment 1 to this Work Plan.

#### Field Methodology

The samples will be collected by personnel trained to perform PFAS sampling. The samples will be collected using the low-flow sampling procedure. Purged groundwater will be transferred to appropriate on-site containers for appropriate characterization and disposal. Recommended sample bottle requirements, preservation, and holding times are provided in Table 1.

Since PFAS are to be analyzed, the following techniques will be used in conjunction with, or instead of, the procedures cited in the Supplemental RFI Work Plan:

- Use only laboratory certified "PFAS-free" water for equipment decontamination.
- Use only Alconox® or Liquinox® soap for decontamination.
- Do not use Sharpies, only ball point pens.
- Do not use waterproof field books, only loose paper on aluminum clipboards.
- Do not wear the following:
  - o Personal hygiene items (cosmetics, lotions, moisturizers).
  - Sunscreens and insect repellants. Instead, wear long sleeve/light colored 100% cotton shirts and wide brimmed hats.
  - New or unwashed clothing.
  - Clothing washed with fabric softeners.
  - o Treated clothing (i.e., waterproof, water resistant, stain-resistant, etc.).
  - o Treated boots (i.e., waterproof, water resistant, stain-resistant, etc.).
  - Coated Tyvek<sup>®</sup> suits.
- Do not handle prepackaged food products immediately prior to sampling.
- Wear a new pair of disposable powderless nitrile gloves prior to sample collection.
- Do not use fluoropolymer bailers, pump bladders, tubing, valves and other pump parts.
- Do not use anything with Teflon<sup>®</sup>.
- Use high-density polyethylene (HDPE) and silicon materials only.
- Do not use glass containers.
- Do not use aluminum foil.
- Do not filter samples in the field.

The PFAS Sampling Checklist, provided in Attachment 2, will be filled out prior to the beginning of the field sampling event and if there are staffing or associated sampling equipment changes. The samples will be analyzed for the following parameters (in addition to the analytical parameters proposed in the Supplemental RFI Work Plan):

- 1,4-dioxane by EPA Method 8270D Selective Ion Monitoring (SIM); and,
- 21 PFAS compounds by EPA Method 537 Modified (low level):

Chemical Name	Abbreviation	CAS Number
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroheptanesulfonic acid	PFHpS	375-93-8
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorodecanesulfonic acid	PFDS	335-77-3
Perfluorobutanoic acid	PFBA	275-22-4
Perfluoropentanoic acid	PFPeA	2706-90-3
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorononanoic acid	PFNA	375-95-1
Perfluorodecanoic acid	PFDA	335-76-2
Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctanesulfonamide	FOSA	75409106
N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
N-ethyl perlfuorooctanesulfonamidoaceetic acid	N-EtFOSAA	2991-50-6

The samples will be delivered to Eurofins Spectrum Analytical Inc. (Eurofins), a New York State Department of Health Environmental Laboratory Approval Program-(ELAP) approved analytical laboratory. Eurofins' ELAP certifications for PFOA and Perfluorodecanesulfonic acid (PFOS) in drinking water by EPA Method 537 Modified and for 1,4-dioxane in non-potable water by EPA Method 8270D SIM are provided in Attachment 3 for your reference.

#### **Quality Assurance**

The laboratory has stated that they can achieve the method detection limit of 2 nanograms/liter (ng/L) for each PFAS target analyte. Additionally, the laboratory has stated that they can achieve the method detection limit of 0.28 micrograms/liter (µg/L) for 1,4-dioxane.

Quality control samples (i.e., matrix spike/matrix spike duplicate, field duplicate, equipment blank, and field blank) will be collected as summarized in Table 2. Equipment and field blanks will be collected with PFAS-free water supplied by the laboratory. The laboratory will provide the results in an Analytical Services Protocol (ASP) Category B equivalent data deliverable. A Data Usability Summary Report (DUSR) will be prepared for all data acquired and included with the groundwater sampling summary report.

#### **Precautions During Drilling and Well Installations**

Although none of the wells that will be installed during the planned Supplemental RFI are scheduled to be sampled for PFAS, appropriate precautions will be taken during drilling and well installation to avoid potential cross contamination of PFAS-containing materials. In addition to the items noted above for groundwater sampling, the following precautions will be taken during drilling and well installation activities:

- Downhole drilling equipment will be assessed for materials potentially containing PFAS.
   PFAS-containing parts will be replaced with non-PFAS parts or the equipment will be replaced.
- Prior to mobilization, an equipment rinse blank sample will be collected from downhole drilling and equipment using PFAS-free water and submitted for PFAS analysis.
- Lubricants or greases used for the equipment will be evaluated for PFAS content. Acceptable lubricants include Crisco® or other vegetable-based greases.
- For decontaminating large drill rigs (if needed) for groundwater well installation, the following equipment decontamination procedures will be followed.
  - A PFAS-free water source will be used for decontamination and drilling water. If a large quantity of water is needed for drilling operations and decontamination it may be necessary to truck in water from a PFAS-free source to the site.
  - Water holding tanks used to transport and store drilling and decontamination water shall be clean and free of sediment or dirt from previous jobs. The tanks used will be constructed of HDPE or steel.
  - Decontamination pads will be lined with a minimum of doubled 6-milimeter polyvinyl of HDPE sheeting within a bermed area capable of holding all waste water.
  - O Downhole drilling equipment will be decontaminated between wells utilizing a steam cleaner or pressure washer with PFAS-free water, a polyethylene or PVC plastic scrub brush, and Alconox, Citranox, or Liquinox, as needed.
- For decontaminating smaller drill rig equipment such as augers, rods and bits, the following procedures will be followed:
  - Rinse equipment with PFAS-free water and scrub equipment using a polyethylene or PVC plastic brush to get rid of particulates.

- o Use Alconox, Citranox, or Liquinox for equipment decontamination.
- o Rinse equipment three times using PFAS-free water.

#### **Schedule**

The collection of 1,4-dioxane and PFAS groundwater samples is scheduled to occur during the Supplemental RFI which is scheduled to begin in August 2018. We anticipate that the groundwater sampling will occur in September 2018. NYSDEC will be provided at least seven day advance notice of the planned sampling date.

#### Reporting

The groundwater sample results will be provided in the RFI Report.

Please call if you have any questions (919.461.1194).

Sincerely,

Peter Hollatz Project Manager

Peter.Hollatz@aecom.com

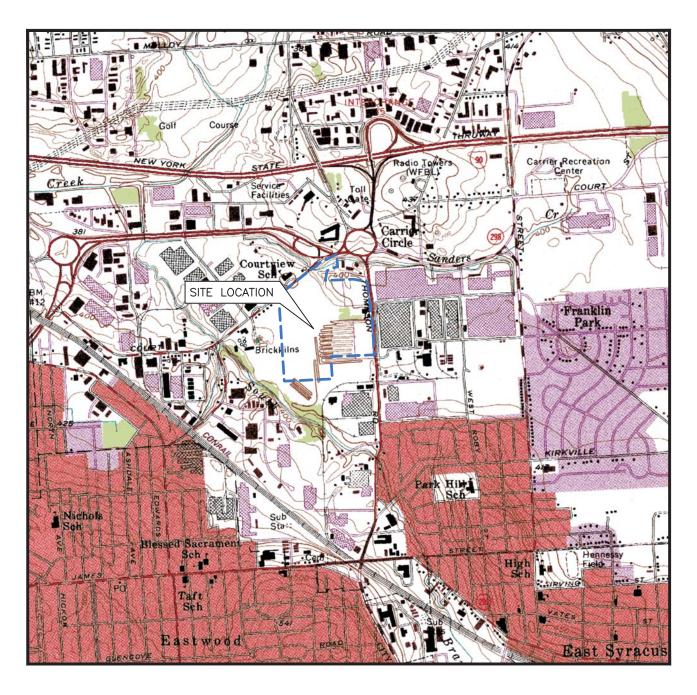
peter sollet

Attachments: Figures 1 and 2 Tables 1 and 2

Attachment 1 – NYSDEC provided Sampling Guidance Documents

Attachment 2 – PFAS Sampling Checklist Attachment 3 - NYSDOH ELAP Certifications

cc: John Wolski, UTC





NOTE: MAP DERIVED FROM U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE, SYRACUSE EAST, NY, DATED 1957, PHOTOREVISED 1978.





Table 1
Sample Bottle, Volume, Preservation, and Holding Time Summary
UTC/Carrier AOC G RFI

Matrix/Analysis	Analytical Method	Sample Bottles		Preservation	Holding Time	
iviati ix/ Alialysis	Allalytical Method	Material	Size	Preservation	Extraction	Analysis
<b>Groundwater Samples</b>						
1,4-Dioxane	SW846 8270D SIM	Glass	1 - 1L	Cool, 4°C	7 days	40 days from extraction
21 PFAS Compounds	537 Modified	HDPE	2 - 250 mL	Cool, 4°C	14 days	28 days from extraction

#### Notes:

(1) SW-846: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. USEPA SW-846. Complete through Update IV, March 2009.

Table 2
Laboratory Analyses
UTC/Carrier AOC G RFI

Matrix/Analysis	Analytical Method	Field Samples	MS/MSD	Field Duplicate	Equipment Blank	Field Blank	Total Analyses
Groundwater							
1,4-dioxane	SW846 8270D SIM	10	1	1	1	1	14
PFAS	537 Modified	10	1	1	1	1	14

Notes:

MS/MSD - matrix spike/matrix spike duplicate

PFAS - per- and polyfluoroalkyl substances

SW-846: Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. USEPA SW-846. Complete through Update IV, March 2009.

#### **ATTACHMENT 1**

**Groundwater Sampling for Emerging Contaminants** 

Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

# Collection of Groundwater Samples for Perfluorooctanoic Acid (PFOA) and Perfluorinated Compounds (PFCs) from Monitoring Wells Sample Protocol

Samples collected using this protocol are intended to be analyzed for perfluorooctanoic acid (PFOA) and other perfluorinated compounds by Modified (Low Level) Test Method 537.

The procedure used must be consistent with the NYSDEC March 1991 Sampling Guidelines and Protocols <a href="http://www.dec.ny.gov/docs/remediation\_hudson\_pdf/sgpsect5.pdf">http://www.dec.ny.gov/docs/remediation\_hudson\_pdf/sgpsect5.pdf</a> with the following materials limitations.

At this time acceptable materials for sampling include: stainless steel, high density polyethylene (HDPE), PVC, silicone, acetate and polypropylene. Equipment blanks should be generated at least daily. Additional materials may be acceptable if preapproved by NYSDEC. Requests to use alternate equipment should include clean equipment blanks. NOTE: Grunfos pumps and bladder pumps are known to contain PFC materials (e.g. Teflon<sup>TM</sup> washers for Grunfos pumps and LDPE bladders for bladder pumps). All sampling equipment components and sample containers should not come in contact with aluminum foil, low density polyethylene (LDPE), glass or polytetrafluoroethylene (PTFE, Teflon<sup>TM</sup>) materials including sample bottle cap liners with a PTFE layer. Standard two step decontamination using detergent and clean water rinse will be performed for equipment that does come in contact with PFC materials. Clothing that contains PTFE material (including GORE-TEX®) or that have been waterproofed with PFC materials must be avoided. Many food and drink packaging materials and "plumbers thread seal tape" contain PFCs.

All clothing worn by sampling personnel must have been laundered multiple times. The sampler must wear nitrile gloves while filling and sealing the sample bottles.

Pre-cleaned sample bottles with closures, coolers, ice, sample labels and a chain of custody form will be provided by the laboratory.

- 1. Fill two pre-cleaned 500 mL HDPE or polypropylene bottle with the sample.
- 2. Cap the bottles with an acceptable cap and liner closure system.
- 3. Label the sample bottles.
- 4. Fill out the chain of custody.
- 5. Place in a cooler maintained at 4 ± 2° Celsius.

Collect one equipment blank for every sample batch, not to exceed 20 samples.

Collect one field duplicate for every sample batch, not to exceed 20 samples.

Collect one matrix spike / matrix spike duplicate (MS/MSD) for every sample batch, not to exceed 20 samples.

Request appropriate data deliverable (Category A or B) and an electronic data deliverable.

## **Groundwater Sampling for Emerging Contaminants**

April 2018

<u>Issue:</u> NYSDEC has committed to analyzing representative groundwater samples at remediation sites for emerging contaminants (1,4-dioxane and PFAS) as described in the below guidance.

# **Implementation**

NYSDEC project managers will be contacting site owners to schedule sampling for these chemicals. Only groundwater sampling is required. The number of samples required will be similar to the number of samples where "full TAL/TCL sampling" would typically be required in a remedial investigation. If sampling is not feasible (e.g., the site no longer has any monitoring wells in place), sampling may be waived on a site-specific basis after first considering potential sources of these chemicals and whether there are water supplies nearby.

Upon a new site being brought into any program (i.e., SSF, BCP), PFAS and 1,4-dioxane will be incorporated into the investigation of groundwater as part of the standard "full TAL/TCL" sampling. Until an SCO is established for PFAS, soil samples do not need to be analyzed for PFAS unless groundwater contamination is detected. Separate guidance will be developed to address sites where emerging contaminants are found in the groundwater. The analysis currently performed for SVOCs in soil is adequate for evaluation of 1,4-dioxane, which already has an established SCO.

# **Analysis and Reporting**

Labs should provide a full category B deliverable, and a DUSR should be prepared by a data validator, and the electronic data submission should meet the requirements provided at: <a href="https://www.dec.ny.gov/chemical/62440.html">https://www.dec.ny.gov/chemical/62440.html</a>,

The work plan should explicitly describe analysis and reporting requirements.

PFAS sample analysis: Currently, ELAP does not offer certification for PFAS compounds in matrices other than finished drinking water. However, laboratories analyzing environmental samples (ex. soil, sediments, and groundwater) are required, by DER, to hold ELAP certification for PFOA and PFOS in drinking water by EPA Method 537 or ISO 25101.

Modified EPA Method 537 is the preferred method to use for groundwater samples due to the ability to achieve 2 ng/L (ppt) detection limits. If contract labs or work plans submitted by responsible parties indicate that they are not able to achieve similar reporting limits, the project manager should discuss this with a DER chemist. Note: Reporting limits for PFOA and PFOS should not exceed 2 ng/L.

<u>PFAS sample reporting:</u> DER has developed a PFAS target analyte list (below) with the intent of achieving reporting consistency between labs for commonly reportable analytes. It is expected that reported results for PFAS will include, at a minimum, all the compounds listed. This list may be updated in the future as new information is learned and as labs develop new capabilities. If lab and/or matrix specific issues are encountered for any particular compounds, the NYSDEC project manager will make case-by-case decisions as to whether particular analytes may be temporarily or permanently discontinued from analysis for each site. Any technical lab issues should be brought to the attention of a NYSDEC chemist.

Some sampling using this full PFAS target analyte list is needed to understand the nature of contamination. It may also be critical to differentiate PFAS compounds associated with a site from other

sources of these chemicals. Like routine refinements to parameter lists based on investigative findings, the full PFAS target analyte list may not be needed for all sampling intended to define the extent of contamination. Project managers may approve a shorter analyte list (e.g., just the UCMR3 list) for some reporting on a case by case basis.

<u>1,4-Dioxane Analysis and Reporting:</u> The method detection limit (MDL) for 1,4-dioxane should be no higher than 0.28  $\mu$ g/l (ppb). ELAP offers certification for both EPA Methods 8260 and 8270. In order to get the appropriate detection limits, the lab would need to run either of these methods in "selective ion monitoring" (SIM) mode. DER is advising the use of method 8270, since this method provides a more robust extraction procedure, uses a larger sample volume, and is less vulnerable to interference from chlorinated solvents (we acknowledge that 8260 has been shown to have a higher recovery in some studies).

#### **Full PFAS Target Analyte List**

Group	Chemical Name	Abbreviation	CAS Number
	Perfluorobutanesulfonic acid	PFBS	375-73-5
D (1 11 1	Perfluorohexanesulfonic acid	PFHxS	355-46-4
Perfluoroalkyl sulfonates	Perfluoroheptanesulfonic acid	PFHpS	375-92-8
Sanonatos	Perfluorooctanessulfonic acid	PFOS	1763-23-1
	Perfluorodecanesulfonic acid	PFDS	335-77-3
	Perfluorobutanoic acid	PFBA	375-22-4
	Perfluoropentanoic acid	PFPeA	2706-90-3
	Perfluorohexanoic acid	PFHxA	307-24-4
	Perfluoroheptanoic acid	PFHpA	375-85-9
Dorflyonoollod	Perfluorooctanoic acid	PFOA	335-67-1
Perfluoroalkyl carboxylates	Perfluorononanoic acid	PFNA	375-95-1
	Perfluorodecanoic acid	PFDA	335-76-2
	Perfluoroundecanoic acid	PFUA/PFUdA	2058-94-8
	Perfluorododecanoic acid	PFDoA	307-55-1
	Perfluorotridecanoic acid	PFTriA/PFTrDA	72629-94-8
	Perfluorotetradecanoic acid	PFTA/PFTeDA	376-06-7
Fluorinated Telomer	6:2 Fluorotelomer sulfonate	6:2 FTS	27619-97-2
Sulfonates	8:2 Fluorotelomer sulfonate	8:2 FTS	39108-34-4
Perfluorooctane- sulfonamides	Perfluroroctanesulfonamide	FOSA	754-91-6
Perfluorooctane-	N-methyl perfluorooctanesulfonamidoacetic acid	N-MeFOSAA	2355-31-9
sulfonamidoacetic acids	N-ethyl perfluorooctanesulfonamidoacetic acid	N-EtFOSAA	2991-50-6

Bold entries depict the 6 original UCMR3 chemicals

## **ATTACHMENT 2**

**PFAS Sampling Checklist** 

# PFAS Sampling Checklist

Project No.: Project Location: Signature: Date:

#### **Team Members**

Yes	No	Has field sampling staff received needed training certification?
		Comments:
Yes	No	Was a briefing held for field sampling staff?
		Comments:
Yes	No	Were additional PFAS sampling instructions given to field sampling staff?
		Comments:
Yes	No	Have personal clothing and PPE requirements been followed by all field sampling staff?
		Comments:
Yes	No	Were lotions and sunscreen used for field sampling staff?
		Comment:

**Sample Collection** 

Yes	No	Has a PFAS-free water source been identified?
		Comment
		Source of PFAS-free water:
Yes	No	Have all sampling items, parts and equipment been inspected to be free of PFAS?
		Comment:
Yes	No	Has sampling location sequence been communicated to avoid cross-contaminations?
		Comment:
Yes	No	Have drilling fluids been evaluated and shown to be free of PFAS?
		Comment:
Yes	No	Use of PFAS-free decontamination solution?
		Brand name of decontamination solution:
Yes	No	Have all field logs, notebooks, pens, labels been inspected, and do they meet PFAS sampling guidance requirements?
		Comment:
Yes	No	Have all sample shipping materials (ice, Ziploc® bags) been inspected, and do they meet PFAS sampling guidance requirements?
		Comment:
Yes	No	Have all blanks arrived at the site and will they be collected to verify cross-contamination?
		Comment:

#### Document Control

		Document Control
Yes	No	Have all variances from sampling guidance been documented?
		Comment:
Other Co	mments	): :

## **ATTACHMENT 3**

**NYSDOH ELAP Certification** 

# NEW YORK STATE DEPARTMENT OF HEALTH WADSWORTH CENTER



Expires 12:01 AM April 01, 2019 Issued April 01, 2018 Revised June 15, 2018

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MS. PHYLLIS SHILLER
PHOENIX ENVIRONMENTAL LABS
587 EAST MIDDLE TURNPIKE
MANCHESTER, CT 06040

NY Lab Id No: 11301

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES NON POTABLE WATER
All approved analytes are listed below:

Volatile Halocarbons		Sample Preparation Methods	
Vinyl chloride	EPA 8260C		EPA 3510C
	EPA 624.1		EPA 3520C
Volatiles Organics			EPA 3020A
1,4-Dioxane	EPA 8260C EPA 8270D EPA 8270D SIM		SM 4500-NH3 B-2011 EPA 9010C
2-Butanone (Methylethyl ketone)	EPA 8260C		
2-Hexanone	EPA 8260C		
4-Methyl-2-Pentanone	EPA 8260C		
Acetone	EPA 8260C		
	EPA 624.1		
Carbon Disulfide	EPA 8260C		
Cyclohexane	EPA 8260C		
Di-ethyl ether	EPA 8260C		
Ethylene Glycol	EPA 8015D		
Isobutyl alcohol	EPA 8015D		
Methyl acetate	EPA 8260C		
Methyl cyclohexane	EPA 8260C		
Vinyl acetate	EPA 8260C		
Sample Preparation Methods			
	SM 4500-P B(5)-2011		

Serial No.: 58423

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

EPA 5030C

EPA 3010A EPA 3005A

SM 4500-CN B-2011 and C-2011



# NEW YORK STATE DEPARTMENT OF HEALTH WADSWORTH CENTER



Expires 12:01 AM April 01, 2019 Issued April 01, 2018 Revised April 13, 2018

#### CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 502 Public Health Law of New York State

MR. DUANE LUCKENBILL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL LLC 2425 NEW HOLLAND PIKE LANCASTER, PA 17601-5994 NY Lab Id No: 10670

is hereby APPROVED as an Environmental Laboratory in conformance with the National Environmental Laboratory Accreditation Conference Standards (2003) for the category ENVIRONMENTAL ANALYSES POTABLE WATER
All approved analytes are listed below:

Organohalide Pesticides		Volatile Aromatics	
Metribuzin	EPA 525.2	Chlorobenzene	EPA 524.2
Propachlor	EPA 525.2	Ethyl benzene	EPA 524.2
Simazine	EPA 525.2	Hexachlorobutadiene	EPA 524.2
Perfluorinated Alkyl Acids		Isopropylbenzene	EPA 524.2
Perfluorooctanesulfonic acid (PFOS)	EPA 537	n-Butylbenzene	EPA 524.2
Perfluorooctanoic acid (PFOA)	EPA 537	n-Propylbenzene	EPA 524.2
- W/4	El Addi	p-Isopropyltoluene (P-Cymene)	EPA 524.2
Trihalomethanes		sec-Butylbenzene	EPA 524.2
Bromodichloromethane	EPA 524.2	Styrene	EPA 524.2
Bromoform	EPA 524.2	tert-Butylbenzene	EPA 524.2
Chloroform	EPA 524.2	Toluene	EPA 524.2
Dibromochloromethane	EPA 524.2	Total Xylenes	EPA 524.2
Total Trihalomethanes	EPA 524.2	Volatile Halocarbons	
Volatile Aromatics	20/20/2	1,1,1,2-Tetrachloroethane	EPA 524.2
1,2,3-Trichlorobenzene	EPA 524.2	1,1,1-Trichloroethane	EPA 524.2
1,2,4-Trichlorobenzene	EPA 524.2	1,1,2,2-Tetrachloroethane	EPA 524.2
1,2,4-Trimethylbenzene	EPA 524.2	1,1,2-Trichloroethane	EPA 524.2
1,2-Dichlorobenzene	EPA 524.2	1,1-Dichloroethane	EPA 524.2
1,3,5-Trimethylbenzene	EPA 524.2	1,1-Dichloroethene	EPA 524.2
1,3-Dichlorobenzene	EPA 524.2	1,1-Dichloropropene	EPA 524.2
1,4-Dichlorobenzene	EPA 524.2	1,2,3-Trichloropropane	EPA 524.2
2-Chlorotoluene	EPA 524.2	1,2-Dichloroethane	EPA 524.2
4-Chlorotoluene	EPA 524.2	1,2-Dichloropropane	EPA 524.2
Benzene	EPA 524.2	1,3-Dichloropropane	EPA 524.2
Bromobenzene	EPA 524.2	2,2-Dichloropropane	EPA 524.2

Serial No.: 58290

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (518) 485-5570 to verify the laboratory's accreditation status.

