ADDENDUM No. 2

RFP No. 19-14

Certified Laboratory for PFAS Testing

Proposals Due: May 14, 2019 at 2:00 P.M. (local time)

The following questions and answers are available for the Request for Proposal for Certified Laboratory for PFAS Testing RFP No. 19-14, on which proposals will be received on/or before the date and time listed above.

The information contained herein shall take precedence over the original documents and all previous addenda (if any), and is appended thereto. **This Addendum includes three (3) pages.**

The Proposer is to acknowledge receipt of this Addendum No. 1, including all attachments in its Proposal by so indicating in the proposal that the addendum has been received. Proposals submitted without acknowledgement of receipt of this addendum may be considered non-conforming.

The following forms provided within the RFP Document must be included in submitted proposal:

- Attachment C Non-Discrimination Declaration of Compliance
- Attachment D Living Wage Ordinance Declaration of Compliance
- Attachment E Vendor Conflict of Interest Disclosure Form

<u>Proposals that fail to provide these forms listed above upon proposal opening will be</u> <u>rejected as non-responsive and will not be considered for award.</u>

I. QUESTIONS AND ANSWERS

The following Questions have been received by the City. Responses are being provided in accordance with the terms of the RFP. Respondents are directed to take note in its review of the documents of the following questions and City responses as they affect work or details in other areas not specifically referenced here.

- Question 1: Please confirm the drinking water samples need to be analyzed by the drinking water method 537 rev 1.1.
- Answer 1: We are looking for the list of 24 PFAS compounds as given on the <u>Michigan IPP</u> <u>PFAS list</u> (also attached hereto). Please use whatever method is necessary to be able to report all of those compounds.

Offerors are responsible for any conclusions that they may draw from the information contained in the Addendum.

PERFLUOROALKYL AND POLYFLUOROALKYL SUBSTANCES (PFAS) MINIMUM LABORATORY ANALYTE LIST

Below is the minimum laboratory PFAS analyte list for analysis of deer, drinking water, groundwater, surface water, soil, wastewater effluent, and landfill leachate collected by Michigan's Departments of Environmental Quality (MDEQ), Health and Human Services (MDHHS), Agriculture and Rural Development, and Natural Resources.

This minimum analyte list was developed based on the potential for these chemicals to be found in Michigan, the availability of the chemical standards used for testing, and the ability of available laboratories to test for these PFAS. This list includes PFAS that can be tested for in drinking water using United States Environmental Protection Agency (USEPA) Method 537 Rev.1.1, which is the only method that should be used when analyzing drinking water samples. Other testing methodology may be used to test for PFAS in other media (**not** drinking water). This list is not exhaustive of PFAS in Michigan's environment.

A fish icon (>>>) precedes those compounds that are also currently being tested for in fish tissue.

Analyte Name	Acronym	Fluorinated Carbon Chain Length	Molecular Formula	CAS Number	USEPA Method 537 Rev. 1.1
Perfluorotetradecanoic acid	PFTeA	C ₁₄	C ₁₃ F ₂₇ COOH	376-06-7	Х
Perfluorotridecanoic acid	PFTriA	C ₁₃	$C_{12}F_{25}COOH$	72629-94-8	Х
Perfluorododecanoic acid	PFDoA	C ₁₂	C ₁₁ F ₂₃ COOH	307-55-1	Х
Perfluoroundecanoic acid	PFUnA	C11	C ₁₀ F ₂₁ COOH	2058-94-8	Х
Perfluorodecanoic acid	PFDA	C ₁₀	C ₉ F ₁₉ COOH	335-76-2	Х
Perfluorononanoic acid	PFNA	C9	C ₈ F ₁₇ COOH	375-95-1	Х
Perfluorooctanoic acid	PFOA	C ₈	C7F15COOH	335-67-1	Х
Perfluoroheptanoic acid	PFHpA	C 7	C ₆ F ₁₃ COOH	375-85-9	Х
Perfluorohexanoic acid	PFHxA	C ₆	$C_5F_{11}COOH$	307-24-4	Х
Perfluoropentanoic acid	PFPeA	C ₅	C4F9COOH	2706-90-3	
Perfluorobutanoic acid	PFBA	C4	C ₃ F ₇ COOH	375-22-4	
Perfluorodecanesulfonic acid	PFDS	C10	$C_{10}F_{21}SO_3H$	335-77-3	
Perfluorononanesulfonic acid	PFNS	C9	$C_9F_{19}SO_3H$	68259-12-1	
Perfluorooctanesulfonic acid	PFOS	C ₈	C ₈ F ₁₇ SO ₃ H	1763-23-1	Х
Perfluoroheptanesulfonic acid	PFHpS	C 7	$C_7F_{15}SO_3H$	375-92-8	
Perfluorohexanesulfonic acid	PFHxS	C ₆	C ₆ F ₁₃ SO ₃ H	355-46-4	Х
Perfluoropentanesulfonic acid	PFPeS	C ₅	$C_5F_{11}SO_3H$	2706-91-4	

Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) Minimum Laboratory Analyte List

Analyte Name	Acronym	Fluorinated Carbon Chain Length	Molecular Formula	CAS Number	USEPA Method 537 Rev. 1.1
Perfluorobutanesulfonic acid	PFBS	C40MG	C4F9SO3H	375-73-5	х
Perfluorooctanesulfonamide	PFOSA	C ₈	$C_8F_{17}SO_2NH_2$	754-91-6	
Fluorotelomer sulphonic acid 8:2	FtS 8:2	C8	$C_8F_{17}CH_2CH_2SO_3$	39108-34-4	
Fluorotelomer sulphonic acid 6:2	FtS 6:2	C ₆	$C_6F_{13}CH_2CH_2SO_3$	27619-97-2	
Fluorotelomer sulphonic acid 4:2	FtS 4:2	C4	C ₄ F ₉ CH ₂ CH ₂ SO ₃	757124-72-4	
2-(N-Ethylperfluorooctanesulfonamido) acetic acid	N-EtFOSAA	C ₈	$C_8F_{17}SO_2N(C_2H_5)CH_2COOH$	2991-50-6	Х
2-(N- Methylperfluorooctanesulfonamido) acetic acid	N-MeFOSAA	C ₈	$C_8F_{17}SO_2N(CH_3)CHCOOH$	2355-31-9	Х

Laboratories Providing PFAS Analytical Services

(The provision of the following links does not constitute an endorsement of the firms that may be identified by those links, nor is it a statement against any firm not on the lists generated. Additionally, the capacity of any identified laboratories to provide services consistent with the MDEQ recommendations above has not been verified and these details should be addressed prior to contracting with any laboratory.)

- The U.S. Environmental Protection Agency (US EPA) has a list of laboratories approved under the UCMR3 program using US EPA Method 537 Rev. 1.1 for PFAS in drinking water: www.epa.gov/dwucmr/third-unregulated-contaminant-monitoring-rule
- The U.S. Department of Defense, Environmental Laboratory Accreditation Program (US DoD ELAP) maintains a list of labs for the determination of PFAS in various environmental media other than drinking water on the Defense Environmental Network Information Exchange (DENIX) server: www.denix.osd.mil/edqw/accreditation/accreditedlabs/

Contact Information

Questions regarding PFAS in general, contact:

- MDHHS Toxics and Health Hotline: 800-648-6942
- MDEQ Environmental Assistance Center 800-662-9278

Questions regarding laboratory information, contact:

- MDHHS Toxics and Health Hotline: 800-648-6942
- MDEQ Drinking Water Analysis Laboratory 517-335-8184