

**FIRST AMENDMENT TO AGREEMENT FOR  
PROFESSIONAL SERVICES**

THIS FIRST AMENDMENT TO AGREEMENT is made and entered into this \_\_\_ day of \_\_\_\_\_, 20\_\_\_, by and between the City of Merced, a California Charter Municipal Corporation, whose address of record is 678 West 18<sup>th</sup> Street, Merced, California 95340, (hereinafter referred to as “City”), and HerSchy Environmental, Inc., a California Corporation, whose address of record is P.O. Box 229, Bass Lake, California 93604 (hereinafter referred to as “Consultant”).

WHEREAS, City is undertaking a project to monitor the Airport Hazardous Waste Site; and,

WHEREAS, City and Consultant have previously entered into an Agreement for Professional Services (“Agreement”) dated August 15, 2022; and,

WHEREAS, City and Consultant desire to amend said Agreement to provide for additional services in connection with said project.

NOW, THEREFORE, the parties hereto, in consideration of the mutual covenants hereinafter recited, agree as follows:

1. Section 23, “ADDITIONAL WORK,” is hereby added to the Agreement to read as follows:

“SECTION 23. ADDITIONAL WORK. Consultant shall perform the additional work outlined in the proposal from Consultant to City dated December 22, 2022 attached hereto as Exhibit “1”.

2. Section 24, “ADDITIONAL COMPENSATION,” is hereby added to the Agreement to read as follows:

“SECTION 24. ADDITIONAL COMPENSATION. City shall pay to Consultant the not to exceed additional sum of Forty-Four Thousand Five Hundred Fifty-Five Dollars and Forty-Seven Cents (\$44,555.47) for the additional work described in the proposal attached hereto

as Exhibit "1" and in accordance with the rates set forth on Exhibit "1."

3. Except as herein amended, the Agreement dated August 15, 2022, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties have caused this First Amendment to Agreement to be executed on the date first above written.

CITY OF MERCED  
A California Charter Municipal  
Corporation

BY: \_\_\_\_\_  
City Manager

ATTEST:  
STEPHANIE R. DIETZ, CITY CLERK

BY: \_\_\_\_\_  
Assistant/Deputy City Clerk

APPROVED AS TO FORM:

BY:  \_\_\_\_\_ 4/19/23  
City Attorney Date

ACCOUNT DATA:

BY: \_\_\_\_\_  
Verified by Finance Officer

CONSULTANT  
HERSCHY Environmental, Inc.,  
A California Corporation

BY: Cynthia Schymiczek  
(Signature)

Cynthia Schymiczek  
(Typed Name)

Its: President/owner  
(Title)

BY: Scott Jackson  
(Signature)

Scott Jackson  
(Typed Name)

Its: Principal Geologist  
(Title)

Taxpayer I.D. No. 41-2103509

ADDRESS: P.O. Box 229  
Bass Lake, CA 93604

TELEPHONE: (559) 412-4718

FAX: (559) 641-7340

E-MAIL: scottjhersch@sti.net



# HerSchy Environmental, Inc.

PO Box 229 ♦ Bass Lake, CA 93604-0229 ♦ Phone: 559-412-4718 ♦ Fax: 559-412-4838

December 22, 2022

Ms. Amber Minami  
City of Merced  
678 W. 18<sup>th</sup> Street  
Merced, California 95340

RE: **Modification to Scope of Work**  
Environmental Investigation  
Merced Regional Airport hazardous waste site

Ms. Minami:

HerSchy Environmental, Inc. (HerSchy) is pleased to present this document proposing a modification to the scope of work as described in the contract executed on August 15, 2022 between the City of Merced (City) and HerSchy. The contracted work included requirements described in the June 9, 2011 final Monitoring and Reporting Program No. R5-2011-0808 (MRP) from the California Regional Water Quality Control Board (RWQCB). Subsequent to the issuance of City's Request for Proposal for that work, the RWQCB issued their letter dated June 21, 2022 which required sampling all wells at the regional airport site for per and poly-fluorinated substances (PFAS), adsorbable organic fluorine (AOF), and general chemistry, and conducting a sensitive receptor survey. The following describes the additional scope of work and additional costs for the work required in the RWQCB letter, and is in addition to but not duplicative of work in the existing contract.

The general methods for sample collection will be as utilized for PCE sample collection under multiple contracts, and as modified by the September 2020 *Per- and Polyfluoroalkyl substances (PFAS) Sampling Guidelines for Non-Drinking Water (Guidelines)*, prepared by the California State Water Quality Control Board. The Guidelines provide for methods and procedures to mitigate or eliminate potential cross-contamination of PFAS samples from sampling materials, personnel clothing, and many type of common materials. HerSchy will adhere to all guidelines to maintain sample integrity.

Samples will be additionally collected from all wells during the March 2023 PCE sampling event that contain sufficient water for laboratory analysis of PFAS, AOF, and general chemistry. Certain field parameters will be measured during the well purging process. PFAS analysis will be in compliance with the Department of Defense Table B-15 of Quality Systems Manual (QSM) and AOF analysis in compliance with Table 4 of the draft EPA method 1621. Appendix A presents tables identifying the list of PFAS (Table 1), AOF (Table 2), general chemistry and field parameters (Table 3) as presented in the RWQCB directive letter, and for AOF (Table 4) as presented in draft Method 1621.

For budgeting purposes, all 24 existing wells are included in the additional analytical and labor costs, with no more than half expected to contain sufficient water for sampling. Wells not sampled for PFAS, AOF, and general minerals will be discounted as described below. These costs are in addition to the current PCE contract costs.

**EXHIBIT 1**



# HerSchy Environmental, Inc.

PO Box 229 ♦ Bass Lake, CA 93604-0229 ♦ Phone: 559-412-4718 ♦ Fax: 559-412-4838

## FEE PROPOSAL AND BUDGET

The following is a listing of personnel and billing rates HerSchy shall use in conducting work outlined above for PFAS sampling and sensitive survey requirements and is in addition to the current PCE sampling contract. The method of compensation as described in the PCE contract remains in effect for the expanded scope of work, with the one-time PFAS sampling and sensitive survey costs due when invoiced. For this proposal, all 24 existing wells are included, with many having been dry for approximately 10 years. Costs shall be deducted as described below for wells not sampled for PFAS, AOF, and general minerals in accordance with whether the wells were otherwise scheduled for PCE sampling. Budget categories with a not-to-exceed amount are presented below.

Name	Job Title	Description	Hourly Rate
Oscar Salvatierra	Senior Field Technician	Primary groundwater sampling technician	\$87
Darryl Garza Scott Jackson	Field Technician	Groundwater Sampling Technician	\$50
Scott Jackson	Sr. Project Geologist/Manager	Project management and oversight, report preparation	\$109
Reba Ahart	Clerical	Documentation and submittal of field data	\$50

### Budget Categories

### Task Sub-total

Task 1: PFAS sampling, analysis, and reporting

**\$41,835.47**

Invoice deduction for non-sampled wells

PFAS-only scheduled well

\$1761.30

PCE scheduled well

\$1631.30

Task 2: Sensitive Receptor Survey

**\$2,720.00**

Not to Exceed Costs

**\$44,555.47**

The costs for the additional sampling and sensitive receptor survey are due when invoiced as one-time events outside of the original RFP. If you have any questions, please contact Scott Jackson at (559) 412-4718.

With best regards,

Scott Jackson, PG  
Senior Geologist

Cynthia Schymiczek  
President/Owner

12/22/22

Date

**APPENDIX A**

**PFAS, AOF, and General Minerals Analytical Requirements**



**Table 1. Requested PFAS analytes and the highest acceptable Reporting Limits**

Chemical Name/ Abbreviation(s)	GeoTracker PARLABEL	Chemical Abstracts Service (CAS) No.	Acceptable Reporting Limit for Groundwater (ng/L)	Acceptable Reporting Limit for Stormwater (ng/L)	Acceptable Reporting Limit for Soil (ng/g)
Perfluorobutanoic acid (PFBA)	PFBA, PFBTA	375-22-4	8.0	8.0	1.0
Perfluoropentanoic acid (PFPeA)	PFPeA, PFPA	2706-90-3	5.0	5.0	1.0
Perfluorohexanoic acid (PFHxA)	PFHxA, PFHA	307-24-4	5.0	5.0	1.0
Perfluoroheptanoic acid (PFHpA)	PFHPA	375-85-9	5.0	5.0	1.0
Perfluorooctanoic acid (PFOA)	PFOA	335-67-1	5.0	5.0	1.0
Perfluorononanoic acid (PFNA)	PFNA	375-95-1	5.0	5.0	1.0
Perfluorodecanoic acid (PFDA)	PFDA, PFNDCA	335-76-2	5.0	5.0	1.0
Perfluoroundecanoic acid (PFUnDA)	PFUnA, PFUNDCA	2058-94-8	5.0	5.0	1.0
Perfluorododecanoic acid (PFDoA)	PFDOA	307-55-1	5.0	5.0	1.0
Perfluorotridecanoic acid (PFTrDA)	PFTrDA, PFTRIDA	72629-94-8	5.0	5.0	1.0
Perfluorotetradecanoic acid (PFTA)	PFTA, PFTEDA	376-06-7	8.0	8.0	2.0
Perfluorobutane sulfonic acid (PFBS)	PFBS, PFBSA	375-73-5	5.0	5.0	1.0
Perfluoropentane sulfonic acid (PFPeS)	PFPeS	2706-91-4	5.0	5.0	1.0
Perfluorohexane sulfonic acid (PFHXS)	PFHXS, PFHXSA	355-46-4	5.0	5.0	1.0
Perfluoroheptane sulfonic acid (PFHpS)	PFHpS, PFHPSA	375-92-8	5.0	5.0	1.0
Perfluorooctane sulfonic acid (PFOS)	PFOS, PFOS_A	1763-23-1	5.0	5.0	1.0
Perfluorodecane sulfonic acid (PFDS)	PFDS, PFDSA	335-77-3	5.0	5.0	1.0
Perfluorooctanesulfonamide (PFOSAm)	PFOSA	754-91-6	8.0	8.0	1.0
N-Ethyl perfluorooctane sulfonamido ethanol (EtFOSE)	ETFOSE	1691-99-2	8.0	8.0	2.0
N-Methyl perfluorooctane sulfonamido ethanol (MeFOSE)	MEFOSE	24448-09-7	8.0	8.0	2.0
N-Ethyl perfluorooctane sulfonamide <sup>2</sup> (EtFOSAm)	EtFOSAm, ETFOSA	4151-50-2	8.0	8.0	2.0

Table 1, Continued

Chemical Name/ Abbreviation(s)	GeoTracker PARLABEL	Chemical Abstracts Service (CAS) No.	Acceptable Reporting Limit for Groundwater (ng/L)	Acceptable Reporting Limit for Stormwater (ng/L)	Acceptable Reporting Limit for Soil (ng/g)
N-Methyl perfluorooctane sulfonamide (MeFOSA, MeFOSAm)	MeFOSAm, MEFOSA	31506-32-8	8.0	8.0	2.0
N-Methyl perfluorooctane sulfonamidoacetic acid (NMeFOSAA)	NMEFOSAA	2355-31-9	8.0	8.0	2.0
N-Ethyl perfluorooctane sulfonamidoacetic acid (NEtFOSAA)	NETFOSAA	2991-50-6	8.0	8.0	2.0
4:2 Fluorotelomer sulfonic acid (4:2 FTS)	4:2FTS	757124-72-4	8.0	8.0	2.0
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	6:2FTS	27619-97-2	8.0	8.0	2.0
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	8:2FTS	39108-34-4	8.0	8.0	2.0
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA)	HFPO-DA, HFPA-DA	13252-13-6	8.0	8.0	5.0
4,8-Dioxa-3H- perfluorononanoic acid (ADONA)	ADONA	919005-14-4	8.0	8.0	5.0
9-Chlorohexadecafluoro-3- oxanonane-1-sulfonic acid (9- Cl-PF3ONS)	9ClPF3ONS	756426-58-1	8.0	8.0	5.0
11-Chloroeicosafuoro-3- oxaundecane-1-sulfonic acid (11-Cl-PF3OUdS)	11ClPF3OUd S	763051-92-9	8.0	8.0	5.0



**Table 2. Highest Reporting Limit for Adsorbable Organic Fluorine Analysis**

Analyte	Acceptable Reporting Limit for Groundwater (ng/L)
Adsorbable Organic Fluorine	10

**Table 3. Field and General Chemistry Parameters for Groundwater Samples**

Field Parameters	Units	General Chemistry	Units
Depth to Groundwater	Feet, bgs	Total Dissolved Solids	mg/L
Temperature	Degrees C	Chloride	mg/L
Electrical Conductivity	µmhos/cm	Carbonate	mg/L
pH	units	Bicarbonate	mg/L
Turbidity	NTU	Nitrate-Nitrogen	mg/L
Dissolved Oxygen	mg/L	Sulfate	mg/L
Oxidation/Reduction Potential	mV	Calcium	mg/L
		Magnesium	mg/L
		Potassium	mg/L
		Sodium	mg/L

**Notes:**  
 bgs – below ground surface C – Celsius  
 mg/L – milligrams per liter  
 NTU – nephelometric turbidity units  
 µmhos/cm – micromhos per centimeter  
 mV - millivolts

# DRAFT METHOD 1621

## 19.0 Tables, Diagrams, Flowcharts, and Validation Data

**Table 1. Example Retention Time and MDL Values**

Analyte	Retention Time (min) <sup>a</sup>	Organofluorine Fortified Conc. (µg/L) <sup>b</sup>	MDL (µg/L)
AOF	5.9	5.0	2.4

<sup>a</sup> Retention time based on Metrohm Metrosep A Supp 7 column and isocratic carbonate-bicarbonate elution. Other column and elution reagents will give different retention times.

<sup>b</sup> Fluoride concentration used to determine MDLs. PFHxS used as source of organofluorine.

**Data for this table are derived from the single-laboratory validation study and are only provided as examples for this draft method. The data will be updated with the pooled MDLs from the interlaboratory study results in a subsequent revision.**

**Table 2. Example Calibration Standard Solutions**

Analyte	Calibration Standards (µg F/ L)					
	CS1	CS2	CS3	CS4	CS5	CS6
AOF	1.0	2.0	5.0	10	25	50

**Data for this table are derived from the single-laboratory validation study and are only provided as examples for this draft method.**

**Table 3. IPR and OPR QC Based on Single-Lab Data**

Compound	IPR		OPR
	Recovery (%)	RSD (%)	Recovery (%)
PFHxS	85 – 115	7.5	75 - 110

**Data for this table are derived from the single-laboratory validation study and are only provided as examples for this draft method.**

**Table 4. Summary of Quality Control**

Method Reference	Requirement	Specification and Frequency
Section 10.3	Initial Calibration (ICAL)	Minimum 5 calibration standards for linear model and 6 calibration standards for non-linear models.
Sections 10.2.2, 10.2.3, 14.1	Retention Time (RT) window	After ICAL and at the beginning of analytical sequence
Section 10.4, 13.1	Calibration Verification (CV)	At the beginning and every 10 samples
Sections 9.1.3, 9.3, 13.3	Method Blank	Two per preparation batch
Section 13.4	Ongoing Precision and Recovery (OPR)	One per preparation batch
Sections 9.7, 11.3	Matrix Spike (MS/MSD)	One set per preparation batch