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STATE OF NEW HAMPSHIRE

DEPARTMENT OF HEALTH AND HUMAN SERVICES

29 HAZEN DRIVE, CONCORD, NH 03301-6503
603-271-4612 1-800-852-3345 Ext. 4612
Fax: 603-271-4827 TDD Access: 1-800-735-2964



Nicholas A. Toumpas
Commissioner

Marcella J. Bobinsky
Acting Director

November 3, 2015

Her Excellency Governor Margaret Wood Hassan
and the Honorable Executive Council
State House
Concord, NH 03301

Sole Source

REQUESTED ACTION

Authorize the Department of Health and Human Services, Division of Public Health Services to enter into a **sole source** agreement with the AXYS Analytical Services, Ltd., 2045 Mills Road West, Sidney, BC V8L 5X2, Canada to provide analytical laboratory testing services in an amount not to exceed \$146,547 effective upon Governor and Executive Council approval, through June 30, 2017. 100% General Funds

Funds are available in the following accounts for State Fiscal Year 2016 and State Fiscal Year 2017 upon the availability and continued appropriation of funds, with the ability to adjust encumbrances between State Fiscal Years through the Budget Office without further Governor and Executive Council approval, if needed and justified.

05-95-90-902510-51700000 HEALTH AND SOCIAL SERVICES, DEPT OF HEALTH AND HUMAN SERVICES, HHS: DIVISION OF PUBLIC HEALTH, BUREAU OF INFECTIOUS DISEASE CONTROL, DISEASE CONTROL

Fiscal Year	Class	Title	Activity Code	Amount
2016	547-500394	Disease Control Emergencies	90027021	\$71,547
2017	547-500394	Disease Control Emergencies	90027021	\$0
2016	546-500390	Patient Care	90027021	\$75,000
2017	546-500390	Patient Care	90027021	\$0
			Total:	\$146,547

EXPLANATION

This agreement is **sole source** because AXYS Analytical Services, Ltd. has extensive technical expertise in measuring perfluorochemicals in human serum. This is highly specialized testing. The Department identified only two laboratories with the technical capability and combined capacity to assist in the testing and analysis of human serum. The two laboratories were contacted and contracts were negotiated. This agreement represents the first of two (2) contracts that will be presented for Governor and Executive Council approval for these specialized laboratory services. The second contract will be brought forward to the Governor and Executive Council for approval once the executed documents are received from the vendor.

The purpose of this agreement is to conduct analytical laboratory testing services to measure perfluorochemicals (PFC) in human serum collected as a result of potential exposure to perfluorochemical-contaminated drinking water at the Pease Tradeport.

Perfluorochemicals are a group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. They were also an ingredient in fire-fighting foam used at the Pease Tradeport. Fluoropolymer coatings can be used in products such as clothing, furniture, adhesives, food packaging, heat resistant non-stick cooking surfaces, and the insulation of electrical wire. Many chemicals in this group are a concern as they are slow to break down in the environment and can accumulate in human tissues. Scientific studies are ongoing to better understand what, if any, health effects are associated with exposure to perfluorochemicals.

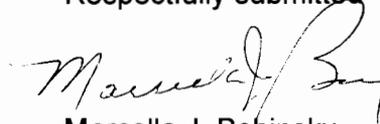
The Centers for Disease Control and Prevention has conducted tests for the Department for the presence of perfluorochemicals in specimens that were collected from the aforementioned location. However, the Centers for Disease Control and Prevention has reached its capacity for conducting these tests. The Department identified only two laboratories with the technical capability and combined capacity to assist in the testing and analysis of human serum

Should the Governor and Executive Council determine not to approve this request, then the New Hampshire Division of Public Health Services will not have access to PFC exposure information for the Pease Tradeport population and community members will not receive their expected individual test results.

Area Served: Statewide

Source of Funds: 100% General

Respectfully submitted



Marcella J. Bobinsky
Acting Director

Approved by:



Nicholas A. Toumpas
Commissioner

Subject: PFC Exposure Assessment Services

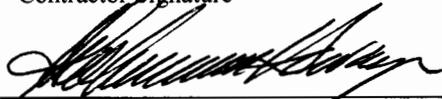
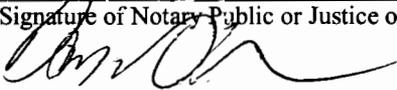
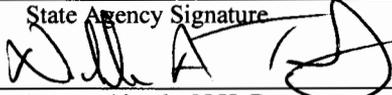
Notice: This agreement and all of its attachments shall become public upon submission to Governor and Executive Council for approval. Any information that is private, confidential or proprietary must be clearly identified to the agency and agreed to in writing prior to signing the contract.

AGREEMENT

The State of New Hampshire and the Contractor hereby mutually agree as follows:

GENERAL PROVISIONS

1. IDENTIFICATION.

1.1 State Agency Name Department of Health and Human Services		1.2 State Agency Address 129 Pleasant Street Concord, NH 03301-3857	
1.3 Contractor Name AXYS Analytical Services, Ltd		1.4 Contractor Address 2045 Mills Road West Sidney, BC V8L 5X2 Canada	
1.5 Contractor Phone Number (250) 655-5800	1.6 Account Number 05-95-90-902510-51700000	1.7 Completion Date June 30, 2017	1.8 Price Limitation \$146,547
1.9 Contracting Officer for State Agency Eric Borrin, Director		1.10 State Agency Telephone Number 603-271-9558	
1.11 Contractor Signature 		1.12 Name and Title of Contractor Signatory DIRECTOR OF OPERATIONS, SHEA NEWAGE	
1.13 Acknowledgement: State of _____, County of _____ On <u>Oct 30/15</u> , before the undersigned officer, personally appeared the person identified in block 1.12, or satisfactorily proven to be the person whose name is signed in block 1.11, and acknowledged that s/he executed this document in the capacity indicated in block 1.12.			
1.13.1 Signature of Notary Public or Justice of the Peace  [Seal] DAMON O'BRIEN			
1.13.2 Name and Title of Notary or Justice of the Peace 9830 Fourth Street Sidney BC V8L 2Z3 Barrister & Solicitor			
1.14 State Agency Signature 		1.15 Name and Title of State Agency Signatory N. TOMPKINS, COMMISSIONER	
1.16 Approval by the N.H. Department of Administration, Division of Personnel (if applicable) By: _____ Director, On: _____			
1.17 Approval by the Attorney General (Form, Substance and Execution) (if applicable) By:  On: <u>11/3/15</u> Attorney			
1.18 Approval by the Governor and Executive Council (if applicable) By: _____ On: _____			

2. EMPLOYMENT OF CONTRACTOR/SERVICES TO BE PERFORMED. The State of New Hampshire, acting through the agency identified in block 1.1 ("State"), engages contractor identified in block 1.3 ("Contractor") to perform, and the Contractor shall perform, the work or sale of goods, or both, identified and more particularly described in the attached EXHIBIT A which is incorporated herein by reference ("Services").

3. EFFECTIVE DATE/COMPLETION OF SERVICES.

3.1 Notwithstanding any provision of this Agreement to the contrary, and subject to the approval of the Governor and Executive Council of the State of New Hampshire, if applicable, this Agreement, and all obligations of the parties hereunder, shall become effective on the date the Governor and Executive Council approve this Agreement as indicated in block 1.18, unless no such approval is required, in which case the Agreement shall become effective on the date the Agreement is signed by the State Agency as shown in block 1.14 ("Effective Date").

3.2 If the Contractor commences the Services prior to the Effective Date, all Services performed by the Contractor prior to the Effective Date shall be performed at the sole risk of the Contractor, and in the event that this Agreement does not become effective, the State shall have no liability to the Contractor, including without limitation, any obligation to pay the Contractor for any costs incurred or Services performed. Contractor must complete all Services by the Completion Date specified in block 1.7.

4. CONDITIONAL NATURE OF AGREEMENT.

Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including, without limitation, the continuance of payments hereunder, are contingent upon the availability and continued appropriation of funds, and in no event shall the State be liable for any payments hereunder in excess of such available appropriated funds. In the event of a reduction or termination of appropriated funds, the State shall have the right to withhold payment until such funds become available, if ever, and shall have the right to terminate this Agreement immediately upon giving the Contractor notice of such termination. The State shall not be required to transfer funds from any other account to the Account identified in block 1.6 in the event funds in that Account are reduced or unavailable.

5. CONTRACT PRICE/PRICE LIMITATION/PAYMENT.

5.1 The contract price, method of payment, and terms of payment are identified and more particularly described in EXHIBIT B which is incorporated herein by reference.

5.2 The payment by the State of the contract price shall be the only and the complete reimbursement to the Contractor for all expenses, of whatever nature incurred by the Contractor in the performance hereof, and shall be the only and the complete compensation to the Contractor for the Services. The State shall have no liability to the Contractor other than the contract price.

5.3 The State reserves the right to offset from any amounts otherwise payable to the Contractor under this Agreement those liquidated amounts required or permitted by N.H. RSA 80:7 through RSA 80:7-c or any other provision of law.

5.4 Notwithstanding any provision in this Agreement to the contrary, and notwithstanding unexpected circumstances, in no event shall the total of all payments authorized, or actually made hereunder, exceed the Price Limitation set forth in block 1.8.

6. COMPLIANCE BY CONTRACTOR WITH LAWS AND REGULATIONS/ EQUAL EMPLOYMENT OPPORTUNITY.

6.1 In connection with the performance of the Services, the Contractor shall comply with all statutes, laws, regulations, and orders of federal, state, county or municipal authorities which impose any obligation or duty upon the Contractor, including, but not limited to, civil rights and equal opportunity laws. This may include the requirement to utilize auxiliary aids and services to ensure that persons with communication disabilities, including vision, hearing and speech, can communicate with, receive information from, and convey information to the Contractor. In addition, the Contractor shall comply with all applicable copyright laws.

6.2 During the term of this Agreement, the Contractor shall not discriminate against employees or applicants for employment because of race, color, religion, creed, age, sex, handicap, sexual orientation, or national origin and will take affirmative action to prevent such discrimination.

6.3 If this Agreement is funded in any part by monies of the United States, the Contractor shall comply with all the provisions of Executive Order No. 11246 ("Equal Employment Opportunity"), as supplemented by the regulations of the United States Department of Labor (41 C.F.R. Part 60), and with any rules, regulations and guidelines as the State of New Hampshire or the United States issue to implement these regulations. The Contractor further agrees to permit the State or United States access to any of the Contractor's books, records and accounts for the purpose of ascertaining compliance with all rules, regulations and orders, and the covenants, terms and conditions of this Agreement.

7. PERSONNEL.

7.1 The Contractor shall at its own expense provide all personnel necessary to perform the Services. The Contractor warrants that all personnel engaged in the Services shall be qualified to perform the Services, and shall be properly licensed and otherwise authorized to do so under all applicable laws.

7.2 Unless otherwise authorized in writing, during the term of this Agreement, and for a period of six (6) months after the Completion Date in block 1.7, the Contractor shall not hire, and shall not permit any subcontractor or other person, firm or corporation with whom it is engaged in a combined effort to perform the Services to hire, any person who is a State employee or official, who is materially involved in the procurement, administration or performance of this

Agreement. This provision shall survive termination of this Agreement.

7.3 The Contracting Officer specified in block 1.9, or his or her successor, shall be the State's representative. In the event of any dispute concerning the interpretation of this Agreement, the Contracting Officer's decision shall be final for the State.

8. EVENT OF DEFAULT/REMEDIES.

8.1 Any one or more of the following acts or omissions of the Contractor shall constitute an event of default hereunder ("Event of Default"):

8.1.1 failure to perform the Services satisfactorily or on schedule;

8.1.2 failure to submit any report required hereunder; and/or

8.1.3 failure to perform any other covenant, term or condition of this Agreement.

8.2 Upon the occurrence of any Event of Default, the State may take any one, or more, or all, of the following actions:

8.2.1 give the Contractor a written notice specifying the Event of Default and requiring it to be remedied within, in the absence of a greater or lesser specification of time, thirty (30) days from the date of the notice; and if the Event of Default is not timely remedied, terminate this Agreement, effective two (2) days after giving the Contractor notice of termination;

8.2.2 give the Contractor a written notice specifying the Event of Default and suspending all payments to be made under this Agreement and ordering that the portion of the contract price which would otherwise accrue to the Contractor during the period from the date of such notice until such time as the State determines that the Contractor has cured the Event of Default shall never be paid to the Contractor;

8.2.3 set off against any other obligations the State may owe to the Contractor any damages the State suffers by reason of any Event of Default; and/or

8.2.4 treat the Agreement as breached and pursue any of its remedies at law or in equity, or both.

9. DATA/ACCESS/CONFIDENTIALITY/PRESERVATION.

9.1 As used in this Agreement, the word "data" shall mean all information and things developed or obtained during the performance of, or acquired or developed by reason of, this Agreement, including, but not limited to, all studies, reports, files, formulae, surveys, maps, charts, sound recordings, video recordings, pictorial reproductions, drawings, analyses, graphic representations, computer programs, computer printouts, notes, letters, memoranda, papers, and documents, all whether finished or unfinished.

9.2 All data and any property which has been received from the State or purchased with funds provided for that purpose under this Agreement, shall be the property of the State, and shall be returned to the State upon demand or upon termination of this Agreement for any reason.

9.3 Confidentiality of data shall be governed by N.H. RSA chapter 91-A or other existing law. Disclosure of data requires prior written approval of the State.

10. TERMINATION. In the event of an early termination of this Agreement for any reason other than the completion of the Services, the Contractor shall deliver to the Contracting Officer, not later than fifteen (15) days after the date of termination, a report ("Termination Report") describing in detail all Services performed, and the contract price earned, to and including the date of termination. The form, subject matter, content, and number of copies of the Termination Report shall be identical to those of any Final Report described in the attached EXHIBIT A.

11. CONTRACTOR'S RELATION TO THE STATE. In the performance of this Agreement the Contractor is in all respects an independent contractor, and is neither an agent nor an employee of the State. Neither the Contractor nor any of its officers, employees, agents or members shall have authority to bind the State or receive any benefits, workers' compensation or other emoluments provided by the State to its employees.

12. ASSIGNMENT/DELEGATION/SUBCONTRACTS. The Contractor shall not assign, or otherwise transfer any interest in this Agreement without the prior written notice and consent of the State. None of the Services shall be subcontracted by the Contractor without the prior written notice and consent of the State.

13. INDEMNIFICATION. The Contractor shall defend, indemnify and hold harmless the State, its officers and employees, from and against any and all losses suffered by the State, its officers and employees, and any and all claims, liabilities or penalties asserted against the State, its officers and employees, by or on behalf of any person, on account of, based or resulting from, arising out of (or which may be claimed to arise out of) the acts or omissions of the Contractor. Notwithstanding the foregoing, nothing herein contained shall be deemed to constitute a waiver of the sovereign immunity of the State, which immunity is hereby reserved to the State. This covenant in paragraph 13 shall survive the termination of this Agreement.

14. INSURANCE.

14.1 The Contractor shall, at its sole expense, obtain and maintain in force, and shall require any subcontractor or assignee to obtain and maintain in force, the following insurance:

14.1.1 comprehensive general liability insurance against all claims of bodily injury, death or property damage, in amounts of not less than \$1,000,000 per occurrence and \$2,000,000 aggregate ; and

14.1.2 special cause of loss coverage form covering all property subject to subparagraph 9.2 herein, in an amount not less than 80% of the whole replacement value of the property.

14.2 The policies described in subparagraph 14.1 herein shall be on policy forms and endorsements approved for use in the State of New Hampshire by the N.H. Department of Insurance, and issued by insurers licensed in the State of New Hampshire.

14.3 The Contractor shall furnish to the Contracting Officer identified in block 1.9, or his or her successor, a certificate(s) of insurance for all insurance required under this Agreement. Contractor shall also furnish to the Contracting Officer identified in block 1.9, or his or her successor, certificate(s) of insurance for all renewal(s) of insurance required under this Agreement no later than thirty (30) days prior to the expiration date of each of the insurance policies. The certificate(s) of insurance and any renewals thereof shall be attached and are incorporated herein by reference. Each certificate(s) of insurance shall contain a clause requiring the insurer to provide the Contracting Officer identified in block 1.9, or his or her successor, no less than thirty (30) days prior written notice of cancellation or modification of the policy.

15. WORKERS' COMPENSATION.

15.1 By signing this agreement, the Contractor agrees, certifies and warrants that the Contractor is in compliance with or exempt from, the requirements of N.H. RSA chapter 281-A ("*Workers' Compensation*").

15.2 To the extent the Contractor is subject to the requirements of N.H. RSA chapter 281-A, Contractor shall maintain, and require any subcontractor or assignee to secure and maintain, payment of Workers' Compensation in connection with activities which the person proposes to undertake pursuant to this Agreement. Contractor shall furnish the Contracting Officer identified in block 1.9, or his or her successor, proof of Workers' Compensation in the manner described in N.H. RSA chapter 281-A and any applicable renewal(s) thereof, which shall be attached and are incorporated herein by reference. The State shall not be responsible for payment of any Workers' Compensation premiums or for any other claim or benefit for Contractor, or any subcontractor or employee of Contractor, which might arise under applicable State of New Hampshire Workers' Compensation laws in connection with the performance of the Services under this Agreement.

16. WAIVER OF BREACH. No failure by the State to enforce any provisions hereof after any Event of Default shall be deemed a waiver of its rights with regard to that Event of Default, or any subsequent Event of Default. No express failure to enforce any Event of Default shall be deemed a waiver of the right of the State to enforce each and all of the provisions hereof upon any further or other Event of Default on the part of the Contractor.

17. NOTICE. Any notice by a party hereto to the other party shall be deemed to have been duly delivered or given at the time of mailing by certified mail, postage prepaid, in a United States Post Office addressed to the parties at the addresses given in blocks 1.2 and 1.4, herein.

18. AMENDMENT. This Agreement may be amended, waived or discharged only by an instrument in writing signed by the parties hereto and only after approval of such amendment, waiver or discharge by the Governor and Executive Council of the State of New Hampshire unless no

such approval is required under the circumstances pursuant to State law, rule or policy.

19. CONSTRUCTION OF AGREEMENT AND TERMS.

This Agreement shall be construed in accordance with the laws of the State of New Hampshire, and is binding upon and inures to the benefit of the parties and their respective successors and assigns. The wording used in this Agreement is the wording chosen by the parties to express their mutual intent, and no rule of construction shall be applied against or in favor of any party.

20. THIRD PARTIES. The parties hereto do not intend to benefit any third parties and this Agreement shall not be construed to confer any such benefit.

21. HEADINGS. The headings throughout the Agreement are for reference purposes only, and the words contained therein shall in no way be held to explain, modify, amplify or aid in the interpretation, construction or meaning of the provisions of this Agreement.

22. SPECIAL PROVISIONS. Additional provisions set forth in the attached EXHIBIT C are incorporated herein by reference.

23. SEVERABILITY. In the event any of the provisions of this Agreement are held by a court of competent jurisdiction to be contrary to any state or federal law, the remaining provisions of this Agreement will remain in full force and effect.

24. ENTIRE AGREEMENT. This Agreement, which may be executed in a number of counterparts, each of which shall be deemed an original, constitutes the entire Agreement and understanding between the parties, and supersedes all prior Agreements and understandings relating hereto.

Contractor Initials

Date  09 30 2015



Scope of Services

1. Provisions Applicable to All Services

- 1.1. The Contractor agrees that, to the extent future legislative action by the New Hampshire General Court or federal or state court orders may have an impact on the Services described herein, the State Agency has the right to modify Service priorities and expenditure requirements under this Agreement so as to achieve compliance therewith.

2. Scope of Services

- 2.1. The Contractor shall conduct analytical laboratory testing services to measure perfluorochemicals (PFC) in human serum, in accordance with the methodology outlined in Exhibit A-1, MLA-042, R09 V06 for:
 - 2.1.1. perfluorooctane sulfonamide
 - 2.1.2. perfluorohexane sulfonate
 - 2.1.3. perfluorodecanoate
 - 2.1.4. perfluoroundecanoate
 - 2.1.5. perfluorononanoate
 - 2.1.6. perfluorooctanoate
 - 2.1.7. perfluorooctane sulfonate.
- 2.2. The Contractor shall complete testing on all samples received from the Department.
- 2.3. The Contractor shall report all testing results and associated quality control measures, which shall include but not be limited to:
 - 2.3.1. Identification of appropriate detection limits.
 - 2.3.2. Quality assurance measures practiced during testing.

3. Reporting

- 3.1. The Contractor shall provide reports of testing results to the Department within four (4) to six (6) weeks of receiving the initial batch of 80 human serum samples from the Department; then an additional 80/week thereafter until analysis is complete.
- 3.2. The Contractor shall send reports in Section 3.1 to the Department electronically in the following forms:
 - 3.2.1. PDF.
 - 3.2.2. Excel Spreadsheet.

A handwritten signature in black ink, appearing to be 'JWA'.

AXYS Analytical Services Ltd.

Summary of AXYS Method MLA-042 Rev 09 Ver 06:**Analytical Procedure for the Analysis of Perfluorinated Organic Compounds in Blood Serum by LC-MS/MS**

This method, MLA-042, describes the analysis of perfluorinated organic compounds (PFC) in blood serum samples. Typical detection limits are in the range of 0.5 – 1 ng/g for a 0.5 mL serum sample.

Target Analytes

Perfluorobutanoate (PFBA)	Perfluorobutanesulfonate (PFBS)
Perfluoropentanoate (PFPeA)	Perfluorohexanesulfonate (PFHxS)
Perfluorohexanoate (PFHxA)	Perfluorooctanesulfonate (PFOS)
Perfluoroheptanoate (PFHpA)	Perfluorooctane sulfonamide (PFOSA) ¹
Perfluorooctanoate (PFOA)	
Perfluorononanoate (PFNA)	
Perfluorodecanoate (PFDA)	
Perfluoroundecanoate (PFUnA)	
Perfluorododecanoate (PFDoA)	

EXTRACTION

Sample size may be up to 0.5 mL. The sample is spiked with surrogate standards. 3 mL of 50% formic acid is added and the mixture is sonicated for 20 minutes.

COLUMN CHROMATOGRAPHY CLEANUP

Cleanup is performed by solid phase extraction (SPE) using a disposable cartridge containing a weak anion exchange sorbent. The eluate is spiked with recovery standards and analyzed by LC-MS/MS. Calibration solutions are prepared in bovine serum and processed through the same SPE cleanup procedure.

INSTRUMENTAL ANALYSIS

Analysis of sample extracts for perfluorinated organics by HPLC-MS/MS is performed on a high performance liquid chromatograph coupled to a triple quadrupole mass spectrometer. The MS is run at unit mass resolution in the Multiple Reaction Monitoring (MRM) mode.

Exhibit A-1 MLA 042 Rev09 Ver06

AXYS Analytical Services Ltd.

Analytes, Ions, and Quantification References

Perfluorobutanoate (PFBA)	5.0	213	169	¹³ C ₄ -PFBA
Perfluoropentanoate (PFPeA)	5.8	263	219	¹³ C ₂ -PFHxA
Perfluorohexanoate (PFHxA)	6.2	313	269	¹³ C ₂ -PFHxA
Perfluoroheptanoate (PFHpA)	6.6	363	319	¹³ C ₂ -PFHxA
Perfluorooctanoate (PFOA)	7.0	413	369 (169) ¹	¹³ C ₂ -PFOA
Perfluorononanoate (PFNA)	7.4	463	419	¹³ C ₅ -PFNA
Perfluorodecanoate (PFDA)	7.9	513	469	¹³ C ₂ -PFDA
Perfluoroundecanoate (PFUnA)	8.5	563	519	¹³ C ₂ -PFDA, ¹³ C ₂ -PFDoA average
Perfluorododecanoate (PFDoA)	9.0	613	569	¹³ C ₂ -PFDoA
Perfluorobutanesulfonate (PFBS)	6.3	299	80 (99) ¹	¹⁸ O ₂ -PFHxS
Perfluorohexanesulfonate (PFHxS)	7.2	399	80 (99/119) ¹	¹⁸ O ₂ -PFHxS
Perfluorooctane sulfonate (PFOS)	8.2	499	80 (99) ¹	¹³ C ₄ -PFOS
Perfluorooctane sulfonamide (PFOSA)	9.9	498	78	¹³ C ₈ -PFOSA
Perfluorocarboxylic Acids				
¹³ C ₄ -Heptafluorobutyric acid (¹³ C ₄ -PFBA)	5.0	217	172	¹³ C ₂ -PFOUEA
¹³ C ₂ -Perfluorocaproic acid (¹³ C ₂ -PFHxA)	6.2	315	270	¹³ C ₂ -PFOUEA
¹³ C ₂ -Perfluorooctanoic acid (¹³ C ₂ -PFOA)	7.0	415	370	¹³ C ₄ -PFOA
¹³ C ₅ -Heptadecafluorononanoic acid (¹³ C ₅ -PFNA)	7.4	468	423	¹³ C ₂ -PFOUEA
¹³ C ₂ -Perfluorodecanoic acid (¹³ C ₂ -PFDA)	7.9	515	470	¹³ C ₂ -PFOUEA
¹³ C ₂ -Perfluorododecanoic acid (¹³ C ₂ -PFDoA)	9.0	615	570	¹³ C ₂ -PFOUEA
¹⁸ O ₂ -Perfluorohexanesulfonate (¹⁸ O ₂ -PFHxS)	7.2	403	84 (103) ¹	¹³ C ₂ -PFOUEA
¹³ C ₄ -Perfluorooctanesulfonate (¹³ C ₄ -PFOS)	8.2	503	80 (99) ¹	¹³ C ₂ -PFOUEA
¹³ C ₈ -Perfluorooctane sulphonamide (¹³ C ₈ -PFOSA)	9.9	506	78	¹³ C ₂ -PFOUEA
Recovery Standard				
¹³ C ₂ -2H-Perfluoro-2-decenoic acid (¹³ C ₂ -PFOUEA)	7.3	459	394	-
¹³ C ₄ -Perfluorooctanoic acid (¹³ C ₄ -PFOA)	6.9	417	372	-

¹ Alternate transition within brackets, may be used if necessary to avoid interference.

Exhibit A-1 MLA 042 Rev09 Ver06

AXYS Analytical Services Ltd.

CALIBRATION

Initial calibration of the LC-MS/MS instrument is performed by the analysis of six or more calibration solutions. A mid-level calibration standard is analyzed to verify the initial calibration after every 12 hours at a minimum. All calibration solutions go through the same SPE extraction/cleanup procedure as the samples.

Nominal Concentrations of Calibration Solutions (ng/mL) ¹

	CAL A	CAL B	CAL C	CAL D	CAL E	CAL F	CAL I	CAL J	CAL K
PFBA	0.125	0.312	1.25	5	25	50			
PFPeA	0.125	0.312	1.25	5	25	50			
PFHxA	0.125	0.312	1.25	5	25	50			
PFHpA	0.125	0.312	1.25	5	25	50			
PFOA	0.125	0.312	1.25	5	25	50	150	300	600
PFNA	0.125	0.312	1.25	5	25	50			
PFDA	0.125	0.312	1.25	5	25	50			
PFOA	0.125	0.312	1.25	5	25	50			
PFDoA	0.125	0.312	1.25	5	25	50			
PFBS	0.25	0.625	2.5	10	50	100			
PFHxS	0.25	0.625	2.5	10	50	100			
PFOS	0.25	0.625	2.5	10	50	100			
PFOSA	0.125	0.312	1.25	5	25	50			
¹³ C ₄ -PFBA	6	6	6	6	6	6	6	6	6
¹³ C ₂ -PFHxA	6	6	6	6	6	6	6	6	6
¹³ C ₂ -PFOA	18	18	18	18	18	18	18	18	18
¹³ C ₅ -PFNA	6	6	6	6	6	6	6	6	6
¹³ C ₂ -PFDA	6	6	6	6	6	6	6	6	6
¹³ C ₂ -PFDoA	6	6	6	6	6	6	6	6	6
¹⁸ O ₂ -PFHxS	9	9	9	9	9	9	9	9	9
¹³ C ₄ -PFOS	9	9	9	9	9	9	9	9	9
¹³ C ₈ -PFOSA	6	6	6	6	6	6	6	6	6
¹³ C ₂ -PFOUEA	5	5	5	5	5	5	5	5	5
¹³ C ₄ -PFOA	6	6	6	6	6	6	6	6	6

¹ Concentrations shown are calculated from the amount added to the calibration standard and based on a 2 mL final extract volume.

AXYS Analytical Services Ltd.

ANALYTE IDENTIFICATION

Positive identification of target PFC, surrogate standard and recovery standards require:

- $\geq 3:1$ S:N for parent ion to daughter ion transition
- Compound retention times must fall within 0.4 minutes of the predicted retention times from the daily Calibration Verification. Natives with labelled surrogate standards must elute within 0.1 minutes of the respective ^{13}C -labelled surrogates.

QUANTIFICATION

Target compounds are quantified using the internal standard method, comparing the area of the quantification ion to that of the ^{13}C -labelled standard and correcting for response factors. Linear quantification equations are determined from a multi-point calibration series with $1/X^2$ weighting fit and expressed as below:

$$Y = \text{slope} \times X + \text{intercept}$$

Where: $Y = \text{response ratio} = \left(\frac{\text{area of Target}}{\text{area of Surr}} \times \text{weight of Surr (ng)} \right)$, and

$X = \text{weight of target (ng)}$

Surr = the surrogate standard

The slope and intercept are used to convert raw peak areas in sample chromatograms to final concentrations as follows:

$$\text{Sample Conc.} = \left(\frac{\text{area of Target}}{\text{area of Surr}} \times \text{weight of Surr (ng)} - \text{intercept} \right) \times \left(\frac{1}{\text{slope}} \right) \times \left(\frac{1}{\text{sample size (g)}} \right)$$

The recovery of the surrogate standard is calculated (by internal standard quantification against the recovery standard using an average RRF) and monitored as an indication of overall data quality. Final target concentrations are recovery corrected by this method of quantification. Surrogate standard recovery is calculated as:

$$\% \text{ surrogate recovery} = \left(\frac{\text{area of Surr}}{\text{area of Rec}} \right) \times \left(\frac{\text{weight of Rec}}{\text{weight of Surr}} \right) \times \frac{100}{\text{RRF}_s}, \text{ in the sample}$$

where Rec = the recovery standard used, and

$$\text{RRF}_s = \left(\frac{\text{area of Surr}}{\text{area of Rec}} \right) \times \left(\frac{\text{weight of Rec}}{\text{weight of Surr}} \right); \text{ from the calibration}$$

AXYS Analytical Services Ltd.

REPORTING LIMITS

Concentrations and detection limits for the target analytes are reported. Typical reporting units for all data are ng/mL.

The following are commonly requested reporting limits:

Method Detection Limit (MDL) - determined as specified by EPA Fed. Reg. 40 CFR Part 136 Appendix B (no iteration option). The 99% confidence level MDL is determined based on analysis of a minimum of 7 replicate matrix spikes fortified at 1-5 times the estimated detection limit. MDL is determined as required based on accreditation, contract and workload requirements.

Lower Method Calibration Limit (LMCL) - determined by prorating the concentration of the lowest calibration limit for sample size and extract volume. The following equation is used. $((\text{lowest level cal conc.}) \times (\text{extract volume})) / \text{sample size}$. Typical extract volume for PFCs in serum is 2 mL.

For the analysis of PFCs it is AXYS standard to report sample concentrations using the LMCL as the lower reporting limit. In cases where the SDL is higher than the LMCL, the SDL will be used as the lower reporting limit.

The SDL is defined as follows: *Sample Specific Detection Limit or Sample Detection Limit (SDL)* – determined individually for every sample analysis run by converting the area equivalent of 3.0 times the estimated chromatographic noise height to a concentration in the same manner that target peak responses are converted to final concentrations. The SDL accounts for any effect of matrix on the detection system and for recovery achieved through the analytical work-up.

QUALITY ASSURANCE / QUALITY CONTROL

All samples are analyzed in batches. The composition of a batch is detailed on a batch sheet. Each batch has the following composition:

- Batch Size - Each batch consists of test samples and additional QC samples.
- Blanks – Blanks are analyzed with a minimum frequency of 5% of client samples (i.e. each batch of up to 20 client samples contains a procedural blank.)
- Duplicates – 5% of the samples within a batch are analyzed in duplicate.
- OPR (Spiked Reference Sample) – OPRs are analyzed with a minimum frequency of 5% of client samples (i.e. each batch of up to 20 client samples contains an OPR.)
- Matrix Spike/Matrix Spike Duplicate may be analyzed upon client request.
- Surrogate/Authentic/Recovery (SAR) solution is an optional diagnostic test that may be prepared and analyzed with a batch.

Exhibit A-1 MLA 042 Rev09 Ver06

AXYS Analytical Services Ltd.

QC Specification Table: Procedural Blank Levels and OPR Recoveries

Analyte		Procedural Blank Level (ng/sample) ¹	Acceptable Matrix Spike in OPR (% Recovery)
Perfluorobutanoate	(PFBA) ¹	<0.1	70-130
Perfluoropentanoate	(PFPeA)	<0.1	70-130
Perfluorohexanoate	(PFHxA)	<0.1	70-130
Perfluoroheptanoate	(PFHpA)	<0.1	70-130
Perfluorooctanoate	(PFOA)	<0.1	80-120
Perfluorononanoate	(PFNA)	<0.1	70-130
Perfluorodecanoate	(PFDA)	<0.1	70-130
Perfluoroundecanoate	(PFUnA)	<0.1	60-130
Perfluorododecanoate	(PFDoA)	<0.1	70-130
Perfluorobutanesulfonate	(PFBS)	<0.2	70-130
Perfluorohexanesulfonate	(PFHxS)	<0.2	60-130
Perfluorooctanesulfonate	(PFOS)	<0.2	70-130
Perfluorooctanesulfonamide	(PFOSA)	<0.2	70-130

¹ Reporting limits (based on the lowest calibration standard - CAL A in Table 3 - and routine final extract volume of 2 mL) may exceed the stated blank criteria.

QC Specification Table: Surrogate Standard Recoveries, Calibration and Samples

Surrogate Standard		Recovery Range ¹ (% Recovery)
¹³ C ₄ -Perfluorobutyric acid	(¹³ C ₄ -PFBA)	50 – 150
¹³ C ₂ -Perfluorocaproic acid	(¹³ C ₂ -PFHxA)	50 – 150
¹³ C ₂ -Perfluorooctanoic acid	(¹³ C ₂ -PFOA)	50 – 150
¹³ C ₅ -Perfluorononanoic acid	(¹³ C ₅ -PFNA)	50 – 150
¹³ C ₂ -Perfluorodecanoic acid	(¹³ C ₂ -PFDA)	40 – 150
¹³ C ₂ -Perfluorododecanoic acid	(¹³ C ₂ -PFDoA)	40 – 150
¹⁸ O ₂ -Perfluorohexanesulfonate	(¹⁸ O ₂ -PFHxS)	50 – 150
¹³ C ₄ -Perfluorooctanesulfonate	(¹³ C ₄ -PFOS)	50 – 150
¹³ C ₈ -Perfluorooctanesulfonamide	(¹³ C ₈ -PFOSA)	40 - 150

¹ Surrogate recovery limits are internal QC guidelines for general method performance monitoring. Results are recovery corrected by the method of analysis and results with lower surrogate recoveries are acceptable where QC control samples demonstrate acceptable accuracy of quantification.

Exhibit A-1 MLA 042 Rev09 Ver06

AXYS Analytical Services Ltd.

QC Specification Table: Other Parameters

QC Parameter	Specification
Instrument Sensitivity	Daily, S:N ≥ 3:1 for all analytes for lowest calibration standard.
Initial Calibration (native compounds - maximum difference between calculated and actual concentrations)	Daily, (1/x ²) weighed linear regression. - PFOA: 20%, one point may be 30% - all other compounds: 30% -Internal guideline only– R ² >0.95, lower values may be accepted based on evaluation of batch QC results. Surrogate recoveries must fall within the limits of the table above.
Continuing Calibration Verification (native compounds - maximum difference between calculated and actual concentrations)	Determined every 12 hours or more frequently, -PFOA: 20% - all other compounds: 30% Surrogate recoveries must fall within the limits in the table above.
Instrumental Carryover and Instrument Background	Every Initial Calibration, Cal/Ver, or SPM: ≤0.3 % carryover and area response of analytes in instrument blank ≤800 judged following two previous methanol blank injections.
Duplicate Samples or MS/MSD guideline	If conc. > 5 times R.L., RPD < 40% If conc. < 5 times R.L., difference between pairs < (40 RPD + R.L).



Method and Conditions Precedent to Payment

1. The State shall pay the Contractor an amount not to exceed the Price Limitation, block 1.8, for the services provided by the Contractor pursuant to Exhibit A, Scope of Services.
2. This Contract is funded by general funds. Funds available to implement this agreement are conditioned upon continued support of the program by the State government and continued appropriation of general funds.
3. Payment for said services shall be made as follows:
 - 3.1. The Contractor will submit an invoice on Contractor letterhead by the tenth (10th) working day of each month, which identifies and requests payment for testing services completed in accordance with Exhibit A, Scope of Services.
 - 3.2. The test results provided in accordance with Exhibit A, Scope of Services shall be paid on a fee-for-service basis at the rate of \$199.00 per test.
 - 3.3. The State shall make payment to the Contractor within thirty (30) days of receipt of each invoice for Contractor services provided pursuant to this Agreement.
 - 3.4. The invoice and must be submitted by mail or e-mail to:

NH Public Health Laboratories
29 Hazen Drive
Concord, NH 03301
Attn: Julianne Nassif
E-mail: Julianne.nassif@dhhs.state.nh.us
4. A final payment request shall be submitted no later than forty (40) days from the Form P37, General Provisions, Contract Completion Date, Block 1.7.
5. Notwithstanding anything to the contrary herein, the Contractor agrees that funding under this Contract may be withheld, in whole or in part, in the event of noncompliance with any State or Federal law, rule or regulation applicable to the services provided, or if the said services have not been completed in accordance with the terms and conditions of this Agreement.



SPECIAL PROVISIONS

10. **Confidentiality of Records:** All information, reports, and records maintained hereunder or collected in connection with the performance of the services and the Contract shall be confidential and shall not be disclosed by the Contractor, provided however, that pursuant to state laws and the regulations of the Department regarding the use and disclosure of such information, disclosure may be made to public officials requiring such information in connection with their official duties and for purposes directly connected to the administration of the services and the Contract; and provided further, that the use or disclosure by any party of any information concerning a recipient for any purpose not directly connected with the administration of the Department or the Contractor's responsibilities with respect to purchased services hereunder is prohibited except on written consent of the recipient, his attorney or guardian



REVISIONS TO GENERAL PROVISIONS

1. Subparagraph 4 of the General Provisions of this contract, Conditional Nature of Agreement, is replaced as follows:
 4. **CONDITIONAL NATURE OF AGREEMENT.**
Notwithstanding any provision of this Agreement to the contrary, all obligations of the State hereunder, including without limitation, the continuance of payments, in whole or in part, under this Agreement are contingent upon continued appropriation or availability of funds, including any subsequent changes to the appropriation or availability of funds affected by any state or federal legislative or executive action that reduces, eliminates, or otherwise modifies the appropriation or availability of funding for this Agreement and the Scope of Services provided in Exhibit A, Scope of Services, in whole or in part. In no event shall the State be liable for any payments hereunder in excess of appropriated or available funds. In the event of a reduction, termination or modification of appropriated or available funds, the State shall have the right to withhold payment until such funds become available, if ever. The State shall have the right to reduce, terminate or modify services under this Agreement immediately upon giving the Contractor notice of such reduction, termination or modification. The State shall not be required to transfer funds from any other source or account into the Account(s) identified in block 1.6 of the General Provisions, Account Number, or any other account, in the event funds are reduced or unavailable.
2. Subparagraph 10 of the General Provisions of this contract, Termination, is amended by adding the following language:
 - 10.1 The State may terminate the Agreement at any time for any reason, at the sole discretion of the State, 30 days after giving the Contractor written notice that the State is exercising its option to terminate the Agreement.
3. Subparagraph 14 of the General Provisions of this contract, Insurance, is amended by deleting subparagraph 14.1.2.
4. The Division reserves the right to renew the Contract for up to four (4) years, subject to the continued availability of funds, satisfactory performance of services and approval by the Governor and Executive Council.

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CERTIFICATION REGARDING DRUG-FREE WORKPLACE REQUIREMENTS

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Sections 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.), and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

ALTERNATIVE I - FOR GRANTEES OTHER THAN INDIVIDUALS

**US DEPARTMENT OF HEALTH AND HUMAN SERVICES - CONTRACTORS
US DEPARTMENT OF EDUCATION - CONTRACTORS
US DEPARTMENT OF AGRICULTURE - CONTRACTORS**

This certification is required by the regulations implementing Sections 5151-5160 of the Drug-Free Workplace Act of 1988 (Pub. L. 100-690, Title V, Subtitle D; 41 U.S.C. 701 et seq.). The January 31, 1989 regulations were amended and published as Part II of the May 25, 1990 Federal Register (pages 21681-21691), and require certification by grantees (and by inference, sub-grantees and sub-contractors), prior to award, that they will maintain a drug-free workplace. Section 3017.630(c) of the regulation provides that a grantee (and by inference, sub-grantees and sub-contractors) that is a State may elect to make one certification to the Department in each federal fiscal year in lieu of certificates for each grant during the federal fiscal year covered by the certification. The certificate set out below is a material representation of fact upon which reliance is placed when the agency awards the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment. Contractors using this form should send it to:

Commissioner
NH Department of Health and Human Services
129 Pleasant Street,
Concord, NH 03301-6505

1. The grantee certifies that it will or will continue to provide a drug-free workplace by:
 - 1.1. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - 1.2. Establishing an ongoing drug-free awareness program to inform employees about
 - 1.2.1. The dangers of drug abuse in the workplace;
 - 1.2.2. The grantee's policy of maintaining a drug-free workplace;
 - 1.2.3. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - 1.2.4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - 1.3. Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a);
 - 1.4. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will
 - 1.4.1. Abide by the terms of the statement; and
 - 1.4.2. Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
 - 1.5. Notifying the agency in writing, within ten calendar days after receiving notice under subparagraph 1.4.2 from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position title, to every grant officer on whose grant activity the convicted employee was working, unless the Federal agency



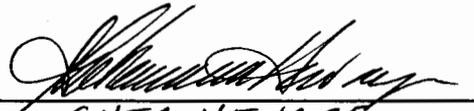
- has designated a central point for the receipt of such notices. Notice shall include the identification number(s) of each affected grant;
- 1.6. Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph 1.4.2, with respect to any employee who is so convicted
 - 1.6.1. Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended; or
 - 1.6.2. Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
 - 1.7. Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs 1.1, 1.2, 1.3, 1.4, 1.5, and 1.6.
2. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant.

Place of Performance (street address, city, county, state, zip code) (list each location)

Check if there are workplaces on file that are not identified here.

Contractor Name: AXYS ANALYTICAL SERVICES

OCT 30 2015
Date


Name: SHEA HENAGE
Title: DIRECTOR OF OPERATIONS



CERTIFICATION REGARDING LOBBYING

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Section 319 of Public Law 101-121, Government wide Guidance for New Restrictions on Lobbying, and 31 U.S.C. 1352, and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

US DEPARTMENT OF HEALTH AND HUMAN SERVICES - CONTRACTORS
US DEPARTMENT OF EDUCATION - CONTRACTORS
US DEPARTMENT OF AGRICULTURE - CONTRACTORS

Programs (indicate applicable program covered):

- *Temporary Assistance to Needy Families under Title IV-A
- *Child Support Enforcement Program under Title IV-D
- *Social Services Block Grant Program under Title XX
- *Medicaid Program under Title XIX
- *Community Services Block Grant under Title VI
- *Child Care Development Block Grant under Title IV

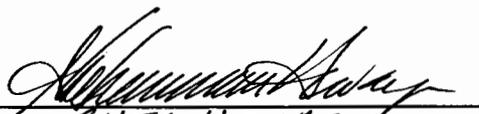
The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement (and by specific mention sub-grantee or sub-contractor).
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement (and by specific mention sub-grantee or sub-contractor), the undersigned shall complete and submit Standard Form LLL, (Disclosure Form to Report Lobbying, in accordance with its instructions, attached and identified as Standard Exhibit E-I.)
3. The undersigned shall require that the language of this certification be included in the award document for sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Contractor Name: *AXYS ANALYTICAL SERVICES*

OCT 30 2015
Date


Name: *SHEA HENAGE*
Title: *DIRECTOR OF OPERATIONS*

Contractor Initials 



**CERTIFICATION REGARDING DEBARMENT, SUSPENSION
AND OTHER RESPONSIBILITY MATTERS**

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of Executive Office of the President, Executive Order 12549 and 45 CFR Part 76 regarding Debarment, Suspension, and Other Responsibility Matters, and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal (contract), the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. If necessary, the prospective participant shall submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the NH Department of Health and Human Services' (DHHS) determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when DHHS determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, DHHS may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the DHHS agency to whom this proposal (contract) is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549: 45 CFR Part 76. See the attached definitions.
6. The prospective primary participant agrees by submitting this proposal (contract) that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by DHHS.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," provided by DHHS, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or involuntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List (of excluded parties).
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and

Handwritten initials of the contractor, appearing to be "JH".



information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal government, DHHS may terminate this transaction for cause or default.

PRIMARY COVERED TRANSACTIONS

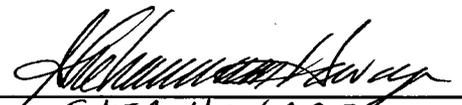
11. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - 11.1. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - 11.2. have not within a three-year period preceding this proposal (contract) been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or a contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - 11.3. are not presently indicted for otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (l)(b) of this certification; and
 - 11.4. have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
12. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal (contract).

LOWER TIER COVERED TRANSACTIONS

13. By signing and submitting this lower tier proposal (contract), the prospective lower tier participant, as defined in 45 CFR Part 76, certifies to the best of its knowledge and belief that it and its principals:
 - 13.1. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.
 - 13.2. where the prospective lower tier participant is unable to certify to any of the above, such prospective participant shall attach an explanation to this proposal (contract).
14. The prospective lower tier participant further agrees by submitting this proposal (contract) that it will include this clause entitled "Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion - Lower Tier Covered Transactions," without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

Contractor Name: *AXYS ANALYTICAL SERVICES*

OCT 30 2015
Date


Name: *SHEA HENAGE*
Title: *DIRECTOR OF OPERATIONS*



**CERTIFICATION OF COMPLIANCE WITH REQUIREMENTS PERTAINING TO
FEDERAL NONDISCRIMINATION, EQUAL TREATMENT OF FAITH-BASED ORGANIZATIONS AND
WHISTLEBLOWER PROTECTIONS**

The Contractor identified in Section 1.3 of the General Provisions agrees by signature of the Contractor's representative as identified in Sections 1.11 and 1.12 of the General Provisions, to execute the following certification:

Contractor will comply, and will require any subgrantees or subcontractors to comply, with any applicable federal nondiscrimination requirements, which may include:

- the Omnibus Crime Control and Safe Streets Act of 1968 (42 U.S.C. Section 3789d) which prohibits recipients of federal funding under this statute from discriminating, either in employment practices or in the delivery of services or benefits, on the basis of race, color, religion, national origin, and sex. The Act requires certain recipients to produce an Equal Employment Opportunity Plan;
- the Juvenile Justice Delinquency Prevention Act of 2002 (42 U.S.C. Section 5672(b)) which adopts by reference, the civil rights obligations of the Safe Streets Act. Recipients of federal funding under this statute are prohibited from discriminating, either in employment practices or in the delivery of services or benefits, on the basis of race, color, religion, national origin, and sex. The Act includes Equal Employment Opportunity Plan requirements;
- the Civil Rights Act of 1964 (42 U.S.C. Section 2000d, which prohibits recipients of federal financial assistance from discriminating on the basis of race, color, or national origin in any program or activity);
- the Rehabilitation Act of 1973 (29 U.S.C. Section 794), which prohibits recipients of Federal financial assistance from discriminating on the basis of disability, in regard to employment and the delivery of services or benefits, in any program or activity;
- the Americans with Disabilities Act of 1990 (42 U.S.C. Sections 12131-34), which prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, State and local government services, public accommodations, commercial facilities, and transportation;
- the Education Amendments of 1972 (20 U.S.C. Sections 1681, 1683, 1685-86), which prohibits discrimination on the basis of sex in federally assisted education programs;
- the Age Discrimination Act of 1975 (42 U.S.C. Sections 6106-07), which prohibits discrimination on the basis of age in programs or activities receiving Federal financial assistance. It does not include employment discrimination;
- 28 C.F.R. pt. 31 (U.S. Department of Justice Regulations – OJJDP Grant Programs); 28 C.F.R. pt. 42 (U.S. Department of Justice Regulations – Nondiscrimination; Equal Employment Opportunity; Policies and Procedures); Executive Order No. 13279 (equal protection of the laws for faith-based and community organizations); Executive Order No. 13559, which provide fundamental principles and policy-making criteria for partnerships with faith-based and neighborhood organizations;
- 28 C.F.R. pt. 38 (U.S. Department of Justice Regulations – Equal Treatment for Faith-Based Organizations); and Whistleblower protections 41 U.S.C. §4712 and The National Defense Authorization Act (NDAA) for Fiscal Year 2013 (Pub. L. 112-239, enacted January 2, 2013) the Pilot Program for Enhancement of Contract Employee Whistleblower Protections, which protects employees against reprisal for certain whistle blowing activities in connection with federal grants and contracts.

The certificate set out below is a material representation of fact upon which reliance is placed when the agency awards the grant. False certification or violation of the certification shall be grounds for suspension of payments, suspension or termination of grants, or government wide suspension or debarment.

Exhibit G

Certification of Compliance with requirements pertaining to Federal Nondiscrimination, Equal Treatment of Faith-Based Organizations
and Whistleblower protections

Contractor Initials

New Hampshire Department of Health and Human Services
Exhibit G



In the event a Federal or State court or Federal or State administrative agency makes a finding of discrimination after a due process hearing on the grounds of race, color, religion, national origin, or sex against a recipient of funds, the recipient will forward a copy of the finding to the Office for Civil Rights, to the applicable contracting agency or division within the Department of Health and Human Services, and to the Department of Health and Human Services Office of the Ombudsman.

The Contractor identified in Section 1.3 of the General Provisions agrees by signature of the Contractor's representative as identified in Sections 1.11 and 1.12 of the General Provisions, to execute the following certification:

1. By signing and submitting this proposal (contract) the Contractor agrees to comply with the provisions indicated above.

Contractor Name: AXYS ANALYTICAL SERVICES

OCT 30 2015
Date

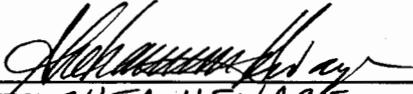

Name: SHEA HENAGE
Title: DIRECTOR OF OPERATIONS

Exhibit G

Certification of Compliance with requirements pertaining to Federal Nondiscrimination, Equal Treatment of Faith-Based Organizations and Whistleblower protections

Contractor Initials



CERTIFICATION REGARDING ENVIRONMENTAL TOBACCO SMOKE

RESERVED



HEALTH INSURANCE PORTABILITY ACT
BUSINESS ASSOCIATE AGREEMENT

RESERVED



**CERTIFICATION REGARDING THE FEDERAL FUNDING ACCOUNTABILITY AND TRANSPARENCY
ACT (FFATA) COMPLIANCE**

The Federal Funding Accountability and Transparency Act (FFATA) requires prime awardees of individual Federal grants equal to or greater than \$25,000 and awarded on or after October 1, 2010, to report on data related to executive compensation and associated first-tier sub-grants of \$25,000 or more. If the initial award is below \$25,000 but subsequent grant modifications result in a total award equal to or over \$25,000, the award is subject to the FFATA reporting requirements, as of the date of the award.

In accordance with 2 CFR Part 170 (Reporting Subaward and Executive Compensation Information), the Department of Health and Human Services (DHHS) must report the following information for any subaward or contract award subject to the FFATA reporting requirements:

1. Name of entity
2. Amount of award
3. Funding agency
4. NAICS code for contracts / CFDA program number for grants
5. Program source
6. Award title descriptive of the purpose of the funding action
7. Location of the entity
8. Principle place of performance
9. Unique identifier of the entity (DUNS #)
10. Total compensation and names of the top five executives if:
 - 10.1. More than 80% of annual gross revenues are from the Federal government, and those revenues are greater than \$25M annually and
 - 10.2. Compensation information is not already available through reporting to the SEC.

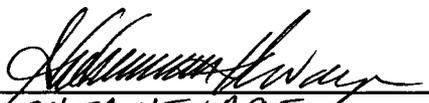
Prime grant recipients must submit FFATA required data by the end of the month, plus 30 days, in which the award or award amendment is made.

The Contractor identified in Section 1.3 of the General Provisions agrees to comply with the provisions of The Federal Funding Accountability and Transparency Act, Public Law 109-282 and Public Law 110-252, and 2 CFR Part 170 (Reporting Subaward and Executive Compensation Information), and further agrees to have the Contractor's representative, as identified in Sections 1.11 and 1.12 of the General Provisions execute the following Certification:

The below named Contractor agrees to provide needed information as outlined above to the NH Department of Health and Human Services and to comply with all applicable provisions of the Federal Financial Accountability and Transparency Act.

Contractor Name: *AXYS ANALYTICAL SERVICES*

OCT 30 2015
Date


Name: *SHEA HENAGE*
Title: *DIRECTOR OF OPERATIONS*

Contractor Initials 
Date *OCT 30 2015*



FORM A

As the Contractor identified in Section 1.3 of the General Provisions, I certify that the responses to the below listed questions are true and accurate.

1. The DUNS number for your entity is: 24-995-8588
2. In your business or organization's preceding completed fiscal year, did your business or organization receive (1) 80 percent or more of your annual gross revenue in U.S. federal contracts, subcontracts, loans, grants, sub-grants, and/or cooperative agreements; and (2) \$25,000,000 or more in annual gross revenues from U.S. federal contracts, subcontracts, loans, grants, subgrants, and/or cooperative agreements?

NO YES

If the answer to #2 above is NO, stop here

If the answer to #2 above is YES, please answer the following:

3. Does the public have access to information about the compensation of the executives in your business or organization through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C.78m(a), 78o(d)) or section 6104 of the Internal Revenue Code of 1986?

NO YES

If the answer to #3 above is YES, stop here

If the answer to #3 above is NO, please answer the following:

4. The names and compensation of the five most highly compensated officers in your business or organization are as follows:

Name: _____	Amount: _____

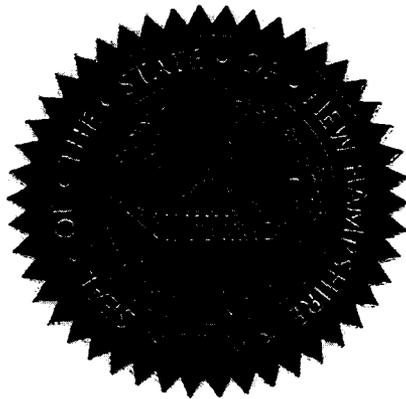
AK

OCT 30 2015

State of New Hampshire
Department of State

CERTIFICATE

I, William M. Gardner, Secretary of State of the State of New Hampshire, do hereby certify that Axys Analytical Services Ltd., a(n) British Columbia, Canada corporation, is authorized to transact business in New Hampshire and qualified on May 8, 2015. I further certify that all fees required by the Secretary of State's office have been received.



In TESTIMONY WHEREOF, I hereto set my hand and cause to be affixed the Seal of the State of New Hampshire, this 2nd day of June, A.D. 2015

A handwritten signature in cursive script, appearing to read "Wm Gardner".

William M. Gardner
Secretary of State

CERTIFICATE OF VOTE

I, Sean Helmus, do hereby certify that:
(Name of the elected Officer of the Agency; cannot be contract signatory)

1. I am a duly elected Officer of AXYS Analytical Services Ltd.
(Agency Name)

2. The following is a true copy of the resolution duly adopted at a meeting of the Board of Directors of the Agency duly held on 13-FEB-15:
(Date)

RESOLVED: That the Director of Operations
(Title of Contract Signatory)

is hereby authorized on behalf of this Agency to enter into the said contract with the State and to execute any and all documents, agreements and other instruments, and any amendments, revisions, or modifications thereto, as he/she may deem necessary, desirable or appropriate.

3. The forgoing resolutions have not been amended or revoked, and remain in full force and effect as of the 30 day of Octol, 2015.
(Date Contract Signed)

4. Shea Hewage is the duly elected Director of Operations
(Name of Contract Signatory) (Title of Contract Signatory)

of the Agency.



(Signature of the Elected Officer)

Province of British Columbia
~~STATE OF NEW HAMPSHIRE~~

County of _____

The forgoing instrument was acknowledged before me this 30 day of Octn, 2015,

By Sean Helmus
(Name of Elected Officer of the Agency)



(Notary Public/Justice of the Peace)

(NOTARY SEAL)

DAMON O'BRIEN
9830 Fourth Street
Sidney BC V8L 2Z3
Barrister & Solicitor

Commission Expires: Does not expire

Excerpt of
AXYS ANALYTICAL SERVICES LTD.
MINUTES OF THE
BOARD OF DIRECTORS MEETING
February 13, 2015

Resolution to appoint Shea Hewage (Director of Operations) as a corporate officer

- MOTION: Be it resolved that Shea Hewage be appointed as a corporate officer for the purposes of client contract management, including contract binding signatory power subject to verbal or written approval of the President or designate.
 - Moved: Cosgrove Seconded: Berrang Carried



3561 SHELBOURNE ST
VICTORIA BC V8P 4G8
250-595-5212
250-595-2900

1116 MCKENZIE AVE
VICTORIA BC V8P 5P5
250-727-7961
250-727-7965

120-174 WILSON ST
VICTORIA BC V9A 7N6
250-385-1306
250-385-9139

101-3531 BLANSHARD ST
VICTORIA BC V8Z 0B9
250-475-2276
250-475-2298

1-800-595-5212

megsonfitzpatrick.com

To: State of New Hampshire
Attn: Eric Borrin, Director
Email: c/o shelums@axys.com
Page 1 of 2

CERTIFICATE OF INSURANCE

Dated: October 30, 2015, 2015/ hla

Certificate Holder: State of New Hampshire, Department of Health and Human Services – 129 Pleasant Street, Concord, NH 03301-3857, Attn. Eric Borrin, Director

This will certify that Insurance as described hereunder has been arranged on behalf of the herein Named Insured and that such Insurance, at the date hereof, is in full force and effect.

Named Insured & Mailing Address Axys Analytical Services Ltd. 2045 Mills Road, Sidney, BC V8L 5X2	Policy Effective Date June 15, 2015
	Policy Expiry Date June 15, 2016
Insurance Company Travelers Canada	Policy Number CPC0322919

EFFECTIVE DATE: October 30, 2015

COMMERCIAL GENERAL LIABILITY -

Limits: \$5,000,000 CDN Inclusive limit each occurrence Bodily Injury / Property Damage
\$5,000,000 CDN General Total Limit
\$5,000,000 CDN Aggregate limit Products & Completed Operations
\$1,000,000 CDN Tenants Legal Liability Broad Form
\$1,000,000 CDN Employers Liability

Including Non Owned Automobile Liability, Long Term Leased Automobiles Exclusion, Contractual Liability & Cross Liability. Deductible: \$5,000 / \$10,000 with respect to U.S. Sales

EXCESS COMMERCIAL GENERAL LIABILITY -

Limits: \$5,000,000 CDN Total Limit
\$5,000,000 CDN Each Loss Limit

Underlying: Travelers Commercial General Liability Form and Non Owned Automobile Endorsement

30 Days Notice of Cancellation or material change

Conditions: As per Policy Terms, Conditions and Exclusions.

THIS POLICY CONTAINS A CLAUSE(S) THAT MAY LIMIT THE AMOUNT PAYABLE.

The Insurance described above is subject to the limitations, exclusions and conditions contained in the policies.
This Certificate is issued as a matter of information only and confers no rights on the holder and imposes no Liability on the Insurer.

Megson FitzPatrick Insurance Services

Weather Anderson
Authorized Representative



3561 SHELBOURNE ST
 VICTORIA BC V8P 4G8
 : 250-595-5212
 : 250-595-2900
 1-888-595-5212

1116 MCKENZIE AVE
 VICTORIA BC V8P 5P5
 : 250-727-7961
 : 250-727-7965

120-174 WILSON ST
 VICTORIA BC V9A 7N6
 : 250-385-1306
 : 250-385-9139

101-3531 BLANSHARD ST
 VICTORIA BC V8Z 0B9
 : 250-475-2276
 : 250-475-2298

megsonfitzpatrick.com

CERTIFICATE OF INSURANCE

Dated: October 30, 2015/ hla

Certificate Holder: State of New Hampshire, Department of Health and Human Services – 129 Pleasant Street, Concord, NH 03301-3857, Attn. Eric Borrin, Director

This will certify that Insurance as described hereunder has been arranged on behalf of the herein Named Insured and that such Insurance, at the date hereof, is in full force and effect.

Named Insured & Mailing Address Axys Analytical Services Ltd. 2045 Mills Road, Sidney, BC V8L 5X2	Policy Effective Date June 13, 2015
	Policy Expiry Date June 13, 2016
Insurance Company Zurich Insurance Company	Policy Number 8434643

PROFESSIONAL LIABILITY –

Limits: \$ 2,000,000 Each Claim
 \$ 2,000,000 Total for all Claims

Deductible: \$10,000

Retroactive Date: June 13, 2008

PROFESSIONAL SERVICES: Commercial testing laboratories specializing in environment analytical services.

30 Days Notice of Cancellation or material change

Conditions: As per Policy Terms, Conditions and Exclusions.

THIS POLICY CONTAINS A CLAUSE(S) THAT MAY LIMIT THE AMOUNT PAYABLE.

The Insurance described above is subject to the limitations, exclusions and conditions contained in the policies.
 This Certificate is issued as a matter of information only and confers no rights on the holder and imposes no Liability on the Insurer.

Megson FitzPatrick Insurance Services

Weather Anderson
 Authorized Representative



WORKING TO MAKE A DIFFERENCE

Assessment Department Location

Mailing Address

PO Box 5350
Station Terminal
Vancouver BC V6B 5L5

6951 Westminster Highway
Richmond BC
V7C 1C6
www.worksafebc.com

Clearance Section

Telephone 604 244 6380
Toll Free within Canada
1 888 922 2768
Fax 604 244 6390

State of New Hampshire
Department of Health and Human Svcs
129 Pleasant Street
CONCORD, NH 03301-3857
United States

October 31, 2015

**Person/Business : AXYS ANALYTICAL SERVICES LTD
411909 AQ(022)**

This letter provides clearance information for the purposes of Section 51 of the *Workers Compensation Act*.

We confirm that the above-referenced firm is active, in good standing, and has met WorkSafeBC's criteria for advance clearance. Accordingly, if the addressee on this letter is the prime contractor, the addressee will not be held liable for the amount of any assessment payable for work undertaken by the above-referenced firm to **January 01, 2016**.

This firm has had continuous coverage with us since April 01, 1989.

Employer Service Centre
Assessment Department

**Clearance Reference # : C128623609
CLRAAA**

For more information about Section 51 and clearance letters visit WorkSafeBC.com

Please refer to your account number in your correspondence or when contacting the Assessment Department.

To alter this document constitutes fraud.