



Buckman Direct Diversion

A joint regional project of the City of Santa Fe and Santa Fe County to build a reliable and sustainable water supply.

Memo

DATE: August 6, 2015
TO: Buckman Direct Diversion Board
FROM: Mackie Romero, BDD Financial Manager 

ITEM AND ISSUE:

Request for approval of a Professional Services Agreement with ALS Global for Analytical Testing Services per RFP# '15/40/P for the amount of \$120,000 inclusive of NM Gross Receipts Tax.

BACKGROUND AND SUMMARY:

On May 7, 2015, the Buckman Direct Diversion Board approved our request to release a Request for Proposal to procure analytical testing services for fiscal year 2015/2016. In response to our request (4) proposals were received. On June 25, 2015, a Selection Committee consisting of Santa Fe County staff member and Buckman Direct Diversion staff members, met to evaluate the received proposals. On July 8, 2015, the Selection Committee members also met with the City of Santa Fe, Purchasing Director to discussed the preliminary scores and all proponents to the RFP. The selection committee evaluated ALS Global with the highest score of all proponents.

DOE/LANL awarded a federal grant to BDDDB for the surface water monitoring effort at BDD. Those funds will be used for the Analytical Testing Services with ALS Global.

EVALUATION:

The Selection Committee recommended that ALS Global serve as the analytical laboratory for the surface water monitoring project for the Buckman Direct Diversion Board.

The Scope of Services consists of:

-  Conduct analytical testing of surface water and sediment, and provide results to the BDD Regulatory Compliance Officer;
-  Meet the minimum requirements for laboratory report and electronic data deliverables;
-  Meet US Environmental Protection Agency and NM Environment Department compliance requirements;



-  Apply US Environmental Protection Agency and NM Environment Department approved analytical methods;
-  Meet US Environmental Protection Agency and NM Environment Department approved QA/QC requirements.

ACTION REQUESTED:

Staff recommends approval of PSA # xx-xxxx with ALS Global in the amount of \$120,000 (inclusive of NMGRT) for analytical testing services effective July 1, 2015 thru June 30, 2016.

<u>Fund Source</u>	<u>Business Unit/Line Item/Description</u>	<u>Amount</u>
FY 2015/2016	7280000.510250.753030	\$120,000

ATTACHMENTS:

- PSA # XX-XXXX
- Summary of Evaluation Scores

Approved by BDDDB August 6, 2015

Liz Stefanics, BDDDB Chairperson

Summary of Evaluation Scores
BDD RFP #’15/40/P

Evaluator Initials →	Max	RG		DB		DC		Total
Proposal Component	Score	Proponent/Score		Proponent/Score		Proponent/Score		
Design Approach/ Methodology. <i>Grasp of project requirements</i>	250	ALS	225	ALS	225	ALS	200	ALS 650
		GEL	250	GEL	250	GEL	200	GEL 700
		OR	200	OR	125	OR	150	OR 475
		TA	200	TA	250	TA	175	TA 625
Relevant experience of firm and specific qualifications & experience of project team, demonstrated by previous projects	150	ALS	135	ALS	150	ALS	120	ALS 405
		GEL	135	GEL	150	GEL	120	GEL 405
		OR	75	OR	75	OR	60	OR 210
		TA	75	TA	75	TA	75	TA 225
Past Performance. <i>The quality and timeliness of previous work; the demonstrated ability to mobilize quickly, control costs, provide competent designs and accurate plans; the ability to meet schedules.</i>	150	ALS	135	ALS	150	ALS	120	ALS 405
		GEL	135	GEL	112.5	GEL	105	GEL 352.5
		OR	90	OR	15	OR	60	OR 165
		TA	135	TA	75	TA	75	TA 285
Knowledge of Local Conditions. <i>Industry Std. Construction practice; Labor & Trades, Bonding, seasonal construction limitations, Project site, environmental, regulatory and procurement requirements.</i>	50	ALS	40	ALS	50	ALS	45	ALS 135
		GEL	25	GEL	50	GEL	45	GEL 120
		OR	20	OR	5	OR	20	OR 45
		TA	40	TA	50	TA	25	TA 115
Work Plan & Project Schedule. <i>discussion of work elements and time frames</i>	150	ALS	75	ALS	150	ALS	120	ALS 345
		GEL	75	GEL	150	GEL	120	GEL 345
		OR	45	OR	150	OR	120	OR 315
		TA	105	TA	150	TA	120	TA 375
Work Load. <i>Consultant's staff size related to current uncompleted work and the amount of work proposed under this project.</i>	50	ALS	35	ALS	50	ALS	40	ALS 125
		GEL	35	GEL	50	GEL	40	GEL 125
		OR	30	OR	50	OR	30	OR 110
		TA	20	TA	50	TA	35	TA 105
Proposed Fees. <i>Is fee reasonable for scope and schedule? A very low fee may reflect a narrow scope or missing scope. A very High fee may reflect us paying firm's learning curve.</i>	200	ALS	200	ALS	200	ALS	180	ALS 580
		GEL	160	GEL	160	GEL	160	GEL 480
		OR	140	OR	180	OR	200	OR 520
		TA	180	TA	140	TA	160	TA 480
Total Score per Evaluator	1000	ALS	845	ALS	975	ALS	825	ALS 2,645
		GEL	815	GEL	922.5	GEL	790	GEL 2,528
		OR	600	OR	600	OR	640	OR 1,840
		TA	755	TA	790	TA	665	TA 2,210
Ranking				ALS	1			
				GEL	2			
				OR	4			
				TA	3			

**BUCKMAN DIRECT DIVERSION BOARD
PROFESSIONAL SERVICES AGREEMENT
WITH ALS GLOBAL**

THIS AGREEMENT is made and entered into by and between the BUCKMAN DIRECT DIVERSION BOARD (the "BDDDB") and ALS Global, ("Contractor"). The date of this Agreement shall be the date when it is executed by the BDDDB Facilities Manager.

1. SCOPE OF SERVICES

Contractor shall provide laboratory analysis of environmental samples, to include meeting standards for QA/QC and for reporting in accordance with the electronic data deliveries described therein. Contractor shall analyze environmental samples in accordance with approved US EPA, or industry accepted methods including specified EPA method detection limits or equivalent methods.

2. STANDARD OF PERFORMANCE; LICENSES

A. Contractor represents that it possesses the experience and knowledge necessary to perform the services described under this Agreement.

B. Contractor agrees to obtain and maintain throughout the term of this Agreement, all applicable professional and business licenses required by law, for itself, its employees, agents, representatives and subcontractors.

3. COMPENSATION

A. The BDDDB shall pay to Contractor in full payment for services rendered, a sum not to exceed \$120,000.00, inclusive of gross receipts taxes in accordance with the Fee Schedule provided in Attachment 1, hereto.

B. Contractor shall be responsible for payment of gross receipts taxes levied by the State of New Mexico on the sums paid under this Agreement.

C. Invoices for services will be made on a monthly basis. Payment shall be made upon receipt and approval by the BDDDB of detailed statements containing a report of services completed. Compensation shall be paid only for services actually performed.

4. APPROPRIATIONS

This Agreement is contingent upon sufficient appropriations and authorization being made by the BDDDB for the performance of the Agreement. If sufficient appropriations and authorization are not made by the BDDDB, this Agreement shall terminate upon written notice being given by the BDDDB to Contractor. The BDDDB's decision as to whether sufficient appropriations are available shall be accepted by Contractor and shall be final.

5. TERM AND EFFECTIVE DATE

This Agreement shall be effective when signed by the BDDDB and terminate on June 30, 2017, unless terminated sooner pursuant to Article 6 below.

6. TERMINATION

A. This Agreement may be terminated by the BDDDB upon 10 days written notice to Contractor. In the event of such termination:

(1) Contractor shall render a final report of the services performed up to the date of termination and shall turn over to the BDDDB original copies of all work product, research or papers prepared under this Agreement.

(2) If compensation is not based upon hourly rates for services rendered, the BDDDB shall pay Contractor for the reasonable value of services satisfactorily performed through the date Contractor receives notice of such termination, and for which compensation has not already been paid.

(3) If compensation is based upon hourly rates and expenses, then Contractor shall be paid for services rendered and expenses incurred through the date Contractor receives notice of such termination.

7. STATUS OF CONTRACTOR; RESPONSIBILITY FOR PAYMENT OF EMPLOYEES AND SUBCONTRACTORS

A. Contractor and its agents and employees are independent contractors performing professional services for the BDDDB and are not employees of the BDDDB. Contractor, and its agents and employees, shall not accrue leave, retirement, insurance, bonding, use of BDDDB vehicles, or any other benefits afforded to employees of the BDDDB as a result of this Agreement.

B. Contractor shall be solely responsible for payment of wages, salaries and benefits to any and all employees or subcontractors retained by Contractor in the performance of the services under this Agreement.

8. CONFIDENTIALITY

Any confidential information provided to or developed by Contractor in the performance of this Agreement shall be kept confidential and shall not be made available to any individual or organization by Contractor without the prior written approval of the BDDDB.

9. CONFLICT OF INTEREST

Contractor warrants that it presently has no interest and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required under this Agreement. Contractor further agrees that in the performance of this Agreement no persons having any such interests shall be employed.

10. ASSIGNMENT; SUBCONTRACTING

Contractor shall not assign or transfer any rights, privileges, obligations or other interest under this Agreement, including any claims for money due, without the prior written consent of

the BDDDB. Contractor shall not subcontract any portion of the services to be performed under this Agreement without the prior written approval of the BDDDB.

11. RELEASE

Contractor, upon acceptance of final payment of the amount due under this Agreement, releases the BDDDB, the City of Santa Fe, Santa Fe County and, their officers, officials and employees, from all liabilities, claims and obligations whatsoever arising from or under this Agreement. Contractor agrees not to purport to bind the BDDDB to any obligation not assumed herein by the BDDDB unless Contractor has express written authority to do so, and then only within the strict limits of that authority.

12. INSURANCE

A. Contractor shall not begin the Professional Services required under this Agreement until it has: (a) obtained, and upon the BDDDB's request provided to the BDDDB, insurance certificates reflecting evidence of all insurance required herein; however, the BDDDB reserves the right to request, and Contractor shall submit, copies of any policy upon reasonable request by the BDDDB; (b) obtained BDDDB approval of each company or companies as required below; and (c) confirmed that all policies contain the specific provisions required. Contractor's liabilities, including but not limited to Contractor's indemnity obligations, under this Agreement, shall not be deemed limited in any way to the insurance coverage required herein. Maintenance of specified insurance coverage is a material element of this Agreement and Contractor's failure to maintain or renew coverage or to provide evidence of renewal during the term of this Agreement may be treated as a material breach of Agreement by the BDDDB.

B. Further, Contractor shall not modify any policy or endorsement thereto which increases the Board's exposure to loss for the duration of this Agreement.

C. At all times during the term of this Agreement, Contractor shall maintain insurance coverage as follows:

(1) **Commercial General Liability.** Commercial General Liability (CGL)

Insurance must be written on an ISO Occurrence form or an equivalent form providing coverage at least as broad which shall cover liability arising from any and all bodily injury, personal injury or property damage providing the following minimum limits of liability.

General Annual Aggregate \$5,000,000
(other than Products/Completed Operation)

Products/Completed Operations Aggregate \$5,000,000
Limit

Personal Injury Limit \$1,000,000

Each Occurrence \$5,000,000

(2) **Automobile Liability.** For all of Contractor's automobiles including owned, hired and non-owned automobiles, Contractor shall keep in full force and effect, automobile liability insurance providing coverage at least as broad for bodily injury and property damage with a combined single limit of not less than \$2 million per accident. An insurance certificate shall be submitted to the BDDb that reflects coverage for any automobile [any auto].

(3) **Professional Liability.** For Contractor and all of Contractor's employees who are to perform professional services under this Agreement, Contractor shall keep in full force and effect, Professional Liability insurance for any professional acts, errors or omissions. Such policy shall provide a limit of not less than \$5,000,000 per claim and \$5,000,000 annual aggregate. Contractor shall ensure both that: (1) the policy retroactive

date is on or before the date of commencement of the first work performed under this Agreement; and (2) the policy will be maintained in force for a period of three years after substantial completion of the project or termination of this Agreement whichever occurs last. If professional services rendered under this Agreement include work relating to environmental or pollution hazards, Contractors policy shall not contain exclusions for those activities.

(4) **Workers' Compensation.** For all of Contractor's employees who are subject to this Agreement and to the extent required by any applicable state or federal law, Contractor shall keep in full force and effect, a Workers' Compensation policy & Employers Liability policy. That policy shall provide Employers Liability Limits as follows:

Bodily Injury by Accident	\$1,000,000	Each Accident
Bodily Injury by Disease	\$1,000,000	Each Employee
Bodily Injury by Disease	\$1,000,000	Policy Limit

Contractor shall provide an endorsement that the insurer waives the right of subrogation against the Board, City of Santa Fe, Santa Fe County and their respective elected officials, officers, employees, agents, volunteers and representatives.

D. **Cancellation.** Except as provided for under New Mexico law, all policies of insurance required hereunder must provide that the Board is entitled to thirty (30) days prior written notice (10 days for cancellation due to non-payment of premium) of cancellation or non-renewal of the policy or policies. Cancellation provisions in insurance certificates shall not contain the qualifying words "endeavor to" and "but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives." In the event Contractors' insurance carriers will not agree to this notice requirement, Contractor will provide

written notice to the Board within four working days of Contractors receipt of notice from its insurance carrier(s) of any cancellation, nonrenewal or material reduction of the required insurance.

E. **Insurer Requirements.** All insurance required by express provision of this Agreement shall be carried only by responsible insurance companies that have rated "A-" and "VII" or better by the A.M. Best Key Rating Guide, that are authorized to do business in the State of New Mexico, and that have been approved by the BDDDB. The BDDDB will accept insurance provided by non-admitted, "surplus lines" carriers only if the carrier is authorized to do business in the State of New Mexico.

F. **Deductibles.** All deductibles or co-payments on any policy shall be the responsibility of Contractor.

G. **Specific Provisions Required.**

(1) Each policy shall expressly provide, and an endorsement shall be submitted to the Board, that the policy or policies providing coverage for Commercial General Liability must be endorsed to include as an Additional Insured, the Board, City of Santa Fe, Santa Fe County and their respective elected officials, officers, employees, agents, volunteers and representatives.

(2) All policies required herein are primary and non-contributory to any insurance that may be carried by the Board, City of Santa Fe, Santa Fe County and their respective elected officials, officers, employees, agents, volunteers and representatives, as reflected in an endorsement which shall be submitted to the BDDDB.

(3) Contractor agrees that for the time period defined above, there will be no changes or endorsements to the policy that increase the BDDDB's exposure to loss.

(4) Before performing any Professional Services, Contractor shall provide the BDDDB with all Certificates of Insurance accompanied with all endorsements.

(5) The BDDDB reserves the right, from time to time, to review Contractor's insurance coverage, limits, and deductible and self-insured retentions to determine if they are acceptable to the BDDDB. The BDDDB will reimburse Contractor for the cost of the additional premium for any coverage requested by the BDDDB in excess of that required by this Agreement without overhead, profit, or any other markup.

(6) Contractor may obtain additional insurance not required by this Agreement.

13. INDEMNIFICATION

A. General Indemnification. To the greatest extent permitted by law, Contractor shall indemnify, hold harmless and defend the BDDDB, City of Santa Fe, Santa Fe County and their respective elected officials, officers, employees, agents, volunteers and representatives from all losses, damages, claims or judgments, including payments of all attorneys' fees and costs on account of any suit, judgment, execution, claim, action or demand whatsoever arising from Contractor's performance or non-performance under this Agreement as well as the performance or non-performance of Contractor's employees, agents, representatives and subcontractors or any tier.

B. Indemnification for Professional Acts, Errors or Omissions.

Except for professional acts, errors or omissions that are the result of established gross negligence or willful or wanton conduct on the part of Contractor or its employees, agents, representatives or sub consultants, the General Indemnification shall not apply to professional acts, errors or omission unless covered by Professional Liability insurance required in this Agreement.

14. NEW MEXICO TORT CLAIMS ACT

Any liability incurred by the BDDDB in connection with this Agreement is subject to the immunities and limitations of the New Mexico Tort Claims Act, Section 41-4-1, et. seq. NMSA 1978, as amended. The BDDDB and its "public employees" as defined in the New Mexico Tort Claims Act, do not waive sovereign immunity, do not waive any defense and do not waive any limitation of liability pursuant to law. No provision in this Agreement modifies or waives any provision of the New Mexico Tort Claims Act.

15. THIRD PARTY BENEFICIARIES

By entering into this Agreement, the parties do not intend to create any right, title or interest in or for the benefit of any person other than the BDDDB and Contractor. No person shall claim any right, title or interest under this Agreement or seek to enforce this Agreement as a third party beneficiary of this Agreement.

16. RECORDS, DOCUMENT CONTROL AND AUDIT

A. Contractor shall conform with and participate in the Document Control policies of the BDDDB or the City of Santa Fe. Contractor shall maintain, throughout the term of this Agreement and for a period of three years thereafter, all records that relate to the scope of services provided under this Agreement.

B. Detailed records that indicate the date, time and nature of services rendered shall also be retained for a period of three years after the term of this agreement expires. These records shall be subject to inspection by the City of Santa Fe, the Department of Finance and Administration and the State Auditor. The BDDDB and the City of Santa Fe shall have the right to audit the billing both before and after payment to Contractor. Payment under this Agreement shall not foreclose the right of the BDDDB or the City of Santa Fe to recover excessive or illegal payments.

17. APPLICABLE LAW; CHOICE OF LAW; VENUE

Contractor shall abide by all applicable federal and state laws and regulations, and all ordinances, rules and regulations of the BDDDB. In any action, suit or legal dispute arising from this Agreement, Contractor agrees that the laws of the State of New Mexico shall govern. The parties agree that any action or suit arising from this Agreement shall be commenced in a federal or state court of competent jurisdiction in New Mexico. Any action or suit commenced in the courts of the State of New Mexico shall be brought in the First Judicial District Court.

18. AMENDMENT

This Agreement shall not be altered, changed or modified except by an amendment in writing executed by the parties hereto.

19. SCOPE OF AGREEMENT

This Agreement incorporates all the agreements, covenants, and understandings between the parties hereto concerning the services to be performed hereunder, and all such agreements, covenants and understandings have been merged into this Agreement. This Agreement expresses the entire Agreement and understanding between the parties with respect to said

services. No prior agreement or understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless embodied in this Agreement.

20. NON-DISCRIMINATION

During the term of this Agreement, Contractor shall not discriminate against any employee or applicant for an employment position to be used in the performance of services by Contractor hereunder, on the basis of ethnicity, race, age, religion, creed, color, national origin, ancestry, sex, gender, sexual orientation, physical or mental disability, medical condition, or citizenship status.

21. SEVERABILITY

In case any one or more of the provisions contained in this Agreement or any application thereof shall be invalid, illegal or unenforceable in any respect, the validity, legality, and enforceability of the remaining provisions contained herein and any other application thereof shall not in any way be affected or impaired thereby.

22. NOTICES

Any notices required to be given under this Agreement shall be in writing and served by personal delivery or by mail, postage prepaid, to the parties at the following addresses:

BDDDB: Charles Vokes, BDD Facilities Manager
Buckman Direct Diversion
801 San Mateo
Santa Fe, NM 87504

With a copy to: Nancy R. Long, Esq., BDDDB Counsel
Long, Komer & Associates, P.A.
P. O. Box 5098
Santa Fe, NM 87502-5098

CONTRACTOR: ALS Global
Roy French, Laboratory Director
225 Commerce Drive
Fort Collins, CO 80524

Any such notice sent by registered or certified mail, return receipt, shall be deemed to have been duly given and received seventy-two (72) hours after the same is so addressed and mailed with postage prepaid. Notice sent by recognized overnight delivery service shall be effective only upon actual receipt thereof at the office of the addressee set forth above, and any such notice delivered at a time outside of normal business hours shall be deemed effective at the opening of business on the next business day. Notice sent by facsimile shall be effective only upon actual receipt of the original unless written confirmation is sent by the recipient of the facsimile stating that the notice has been received, in which case the notice shall be deemed effective as of the date specified in the confirmation. Any party may change its address for purposes of this paragraph by giving notice to the other party as herein provided. Delivery of any copies as provided herein shall not constitute delivery of notice hereunder.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date set forth below.

[BALANCE OF PAGE INTENTIONALLY LEFT BLANK;

SIGNATURE PAGE FOLLOWS]

BUCKMAN DIRECT DIVERSION BOARD

By: _____

Charles Vokes,
BDD Facilities Manager

Date: _____

APPROVED AS TO FORM:


Nancy R. Long, BDDDB Counsel

APPROVED:

Oscar Rodriguez, City Finance Director

728000
Business Unit/Line Item

ATTEST:

Yolanda Y. Vigil, City Clerk

File Date: _____

CONTRACTOR:

ALS Global

By: _____

Name: Roy French

Title: Laboratory Director

Date: _____

NM Taxation & Revenue
CRS #03-185297-00-1

City of Santa Fe Business
Registration # _____

ALS Environmental

Attachment 1 Fee Schedule

MDL means minimum or method detection limit. MDL is the minimum concentration of an analyte that can be distinguished from a blank with 99% confidence that the analytical concentration is greater than zero.
 RL means the reporting limit. RL is the lowest concentration that an analyte can be detected in a sample and its concentration can be reported with reasonable degree of accuracy and precision.

Analytes	Method	Sub-contractor	Proposed Alternative Method	Proposed MDL/RL	Cost for water sample/Required Volume	Cost for solid sample
Suspended Sediment Concentration	ASTM:D3977-97				No Bid	No Bid
Gross alpha	EPA:900.0			see attached	\$50.00	\$50.00
Gross beta	EPA:900.0			see attached	incl. w/Alpha	incl. w/Alpha
Strontium-90	ASTM 5811			see attached	\$110.00	\$110.00
Americium-241	HASL-300:AM-241			see attached	\$120.00	\$120.00
Radionuclides by gamma spec Ac-228 Bi-212 Bi-214 Cs-137 Cs-134 Co-60 Na-22 K-40 Pa-234m Pb-212 Pb-214 Tl-208 Th-238	EPA:901.1			see attached	\$90.00	\$90.00
Neptunium-237	HASL-300			see attached	\$120.00	\$120.00

Analytes	Method	Sub-contractor	Proposed Alternative Method	Proposed MDL/RL	Cost for water sample/Required Volume	Cost for solid sample
Na Ti U V Zn				see attached		

ALS Environmental
June 2015

Analyte	Matrix	Analytical Method	MDC (pCi/L) or RL (ppb)	MDL (ppb)
ALUMINUM	liquid	EPA200.8	5.00	1.31
ANTIMONY	liquid	EPA200.8	0.0300	0.0179
ARSENIC	liquid	EPA200.8	0.200	0.0348
BARIUM	liquid	EPA200.8	0.100	0.0581
BERYLLIUM	liquid	EPA200.8	0.0500	0.0131
BORON	liquid	EPA200.8	5.00	0.691
CADMIUM	liquid	EPA200.8	0.0300	0.0177
CALCIUM	liquid	EPA200.8	100	10.0
CHROMIUM	liquid	EPA200.8	1.00	0.0600
COBALT	liquid	EPA200.8	0.100	0.0240
COPPER	liquid	EPA200.8	1.00	0.305
IRON	liquid	EPA200.8	10.0	2.47
LEAD	liquid	EPA200.8	0.0500	0.0130
MAGNESIUM	liquid	EPA200.8	10.0	4.46
MANGANESE	liquid	EPA200.8	0.200	0.0695
MERCURY	liquid	EPA245.1	0.200	0.0600
NICKEL	liquid	EPA200.8	0.500	0.244
POTASSIUM	liquid	EPA200.8	100	22.0
SELENIUM	liquid	EPA200.8	0.100	0.0675
SILVER	liquid	EPA200.8	0.0100	0.00379
SODIUM	liquid	EPA200.8	100	24.5
URANIUM	liquid	EPA200.8	0.0100	0.00502
VANADIUM	liquid	EPA200.8	0.100	0.0382
ZINC	liquid	EPA200.8	2.00	0.621
Gamma Spec				
Ac-228	liquid	ALS SOP 713/901.1		NA
Bi-212	liquid	ALS SOP 713/901.1		NA
Bi-214	liquid	ALS SOP 713/901.1		NA
Co-60	liquid	ALS SOP 713/901.1		NA
Cs-134	liquid	ALS SOP 713/901.1		NA
Cs-137	liquid	ALS SOP 713/901.1	10	NA
K-40	liquid	ALS SOP 713/901.1		NA
Na-22	liquid	ALS SOP 713/901.1		NA
Pa-234m	liquid	ALS SOP 713/901.1		NA
Pb-212	liquid	ALS SOP 713/901.1		NA
Pb-214	liquid	ALS SOP 713/901.1		NA
Tl-208	liquid	ALS SOP 713/901.1		NA

ALS Environmental
June 2015

Analyte	Matrix	Analytical Method	MDC (pCi/L) or RL (ppb)	MDL (ppb)
Gross alpha	liquid	ALS SOP/900.0	3 pCi/L	NA
Gross beta	liquid	ALS SOP/900.0	4 pCi/L	NA
Strontium 90	liquid	ALI SOP/ASTM 5811	1 pCi/L	NA
Americium-241	liquid	ALS SOP/HASL-300	0.1 pCi/L	NA
Neptunium-237	liquid	HASL-300	0.2 pCi/L	NA
Isotopic Plutonium (Pu-238, Pu-239)	liquid	ALS SOP/ HASL-300	0.1 pCi/L	NA
Isotopic Uranium (U-234, U-235, U-238)	liquid	ALS SOP/HASL-300	0.2 pCi/L	NA
Radium-226	liquid	ALS SOP/ 903.1	1 pCi/L	NA
Radium-228	liquid	ALS SOP/904.0	1 pCi/L	NA
Total cyanide	liquid	ALS SOP/ 335.2	10	3
Perchlorate	liquid	SW846 6850	0.2	0.06

Polychlorinated biphenyls:

Analyte	ALS Water MDL	LOQ (low Cal Std)
	Analysis Date: Jun 20, 2013 (pg/L)	(pg/L)
CL1-PCB-1	2.5	40
CL1-PCB-2	1.7	40
CL1-PCB-3	2.2	40
CL2-PCB-4	9.1 ¹	40
CL2-PCB-5	7.8 ¹	40
CL2-PCB-6	10 ¹	40
CL2-PCB-7	50 ¹	40
CL2-PCB-8	5.3 ¹	40
CL2-PCB-9	7.5 ¹	40
CL2-PCB-10	7.0 ¹	40
CL2-PCB-11	3.5 ¹	40
CL2-PCB-12/13	4.0 ¹	40
CL2-PCB-14	5.9 ¹	40
CL2-PCB-15	7.0 ¹	40
CL3-PCB-16	2.0	40
CL3-PCB-17	2.7	40
CL3-PCB-19	2.1	40
CL3-PCB-21/33	2.4	40
CL3-PCB-22	1.4	40
CL3-PCB-23	2.2	40
CL3-PCB-24	1.7	40
CL3-PCB-25	3.4	40
CL3-PCB-26/29	2.3	40
CL3-PCB-27	2.1	40
CL3-PCB-28/20	1.9	40
CL3-PCB-30/18	5.0	40
CL3-PCB-31	3.3	40
CL3-PCB-32	1.4	40
CL3-PCB-34	1.9	40
CL3-PCB-35	1.8	40
CL3-PCB-36	1.9	40
CL3-PCB-37	1.6	40
CL3-PCB-38	1.3	40
CL3-PCB-39	1.8	40
CL4-PCB-41/40/71	4.8	40
CL4-PCB-42	1.6	40
CL4-PCB-43	2.7	40
CL4-PCB-44/47/65	4.1	40
CL4-PCB-45/51	5.2	40
CL4-PCB-46	2.8	40
CL4-PCB-48	2.9	40
CL4-PCB-50/53	3.6	40
CL4-PCB-52	2.2	40
CL4-PCB-54	2.0	40
CL4-PCB-55	3.0	40
CL4-PCB-56	1.2	40
CL4-PCB-57	3.8	40
CL4-PCB-58	3.6	40
CL4-PCB-59/62/75	4.5	40
CL4-PCB-60	2.4	40
CL4-PCB-61/70/74/76	5.5	40
CL4-PCB-63	0.9	40
CL4-PCB-64	2.6	40
CL4-PCB-66	3.0	40
CL4-PCB-67	1.8	40
CL4-PCB-68	3.5	40
CL4-PCB-69/49	5.2	40
CL4-PCB-72	1.8	40
CL4-PCB-73	3.9	40
CL4-PCB-77	3.6	40

Polychlorinated biphenyls:

Analyte	ALS Water MDL	LOQ (low Cal Std)
	Analysis Date: Jun 20, 2013 (pg/L)	(pg/L)
CL4-PCB-78	1.4	40
CL4-PCB-79	1.6	40
CL4-PCB-80	3.2	40
CL4-PCB-81	2.0	40
CL5-PCB-82	4.1	40
CL5-PCB-83/99	5.2	40
CL5-PCB-84	2.5	40
CL5-PCB-88/91	7.0	40
CL5-PCB-89	4.3	40
CL5-PCB-92	2.6	40
CL5-PCB-94	3.9	40
CL5-PCB-95	2.7	40
CL5-PCB-100/93/102/98	5.8	40
CL5-PCB-96	2.3	40
CL5-PCB-103	3.2	40
CL5-PCB-104	1.8	40
CL5-PCB-105	2.8	40
CL5-PCB-106	3.8	40
CL5-PCB-108/124	3.6	40
CL5-PCB-109/119/86/97/125/87	6.5	40
CL5-PCB-107	4.7	40
CL5-PCB-111	3.8	40
CL5-PCB-112	3.2	40
CL5-PCB-113/90/101	4.3	40
CL5-PCB-114	2.2	40
CL5-PCB-117/116/85/110/115	6.5	40
CL5-PCB-118	1.9	40
CL5-PCB-120	2.5	40
CL5-PCB-121	2.6	40
CL5-PCB-122	1.7	40
CL5-PCB-123	3.8	40
CL5-PCB-126	1.5	40
CL5-PCB-127	2.0	40
CL6-PCB-128/166	3.3	40
CL6-PCB-130	3.2	40
CL6-PCB-131	3.3	40
CL6-PCB-132	2.5	40
CL6-PCB-133	3.1	40
CL6-PCB-134/143	5.0	40
CL6-PCB-136	2.8	40
CL6-PCB-137/164	4.4	40
CL6-PCB-138/163/129	4.1	40
CL6-PCB-139/140	1.5	40
CL6-PCB-141	3.9	40
CL6-PCB-142	4.0	40
CL6-PCB-144	1.9	40
CL6-PCB-145	4.5	40
CL6-PCB-146	2.0	40
CL6-PCB-147/149	5.2	40
CL6-PCB-148	1.7	40
CL6-PCB-150	2.6	40
CL6-PCB-151/135	4.0	40
CL6-PCB-152	2.9	40
CL6-PCB-153/168	5.1	40
CL6-PCB-154	1.9	40
CL6-PCB-155	1.9	40
CL6-PCB-156/157	2.5	40
CL6-PCB-158	3.0	40
CL6-PCB-159	1.7	40
CL6-PCB-160	5.0	40
CL6-PCB-161	2.8	40

Polychlorinated biphenyls:

Analyte	ALS Water MDL	LOQ (low Cal Std)
	Analysis Date: Jun 20, 2013 (pg/L)	(pg/L)
CL6-PCB-162	2.4	40
CL6-PCB-165	3.4	40
CL6-PCB-167	2.9	40
CL6-PCB-169	2.2	40
CL7-PCB-170	2.8	40
CL7-PCB-171/173	4.4	40
CL7-PCB-172	4.1	40
CL7-PCB-174	2.8	40
CL7-PCB-175	3.0	40
CL7-PCB-176	2.3	40
CL7-PCB-177	2.2	40
CL7-PCB-178	1.8	40
CL7-PCB-179	2.7	40
CL7-PCB-180/193	5.2	40
CL7-PCB-181	3.8	40
CL7-PCB-182	3.2	40
CL7-PCB-183	3.8	40
CL7-PCB-184	2.8	40
CL7-PCB-185	5.3	40
CL7-PCB-186	2.3	40
CL7-PCB-187	5.4	40
CL7-PCB-188	2.8	40
CL7-PCB-189	3.4	40
CL7-PCB-190	3.3	40
CL7-PCB-191	3.1	40
CL7-PCB-192	3.9	40
CL8-PCB-194	3.4	40
CL8-PCB-195	3.1	40
CL8-PCB-196	5.2	40
CL8-PCB-197	1.9	40
CL8-PCB-198/199	12.9	40
CL8-PCB-200	2.5	40
CL8-PCB-201	3.7	40
CL8-PCB-202	2.8	40
CL8-PCB-203	4.7	40
CL8-PCB-204	5.2	40
CL8-PCB-205	3.2	40
CL9-PCB-206	2.6	40
CL9-PCB-207	4.7	40
CL9-PCB-208	5.7	40
CL10-PCB-209	2.7	40

ALS MDL = ALS Method Detection Limit based upon a 20g sample size.

Quantitation Limit based upon the level of the low calibration standard

¹ Dichlorobiphenyl MDLs for the water matrix is based on the instrument response to the primary mass only.