

*626144827

PO BOX 634

TEAYS WV

BIO CHEM TESTING INC

PUTNAM VILLAGE SHOPPING CTR

25569-0634

State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

304-757-8954

Request for Quotation

DEP15657

PAGE 1

ADDRESS CORRESPONDENCE TO ATTENTION OF

GUY NISBET 304-558-8802

ENVIRONMENTAL PROTECTION

DEPARTMENT OF
VARIOUS LOCALES AS INDICATED
BY ORDER

DATE PRINTED TERMS OF SALE SHIP VIA F.O.B. FREIGHT TERMS 05/02/2012 BID OPENING DATE: 05/10/2012 OPENING TIME 01:30 PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT ADDENDUM NO.3 ADDENDUM FOR GROUNDWATER MONITORING SERVICES IS ISSUED FOR THE FOLLOWING INFORMATION DISTRIBUTION. PUBLISH Q&A'S SUBMITTED. BID OPENING DATE REMAINS UNCHANGED AT: 05/10/2012 AT 1:30 PM NO OTHER CHANGES END OF ADDENDUM NO.3 0001 JB 493-96 WATER QUALITY MONITORING THIS IS THE END OF REQ \$72,90 DEP156\$7 ***** TOTAL: SEE REVERSE SIDE FOR TERMS AND CONDITIONS TELEPHONE SIGNATURE ~ 10-ADDRESS CHANGES TO BE NOTED ABOVE

GENERAL TERMS & CONDITIONS REQUEST FOR QUOTATION (RFQ) AND REQUEST FOR PROPOSAL (RFP)

- 1. Awards will be made in the best interest of the State of West Virginia.
- 2. The State may accept or reject in part, or in whole, any bid.
- 3. Prior to any award, the apparent successful vendor must be properly registered with the Purchasing Division and have paid the required \$125 fee.
- 4. All services performed or goods delivered under State Purchase Order/Contracts are to be continued for the term of the Purchase Order/Contracts, contingent upon funds being appropriated by the Legislature or otherwise being made available. In the event funds are not appropriated or otherwise available for these services or goods this Purchase Order/Contract becomes void and of no effect after June 30.
- 5. Payment may only be made after the delivery and acceptance of goods or services.
- 6. Interest may be paid for late payment in accordance with the West Virginia Code.
- 7. Vendor preference will be granted upon written request in accordance with the West Virginia Code.
- 8. The State of West Virginia is exempt from federal and state taxes and will not pay or reimburse such taxes.
- 9. The Director of Purchasing may cancel any Purchase Order/Contract upon 30 days written notice to the seller.
- 10. The laws of the State of West Virginia and the *Legislative Rules* of the Purchasing Division shall govern the purchasing process.
- 11. Any reference to automatic renewal is hereby deleted. The Contract may be renewed only upon mutual written agreement of the parties.
- **12. BANKRUPTCY:** In the event the vendor/contractor files for bankruptcy protection, the State may deem this contract null and void, and terminate such contract without further order.
- 13. HIPAA BUSINESS ASSOCIATE ADDENDUM: The West Virginia State Government HIPAA Business Associate Addendum (BAA), approved by the Attorney General, is available online at www.state.wv.us/admin/purchase/vrc/hipaa.html and is hereby made part of the agreement provided that the Agency meets the definition of a Cover Entity (45 CFR §160.103) and will be disclosing Protected Health Information (45 CFR §160.103) to the vendor.
- 14. CONFIDENTIALITY: The vendor agrees that he or she will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/noticeConfidentiality.pdf.
- 15. LICENSING: Vendors must be licensed and in good standing in accordance with any and all state and local laws and requirements by any state or local agency of West Virginia, including, but not limited to, the West Virginia Secretary of State's Office, the West Virginia Tax Department, and the West Virginia Insurance Commission. The vendor must provide all necessary releases to obtain information to enable the director or spending unit to verify that the vendor is licensed and in good standing with the above entities.
- 16. ANTITRUST: In submitting a bid to any agency for the State of West Virginia, the bidder offers and agrees that if the bid is accepted the bidder will convey, sell, assign or transfer to the State of West Virginia all rights, title and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to the bidder.

I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, limited liability company, partnership, or person or entity submitting a bid for the same material, supplies, equipment or services and is in all respects fair and without collusion or Fraud. I further certify that I am authorized to sign the certification on behalf of the bidder or this bid.

INSTRUCTIONS TO BIDDERS

- 1. Use the quotation forms provided by the Purchasing Division. Complete all sections of the quotation form.
- 2. Items offered must be in compliance with the specifications. Any deviation from the specifications must be clearly indicated by the bidder. Alternates offered by the bidder as EQUAL to the specifications must be clearly defined. A bidder offering an alternate should attach complete specifications and literature to the bid. The Purchasing Division may waive minor deviations to specifications.
- 3. Unit prices shall prevail in case of discrepancy. All quotations are considered F.O.B. destination unless alternate shipping terms are clearly identified in the quotation.
- 4. All quotations must be delivered by the bidder to the office listed below prior to the date and time of the bid opening. Failure of the bidder to deliver the quotations on time will result in bid disqualifications: Department of Administration, Purchasing Division, 2019 Washington Street East, P.O. Box 50130, Charleston, WV 25305-0130
- 5. Communication during the solicitation, bid, evaluation or award periods, except through the Purchasing Division, is strictly prohibited (W.Va. C.S.R. §148-1-6.6).

DEP15657 Questions and Answers

Q1. The referenced sampling SOP indicates that QA/QC samples should be taken at a rate of 5% duplicates. The sample count included with the RFQ does not appear to include these duplicate samples nor does it include any trip blanks. Should these be added on?

A1. YES, Duplicate samples are required at the rate of 5%, see revised bid sheet.

Q2. Should costs for bottle ware, preservation and shipping be included for samples or will those be included by the laboratory?

A2. Contractor will be responsible for all bottle ware, preservation and shipping cost.

Q3. Will disposal costs for IDW be paid by the state or will the contractor be responsible for those?

A3 The purge water shall be disposed of in current leachate collection systems

Q4.Does the IDW need to be sampled prior to disposal?

A4. The purge water does not need to be sampled prior to disposal.

Q5. Is current analytical data available for these wells?

A5. Yes, once a selection is made the data will be made available.

Q6.A bailer is mentioned in the RFQ. Is a bailer preferable for sampling to a pump?

A6. The contractor may determine this choice.

(a)

Q7. The Fleming landfill has 7 wells, but 2 of the wells are identified as being "OBSTRUCTED" and no total depth of the well is listed.

A7. May need to use a smaller bailer or pump method to gain access for sampling.

Q8. The McDowell landfill has 6 wells, but 2 of the wells are identified as being "DRY" and no total depth of the well is listed.

A8. Some wells are seasonally dry. Well depth shall be determined by new contractor.

Q9. The Pine Creek Omar landfill has 4 wells, but 1 of the wells has "N/A" in both the total depth & depth to water columns of the Attachment A table.

A9 MW-3B Well Depth 205.00 ft, and water level 179 95ft

Q 10. The first page of Attachment A includes the 5 wells identified above in the number of wells listed to the right of the facility name. Do I need to include cost to repair/replace the 5 wells or should they be removed from the monitoring program?

A10. No this contract is not intended for repair or replacement, only for monitoring and sampling purposes.

- Q 11. How many data sets/sampling events require entry into a database per each landfill?
- A 11. Every sampling event will be entered into the data base.
- Q 12. How many parameters are required per each landfill?
- A 12. The contractor shall monitor for parameters as described in 33CSR1 section 4.11.b, Phase I detection monitoring program.
- Q 13. Does each landfill have on-site disposal for purge water or will the purge water need to be transported off-site for proper disposal?
- A 13. Yes each landfill has a purge water disposal of some type.
- Q 14. Where is the Midwest Landfill located?
- A 14. 37.849747 80.797234
- Q.15. I am working on preparing a cost estimate for providing groundwater monitoring services (sampling and reporting) for the 29 LCAP facilities in West Virginia (DEP RFQ No. 15657). The WVDEP document states that "The successful bidder will be paid a one time statistical analysis set up fee. The will include all labor materials and incidentals required for the successful bidder to prepare a DEP approved statistical analysis database."

My questions are how will we receive historical data for each facility? Will we get it in an electronic format which will eliminate hand-entering all of that data, or will we receive hard copies of historical data and have to hand-enter all of the data? Also, will we receive a copy of a historical report for each facility in order to view the site history, potentiometric maps, and hydrogeologic regime?

A.15. Yes electronic data will be made available in PDF format, all available historical data will be provided.



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State of West Virginia Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

Request for Quotation

RFQ NUMBER
DEP15657

PAGE 1

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DEPARTMENT OF
VARIOUS LOCALES AS INDICATED
BY ORDER

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DATE PRINTED TERMS OF SALE SHIP VIA F.O.B. FREIGHT TERMS 03/28/2012 **BID OPENING DATE:** 04/26/2012 BID OPENING TIME 01:30PM CAT. LINE QUANTITY UOP ITEM NUMBER UNIT PRICE AMOUNT YEAR OR UNTIL SUCH "REASONABLE TIME" THEREAFTER AS IS NECESSARY TO OBTAIN A NEW CONTRACT OR RENEW THE PRIGINAL CONTRACT THE "REASONABLE TIME" PERIOD SHALL NOT EXCEED TWELVE (12) MONTHS. DURING THIS "REASONABLE TIME" THE VENDOR MAY TERMINATE THIS CONTRACT FOR ANY REASON UPON GIVING THE DIRECTOR OF PURCHASING 30 DAYS WRITTEN NOTICE. WNLESS SPECIFIC PROVISTONS ARE STIPULATED ELSEWHERE IN THIS CONTRACT DOCUMENT BY THE STATE OF WEST VIRGINIA, IT\$ AGENCIES OR POLITICAL SUBDIVISIONS, THE ERMS, CONDITIONS AND PRICING SET FORTH HEREIN ARE FIRM FOR THE LIFE OF THE CONTRACT. RENEWAL: THIS CONTRACT MAY BE RENEWED UPON THE MUTUAL WRITTEN CONSENT OF THE SPENDING UNIT AND VENDOR, \$UBMITTED TO THE DIRECTOR OF PURCHASING THIRTY (30) DAYS PRIOR TO THE EXPIRATION DATE. SUCH RENEWAL SHALL BE IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE \$\psi RIGINAL CONTRACT AND \$HALL BE LIMITED TO TWO (2) ONE 1) YEAR PERIODS. THE DIRECTOR OF PURCHASING RESERVES THE CANCELLATION: RIGHT TO CANCEL THIS CONTRACT IMMEDIATELY UPON WRITTEN NOTICE TO THE VENDOR IF THE COMMODITIES AND/OR SERVICES SUPPLIED ARE OF AN INFERIOR QUALITY OR DO NOT CONFORM O THE SPECIFICATIONS OF THE BID AND CONTRACT HEREIN. OPEN MARKET CLAUSE: THE DIRECTOR OF PURCHASING MAY UTHORIZE A SPENDING UNIT TO PURCHASE ON THE OPEN MARKET, WITHOUT THE FILLING OF A REQUISITION OR COST STIMATE, ITEMS SPECIFIED ON THIS CONTRACT FOR MMEDIATE DELIVERY IN EMERGENCIES DUE TO UNFORESEEN CAUSES (INCLUDING BUT NOT LIMITED TO DELAYS IN TRANS-CORTATION OR AN UNANTICIPATED INCREASE IN THE VOLUME F WORK.) SEE REVERSE SIDE FOR TERMS AND CONDITIONS SIGNATURE TELEPHONE DATE 304 TITLE ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



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PAGE 3

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DEP15657 Request for Quotes LCAP Groundwater Monitoring

To provide groundwater monitoring at 29 facilities managed within the Landfill Closure Assistance Program (LCAP) in West Virginia, which includes 148 groundwater monitoring wells. Please see Attachment A.

General Conditions:

This contract shall provide for all labor, materials, transportation, tools, equipment, supplies, and incidentals to obtain the samples from the monitoring wells, to perform the required analysis, to determine statistical trends, and to submit the required reports. All standard protocols required by the WV DEP and sound analytical procedures shall be used when performing the services. All sampling shall be conducted using the WVDEP, Division of Water Resources QA/QC & Standard Operating Procedures for Ground Water Sampling (SOP), can be found at http://www.dep.wv.gov/WWE/Programs/gw/Documents/17812 Groundwater Sampling Procedures. DEP for performing the work. If the contractor shall provide equipment suitable to the WV DEP for performing such as dedicated well pumps, etc., any modifications shall be requested in writing and shall be approved or disapproved in writing by the WV DEP LCAP Program Manager.

The contractor shall be responsible for locking the monitoring wells while not in use. The wells shall remain locked to prevent unauthorized use. The contractor shall be provided a key to the commonly keyed locks that have been installed by WV DEP.

Maintaining access: The WV DEP will be responsible for maintaining reasonable access to well heads to allow for field sampling. Maintenance may include removal of brush, lubrication of hinges, etc. The contractor will report excessive deterioration to access roads if encountered, to allow for repair to be scheduled and completed in a timely manner. If contractor cannot access a well then they must notify WVDEP immediately. Contractor must make a reasonable effort to sample all wells approved by WVDEP. A sampling event shall be defined as an event in which an actual sample was collected. A dry well cannot be defined as a sampling event.

Disposal of purge water: The specific locations, leachate pond, sewer manhole, or leachate tank, shall be identified to the successful bidder. The contractor shall provide for all labor, materials, transportation, tools, equipment, supplies, and incidentals to manage and dispose of purge water at an approved facility. The costs associated with purge water management shall be included in the unit ("per well") cost for field sampling and laboratory analysis.

Statistical analysis: Any landfill that has two years of data either acquired or historical shall receive a semi-annual statistical analysis in accordance with 33CSR1 Section 4.11, groundwater monitoring and corrective action program. The successful bidder will be paid a one time statistical analysis set up fee. This will include all labor materials and incidentals required for the successful bidder to prepare a DEP approved statistical analysis database.

The contractor shall perform semiannual monitoring starting the month of the purchase order effective date, and extending for one full year, resulting in two semiannual reporting periods. Currently, it is anticipated that the monitoring will begin with the first semiannual period of 2012 and ending with the second semiannual period of 2012. The noted semiannual periods are defined as follows:

First semiannual period: January, February, March, April, May and June 2012 Second semiannual period: July, August, September, October, November and December 2012

A list of the twenty-nine (29) LCAP facilities and the number of wells at each location is included as Attachment A. It is the responsibility of the contractor to obtain any other background information necessary to complete the services.

Additional information may be obtained from WV DEP at the following address:

West Virginia Department of Environmental Protection Division of Land Restoration Office of Environmental Remediation 601 - 57th Street, SE Charleston, WV 25304 Phone: (304) 926-0455

The contractor shall determine whether there is a statistical increase over the background values for each parameter according to ASTM Standard D 6312-98 (available from http://www.astm.org), except that any re-sampling or implementing Phase II sampling will be at the discretion of the WV DEP. The contractor shall have the capability to monitor for parameters as described in 33CSR1; Section 4.11.c, Phase II assessment monitoring program.

The contractor shall develop and submit reports for groundwater monitoring events in accordance with 33CSR1 Section 4.11, groundwater monitoring and corrective action program. There must be no less than one hundred and twenty (120) days between sampling events. Reports shall be submitted within sixty (60) days of each sampling event. The contractor shall monitor for parameters as described in 33CSR1 section 4.11.b, Phase I detection monitoring program. The contractor shall submit reports including test results to the WV DEP LCAP Project Manager, WV DEP Division of Water & Waste Management, and the facility owner. The results of the groundwater analysis from each monitoring well shall be provided in a format acceptable to the WV DEP Division of Land Restoration, Office of Environmental Remediation and both MDL's and PQL's shall be specified for all laboratory analyses. Electronic copies of analyses and reports will be required. *Note: Lab cost is not part of this contract and any such cost shall be direct billed to WVDEP using WVDEP laboratory contracts*.

Work and services to be performed under this contract shall be subject to continuous monitoring and inspection by the State's authorized representatives. Such inspection will, among other things, ensure compliance.

The Contractor shall maintain insurance as follows:

Contractor's Public Liability Insurance and Comprehensive Vehicle Liability Insurance shall be in an amount not less than \$1,000,000.00 for bodily injury and property damage for each occurrence and not less than \$1,000,000.00 aggregate.

The vendor / subcontractors shall pay the higher of the U.S. Department of Labor Davis-Bacon Act or the WV Prevailing wage rate as established for various counties pursuant to West Virginia Code 21-5A, Et, Seq. and 42CSR7 Rules & Regulations for the WV Prevailing Wage Act. For prevailing wage rates please refer to:

http://www.sos.wv.gov/administrative-law/wagerates/Pages/default.aspx

Method of measurement: Field services such as gauging, purging and sampling shall be measured as the "per well" unit cost including all labor, equipment, materials, transportation, and incidentals to obtain and preserve samples and to ship to laboratory for analysis. (Do not include the cost of analysis). The unit cost per well measurement shall be per sampling event. A sampling event shall be defined as an event in which an actual sample was collected. A dry well cannot be defined as a sampling event. Payment will only be made for a sampling event. (Note: A shorter bailer may be necessary if the longer bailer will not pass through a bend in the well.) Statistical Analysis Setup shall be measured as the "per site" unit price including all labor equipment, materials, transportation and incidentals to collect, compile, and construct the facility data base for statistical evaluations of information obtained in field services and laboratory analysis. The per site measurement shall be a one time initial cost to the project for development of the database. Any subsequent renewal of the contract shall not include the statistical analysis setup item. Statistical analysis and reporting shall be measured per site including all labor, equipment, materials, transportation, and incidentals to evaluate data and to report findings. The per site measurement shall be per sampling event.

Method of payment: Invoices shall be submitted on a semiannual basis after monitoring including reporting has been submitted to the indicated parties.

Submit invoices and reports to:

West Virginia Department of Environmental Protection Division of Land Restoration Office of Environmental Remediation 601 57th Street, SE Charleston, WV 25304 Attn: Nathan Meadows

Phone: (304) 926-0499 x 2230

Renewal: This contract may be renewed upon the mutual written consent of the spending unit and vendor, submitted to the Director of Purchasing thirty (30) days prior to the expiration date. Such renewal shall be in accordance with the terms and conditions of the original contract and shall be limited to two (2) successive one (1) year periods.

Attachment A

Listed below are the twenty-nine LCAP facilities to be monitored under this RFQ

1.	Berkeley County Landfill	8 wells
2.	Midwest Landfill	11 wells
3.	City of Buckhannon Landfill	4 wells
4.	Capon Springs Landfill	4 wells
5.	Central WV Refuse landfill	3 wells
6.	City of Clarksburg Landfill	4 wells
7.	Don's Disposal Landfill	4 wells
8.	ERO Landfill	7 wells
9.	Fayette County Landfill	4 wells
10.	Fleming Landfill	7 wells
11.	Grant County / Petersburg Landfill	4 wells
12.	Hampshire County Landfill	4 wells
13.	Jackson County Landfill	4 wells
14.	Jefferson County Landfill	15 wells
15.	Kanawha Western Landfill	4 wells
16.	City of Kingwood Landfill	4 wells
17.	Marion County Landfill	4 wells
18.	McDowell County Landfill	6 wells
19.	Mingo County Landfill	4 wells
20.	Monongalia County Landfill	5 wells
21.	City of Montgomery Landfill	4 wells
22.	Morgan County Landfill	4 wells
23.	City of Morgantown Landfill	7 wells
24.	City of Moundsville Landfill	3 wells
25.	Pine Creek / Omar Landfill	4 wells
26.	Preston County / Rehe Landfill	4 wells
27.	City of South Charleston Landfill	4 wells
28.	City of Wheeling Landfill	4 wells
29.	Wyoming County Landfill	4 wells

LANDFILL	WELL#	CONSTRUCTION	DEPTH	STATIC WATER LEVEL
BERKELEY	MW-1B	2" PVC	25.37'	6.89'
	MW-2A	2" PVC	27.76'	9.65'
	MW-3A	2" PVC	28.71'	6.85'
	MW-4A	2" PVC	28.16'	17.55'
	MW-5	2" PVC	168.73'	42.30'
	MW-7	2" PVC	32.33'	23.11'
	MW-9	2" PVC	73.60'	35.25'
	MW-11	2" PVC	21.11'	14.69'
BUGGILLANINGN	1 2014/4	211 00 40	470.641	456.221
BUCKHANNON	MW-1	2" PVC	170.61'	156.32'
	MW-2	2" PVC	180.48'	163.49
	MW-4	2" PVC	28.00'	15.11'
	MW-5	2" PVC	162.19'	110.55'
CAPON SPRINGS	MW-1	2" PVC	60.18'	15.11'
0/11 011 01 1111 100	MW-2	2" PVC	69.71'	27.24'
CANADA NA CANADA	MW-3	2" PVC	60.99'	21.37'
	MW-4	2" PVC	63.96'	3.89'
CENTRAL	MW-3D	2" PVC	83.24'	32.61'
	MW-5D	2" PVC	160.00'	112.71'
	MW-7	2" PVC	350.00'	133.45'
	T			
CLARKSBURG	MW-4	2" PVC	44.23'	18.11'
	MW-5	2" PVC	162.50'	N/A
	MW-6	2" PVC	100.00'	83.01'
	MW-7	2" PVC	75.00'	30.04'
DON'S DISPOSAL	GW-3A	2" PVC	51.94'	25.71'
DOIT O DIO! COME	PWA	2" PVC	173.30'	143.45'
	PWB	2" PVC	57.13'	26.17'
	GW-5C	2" PVC	84.70'	41.89'
ERO	MW-8	2" PVC	34.32'	17.09'
	MW-13	2" PVC	50.51'	15.92'
	MW-17	2" PVC	88.00'	67.32'
	MW-18	2" PVC	54.85'	33.69'
	MW-19	2" PVC	54.42'	33.44'
	MW-20	2" PVC	51.86'	32.77'
	MW-22	2" PVC	32.72'	15.94'
LVCTT	DAMA A	211 00/10	27.52	24 75
<u>FAYETTE</u>	MW-1	2" PVC	37.53	31.75
	MW-2	2" PVC	67.25'	N/A
	MW-3	2" PVC	87.5'	N/A
	MW-4	2" PVC	210.00'	N/A

<u>FLEMING</u>	MW-1A	2" PVC	N/A	OBSTRUCTED
	MW-1B	2" PVC	N/A	OBSTRUCTED
	MW-3A	2" PVC	265.00'	142.97'
	MW-3B	2" PVC	46.00'	28.73'
	MW-4A	2" PVC	34.00'	22.43'
	MW-4B	2" PVC	127.00'	95.83'
	MW-5A	2" PVC	28.00'	16.89'
HANADCHIDE	MW-1	2" PVC	46.19'	19.45'
HAMPSHIRE		2" PVC	46.37'	20.05'
	MW-2		60.53'	15.94'
	MW-3	2" PVC	70.68'	35.17'
	MW-4	2" PVC	70.68	33.17
JACKSON	MW-2	2" PVC	155.00'	41.60'
	MW-2A	2" PVC	160.00'	45.16'
	MW-3	2" PVC	147.00'	37.14'
	MW-4	2" PVC	178.00'	67.17'
ILLLEDCON	MW-11	2" PVC	46.44'	30.12'
JEFFERSON	MW-104	2" PVC	52.88'	20.90'
	SMW-2	2" PVC	27.57'	19.19'
	BC-4	2" PVC	42.72'	OBSTRUCTED
	MW-103R	2" PVC	79.09'	28.61'
	SMW-3	2" PVC	33.93'	28.56'
	MW-4	2" PVC	38.03'	31.53'
	MW-101UG	2" PVC	66.44'	57.31'
	BC-3	2" PVC	68.09'	OBSTRUCTED
	MW-106	2" PVC	53.06'	48.01'
	MW-6B	2" PVC	95.42'	68.55'
	MW-6A	2" PVC	63.22'	59.61'
	SMW-4	2" PVC	34.02'	26.03'
	MW-102	2" PVC	105.44'	25.61'
	MW-105DG	2" PVC	75.01'	52.47'
	Т	011 51/5	20.051	0.451
ANAWHA WEST	S-1	2" PVC	38.35'	8.45'
	MW-1A	2" PVC	77.33'	53.99'
	MW-2	2" PVC	103.87'	14.65'
	MW-3A	2" PVC	292.00'	112.61'
KINGWOOD	MW-1	2" PVC	56.40'	25.97'
	MW-2	2" PVC	59.87'	29.19'
	MW-3	2" PVC	71.58'	51.11'
	MW-4	2" PVC	76.10'	50.74'

MARION	MW-1	2" PVC	269.00'	243.31'
	MW-4B	2" PVC	67.05'	50.62'
	MW-5B	2" PVC	74.72'	55.77'
	MW-6	2" PVC	63.30'	50.63'
MODOWELL	T NAVA / 1	2" PVC	59.22'	45.66'
MCDOWELL	MW-1 MW-2	2" PVC	8.02	DRY
	MW-3	2" PVC	N/A	DRY
	MW-4	2" PVC	81.73'	51.12'
	MW-5	2" PVC	N/A	DRY
	MW-6A	2" PVC	28.3'	DRY
MID-WEST	MN-01	2" PVC	126.79'	112.8'
	MN-02	2" PVC	30.08'	25.9'
	MN-03	2" PVC	34.46'	21.9'
	MN-04	2" PVC	31.50'	26.6'
	MN-07	2" PVC	34.63'	28.6'
	MN-08	2" PVC	46.99'	31.9'
	MN-09	2" PVC	39.51'	N/A
	MN-10A	2" PVC	114.66'	N/A
	MN-10B	2" PVC	43.84'	N/A
	MN-11A	2" PVC	55.54'	42.00'
	MN-11B	2" PVC	13.29'	13.2'
BAINICO	MW-4A	2" PVC	305.50'	225.81
MINGO	MW-4	2" PVC	260.00'	131.77'
	MW-3B	2" PVC	49.90'	19.42'
	MW-2A	2" PVC	51.00'	19.61'
<u>MONONGALIA</u>	MW-4A	2" PVC	55.00'	31.46'
	MW-3C	2" PVC	60.00'	41.93'
	MW-6	2" PVC	139.00'	102.25'
	MW-1A	2" PVC	155.45'	147.68'
	MW-7	2" PVC	100.00'	64.25'
MONTGOMERY	MW-1A	2" PVC	55.6'	29.7'
	MW-2	2" PVC	47.57'	29.43'
	MW-3	2" PVC	49.63'	29.85'
	MW-4	2" PVC	34.55'	21.19'
	T 1000 44	211 51 12	222.001	00.051
MORGAN	MW-1A	2" PVC	222.00'	98.95'
	MW-5	2" PVC	95.00'	N/A
	MW-6	2" PVC	91.55'	N/A

MORGANTOWN	MW-101BG	2" PVC	154.43'	121.64'
	SMW-2	2" PVC	16.45'	9.61'
	SMW-1	2" PVC	20.37'	8.45'
	MW-4	2" PVC	47.57'	20.33'
	MW-103DG	2" PVC	28.60'	17.61'
	MW-102DG	2" PVC	34.44'	15.49'
	SMW-3	2" PVC	15.35'	10.68'
BAOLINID CVIII I	T NAVA A 2 T	2" PVC	114.00'	95.51'
MOUNDSVILLE	MW-A2	2" PVC	65.00'	42.55'
	MWE	2" PVC	35.00'	13.39'
	MWG	2 PVC	35.00	13.39
PETERSBURG	MW-4A	2" PVC	51.44'	33.87'
	MW-2A	2" PVC	46.50'	31.09'
	MW-7	2" PVC	51.38'	27.49'
	MW-3A	2" PVC	140.00'	74.11'
PINE CREEK OMAR	MW-1	2" PVC	240.6'	210.49'
	MW-2	2" PVC	253.00'	59.73'
	MW-3B	2" PVC	N/A	N/A
	MW-4	2" PVC	104.49'	78.33'
REHE	MW-1U	2" PVC	39.20'	24.59'
Manager and Transport	MW-2D	2" PVC	39.20'	26.94'
	MW-3D	2" PVC	49.30'	38.96'
	MW-4D	2" PVC	44.00'	19.07'
	T		T 40 001 T	27.04
SOUTH CHARLESTON		2" PVC	66.00'	27.91'
	NW-1	2" PVC	319.00'	>300'
	NW-2	2" PVC	380.00'	181.51'
	NW-3	2" PVC	340.00'	268.51'
WHEELING	MW-GR	2" PVC	195.00'	169.79'
	MW-1	2" PVC	115.00'	87.99'
	MW-4	2" PVC	35.00'	22.13'
	MW-5	2" PVC	27.00'	19.82'
MANAGERICA	T NAV4 2 T	all puc	165 551	ודר מס
WYOMING	MW-2	2" PVC	165.55'	98.27'
	MW-4	2" PVC	75.55'	25.19'
	MW-6	2" PVC	29.12'	16.38'
	MW-8	2" PVC	17.91'	8.39'

Ground Water Monitoring For LCAP

DEP15657

Contractor's Bid Sheet

Bio-Chem Testing
5 Weatheridge Drive
State Route 34
Otate The Large

SAC Sections to united victorial and ordered section to	Hurricane, WV 25520
	The DEP reserves the right to request additional information and supporting documentation regarding unit prices when the unit price appears to be unreasonable.

Vendors Name:

ITEM NO.	Quantity	ITEM DESCRIPTION	UNIT COST	TOTAL COST
0001	296	Field services (twice/year = 2 x 148) per well	\$200	\$ 59,200
0002	29	Statistical analysis setup (once)	\$175	\$ 5,075
0003	58	Statistical analysis and reporting (twice/year = 2 x 29)	\$ 150	\$8,700
		Quantities are estimated for bidding purposes. Actual field quantities may vary.		
		TOTAL		\$ 72,975

Rev. 09/08

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application* is hereby made for Preference in accordance with West Virginia Code, §5A-3-37. (Does not apply to construction contracts). West Virginia Code, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid)

- 3	ecorda	nce for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in ince with the West Virginia Code This certificate for application is to be used to request such preference. The Purchasing will make the determination of the Resident Vendor Preference, if applicable.
1	1. *\ 	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or 80% of the ownership interest of Bidder is held by another individual, partnership, association or corporation resident vendor who has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification; or, Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
-	2.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
6	3.	Application is made for 2.5% resident vendor preference for the reason checked: Bidder is a nonresident vendor employing a minimum of one hundred state residents or is a nonresident vendor with an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia employing a minimum of one hundred state residents who certifies that, during the life of the contract, on average at least 75% of the employees or Bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
	4.4	Application is made for 5% resident vendor preference for the reason checked: Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
	5.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
	6.	Application is made for 3.5% resident vendor preference who is a veteran for the reason checked: Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
	require agains or ded	r understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the ements for such preference, the Secretary may order the Director of Purchasing to: (a) reject the bid; or (b) assess a penalty of such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency fucted from any unpaid balance on the contract or purchase order.
	author the red deem	omission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and rizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid quired business taxes, provided that such information does not contain the amounts of taxes paid nor any other information ed by the Tax Commissioner to be confidential.
		r penalty of law for false swearing (West Virginia Code, §61-5-3), Bidder hereby certifies that this certificate is true occurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate ges during the tempontract, Bidder will notify the Purchasing Division in writing immediately. 5 Weatherldge Drive
	Bidde	er: State Route 34 Hurricane, WV 25526 Signed:
	Date:	5 · 1() - 12 Title:

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

RFQ No. DEP 15657

* ## 14 /Daving 19/15/00)

STATE OF WEST VIRGINIA Purchasing Division

PURCHASING AFFIDAVIT

West Virginia Code §5A-3-10a states: No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

EXCEPTION: The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (West Virginia Code §61-5-3), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

WITNESS THE FOLLOWING SIGNATURE Vendor's Name: 310 - Chrw 112 string | Date: 5-10-12 Authorized Signature: Date: 5-10-12 State of 400 | County of 400 | Cou

Attachment I

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION DIVISION OF WATER AND WASTE MANAGEMENT

Annual Certified Parameter List

for

BIO-CHEM TESTING, INC.

TEAYS, WEST VIRGINIA

PARAMETERS CERTIFIED

NONPOTABLE WATER INORGANIC NONMETALS

ANALYTE	<u>METHOD</u>	TECHNOLOGY
Acidity	SM19th2310 B(4a)	Titrimetric
Alkalinity	SM19th2320 B	Titrimetric
Ammonia	SM190th4500-NH3 B	Distillation
Ammonia	SM18th4500-NH3 E	Titrimetric
Ammonia	HACH8038	Spectrophotometric
Bromide	EPA300.0 Rev. 2.1	IC
Chloride	EPA300.0 Rev. 2.1	IC
Chloride	SM19th4500-Cl C	Titrimetric
Chlorine, Residual	SM19th4500-Cl G	Spectrophotometric
Chlorine, Residual (Field Test)	SM19th4500-Cl G	Spectrophotometric
Chromium, Hexavalent	SM19th3500-Cr D	Colorimetric
Color	SM19th2120 B	Visual Comparison
Color	SM19th2120 E	Colorimetric
Conductance, Specific	EPA120.1	Probe
Cyanide	SM19th4500-CN ⁻ C	Distillation
Cyanide, Total	SM19th4500-CN E	Spectrophotometric
Cyanide, Available	SM19th4500-CN E	Spectrophotometric
Demand, Biochemical Oxygen (BOD)	SM19th5210 B	Probe
Demand, Carbonaceous (CBOD)	SM19th5210 B	Probe
Demand, Chemical Oxygen (COD)	HACH8000	Spectrophotometric
Fluoride	EPA300.0 Rev. 2.1	IC
Hardness, Calcium	SM19th2340B	Calculation
Hardness, Total	SM19th2340 B	Calculation
Hardness, Total	HACH 8226	Titrimetric
Kjeldahl, Total Nitrogen	SM19th4500-Norg C	Digestion
Kjeldahl, Total Nitrogen	SM19th4500-NH3 B	Distillation
Kjeldahl, Total Nitrogen	SM19th4500-NH3 C	Titrimetric
Kjeldahl, Total Nitrogen	HACH8038	Spectrophotometric

<u>ANALYTE</u>	<u>METHOD</u>	TECHNOLOGY
Nitrate	EPA300.0 Rev. 2.1	IC
Nitrate	EPA353.2 Rev. 2.0	Spectrophotometric
Nitrate-Nitrite	EPA300.0 Rev. 2.1	IC
Nitrate-Nitrite	EPA353.2 Rev. 2.0	Spectrophotometric
Nitrite	EPA300.0 Rev. 2.1	IC
Nitrite	EPA353.2 Rev. 2.0	Spectrophotometric
Oil & Grease	EPA1664 A	Gravimetric
Organic Carbon, Total	SM19th5310 C	Oxidation
Oxygen, Dissolved	SM19th4500-O G	Probe
Oxygen, Dissolved (Field Test)	SM19th4500-O G	Probe
рН	SM19th4500-H B	Probe
pH(Field Test)	SM19th4500-H B	Probe
Phenolics, Total	EPA420.1 Rev 1978	Manual Spectrophotometric
Phosphorus, ortho	SM19th4500 P E	Manual Spectrophotometric
Phosphorus, Total	SM19th4500-P B.5	Digestion
Phosphorus, Total	SM19th4500 P E	Manual Spectrophotometric
Phosphorus, Total	EPA365.1 Rev 2.0	Manual Spectrophotometric
Silica, Dissolved	EPA200.7 Rev. 4.4-1994	ICP
Silica, Dissolved	SW6010B	ICP
Solids, Dissolved	SM19th2540 C	Gravimetric
Solids, Settleable	SM19th2540 F	Imhoff
Solids, Suspended	SM19th2540 D	Gravimetric
Solids, Total	SM19th2540 B	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Sulfate	EPA300.0 Rev. 2.1	IC
Temperature	SM19th2550 B	Thermometric
Turbidity	EPA180.1 Rev. 2.0	Turbidimetric
		i di Oldilloli lo

NONPOTABLE WATER TRACE METALS

METAL	<u>METHOD</u>	TECHNOLOGY
Aluminum	EPA200.7 Rev 4.4-1994	ICP
Aluminum	EPA200.8 Rev 5.4-1994	ICP-MS
Aluminum	SW6010B	ICP
Aluminum	SW6020	ICP-MS
Antimony	EPA200.7 Rev 4.4-1994	ICP
Antimony	EPA200.8 Rev 5.4-1994	ICP-MS
Antimony	SM19th3113B	GFAA
Antimony	SW6010B	ICP
Antimony	SW6020	ICP-MS
Arsenic	EPA200.7 Rev 4.4-1994	ICP
Arsenic	EPA200.8 Rev 5.4-1994	ICP-MS
Arsenic	SM19th3113B	GFAA
Arsenic	SW6010B	ICP
Arsenic	SW6020	ICP-MS
Barium	EPA200.7 Rev 4.4-1994	ICP
Barium	EPA200.8 Rev 5.4-1994	ICP-MS

METAL	Memuon	
Barium	METHOD SW6010B	TECHNOLOGY
Barium	SW6020	ICP
Beryllium	EPA200.7 Rev 4,4-1994	ICP-MS
Beryllium	EPA200.8 Rev 5.4-1994	ICP
Beryllium	SW6010B	ICP-MS
Beryllium	SW6020	ICP
Boron	EPA200.7 Rev 4.4-1994	ICP-MS
Boron	SW6010B	ICP
Cadmium	EPA200.7 Rev 4.4-1994	ICP
Cadmium	EPA200.8 Rev 5.4-1994	ICP
Cadmium	SM19th3113B	ICP-MS
Cadmium	SW6010B	GFAA
Cadmium	SW6020	ICP MG
Calcium	EPA200.7 Rev 4.4-1994	ICP-MS
Calcium	SW6010B	ICP
Chromium	EPA200.7 Rev 4.4-1994	ICP
Chromium	EPA200.8 Rev 5.4-1994	ICP MG
Chromium	SW6010B	ICP-MS
Chromium	SW6020	ICP MG
Cobalt	EPA200.7 Rev 4.4-1994	ICP-MS
Cobalt	EPA200.8 Rev 5.4-1994	ICP MG
Cobalt	SW6010B	ICP-MS
Cobalt	SW6020	ICP MG
Copper	EPA200.7 Rev 4.4-1994	ICP-MS
Copper	EPA200.8 Rev 5.4-1994	ICP MG
Copper	SM19th3113B	ICP-MS
Copper	SW6010B	GFAA
Copper	SW6020	ICP MG
Iron	EPA200.7 Rev 4.4-1994	ICP-MS
Iron	SW6010B	ICP
Lead	EPA200.7 Rev 4.4-1994	ICP ICP
Lead	EPA200.8 Rev 5.4-1994	ICP-MS
Lead	SM19th3113B	
Lead	SW6010B	GFAA ICP
Lead	SW6020	ICP-MS
Magnesium	EPA200.7 Rev 4.4-1994	ICP-WS
Magnesium	SW6010B	
Manganese	EPA200.7 Rev 4.4-1994	ICP ICP
Manganese	EPA200.8 Rev 5.4-1994	2002
Manganese	SW6010B	ICP-MS
Manganese	SW6020	ICP-MS
Mercury	EPA245.1	CVAA
Mercury	EPA245.5	CVAA
Mercury	SW7470A	CVAA
Molybdenum	EPA200.7 Rev 4.4-1994	
Molybdenum	EPA200.7 Rev 4.4-1994 EPA200.8 Rev 5.4-1994	ICP MC
Molybdenum	SW6010B	ICP-MS
Molybdenum	SW6020	ICP
	3 W 0020	ICP-MS

<u>METAL</u> Nickel	METHOD	TECHNOLOGY
Nickel	EPA200.7 Rev 4.4-1994	ICP
Nickel	EPA200.8 Rev 5.4-1994	ICP-MS
Nickel	SW6010B	ICP
Potassium	SW6020	ICP-MS
Potassium	EPA200.7 Rev 4.4-1994	ICP
Selenjum	SW6010B	ICP
Selenium	EPA200.7 Rev 4.4-1994	ICP
Selenium	EPA200.8 Rev 5.4-1994	ICP-MS
Selenium	SM19th3113B	GFAA
Selenium	SM21st3114C*	HG/AF
Selenium	SW6010B	ICP
Silicon	SW6020	ICP-MS
Silicon	EPA200.7 Rev 4.4-1994	ICP
Silver	SW6010B	ICP
Silver	EPA200.7 Rev 4.4-1994	ICP
	EPA200.8 Rev 5.4-1994	ICP-MS
Silver Silver	SM19th3113B	GFAA
(5:35,1.58	SW6010B	ICP
Silver	SW6020	ICP-MS
Sodium	EPA200.7 Rev 4.4-1994	ICP
Sodium	SW6010B	ICP
Strontium	EPA200.7 Rev 4.4-1994	ICP
Strontium	SW6010B	ICP
Thallium	EPA200.7 Rev 4.4-1994	ICP
Thallium	EPA200.8 Rev 5.4-1994	ICP-MS
Thallium	EPA279.2	GFAA
Thallium	SW6010B	ICP
Thallium	SW6020	ICP-MS
Tin	EPA200.7 Rev 4.4-1994	ICP
Tin	SW6010B	ICP
Titanium	EPA200.7 Rev 4.4-1994	ICP
Titanium	SW6010B	ICP
Vanadium	EPA200.7 Rev 4.4-1994	ICP
Vanadium	EPA200.8 Rev 5.4-1994	ICP-MS
Vanadium	SW6010B	ICP
Vanadium	SW6020	ICP-MS
Zinc	EPA200.7 Rev 4.4-1994	ICP
Zinc	EPA200.8 Rev 5.4-1994	ICP-MS
Zinc	SW6010B	ICP
Zinc	SW6020	ICP-MS
Metals	SM19th3030E	Digestion
Metals	SM19th3030F	
Selenium	SM21st3114B (4.c)	Digestion
Total Metals	EPA200.7 Rev 4.4-1994	Digestion
Total Metals	EPA200.8 Rev 5.4-1994	Digestion
Total Recoverable Metals	EPA200.7 Rev 4.4-1994	Digestion
Total Recoverable Metals	EPA200.7 Rev 4.4-1994 EPA200.8 Rev 5.4-1994	Digestion
Dissolved Metals	EPA200.8 Rev 5.4-1994 EPA200.7 Rev 4.4-1994	Digestion
	LI A200.7 REV 4.4-1994	

METAL Dissolved Metals

*Modified

METHOD EPA200.8 Rev 5.4-1994

TECHNOLOGY

NONPOTABLE WATER MICROBIOLOGY

GROUPMETHODTECHNOLOGYFecal ColiformSM19th9222 DMembrane FilterFecal ColiformSM19th9221 EMost Probable NumberTotal ColiformSM19th9222 BMembrane FilterE-coliHACH10029Membrane Filter

WHOLE EFFLUENT TOXICITY

GROUP METHOD TECHNOLOGY Fathead minnow EPA821-R-02-012 2000.0 Acute Ceriodaphnia dubia EPA821-R-02-012 2002.0 Acute Daphnia puplex EPA821-R-02-012 2021.0 Acute Survival & Growth of Fathead Minnow Larval EPA821-R-02-013 1000.0 Chronic Survival & Reproduction of Ceriodaphnia EPA821-R-02-013 1002.0 Chronic

HAZARDOUS WASTE CHARACTERISTICS

PROCEDURE METHOD TECHNOLOGY Corrosivity SW9040 C Probe Reactive Cyanide Run Total Cyanide by SW9010/9014 Paint Filter Test SW9095B Gravimetric TCLP (Metals) SW1311 Rotating Extractor SPLP (Metals) SW1312 Rotating Extractor

SOLID AND CHEMICAL INORGANIC NONMETALS

ANALYTE METHOD **TECHNOLOGY** Ammonia SM18th4500-NH3 B (M)*Distillation Ammonia SM18th4500-NH3 E Titrimetric Ammonia **HACH8038** Spectrophotometric Chloride SM19th4500-Cl C Titrimetric Chloride EPA300.0 Rev. 2.1 IC Cyanide, Total SM19th4500-CN C Distillation Cyanide, Total SM19th4500-CN E Spectrophotometric Fluoride EPA300.0 Rev. 2.1 IC Kjeldahl, Total Nitrogen SM19th4500Norg B Digestion Kjeldahl, Total Nitrogen SM19th4500-NH3 B Distillation Kjeldahl, Total Nitrogen SM19th4500-NH3 C Titrimetric Kjeldahl, Total Nitrogen **HACH8038** Spectrophotometric

ANIAINE		
ANALYTE	<u>METHOD</u>	TECHNOLOGY
Nitrate	EPA300.0 Rev. 2.1	IC
Nitrate	EPA353.2 Rev. 2.0	
Nitrate-Nitrite		Spectrophotometric
	EPA300.0 Rev. 2.1	IC
Nitrate-Nitrite	EPA353.2 Rev. 2.0	Spectrophotometric
Nitrite	EPA300.0 Rev. 2.1	IC
Nitrite	EPA353.2 Rev. 2.0	
рН		Spectrophotometric
S-00-00	SW9045D	Probe
Phosphorus, Total	SM20th4500-P E	Manual Spectrophotometric
Phosphorus, Total	SM19th4500-P B.5 (M)*	Digestion
Phosphorus, Total	EPA365.1 Rev. 2.0	Carried Control of the Control of th
Solids, Total		Manual Spectrophotometric
NOT THE SECOND	SM19th2540 G	Gravimetric
Solids, Volatile	EPA160.4	Gravimetric
Sulfate	EPA300.0 Rev. 2.1	
*Modified for analysis of solid and		IC.

Modified for analysis of solid and chemical matrices.

SOLID AND CHEMICAL TRACE METALS

METAL	<u>METHOD</u>	TECHNOLOGY
Aluminum	SW6010B	ICP
Antimony	SW6010B	ICP
Antimony	SW7010	GFAA
Arsenic	SW6010B	ICP
Arsenic	SW7010	GFAA
Barium	SW6010B	ICP
Beryllium	SW6010B	ICP
Boron	SW6010B	ICP
Cadmium	SW6010B	ICP
Cadmium	SW7010	GFAA
Calcium	SW6010B	ICP
Chromium	SW6010B	ICP
Cobalt	SW6010B	ICP
Copper	SW6010B	ICP
Copper	SW7010	GFAA
Iron	SW6010B	ICP
Lead	SW6010B	ICP
Lead	SW7010	GFAA
Magnesium	SW6010B	ICP
Manganese	SW6010B	ICP
Mercury	SW7470A	CVAA
Mercury	SW7471A	CVAA
Molybdenum	SW6010B	ICP
Nickel	SW6010B	ICP
Potassium	SW6010B	ICP
Selenium	SW6010B	
Selenium	SW7010	ICP
Silicon	SW6010B	GFAA
Silver	SW6010B	ICP
	3 M 00 1 0 B	ICP

METAL Silver Sodium Strontium Thallium Thallium Tin Titanium Uranium Vanadium Zinc Metals	METHOD SW7010 SW6010B SW6010B SW7010 SW6010B SW6010B SW6010B SW6010B SW6010B	TECHNOLOGY GFAA ICP ICP ICP GFAA ICP ICP ICP ICP ICP ICP ICP
Metals	SW3050B	Digestion

SOLID AND CHEMICAL MICROBIOLOGY

GROUP Fecal Coliform

METHOD SM19th9221E

TECHNOLOGY Most Probable Number

This laboratory may test **ONLY** for those environmental parameters listed above for compliance reporting purposes. All testing must be by the test method cited in the current application for certification.

_ Issued on September 06, 2011

This Certification Expires July 31, 2012.

Certificate No 220

Tommy W. Smith II

Quality Assurance Officer

BIO-CHEM TESTING, INC. 5 WEATHERIDGE DRIVE HURRICANE, WV 25526

		T	T
Position Title Laboratory Manager	Name Mukesh Shah	Academic Training HS,BA/BS,MS,PhD BS Chemistry, Biology	Experience Code/Year 1-36,2-36,5-36,6-7, 8-36
Lab Supervisor Chemistry/Microbiology Lab Supervisor Bioassay	Brian Richards Mukesh Shah	BS Biology, MS pending BS Chemistry, Biology	1-6,2-3,8-6 1-36,2-36,5-36,6-7,8-36
QA/QC Officer	John Joseph	BS Chemistry	1-38,2-4,5-6,8-1
Analyst(s)/ Technicians	Hemant Shah William E. Smith Kara Frampton Jamell Hart Nathan Milam Cindy Walker Justin Carpenter Brittany Haggerty Kellie McGettigan Zachary Lanham Fred Walker Frances Meredith	BS Chemistry BS Biology BS Biology BS Marine Science BS Biology BS Biology BS Ecology/Evo Bio BS Forensic Chemistry BS Biology BS Biology Chemistry BS,MS Education	1-11,5-11,8-11 1-10,2-10,4-3,8-9 1-8,2-7,5-8,8-8 1-5.5,5-5.5 1-3yr 7 mo 1-3yr 3 mo 1-3y8m,2-3,8-2y8m 1-8 months 1-5 months 1-5 months 1-9months,8-9months
Support Personnel e.g. Electronics tech, Samplers, etc.	Anu Shah Paul Ice	BS Chemistry, Some Accounting and Computer Courses BS Agronomy	8-6 Sample pickup only, Accounting 1-12,5-10,8-12

EXERIENCE CODES USED

1-Chemistry 2-Atomic Absorption & ICP 4-Mass Spectroscopy 6-Bioassay 8-Sampling