

AGENDA
UTILITIES SERVICE BOARD MEETING

Utilities Service Board Room
City of Bloomington Utilities
600 E. Miller Dr.
Bloomington, Indiana 47402

Julie Roberts, President
Jim Sherman, Vice President
Jason Banach
Amanda Burnham
Jean Capler
Jeff Ehman
Sam Frank
Terri Porter, ex-officio
Jim Sims, ex-officio

September 17, 2018

4:15 P.M. Property and Planning Subcommittee Meeting

Subcommittee members: Banach, Capler, and Frank; Alternate: Burnham

- I. Call to order
- II. Discussion of Options for Decommissioned Griffy Water Treatment Plant
- III. Petitions and Communications*
- IV. Adjournment

* Brief public comment will be limited to 5 minutes per person.



VET ENVIRONMENTAL ENGINEERING, LLC

2335 West Fountain Drive, Bloomington, IN 47404

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Email: info@vet-env.com

September 11, 2018

Mr. Mike Hicks
City of Bloomington Utilities
600 E. Miller Dr.
Bloomington, IN 47401

**RE: Proposal for Phase II Mercury Clean-up (Task 9)
Former Griffy Water Treatment Plant
3501 North Dunn Street, Bloomington, Indiana**

Dear Mr. Hicks,

VET Environmental Engineering, LLC (VET) proposes to conduct further investigation of the interior and exterior of the former Griffy Water Treatment Plant located at 3501 North Dunn Street, Bloomington, Indiana (Site). Previous tasks addressed remediation of readily accessible spilled elemental mercury and contaminated debris. This phase of the operation will address areas of the Site that are currently flooded and have, to this point, been inaccessible. Dewatering of the structure and associated storage tanks will allow for investigation and remediation of the remainder of the Site. The ultimate goal of this phase is to ready the building for demolition.

VET proposes to conduct this work at the Site on a time and material basis with costs not to exceed **\$298,088.15**. VET's standard rates are provided below. All work will be billed in accordance with VET's standard rates and the rates set forth by VET's subcontractors plus a standard mark-up. VET proposes to complete the following tasks in the support of remediation work at the Site:

Item 1: Dewatering the clear well, the building, and associated infrastructure as necessary to allow investigation and cleanup of remaining mercury contamination. Water will be pumped into the sewer system and ultimately discharged to the Blucher Poole Wastewater Treatment Plant. VET will provide oversight for the pumping phase of the operation, the City of Bloomington Utilities Department (CBU) will provide the pump, piping, and access to the sewer system.

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Item 2: Recovery, characterization, and disposal of any remaining spilled mercury and potentially contaminated debris that may contain mercury, lead-based paint chips, and asbestos from areas previously not accessible.

Item 3: Waste characterization of select media including concrete areas cleaned of mercury during Phase I work activities and oil contained within remaining water treatment equipment to determine disposition during future demolition activities.

Item 4: Investigation of outside infrastructure including the clarifier, a venturi meter pit, and coagulation pits for mercury equipment and/or contamination and to characterize any contents within these structures for ultimate waste disposal.

Item 5: Characterize, containerize and dispose of the contents of defunct equipment reservoirs, unknown materials in a poly tank and abandoned drums.

Item 6: Investigation of surface soils adjacent to building entrances to determine if mercury contamination has occurred prior to commencement of remediation activities.

Item 7: Investigation of subsurface soil and groundwater for the presence or absence of mercury and other contamination by advancing soil borings and installing groundwater monitoring wells.

Item 8: Investigation and evaluation of historical drawings to identify potential drain pipe discharge points to the surrounding environment including Griffy Creek and sampling of the associated discharge areas, if warranted, to ensure no off-Site migration of contamination has occurred.

Item 8: Oversight and documentation of the filling of the large basement trench with concrete. CBU will provide a concrete contractor.

Item 9: Pursue a temporary air permit for a portable crusher that will allow CBU to crush limestone, concrete, and brick materials on-Site and use this material for backfill.

Item 10: Evaluate options for abatement and disposal of friable asbestos roofing materials identified during Phase I of remediation activities on the Site.

Item 11: Evaluate options for abatement and disposal of transite piping materials identified on Site plans. This piping material has been inaccessible during past phases of the remediation and abatement due to flooding in the building.

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Item 12: Generate report documenting completion of the remediation project. Final report will include documentation of remediation activities, containment and control measures, and waste disposal. Photographs documenting the remediation will be included.

Item 13: Appropriate coordination with regulatory stakeholders, primarily, the Indiana Department of Environmental Management (IDEM).

This proposal is based on the client providing the following:

1. security to prevent unauthorized access to the Site,
2. pump and piping to dewater the building,
3. heavy equipment and operator to open the clear well,
4. concrete and a concrete pumper truck to pump concrete into the basement trench
5. permission to discharge water from the Site to the sanitary sewer system and ultimately the Blucher Poole Wastewater Treatment Plant.

Any additional requested environmental consulting work will be billed on a time and material basis at the following rate schedule. VET further understands that this project needs to be completed in a timely manner and as cost-effectively as possible.

VET Standard Rates 2018

Principal Engineer	\$125/hour
Registered Professional Engineer	\$110/hour
Licensed Professional Geologist	\$90/hour
Project Manager	\$85/hour
Senior Environmental Scientist	\$85/hour
Graduate Geologist	\$80/hour
Staff Project	\$80/hour
Chemist	\$75/hour
Environmental Scientist	\$70/hour
Ecologist	\$70/hour
Senior Environmental Technician	\$70/hour
Environmental Technician	\$60/hour
GIS Analyst	\$60/hour
Clerical	\$50/hour
Mileage	\$0.70/mile
Outside Services and Expenses	Cost plus 15%

We will produce the best product we are capable of while striving to be as cost effective for you as possible. We will continue to work with our staff and contractors to provide you with

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the best possible cost for the project. Thank you again for this opportunity. If you have questions or comments regarding anything contained in this proposal, please do not hesitate to call the office at (812) 822-0400. If you are comfortable with the proposal as it stands, please sign below and return to me at email: info@vet-env.com or by fax: (812) 650-3892.

Respectfully submitted,



Sara Rae Hamidovic, MS, PE, CHMM
Principal Engineer

Proposal Acceptance	
Signature	Date

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Mercury Cleanup Phase II Cost Estimate (Task 9)
Former Griffy Water Treatment Plant Site - 3501 North Dunn Street
Bloomington, Indiana - September 11, 2018

Activity	Note	Number	Units	Unit Cost	Total Cost
Project Management & Labor					
Project Oversight/Task Project Management	Principal Engineer - VET	160	hours	\$ 125.00	\$ 20,000.00
Field Work	Project Manager - VET	160	hours	\$ 85.00	\$ 13,600.00
	Technician - VET	160	hours	\$ 60.00	\$ 9,600.00
	Technician - VET	160	hours	\$ 60.00	\$ 9,600.00
Reporting	Principal Engineer - VET	40	hours	\$ 125.00	\$ 5,000.00
	Senior Environmental Scientist - VET	24	hours	\$ 85.00	\$ 2,040.00
	Project Manager - VET	24	hours	\$ 85.00	\$ 2,040.00
	Technician - VET	64	hours	\$ 60.00	\$ 3,840.00
Waste Characterization					
Waste Characterization - Drum Composite	TCLP RCRA Metals	15	each	\$ 115.00	\$ 1,725.00
	Total PCBs	15	each	\$ 57.50	\$ 862.50
Waste Characterization - Concrete Composite	TCLP RCRA Metals	3	each	\$ 115.00	\$ 345.00
	Total PCBs	3	each	\$ 57.50	\$ 172.50
Waste Characterization - Poly Tank & Pink "Acid" Drum	Full TCLP (With Total PCBs, Pest, etc.)	2	each	\$ 796.95	\$ 1,593.90
Wastewater Characterization - Clearwell Composite	RCRA Metals	1	each	\$ 80.50	\$ 80.50
	Oil and Grease	1	each	\$ 50.50	\$ 50.50
	Total PCBs	1	each	\$ 57.50	\$ 57.50
	pH	1	each	\$ 13.50	\$ 13.50
	Low Level Mercury	1	each	\$ 92.00	\$ 92.00
Equipment Oil Characterization	RCRA Metals	3	each	\$ 115.00	\$ 345.00
	PCBs	3	each	\$ 80.50	\$ 241.50
Surface Soils & Sediment (Entrance)	VOCs (1 Duplicate) (Trip Blank)	9	each	\$ 74.75	\$ 672.75
	PAHs (1 Duplicate)	8	each	\$ 86.25	\$ 690.00
	RCRA Metals (1 Duplicate)	8	each	\$ 80.50	\$ 644.00
	PCBs (1 Duplicate)	8	each	\$ 80.50	\$ 644.00
Sub-Surface Soils (Soil Borings)	VOCs (1 Duplicate) (Trip Blank)	10	each	\$ 74.75	\$ 747.50
	PAHs (1 Duplicate)	9	each	\$ 86.25	\$ 776.25
	RCRA Metals (1 Duplicate)	9	each	\$ 80.50	\$ 724.50
	PCBs (1 Duplicate)	9	each	\$ 80.50	\$ 724.50
Groundwater	VOCs (1 Duplicate) (Trip Blank)	5	each	\$ 74.75	\$ 373.75
	PAHs (1 Duplicate)	4	each	\$ 86.25	\$ 345.00
	RCRA Metals (1 Duplicate)	4	each	\$ 80.50	\$ 322.00
	PCBs (1 Duplicate)	4	each	\$ 80.50	\$ 322.00
Level 4 Data Package		6	each	\$ 86.25	\$ 517.50
Waste Management					
Cubic Yard Box Hazardous Elemental Hg Waste Disposal	Veolia	2	each	\$ 6,382.50	\$ 12,765.00
Cubic Yard Box Hazardous Waste Disposal	Waste Management	3	each	\$ 2,700.00	\$ 8,100.00
Cubic Yard Box Non-hazardous Waste Disposal	Waste Management	5	each	\$ 300.00	\$ 1,500.00
Drum Hazardous Elemental / Retort Furnace	Veolia	10	each	\$ 2,731.00	\$ 27,310.00
Drum Hazardous Waste Disposal	Veolia	10	each	\$ 350.00	\$ 3,500.00
Drum Non-hazardous Waste Disposal	Waste Management	90	each	\$ 150.00	\$ 13,500.00
Waste Transportation	Varies	6	trips	\$ 1,800.00	\$ 10,800.00
Personal Protective Equipment					
Respirator Daily Charge		45	days	\$ 25.00	\$ 1,125.00
Hg Vapor Cartridges		8	each	\$ 75.00	\$ 600.00
Latex Boot Covers		45	each	\$ 15.00	\$ 675.00
Tyvek Suits		45	each	\$ 29.00	\$ 1,305.00
Equipment					
Mercury Vapor Analyzer (Gerome)		1	month	\$ 3,100.00	\$ 3,100.00
PID-FID		2	days	\$ 300.00	\$ 600.00
Trimble Geo 7X GPS		2	days	\$ 150.00	\$ 300.00
Stair Climbing Hand Truck Rental		1	month	\$ 1,150.00	\$ 1,150.00
Low-Flow Groundwater Sampling Equipment/Tubing		1	days	\$ 750.00	\$ 750.00
MS Surface Pro Tablet		15	days	\$ 50.00	\$ 750.00
Hammer Drill w bits		1	days	\$ 100.00	\$ 100.00
Hg Absorbent Amalgam		5	each	\$ 52.00	\$ 260.00
Hg\ Mercury Decontaminant		5	lb	\$ 46.00	\$ 230.00
Contractors					
Remediation Contractor	ERS, Inc	1	Lump	\$ 108,565.00	\$ 108,565.00
Surveyor (Soil Borings / Monitoring Wells)	TBD	1	Lump	\$ 1,500.00	\$ 1,500.00
Driller (8 Borings and 4 2" Wells)	TBD	1	Lump	\$ 9,100.00	\$ 9,100.00
Other					
On-site Crusher Air Permit (if required)		1	Lump	\$ 3,500.00	\$ 3,500.00
VET Field Trailer		15	day	\$ 25.00	\$ 375.00
Mileage		500	each	\$ 0.70	\$ 350.00
Daily Field Expense		15	each	\$ 25.00	\$ 375.00
Per Diem		60	person/day	\$ 35.00	\$ 2,100.00
Miscellaneous Expenses		1	each	\$ 5,000.00	\$ 5,000.00
Total Cost Estimate					\$ 298,688.15