

Town of Altavista

Town Council Work Session Agenda

J.R. "Rudy" Burgess Town Hall
510 7th Street
Altavista, VA 24517

Tuesday, October 27, 2015

5:00 PM Council Work Session

- 1. Call to Order**
- 2. Agenda Amendments/Approval**
- 3. Public Comments –Agenda Items Only**
- 4. Introductions and Special Presentations**
 - a. Staunton River Boat Ramp Concepts**
 - b. IALR's WWTP Emergency Overflow Pond Re-characterization**
- 5. Items Contingent for the Regular Meeting**
 - a. Economic Development Marketing (Tagline)**
 - b. Declaration of Surplus (Fire Hydrants)**
 - c. VDOT Route 43 "Gateway Project" update**
- 6. Items Scheduled for the Regular Meeting Agenda**
- 7. Public Comments – Comments are limited to three (3) minutes per speaker.**
- 8. Adjournment**

NEXT SCHEDULED REGULAR TOWN COUNCIL MEETING: TUESDAY, NOVEMBER 10, 2015 @ 7:00 p.m.

Notice to comply with Americans with Disabilities Act: Special assistance is available for disabled persons addressing Town Council. Efforts will be made to provide adaptations or accommodations based on individual needs of qualified individuals with disability, provided that reasonable advance notification has been received by the Town Clerk's Office. For assistance, please contact the Town Clerk's Office, Town of Altavista, 510 Seventh Street, Altavista, VA 24517 or by calling (434) 369-5001.

Thank you for taking the time to participate in your Town Council meeting. The Mayor and Members of Council invite and encourage you to attend whenever possible because good government depends on the interest and involvement of citizens.



Town of Altavista, Virginia Work Session Agenda Form

Meeting Date: October 27, 2015

Agenda Item: Staunton River Boat Ramp Concept

Summary: At the July 14, 2015 Town Council meeting, staff was authorized to proceed with the preliminary engineering assessment related to the proposed boat ramp on the Staunton River. The firm of Gay & Neel was hired to assess the site and create a layout and cost estimate for the project. Attached are the two layout concepts and construction estimates based on Gay & Neel's review.

A representative of Gay & Neel will be on hand at the work session to give a presentation on the boat/canoe ramp concepts and to answer any questions.

Following review of the information/presentation, staff will be seeking guidance from Council as to the next step in this process. Does Council want to continue moving forward with the project? If so, what parameters are given by Council to staff in regard to potential funding of the project?

Staff will present information on grant opportunities at the work session.

Budget/Funding: Cost is based on the attached estimates plus the purchase of the land (\$40,000).

Legal Evaluation: The Town Attorney will be available to address legal issues.


Attachments: Boat/Canoe Ramp Concepts and Cost Estimates; News & Advance Article regarding James River access & economic development

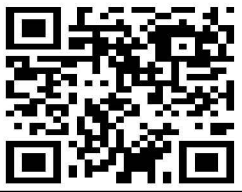
Council Recommendations:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action
Consensus Poll on Action ____ (Aye) ____ (Nay)

X:\Drawings\2630\ENGINEERING\Design\Plans\2630_BaseMap.dwg
Layout1 - 08/27/2015 11:20:11 AM, Lhs, DWG To PDF.pc3, 1:1



**GAY AND NEEL, INC.**
ENGINEERING ♦ LANDSCAPE ARCHITECTURE ♦ SURVEYING


1260 Radford Street
Christiansburg, Virginia 24073
Phone: (540) 381-6011
Fax: (540) 381-2773
Email: info@gayandneel.com
Web: www.gayandneel.com

The drawing, design, and digital files relating to this project are the property of Gay and Neel, Inc. The reproduction, copying, or other use of this drawing without GNI's written consent is prohibited.

STAUNTON RIVER BOATRAMP

TOWN OF ALTAVISTA, VIRGINIA

REVISIONS		
NO.	COMMENTS	DATE

PROJECT TEAM	
P/C	TREVOR KIMZEY, PE
P/M	KEVIN CONNER, LA
DESIGN	CBB, LEC
ISSUE DATE	
08/26/2015	
GNI JOB NO.	
2630	
SHEET TITLE	
BASEMAP	
SHEET NUMBER	
1 OF 1	



GAY AND NEEL, INC.

ENGINEERING ♦ LANDSCAPE ARCHITECTURE ♦ SURVEYING

1260 Radford Street, Christiansburg, Virginia 24073

540-381-6011 FAX 540-381-2773

Date: 08/28/2015

JN 2630

Staunton Boat Landing - Option 1

Town of Altavista, Virginia

Project Budget Estimate

Project Construction ("Hard") Costs

Section 1.00 - Earthwork & Demolition

Item	Description	Unit	Quantity	Unit Cost	Amount
1.01	Clearing & Grubbing	AC	1.5	\$ 3,000.00	\$ 4,500.00
1.02	Earthwork & Grading (cut-to-fill volume)	CY	0	\$ 6.00	\$ -
1.03	Import & Place Fill	CY	6000	\$ 10.00	\$ 60,000.00
1.04	Rock Excavation	CY	0	\$ 30.00	\$ -
1.05	Cofferdam/River Work	LS	1	\$ 60,000.00	\$ 60,000.00
1.06	Retaining Wall (segmental block)	SF	2500	\$ 40.00	\$ 100,000.00
Section Subtotal					\$ 224,500.00

Section 2.00 - Erosion Control

Item	Description	Unit	Quantity	Unit Cost	Amount
2.01	Plastic Safety Fence	LF	0	\$ 5.00	\$ -
2.02	Chain Link Safety Fence	LF	0	\$ 20.00	\$ -
2.03	Construction Entrance	EA	1	\$ 1,000.00	\$ 1,000.00
2.04	Construction Road Stabilization	SY	0	\$ 10.00	\$ -
2.05	Silt Fence	LF	500	\$ 5.00	\$ 2,500.00
2.06	Storm Drain Inlet Protection	EA	0	\$ 200.00	\$ -
2.07	Culvert Inlet Protection	EA	0	\$ 200.00	\$ -
2.08	Temporary Diversion Dikes	LF	0	\$ 6.00	\$ -
2.09	Diversion	LF	0	\$ 13.00	\$ -
2.10	Temporary Sediment Traps	EA	0	\$ 2,000.00	\$ -
2.11	Temporary Sediment Basin	EA	0		\$ -
2.12	Temporary Slope Drains	LF	0	\$ 20.00	\$ -
2.13	Paved Flume	SY	0	\$ 50.00	\$ -
2.14	Blankets & Matting - EC-2	SY	0	\$ 3.00	\$ -
2.15	Blankets & Matting - EC-3 Type B	SY	0	\$ 8.00	\$ -
2.16	Stormwater Conveyance Channel - Seeded	SY	0	\$ 5.00	\$ -
2.17	Stormwater Conveyance Channel - Riprap	SY	0	\$ 70.00	\$ -
2.18	Outlet Protection- Non-grouted Riprap	SY	0	\$ 70.00	\$ -
2.19	Riprap	SY	600	\$ 70.00	\$ 42,000.00
2.20	Rock Check Dam	SY	0	\$ 26.00	\$ -
2.21	Surface Roughening	AC	0	\$ 1,000.00	\$ -
2.22	Temporary Seeding	AC	0.5	\$ 1,400.00	\$ 700.00
2.23	Permanent Seeding & Mulching - Slope	AC	0	\$ 3,000.00	\$ -
2.24	Permanent Seeding & Mulching - Lawn	AC	0.5	\$ 3,000.00	\$ 1,500.00
2.25	Tree Protection	EA	0	\$ 100.00	\$ -
Section Subtotal					\$ 47,700.00

Section 3.00 - Pavement

Item	Description	Unit	Quantity	Unit Cost	Amount
3.01	Regular Duty Pavement - installed (2" SM, 8" Base)	SF	29724	\$ 3.00	\$ 89,172.00
3.02	Heavy Duty Pavement - installed (2" SM, 3" IM, 8" Base)	SF	0	\$ 5.50	\$ -
3.03	Concrete Pavement	SF	0	\$ 6.60	\$ -
3.04	Regular Duty Pavement Patch (small areas)	SF	0	\$ 4.00	\$ -
3.05	Heavy Duty Pavement Patch (small areas)	SF	0	\$ 6.50	\$ -
3.06	Concrete Equipment Pads	SF	2000	\$ 8.00	\$ 16,000.00
3.07	Permeable Pavers	SF	0	\$ 6.50	\$ -
3.08	Pervious Concrete	SF	0	\$ 6.50	\$ -

3.09	Fine Grading - all paved areas (grading to subgrade)	SF		\$ 0.50	\$ -
3.10	Curb & Gutter	LF	0	\$ 17.50	\$ -
3.11	Sidewalk	SF	0	\$ 5.00	\$ -
3.12	Pavement Marking	SF	1000	\$ 8.00	\$ 8,000.00
3.13	VDOT CG-12 (curb ramp)	EA	0	\$ 1,000.00	\$ -
3.14	Gravel Shoulders	SY	0	\$ 5.00	\$ -
3.15	Guardrail (Assumed VDOT GR-2)	LF	500	\$ 20.00	\$ 10,000.00
3.16	Guardrail End-units (Assumed VDOT GR-9, in pairs)	EA	2	\$ 3,000.00	\$ 6,000.00
3.17	Driveway Entrance Gutter (VDOT CG-9D)	LF	0	\$ 125.00	\$ -
3.18	Open Grid Environmental Pavers, & Steel Edging	SF	0	\$ 5.50	\$ -
3.19	Geotextile Fabric	SY	800	\$ 4.00	\$ 3,200.00
Section Subtotal					\$ 132,372.00

Section 4.00 - Misc.					
Item	Description	Unit	Quantity	Unit Cost	Amount
4.01	Fixed Bollard	EA		\$ 1,600.00	\$ -
4.02	Fence (Fabric Only)	LF		\$ 12.00	\$ -
4.03	Signs	EA	3	\$ 225.00	\$ 675.00
4.04	Split Rail Wood Fence	LF	400	\$ 20.00	\$ 8,000.00
4.05	Chain Link Fence	LF		\$ 35.00	\$ -
4.06	Pedestrian Guardrails - Straight Run	LF		\$ 150.00	\$ -
4.07	Pedestrian Guardrails - Sloped (along ramps or steps)	LF		\$ 165.00	\$ -
4.08		LS		\$ 2,500.00	\$ -
4.09		LS		\$ 4,000.00	\$ -
4.10		EA		\$ -	\$ -
Section Subtotal					\$ 8,675.00

Site Work Estimate = \$ 413,247

Section 9.00 - Construction Mobilization / Stakeout			
Item	Description	Ratio	Amount
Section Subtotal			\$ 41,324.70

Mobilized Site Estimate = \$ 454,572

Design Contingency @ \$ 90,914

Projected Final Design Estimate = \$ 545,486

Construction Contingency @ \$ 27,274.30

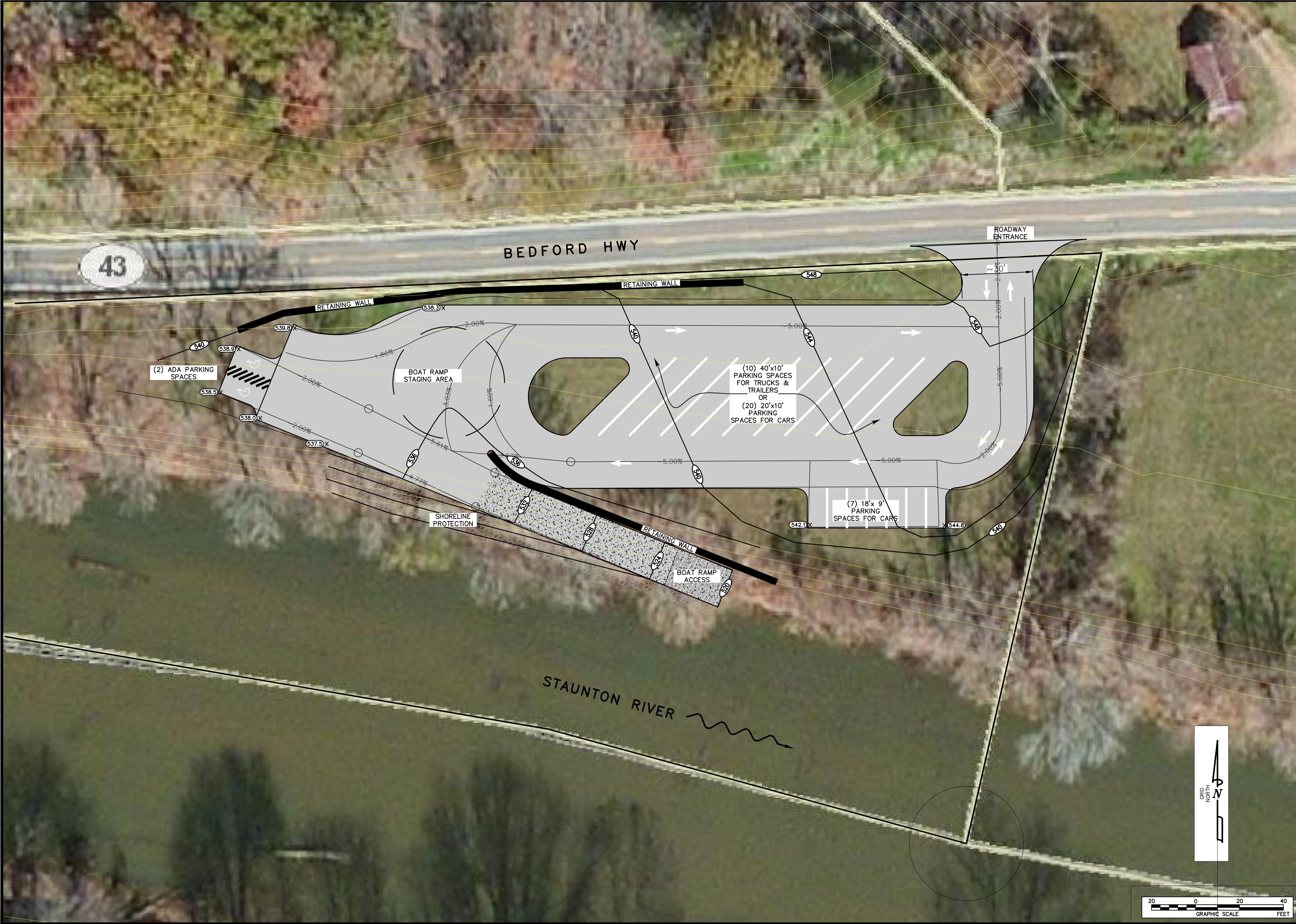
Total Opinion of Probable Construction ('Hard') Costs = \$ 572,760

Project "Soft" Costs

VSMP Permit	LS	1	\$ 3,000
Topographic Survey	LS	1	\$ 7,500
Site Design / Plan Preparation	LS	1	\$ 15,000
Site Plan Approval Process	LS	1	\$ 5,000
Joint Permit Application Process	LS	1	\$ 4,000
Bidding / Construction Contract Admin Services	LS	1	\$ 5,000
Additional FEMA Analysis / Permitting Process (if req'd)	LS	1	\$ 60,000
Total Opinion of Probable Soft Costs =			\$ 99,500

Total Project Budget Estimate (Rounded) = \$ 673,000

X:\Drawings\2630\ENGINEERING\Design\Plans\2630_BaseMap2.dwg
Layout1, 09/03/2015 1:16:54 PM, Lhs, DWG To PDF.pc3, 1:1



**GAY AND NEEL, INC.**
ENGINEERING ♦ LANDSCAPE ARCHITECTURE ♦ SURVEYING



1260 Radford Street
Christiansburg, Virginia 24073
Phone: (540) 381-6011
Fax: (540) 381-2773
Email: info@gayandneel.com
Web: www.gayandneel.com

The drawing, design, and digital files relating to this project are the property of Gay and Neel, Inc. The reproduction, copying, or other use of this drawing without GNI's written consent is prohibited.

STAUNTON RIVER BOATRAMP

TOWN OF ALTAVISTA, VIRGINIA

REVISIONS		
NO.	COMMENTS	DATE

PROJECT TEAM	
P/C	TREVOR KIMZEY, PE
P/M	KEVIN CONNER, LA
DESIGN	CBB, LEC, LHS

ISSUE DATE	
	08/26/2015
GNI JOB NO.	
	2630
SHEET TITLE	
	BASEMAP 2
SHEET NUMBER	
	1 OF 1



GAY AND NEEL, INC.

ENGINEERING ♦ LANDSCAPE ARCHITECTURE ♦ SURVEYING

1260 Radford Street, Christiansburg, Virginia 24073

540-381-6011 FAX 540-381-2773

Date: 09/10/2015

JN 2630

Staunton Boat Landing - Option 2

Town of Altavista, Virginia

Project Budget Estimate

Project Construction ("Hard") Costs

Section 1.00 - Earthwork & Demolition

Item	Description	Unit	Quantity	Unit Cost	Amount
1.01	Clearing & Grubbing	AC	1.5	\$ 3,000.00	\$ 4,500.00
1.02	Earthwork & Grading (cut-to-fill volume)	CY	3000	\$ 6.00	\$ 18,000.00
1.03	Import & Place Fill	CY	0	\$ 10.00	\$ -
1.04	Rock Excavation	CY	0	\$ 30.00	\$ -
1.05	Cofferdam/River Work	LS	1	\$ 60,000.00	\$ 60,000.00
1.06	Retaining Wall (segmental block)	SF	2200	\$ 40.00	\$ 88,000.00
Section Subtotal					\$ 170,500.00

Section 2.00 - Erosion Control

Item	Description	Unit	Quantity	Unit Cost	Amount
2.01	Plastic Safety Fence	LF	0	\$ 5.00	\$ -
2.02	Chain Link Safety Fence	LF	0	\$ 20.00	\$ -
2.03	Construction Entrance	EA	1	\$ 1,000.00	\$ 1,000.00
2.04	Construction Road Stabilization	SY	0	\$ 10.00	\$ -
2.05	Silt Fence	LF	500	\$ 5.00	\$ 2,500.00
2.06	Storm Drain Inlet Protection	EA	0	\$ 200.00	\$ -
2.07	Culvert Inlet Protection	EA	0	\$ 200.00	\$ -
2.08	Temporary Diversion Dikes	LF	0	\$ 6.00	\$ -
2.09	Diversion	LF	0	\$ 13.00	\$ -
2.10	Temporary Sediment Traps	EA	0	\$ 2,000.00	\$ -
2.11	Temporary Sediment Basin	EA	0		\$ -
2.12	Temporary Slope Drains	LF	0	\$ 20.00	\$ -
2.13	Paved Flume	SY	0	\$ 50.00	\$ -
2.14	Blankets & Matting - EC-2	SY	0	\$ 3.00	\$ -
2.15	Blankets & Matting - EC-3 Type B	SY	0	\$ 8.00	\$ -
2.16	Stormwater Conveyance Channel - Seeded	SY	0	\$ 5.00	\$ -
2.17	Stormwater Conveyance Channel - Riprap	SY	0	\$ 70.00	\$ -
2.18	Outlet Protection- Non-grouted Riprap	SY	0	\$ 70.00	\$ -
2.19	Riprap	SY	500	\$ 70.00	\$ 35,000.00
2.20	Rock Check Dam	SY	0	\$ 26.00	\$ -
2.21	Surface Roughening	AC	0	\$ 1,000.00	\$ -
2.22	Temporary Seeding	AC	0.5	\$ 1,400.00	\$ 700.00
2.23	Permanent Seeding & Mulching - Slope	AC	0	\$ 3,000.00	\$ -
2.24	Permanent Seeding & Mulching - Lawn	AC	0.5	\$ 3,000.00	\$ 1,500.00
2.25	Tree Protection	EA	0	\$ 100.00	\$ -
Section Subtotal					\$ 40,700.00

Section 3.00 - Pavement

Item	Description	Unit	Quantity	Unit Cost	Amount
3.01	Regular Duty Pavement - installed (2" SM, 8" Base)	SF	29953	\$ 3.00	\$ 89,859.00
3.02	Heavy Duty Pavement - installed (2" SM, 3" IM, 8" Base)	SF	0	\$ 5.50	\$ -
3.03	Concrete Pavement	SF	0	\$ 6.60	\$ -
3.04	Regular Duty Pavement Patch (small areas)	SF	0	\$ 4.00	\$ -
3.05	Heavy Duty Pavement Patch (small areas)	SF	0	\$ 6.50	\$ -
3.06	Concrete Equipment Pads	SF	2000	\$ 8.00	\$ 16,000.00
3.07	Permeable Pavers	SF	0	\$ 6.50	\$ -
3.08	Pervious Concrete	SF	0	\$ 6.50	\$ -

3.09	Fine Grading - all paved areas (grading to subgrade)	SF		\$ 0.50	\$ -
3.10	Curb & Gutter	LF	0	\$ 17.50	\$ -
3.11	Sidewalk	SF	0	\$ 5.00	\$ -
3.12	Pavement Marking	SF	1000	\$ 8.00	\$ 8,000.00
3.13	VDOT CG-12 (curb ramp)	EA	0	\$ 1,000.00	\$ -
3.14	Gravel Shoulders	SY	0	\$ 5.00	\$ -
3.15	Guardrail (Assumed VDOT GR-2)	LF	600	\$ 20.00	\$ 12,000.00
3.16	Guardrail End-units (Assumed VDOT GR-9, in pairs)	EA	3	\$ 3,000.00	\$ 9,000.00
3.17	Driveway Entrance Gutter (VDOT CG-9D)	LF	0	\$ 125.00	\$ -
3.18	Open Grid Environmental Pavers, & Steel Edging	SF	0	\$ 5.50	\$ -
3.19	Geotextile Fabric	SY	800	\$ 4.00	\$ 3,200.00
Section Subtotal					\$ 138,059.00

Section 4.00 - Misc.					
Item	Description	Unit	Quantity	Unit Cost	Amount
4.01	Fixed Bollard	EA		\$ 1,600.00	\$ -
4.02	Fence (Fabric Only)	LF		\$ 12.00	\$ -
4.03	Signs	EA	3	\$ 225.00	\$ 675.00
4.04	Split Rail Wood Fence	LF	400	\$ 20.00	\$ 8,000.00
4.05	Chain Link Fence	LF		\$ 35.00	\$ -
4.06	Pedestrian Guardrails - Straight Run	LF		\$ 150.00	\$ -
4.07	Pedestrian Guardrails - Sloped (along ramps or steps)	LF		\$ 165.00	\$ -
4.08		LS		\$ 2,500.00	\$ -
4.09		LS		\$ 4,000.00	\$ -
4.10		EA		\$ -	\$ -
Section Subtotal					\$ 8,675.00

Site Work Estimate = \$ 357,934

Section 9.00 - Construction Mobilization / Stakeout			
Item	Description	Ratio	Amount
Section Subtotal			\$ 35,793.40

Mobilized Site Estimate = \$ 393,727

Design Contingency @ \$ 78,745

Projected Final Design Estimate = \$ 472,473

Construction Contingency @ \$ 23,623.64

Total Opinion of Probable Construction ('Hard') Costs = \$ 496,097

Project "Soft" Costs

The following estimates are offered as budgetary placeholders for planning; a final fee proposal will be prepared upon request.

VSMP Permit	LS	1	\$ 3,000
Topographic Survey	LS	1	\$ 7,500
Site Design / Plan Preparation	LS	1	\$ 15,000
Site Plan Approval Process	LS	1	\$ 5,000
Joint Permit Application Process	LS	1	\$ 4,000
Bidding / Construction Contract Admin Services	LS	1	\$ 5,000
Additional FEMA Analysis / Permitting Process (if req'd)	LS	1	\$ 60,000
Total Opinion of Probable Soft Costs =			\$ 99,500

Total Project Budget Estimate (Rounded) = \$ 596,000

Better James River access could boost economy

Alex Rohr | Posted: Saturday, October 17, 2015 9:30 pm



Balcony Falls 6

Kayakers and canoers enter the James River at the Glasgow takeout.

Rivers running down from mountain springs through the hills and into Virginia's valleys have long provided common wealth by sustaining those living near them.

While the James River and other public waterways define the dividing lines around which jurisdictions were often drawn, the river itself is a public resource that many localities want to harness to drive economic growth.

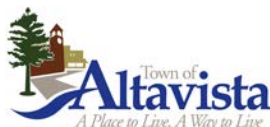
Portions are bordered by public land, such as Jefferson National Forest through Bedford County and Riveredge Park in Madison Heights, but much of the bank is owned privately. Train tracks also run its length, often on both sides.

While adding public access sites can benefit tourism-based businesses, recreation opportunities can be used to draw in unrelated industries as towns compete for employers.

"It's very cheap to put in these access points, but the use you get from the draw of people into the county or into the area is almost immeasurable compared to the amount of money that you put into it," said Rob Campbell, James River Association community conservationist. "... What it comes down to is the question of property to create the access points in the necessary areas."

While state agencies look to develop access points on public easements and property, some localities work within their communities and river advocates.

A Department of Conservation and Recreation plan proposes the “James River Heritage Trail,” which would unify flat water and stretches of rapids, as well as scenic countryside, historic markers, and walking or biking trails.



Town of Altavista, Virginia Work Session Agenda Form

Meeting Date: October 27, 2015

Agenda Item: IALR's WWTP Emergency Overflow Pond PCB Re-characterization

Summary: At the August 11, 2015 Town Council meeting, staff was authorized to proceed with the Institute of Advanced Learning and Research in regard to testing the sludge in the EOP in a manner consistent with the 2003 grid. Dr. Scott Lowman (IALR) was in charge of the re-characterization and recently he issued a report regarding the project. (Report Attached)

The results of the project show natural degradation of the levels of PCB contamination in the pond. Dr. Lowman will present the findings of the testing at the work session.

In addition, the Virginia Department of Environmental Quality (VDEQ) has pushed back the date of the Informal Fact Finding proceeding until Monday, November 30th, time and location to be determined. The information in Dr. Lowman's report should be the centerpiece of our presentation to the DEQ.

Budget/Funding: None at this time.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Attachments: IALR Site Re-Characterization Report

Council Recommendations:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action
Consensus Poll on Action ____ (Aye) ____ (Nay)

SITE RE-CHARACTERIZATION REPORT

**ALTAVISTA WWTP
ALTAVISTA, VIRGINIA
VDEQ FILE NO. VRP000320**

Submitted to:

**Mr. Waverly Coggsdale III
Town Manager
Town of Altavista
510 Seventh Street
Altavista, Virginia 24517**

Prepared by:

**J. Scott Lowman, Ph.D.
The Institute for Advanced Learning and Research
150 Slayton Avenue
Danville, Virginia 24540**

October 19, 2015

1.0 INTRODUCTION

This document presents data from the recreation of sampling procedures/locations performed in the 2003 voluntary remediation report presented to the Town of Altavista (TOA). Concerns regarding the extent of natural biodegradation which has occurred since 2003 arose when, out of 47 samples taken 10' and 20' from the south shore (**Figure 1a**), only 3 were above 100 mg/Kg. The average values of the samples were 27 and 40 mg/Kg respectively (**Figure 2**). These all were well below the reported average of 1766.6 mg/Kg in the 2003 report (**Figure 3**). Sampling was performed on March 16th 2015 and although the samples were taken from different locations compared to 2003 report, 2003 values from the 5 samples taken 50' from the shore were 2600, 630, 3000, 2300, and 540 mg/Kg, all much higher than any value seen in recent sampling. Additionally, only Aroclor 1248 was detected in 2003 whereas only Aroclor 1242 was detected in the south side characterization. Due to these apparent discrepancies and the desire to determine if or how much natural biodegradation was occurring, the Town Council of Altavista, Va. voted to re-characterize the pond. A conference call was then organized with experts including environmental engineers from the University of Iowa and biologists from the University of Maryland and the Institute for Advanced Learning and Research to discuss how to approach resampling the pond. The following protocol is a result of the discussion.

2.0 SITE RE-CHARACTERIZATION

Site re-characterization at the TOA waste water treatment pond (WWTP) included collection of samples on the same grid pattern as reported in the 2003 Voluntary Remediation Report (VRR). Samples collected for the investigation were analyzed for PCBs as Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260 according to U.S. EPA Method SW8082A (2/07) by REI Consultants, Inc. (Beaver, WV 25813). Sampling and analysis procedures are presented below. All safety procedures in the health and safety plan (HASP) for the WWTP were followed throughout the entire sample collection procedure and are attached as Appendix A. Laboratory analytical reports are provided in Appendix B.

2.1 SEDIMENT SAMPLE COLLECTION

Twenty seven (27) residual biosolid samples were collected from the base of the pond at the approximate locations in **Figure 4**. A grid was recreated using the methods reported in the 2003 VRR. The starting point for sediment sampling was location A1 (**Figure 3**), which was 50' feet from the east berm and 50' from the south berm. From this starting point, 2 foot, ½ inch re-bars were used as grid stakes and placed 100' apart along the west and east (sampling location rows A through F) berms. High strength polymer twine was then laid out and marked at the 50' point and then every 100' for the length of the pond and sampling locations were labeled with water proof tape. The twine was then stretched taught over the length of the pond from west to

east at row A. One row was sampled and the twine was then moved 100' north to capture the remaining rows B-F. Two" PVC pipe was placed at each sample point to mark the locations and at the end of sampling, the re-bar grid markers were driven into the ground to mark the grid location for future sampling.

Biosolid samples were collected using a 1" diameter sampler (**Figure 1b**). The sampler was advanced through the entire vertical column of biosolids until the sampler encountered the clay liner of the pond. The average depth of the residual biosolids were 1' to 1.5' for most of the pond, with areas around the island (**Figure 3 and 5**) and near the northeast shore approaching 2.5'. The sampler was advanced approximately 2 inches into the clay liner to effectively plug the sampler. The biosolids were then collected from the sampler above the clay liner, ensuring the entire vertical column was represented. With each sample, the plug of clay was removed and the sample was then extruded into a 14" metal pan (**Figure 1c**) and homogenized utilizing a metal spatula by cutting and blending for approximately one minute. A 5 ounce subsample was then placed in a 6 ounce chemically clean clear glass sample jar provided by REI, Inc at each sample location (**Figure 1d**). After each sample was complete, the sampler, pan, and spatula were all decontaminated using 99% ethanol and paper towels. Chain of custody forms were completed and remained with the samples throughout the entire event. All samples were collected, stored, and transported below 4° C and custody seals were attached appropriately. The TOA provided the watercraft necessary to collect the samples.

2.2 SAMPLE RESULTS

Aroclor 1242 was detected in all samples. As shown in **Figure 3**, PCBs are distributed throughout the pond. As stated in the 2003 report, the observed distribution of PCBs suggests that PCBs were dissolved in wastewater, and associated with fine sediments discharged to the pond. Evaporation, flocculation, and currents caused by winds served to distribute the PCBs throughout the footprint.

The highest concentrations are located at and to the north of the island where reportedly there is a discharge pipe which can be seen in earlier satellite photos (**Figure 5**). Rows E and F levels are significantly higher than any other row. Throughout the rest of the pond, values varied from 1.9 mg/Kg to 242 mg/Kg, lower than the 2003 report. Average values of the samples in the current report for rows A-D were 78 mg/Kg compared to the 2003 report where the A-D average was 1123 mg/Kg. The overall averages for the reports were 1767 mg/Kg in 2003 and 183.3 mg/Kg in 2015 (**Figure 6**). Additional data indicates the Aroclor detected in 2003 was 1248, while in 2015 no 1248 was detected, only 1242. Eighty one percent, or 22 of the 27 data points, were lower in 2015 compared to 2003. Together these data indicate significant biodegradation has occurred.

A couple of discrepancies were noted. F3 and F4 values were much higher compared to values recorded in 2003. This may be explained by the apparent transport and accumulation of sediment in the northeast corner (**Figure 5**). Prevailing weather and wind patterns would be

expected to drive water currents in that direction, creating an accumulation of biosolids. This area indeed had the greatest depth of biosolids during collection. Additionally, the accuracy of the grid on row F was affected by the berm, which was placed after the last sampling in 2003. Because of the berm, an approximate position had to be estimated for F3 and F4. This may have also contributed to the discrepancies in values. Of the values recorded in rows A-E, only one (E4) was clearly higher compared to 2003 (**Figure 4**).

3.0 CONCLUSIONS

Overall, the 2015 re-characterization of the WWTP indicates much lower levels of PCBs present throughout most of the pond. While the areas of highest concentration are still located in the north side of the pond, values are significantly lower than those recorded in 2003. The central and south side of the pond (rows A-D) samples have an average value of 77 mg/Kg, nearing the acceptable target value of 50 mg/Kg. This represents approximately 67% of the pond. Re-characterization data also demonstrates a more homogenous distribution of PCBs compared to the 2003 report, where a value of 19 mg/Kg was found 100' between values of 17,000 mg/Kg and 4,100 mg/Kg (**Figure 3, E1-E3**). In 2015, the values of E1-E3 were 555, 387, and 657 mg/Kg, respectively, indicating the PCBs may have been distributed or significant biodegradation has occurred. It was noted by TOA staff that the pond, over the years, is continually under wet or dry cycles, which may increase biodegradation. This, in combination with relatively warm water temperatures in the shallow pond as well as high nutrient concentrations, make this an ideal site for natural attenuation of organic molecules. Therefore, attributing the clear reduction of PCB concentrations to biodegradation by both anaerobic and aerobic bacteria in the pond is reasonable to infer as a high nutrient and sequential aerobic-anaerobic environment has been proven to hasten natural attenuation of PCBs (Chen et al., 2014).

4.0 REFERENCES

Chen Chen, Chunna Yu, Chaofeng Shen, Xianjin Tang, Zhihui Qin, Kai Yang, Muhammad Zaffar Hashmi, Ronglang Huang, and Huixiang Shi. "Paddy field—A natural sequential anaerobic—aerobic bioreactor for polychlorinated biphenyls transformation." *Environmental Pollution* 190 (2014): 43-50.

Draper Aden Associates. "Voluntary Remediation Report, Altavista WWTP, Altavista Virginia." (2003).

5.0 FIGURES



Figure 1. (a) Example of taking samples 10 and 20 feet from the shore on 3/16/15. (b) Sampler used for the pond re-characterization in 2015. (c) 14 inch metal pan used to homogenize each sample. (d) Sample jar with custody seal applied.

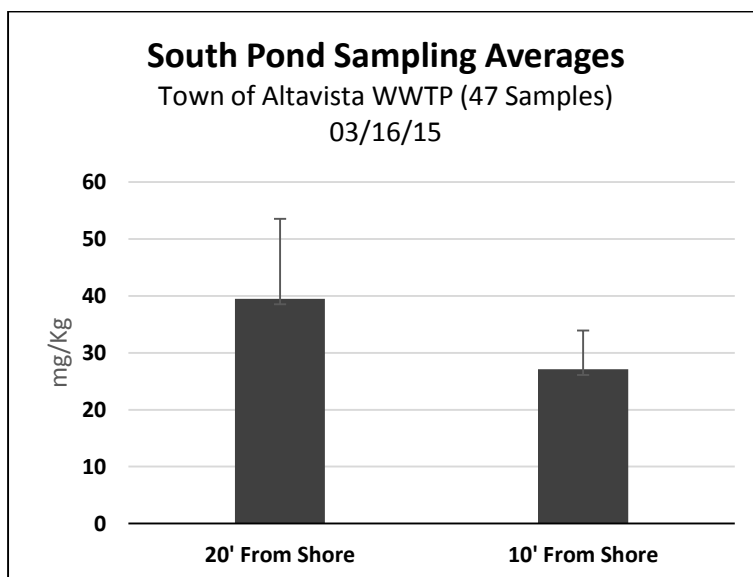


Figure 2. Averages of sample values from 10' and 20' off the shoreline on the south side of the pond. Forty seven total samples were taken and averaged. The bars indicate standard error.

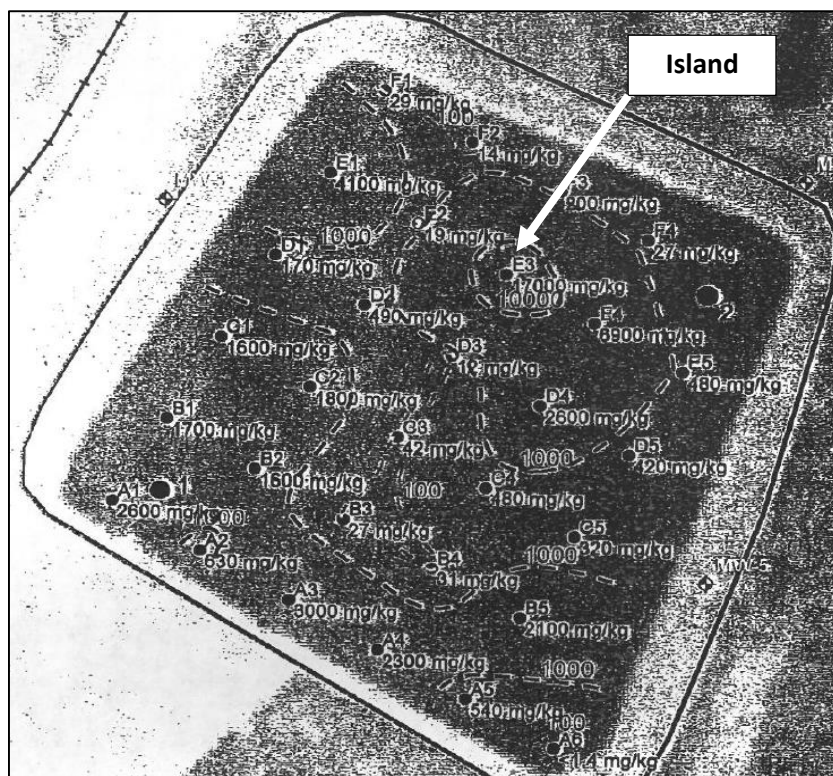


Figure 3. Sample analysis results from the 2003 Voluntary Remediation Report.



Figure 4. 2015 pond re-characterization results. Blue indicates the sample position. White represents data from the 2003 VRR. Yellow indicates results from the 2015 sampling.

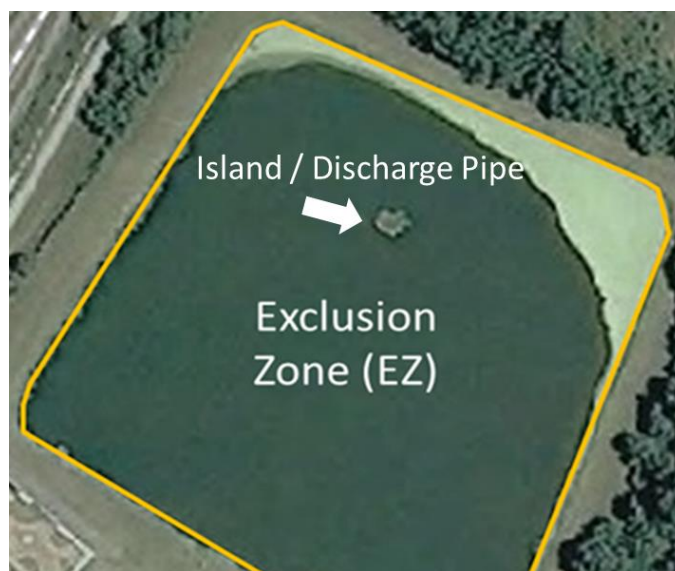


Figure 5. Location of discharge pipe / island and demonstration of sediment accumulation in the northeast area.

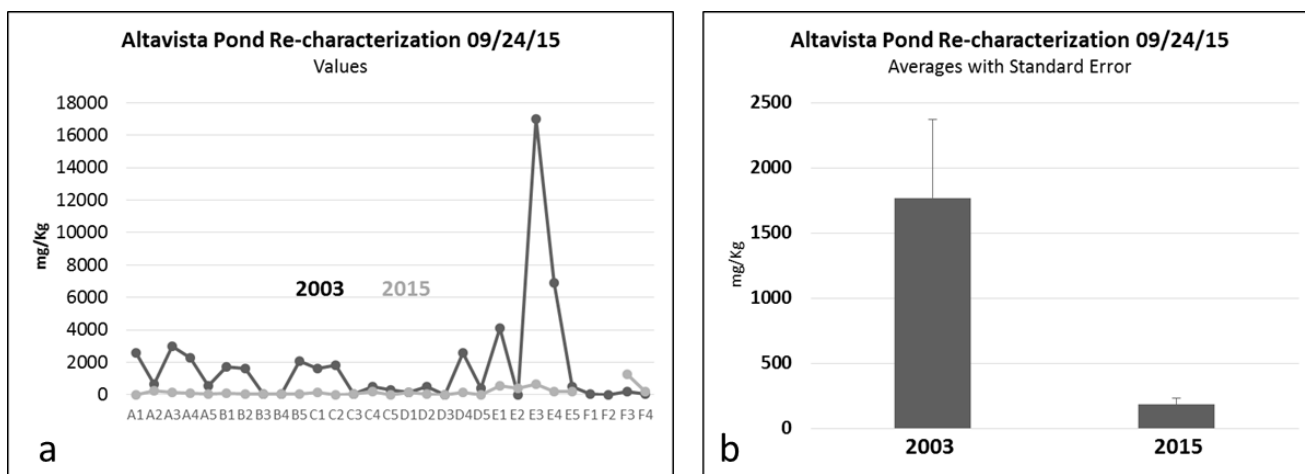


Figure 6. (a) Individual values of the 2003 and 2015 samplings. The black line represents 2003 sample points and the gray line represents 2015 results. (b) Averages of the two sampling events. The bars represent standard error.

HEALTH AND SAFETY PLAN (HASP)

Site: ALTAVISTA WWTP EMERGENCY OVERFLOW POND

Location: ALTAVISTA, VIRGINIA

Date Prepared: DECEMBER 2014

Project Description: ON SITE RESEARCH AND DEVELOPMENT (R&D) FOR PCB REMEDIATION (EPA 40 CFR Ch. 1 (7-1-05 Edition) PART 761.3 p. 611) BIODEGREATION (1)

And

ON SITE TREATABILITY STUDY (EPA 40 CFR Ch. 1 (7-1-05 Edition) PART 761.3 p. 612 1, 3, and 4) TO DETERMINE AMENDABILITY AND EFFICACY OF BIODEGREATION IN SLUDGE

Potential Waste Types: Polychlorinated biphenyls (PCBs)

Characteristics: Aroclor 1248, nonvolatile, strongly bound to soil particles and organic-rich biosolids (2)

Status: Limited use sewer overflow lagoon.

Background Review: Site Records Review

THE TOWN OF ALTAVISTA (TOA) DOES NOT GUARANTEE THE HEALTH OR SAFETY OF ANY PERSON ENTERING THIS SITE. DUE TO THE NATURE OF THIS SITE AND THE ACTIVITY OCCURRING THEREON, IT IS NOT POSSIBLE TO DISCOVER, EVALUATE, AND PROVIDE PROTECTION FOR ALL POSSIBLE HAZARDS THAT MAY BE ENCOUNTERED. STRICT ADHERENCE TO THE HEALTH AND SAFETY GUIDELINES SET FORTH HEREIN WILL REDUCE, BUT NOT ELIMINATE, THE POTENTIAL FOR INJURY AT THIS SITE. THE HEALTH AND SAFETY GUIDANCE IN THIS PLAN WAS PREPARED TO SERVE AS AN EXAMPLE TO POTENTIAL CONTRACTORS, SUBCONTRACTORS, AND RESEARCHERS WHO MAY WORK AT THIS SITE.

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

RESEARCHERS AND CONTRACTOR CERTIFICATIONS

By their signature, the undersigned hereby certify that this HASP has been reviewed and approved for use at the Altavista WWTP, Altavista, Virginia.

PROJECT MANAGER

DATE

TOWN MANAGER

DATE

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

Table of Contents

1.0	INTRODUCTION.....	4
1.1	Purpose.....	4
1.2	Stop Work Authority.....	4
1.3	Scope of Work.....	4
2.0	PROJECT ORGANIZATION AND RESPONSIBILITIES.....	5
2.1	Town of Altavista.....	5
2.2	Project Manager (Researcher).....	5
2.3	Site Personnel.....	5
3.0	SITE HISTORY AND DESCRIPTION.....	6
3.1	Location.....	6
3.2	Site History and Current Conditions.....	6
3.2.1	WWTP History.....	6
3.2.2	Current Conditions.....	6
3.3	Project Description – Bioremediation Research.....	7
3.3.1	Polychlorinated Biphenyls.....	7
4.0	POTENTIAL SITE HAZARDS.....	7
4.1	Polychlorinated Biphenyls.....	7
5.0	PERSONAL PROTECTIVE EQUIPMENT.....	8
5.1	Summary.....	8
5.2	PPE Required.....	8
6.0	SITE ZONE CONTROL MEASURES.....	8
6.1	Site Zones.....	8
7.0	DECONTAMINATION.....	9
7.1	PPEs.....	9
7.1.1	Minimizing Contacts with Contamination.....	10
7.1.2	Personnel Decontamination.....	10
7.1.3	Hand-Held Equipment Decontamination.....	10
7.1.4	Heavy Equipment Decontamination.....	11
8.0	SAMPLE COLLECTION.....	11
8.1	Log Book.....	11
8.2	Shipping Samples.....	12
8.3	Sample Size.....	12
9.0	EMERGENCY CONTACT.....	12
9.1	911.....	12
10.0	FIELD PERSONNEL REVIEW.....	12
10.1	Form.....	12

Appendix A - Site Map

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

1.0 INTRODUCTION

1.1 Purpose

This Health and Safety Plan (HASP) addresses the health and safety practices which will be employed by workers participating in investigation activities at the Altavista Waste Water Treatment Pond (WWTP) site (Site) located in Altavista, Virginia. The HASP takes into account specific hazards inherent to the Site, and presents procedures to be followed by Consultants, Contractors, Researchers, and all site visitors in order to avoid and, if necessary, protect against health and/or safety hazards. Activities performed under this HASP will comply with applicable parts of OSHA Regulations, primarily 29 CFR Parts 1910 and 1926 and the WISHA equivalent. A copy this HASP will be maintained for the duration of work. All workers who may participate in activities at the Site are required to comply with the provisions specified in this HASP. All activities covered by this HASP must be conducted in compliance with all applicable federal, state, and local health and safety regulations. All site visitors who enter designated zones must also comply with this HASP. Refusal or failure to comply with the HASP or violation of any safety procedures by field personnel and/or subcontractors performing work covered by this HASP may result in immediate removal from the Site following consultation with the TOA.

1.2 Stop Work Authority

TOA and its contractors have the express authority at any time during the execution of work or research to call for a “Stop Work”. Anyone who witnesses or perceives a task or activity being planned or performed in such a manner that may lead to endangering health, safety, security or the environment can and should stop the work. Upon executing the stop work authority, workers involved in the task are to immediately stop work and notify the TOA. Collectively they will evaluate the task being performed and take the steps necessary to complete the task in a safe manner.

1.3 Scope of Work

This HASP addresses all general activities below:

Mobilization / Demobilization

- Mobilization/demobilization of equipment and supplies
- Establishment of site security, work zones, and staging areas

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

Research Activities

- Proper personal protective equipment
- Sample collection
- Limitations

2.0 PROJECT ORGANIZATION AND RESPONSIBILITIES

This section includes project organization and structure, and establishes the specific chain-of-command for responsibilities and communications. The organizational structure shall be reviewed and updated as necessary to reflect the current status of project operations.

2.1 Town of Altavista

TOA will have final responsibility and authority for all aspects of the research, and is also responsible for approving all changes to this HASP.

2.2 Project Manager (Researcher)

The project manager will serve as the primary contact for the TOA and will have responsibility for:

- Ensuring implementation of this program
- Conducting periodic inspections
- Participating in incident investigations
- Ensuring the HASP has all of the required approvals before any site work is conducted
- Ensuring that the Town Manager is informed of project changes which require modifications of the site health and safety plan
- Overseeing Project Health and Safety

2.3 Site Personnel

Responsibilities include:

- Reporting any unsafe or potentially hazardous conditions to the TOA
- Maintaining knowledge of the information contained in the HASP
- Complying with rules, regulations and procedures as set forth in the HASP and any revisions

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

- Preventing admittance to work sites by unauthorized personnel
- Inspecting all tools and equipment, including personal protective equipment (PPE).

3.0 SITE HISTORY AND DESCRIPTION

3.1 Location

The Town of Altavista overflow pond is located at the Waste Water Treatment Plant within town limits. The site is bordered to the east by the Staunton River.

3.2 Site History and Current Conditions

3.2.1 WWTP History

The current 3.6 million gallon per day waste water treatment plant opened in the mid 1960's and was subsequently upgraded in 1977 and 1996. To enable the expansion in 1996, the "polishing pond" was left open to serve as an emergency overflow containment structure. While various PCB levels tested in the Staunton were detected as decreasing over time since the 1980's, Virginia Department of Environmental Quality personnel sampled the overflow pond and found Aroclor 1248 levels above 600 ppm in 2000 (2). A primary compounding factor is that the TOA was not responsible for the PCBs found. Industrial customers of the facility were known to use and dispose of PCBs, and are the likely source.

3.2.2 Current Conditions

The 6 acre pond is used only as an emergency overflow basin. Aroclor 1248 was detected in samples above the EPA RBC and VRP Tier III levels of 2.9 mg/kg. Concentrations in all bio-solids samples are below the EPA soil screening level for inhalation (23,900 mg/kg).

3.3 Project Description – Bioremediation Research

3.3.1 Polychlorinated biphenyls

PCBs, the chlorinated derivatives of biphenyl, are one of the most prevalent, toxic, and persistent group of contaminants in the environment. The TOA has expressed interest in alternative methods to lower the levels of PCBs in the pond to acceptable levels (<50ppm). The pond liner has proven to be intact and able to contain the contaminants

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

as shown by acceptable levels found in adjacent ground water monitoring wells. As a functional complementary method to lower levels of PCBs, recent research has focused on the use of both anaerobic and aerobic bacteria as an energy-efficient and cost-effective way to detoxify the pollutant. Enzymes responsible for PCB degradation in bacteria can be divided into four types, including biphenyl dioxygenase (BphA, dihydrodiol dehydrogenase (BphB), 2, 3-dihydroxybiphenyl (BphC), and Hydrolase (BphD). Additionally, 12 different bacterial genera have shown the ability to degrade PCBs, indicating a widespread environmental distribution of the genes responsible. Given the importance and worldwide distribution of the toxic compound, the relatively untapped mechanism of PCB detoxification by bacteria is becoming a major focus of study.

4.0 POTENTIAL SITE HAZARDS

4.1 *Polychlorinated biphenyls*

PCBs have historically been used from a number of sources including, but not limited to: electrical systems, hydraulic oils, lubricants, cutting oils, printer's ink, and asphalt. Exposure to PCBs can occur through unbroken skin without immediate pain or irritation. Acute effects of PCB exposure can include eye, skin, nose, and throat irritation. Chronic effects of PCB exposure can include skin swelling and redness, gastro-intestinal disturbances, and neurological effects such as headache, dizziness, nervousness and numbness of extremities. PCBs are suspected human carcinogens that may cause liver cancer. PCBs can accumulate in fatty tissues and result in health effects after the initial exposure has occurred. The primary route of exposure for PCBs is inhalation, dermal contact, and ingestion. Aroclor 1248, specifically, was detected at the site. With a chemical formula of 3,3',5,5'-Tetrachlorobiphenyl, this congener is not listed by the World Health Organization (WHO) as having dioxin-like properties and is reported to be non-volatile (2).

5.0 PERSONAL PROTECTIVE EQUIPMENT (PPE)

5.1 Summary

The PPE specified represents the PPE selection required by OSHA 29 CFR 1910.132, and is based on the AHA of Section 4. The PPE program addresses elements, such as PPE selection based on site hazards, use and limitations, donning and doffing procedures, maintenance and storage, decontamination and disposal. Below are PPE which are to be utilized if contact with pond sludge is to be expected. Examples of such activities include, but are not limited to, sampling in the pond, test crop planting, and inoculating sludge with microorganisms.

5.2 PPE required

- Tyvek® suit or work overalls
- Hard hats with splash shields and/or safety glasses
- Chemical-resistant gloves as appropriate for work
- Disposable Respirator/ Half- or full-face respirators
- Clothing appropriate for the work being performed
- Chemical-resistant safety boots or shoes or covers

6.0 SITE CONTROL MEASURES

6.1 Site Zones

Site zones are intended to control the potential spread of contamination and to assure that only authorized individuals are permitted into potentially hazardous areas. A three-zone approach will be utilized. It shall include an Exclusion Zone (EZ), Contamination Reduction Zone (CRZ), and a Support Zone (SZ). Specific zones shall be established on the work site when operations begin for each task requiring such delineation. A map depicting the zones is located in Appendix A and will be available at the site. This research is being conducted under the requirements of 29 CFR 1910.120, and any personnel working in an area where

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

the potential for exposure to site contaminants exists, will review and sign the HASP. The following shall be used for zone designations, if necessary.

Support Zone - The SZ is an uncontaminated area that will be the field support area for most operations. Appropriate safety equipment will be located in this zone. Potentially contaminated personnel/materials are not allowed in this zone. The only exception will be appropriately packaged/decontaminated and labeled samples.

Contamination Reduction Zone - The CRZ is established between the EZ and the SZ. The CRZ contains the contamination reduction corridor and provides an area for decontamination of personnel and portable hand-held equipment, tools and heavy equipment. A personnel decontamination area will be prepared at each exclusion zone. The CRZ will be used for Exclusion Zone entry and egress in addition to access for heavy equipment and emergency support services.

Exclusion Zone – The exclusion zone is primarily located in the pond itself. However, all activities which may involve exposure to site contaminants, hazardous materials and/or conditions should be considered an exclusion zone. The TOA may establish more than one EZ where different levels of protection may be employed or different hazards exist. The size of the EZ shall be determined by TOA allowing adequate space for the activity to be completed.

7.0 DECONTAMINATION

7.1 PPEs

PPE helps prevent the wearer from becoming contaminated or inhaling contaminants, and good work practices help reduce contamination on protective clothing, instruments, and equipment. Even with these safeguards, contamination may occur. Harmful materials can be transferred to clean areas, exposing unprotected personnel. To prevent such occurrences, the following contamination reduction and decontamination procedures have been developed.

7.1.1 Minimization of Contact with Contaminants

During completion of all site activities, personnel should attempt to minimize the degree of contact with contaminated materials. This

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

involves a conscientious effort to keep "clean" during site activities. All personnel should minimize kneeling, splash generation, and other physical contact with contamination. This may ultimately minimize the degree of decontamination required and the generation of waste materials from site operations.

7.1.2 *Personnel Decontamination*

Personal hygiene of personnel, coupled with diligent decontamination, will significantly reduce the potential for exposure. Decontamination will be performed by removing all PPE used in EZ and placing in drums/trash cans at CRZ. Disinfecting hand wipes shall be available for wiping hands and face. Personnel should wash and rinse gloves and over boots, remove boot covers, remove outer gloves, remove Tyvek® splash-resistant suit or chemical resistant clothing, wash inner gloves, remove respirator, rinse inner gloves, remove inner gloves and wash and rinse hands and face. If exposed to subsurface soils, wash with soap and water.

7.1.3 *Hand-Held Equipment Decontamination*

Hand-held equipment includes all monitoring instruments, samples, hand tools, and notebooks. The hand-held equipment is dropped at the first decontamination station to be decontaminated by one of the decontamination team members. These items must be decontaminated or discarded as waste prior to removal from the exclusion zone. To aid in decontamination, monitoring instruments can be sealed in plastic bags or wrapped in polyethylene. This will also protect the instruments against contaminants. The instruments will be wiped clean using wipes and paper towels if contamination is visually evident. Decontamination procedures for sampling equipment, hand tools, etc., shall include the use of a detergent wash, as appropriate for the site conditions. All liquids generated in the decontamination will be stored at the Site in drums and then disposed of at an approved facility in accordance with federal, state and local regulations. Personnel performing this task will wear the proper PPE as prescribed in section 5.0.

7.1.4 Heavy Equipment Decontamination

Decontamination of chemically-contaminated heavy equipment will be accomplished using high-pressure steam or dry decontaminated with brushes and shovels. Decontamination shall take place on a decontamination pad and all liquids used in the decontamination procedure will be collected or returned to pond. Vehicles or equipment brought into an exclusion zone will be treated as contaminated, and will be decontaminated prior to removal. All liquids used in the decontamination procedure will be stored at the Site in drums and then disposed of at an approved facility in accordance with federal, state and local regulations. Personnel performing this task will wear the proper PPE as prescribed in section 5.0.

8.0 SAMPLE COLLECTION

8.1 Log Book

8.1.1 A field log book that contains all information pertinent to the site inspection and sampling activities will be maintained by researchers. The person making the entry should sign and date all entries in the log book. Entries into the log book should include the following types of information (3):

- Site and location of the sample extraction
- Date on each page
- Exact times of sampling events or visual observations
- Types of samples collected and sample identification numbers
- Number of samples collected
- Specific description of sample locations
- Description of sampling methods
- Field observations
- Name of all field personnel

8.2 Shipping Samples

A sample collector shipping samples to a laboratory and a laboratory returning samples to a sample collector must comply with applicable U.S.

Health and Safety Plan (HASP)
Research Activities at the Altavista WWTP
Altavista, Virginia

Department of Transportation (DOT) or U.S. Postal Service (USPS) shipping requirements, found respectively in 49 CFR 173.345 and U.S. Postal Regulations 652.2 and 652.3. Assure that the following information accompanies the sample:

- The sample collector's name, mailing address, and telephone number.
- The laboratory's name, mailing address, and telephone number.
- The quantity of the sample.
- The date of shipment.
- A description of the sample
- Package the sample so that it does not leak, spill, or vaporize from its packaging.

8.3 Sample Size

Each sampling point should contain approximately 2 ounces (2)

9.0 EMERGENCY CONTACT

9.1 911

Should any accident occur, 911 should be dialed immediately.

10.0 FIELD PERSONNEL REVIEW

10.1 Form

This form serves as documentation that field personnel have read, or have been informed of, and understand the provisions of this HASP for the Town of Altavista. It is maintained on site by the SSO as a project record. Each field team member or researcher shall sign this section after review of the contents of this HASP has been completed.

[Form on following page.]

Health and Safety Plan (HASP) Research Activities at the Altavista WWTP Altavista, Virginia

I have read, or have been informed of, the Health and Safety Plan and understand the information presented. I will comply with the provisions contained therein.

[illegible]

APPENDIX A - SITE MAP TO DELINEATE ZONES



Figure 1 – Site zones are intended to control the potential spread of contamination and to assure that only authorized individuals are permitted into potentially hazardous areas. A three-zone approach will be utilized. It shall include an Exclusion Zone (EZ), Contamination Reduction Zone (CRZ), and a Support Zone (SZ).

References

- 1) Toxic Substances Control Act (TSCA), (1976). EPA 40 CFR Ch. 1 (7-1-05 Edition).
- 2) Draper Aden Associates (2003). Voluntary Remediation Report Altavista WWTP, Emergency Overflow Pond Altavista, Virginia.
- 3) EPA (1996). Soil Screening Guidance: User's Guide U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Publication 9355.4-23.



REI Consultants, Inc.
PO Box 286
Beaver, WV 25813
TEL: (304) 255-2500
Website: www.reiclabs.com

Improving the environment, one client at a time...

3029-C Peters Creek Road
Roanoke, VA 24019
TEL: 540.777.1276

101 17th Street
Ashland, KY 41101
TEL: 606.393.5027

1557 Commerce Road, Suite 201
Verona, VA 24482
TEL: 540.248.0183

16 Commerce Drive
Westover, WV 26501
TEL: 304.241.5861

Friday, October 09, 2015

Mr. Scott Lowman
INSTITUTE FOR ADVANCED LEARNING AND RESEARCH
150 SLAYTON AVE
DANVILLE, VA 24540

TEL: (434) 766-6628

FAX:

RE: APR

Work Order #: 1509U73

Dear Mr. Scott Lowman:

REI Consultants, Inc. received 27 sample(s) on 9/24/2015 for the analyses presented in the following report.

Sincerely,

Billy Shirley



Client: INSTITUTE FOR ADVANCED LEARNING AND RESEARCH**Project:** APR

The analytical results presented in this report were produced using documented laboratory SOPs that incorporate appropriate quality control procedures as described in the applicable methods. Verification of required sample preservation (as required) is recorded on associated laboratory logs. Any deviation from compliance or method modification is identified within the body of this report by a qualifier footnote which is defined at the bottom of this page.

All sample results for solid samples are reported on an "as-received" wet weight basis unless otherwise noted.

Results reported for sums of individual parameters, such as TTHM and HAA5, may vary slightly from the sum of the individual parameter results, due to rounding of individual results, as required by EPA.

The test results in this report meet all NELAP and/or VELAP requirements for parameters clearly designated as PA, VA, PA/VA, or VELAP in the column labeled NELAP.

Please note if the sample collection time is not provided on the Chain of Custody, the default recording will be 0:00:00. This may cause some tests to be apparently analyzed out of hold.

All tests performed by REIC Service Centers are designated by an annotation on the test code. All other tests were performed by REIC's Main Laboratory in Beaver, WV.

This report may not be reproduced, except in full, without the written approval of REIC.

DEFINITIONS:

MCL: Maximum Contaminant Level

MDL: Method Detection Limit; The lowest concentration of analyte that can be detected by the method in the applicable matrix.

Mg/Kg or mg/L: Units of part per million (PPM) - milligram per Kilogram (weight/weight) or milligram per Liter (weight/volume).

NA: Not Applicable

ND: Not Detected at the PQL or MDL

PQL: Practical Quantitation Limit; The lowest verified limit to which data is quantified without qualifications. Analyte concentrations below PQL are reported either as ND or as a number with a "J" qualifier.

Qual: Qualifier that applies to the analyte reported.

TIC: Tentatively Identified Compound, Estimated Concentration denoted by "J" qualifier.

Ug/Kg or ug/L: Units of part per billion (PPB) - microgram per kilogram (weight/weight) or microgram per liter (weight/volume).

QUALIFIERS:

X: Reported value exceeds required MCL

B: Analyte detected in the associated Method Blank at a concentration > 1/2 the PQL

E: The sample result is within the method accepted Linear Dynamic Range determined by the lab for this analysis. However, it may be considered estimated when applying the TNI (The NELAC Institute) standard.

H: Holding time for preparation or analysis has been exceeded.

J: Analyte concentration is reported, and is less than the PQL and greater than or equal to the MDL. The result reported is an estimate.

S: % REC (% recovery) exceeds control limits

CERTIFICATIONS:

Beaver, WV: WVDHHR 00412CM, WVDEP 060, VADCLS 00281, KYDEP 90039, TNDEQ TN02926, NCDWQ 466, PADEP 68-00839, VADCLS (VELAP) 460148

Bioassay (Beaver, WV): WVDEP 060, VADCLS(VELAP) 460148, PADEP 68-00839

Roanoke, VA: VADCLS(VELAP) 460150

Verona, VA: VADCLS(VELAP) 460151

Ashland, KY: KYDEP 00094, WV 389

Morgantown, WV: WVDHHR 003112M, WVDEP 387

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 9:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-01A	Matrix:	Sludge
Client Sample ID:	A1	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Aroclor 1221	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Aroclor 1232	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Aroclor 1242	1.09	NA	0.0832	NA	mg/Kg	09/26/15 7:55AM	10/08/15 9:21AM	PA/VA
Aroclor 1248	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Aroclor 1254	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Aroclor 1260	ND	NA	0.0166	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:25PM	PA/VA
Surr: Tetrachloro-m-xylene	2.02	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 12:25PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 9:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-02A	Matrix:	Sludge
Client Sample ID:	A2	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Aroclor 1221	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Aroclor 1232	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Aroclor 1242	242	NA	1.65	NA	mg/Kg	09/26/15 7:55AM	10/08/15 9:36AM	PA/VA
Aroclor 1248	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Aroclor 1254	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Aroclor 1260	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:39PM	PA/VA
Surr: Tetrachloro-m-xylene	43.4	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 12:39PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 10:00:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-03A	Matrix:	Sludge
Client Sample ID:	A3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Aroclor 1221	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Aroclor 1232	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Aroclor 1242	129	NA	1.65	NA	mg/Kg	09/26/15 7:55AM	10/08/15 9:50AM	PA/VA
Aroclor 1248	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Aroclor 1254	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Aroclor 1260	ND	NA	0.0165	NA	mg/Kg	09/26/15 7:55AM	09/29/15 12:54PM	PA/VA
Surr: Tetrachloro-m-xylene	24.7	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 12:54PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 10:15:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-04A	Matrix:	Sludge
Client Sample ID:	A4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Aroclor 1221	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Aroclor 1232	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Aroclor 1242	83.2	NA	1.05	NA	mg/Kg	09/26/15 7:55AM	10/08/15 10:04AM	PA/VA
Aroclor 1248	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Aroclor 1254	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Aroclor 1260	ND	NA	0.0210	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:08PM	PA/VA
Surr: Tetrachloro-m-xylene	11.6	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 1:08PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 10:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-05A	Matrix:	Sludge
Client Sample ID:	A5	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Aroclor 1221	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Aroclor 1232	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Aroclor 1242	28.3	NA	0.816	NA	mg/Kg	09/26/15 7:55AM	10/08/15 10:19AM	PA/VA
Aroclor 1248	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Aroclor 1254	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Aroclor 1260	ND	NA	0.0163	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:22PM	PA/VA
Surr: Tetrachloro-m-xylene	24.7	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 1:22PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 10:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-06A	Matrix:	Sludge
Client Sample ID:	B1	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Aroclor 1242	117	NA	0.834	NA	mg/Kg	09/26/15 7:55AM	10/08/15 11:16AM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:36PM	PA/VA
Surr: Tetrachloro-m-xylene	20.2	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 1:36PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 10:55:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-07A	Matrix:	Sludge
Client Sample ID:	B2	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Aroclor 1242	70.9	NA	1.67	NA	mg/Kg	09/26/15 7:55AM	10/08/15 11:30AM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	09/26/15 7:55AM	09/29/15 1:51PM	PA/VA
Surr: Tetrachloro-m-xylene	26.8	NA	68.1-138	NA	S %REC	09/26/15 7:55AM	09/29/15 1:51PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 11:10:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-08A	Matrix:	Sludge
Client Sample ID:	B3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Aroclor 1242	27.8	NA	1.67	NA	mg/Kg	09/29/15 7:47AM	10/08/15 2:23PM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:14PM	PA/VA
Surr: Tetrachloro-m-xylene	14.6	NA	68.1-138	NA	S %REC	09/29/15 7:47AM	09/30/15 6:14PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 11:25:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-09A	Matrix:	Sludge
Client Sample ID:	B4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Aroclor 1221	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Aroclor 1232	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Aroclor 1242	66.1	NA	0.333	NA	mg/Kg	09/29/15 7:47AM	10/08/15 2:37PM	PA/VA
Aroclor 1248	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Aroclor 1254	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Aroclor 1260	ND	NA	0.0166	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:28PM	PA/VA
Surr: Tetrachloro-m-xylene	12.6	NA	68.1-138	NA	S %REC	09/29/15 7:47AM	09/30/15 6:28PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/16/2015 11:40:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-10A	Matrix:	Sludge
Client Sample ID:	B5	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Aroclor 1221	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Aroclor 1232	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Aroclor 1242	30.6	NA	1.78	NA	mg/Kg	09/29/15 7:47AM	10/08/15 12:14PM	PA/VA
Aroclor 1248	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Aroclor 1254	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Aroclor 1260	ND	NA	0.0178	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:43PM	PA/VA
Surr: Tetrachloro-m-xylene	23.7	NA	68.1-138	NA	S %REC	09/29/15 7:47AM	09/30/15 6:43PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 6:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-11A	Matrix:	Sludge
Client Sample ID:	C1	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Aroclor 1221	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Aroclor 1232	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Aroclor 1242	162	NA	3.55	NA	mg/Kg	09/29/15 7:47AM	10/08/15 1:11PM	PA/VA
Aroclor 1248	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Aroclor 1254	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Aroclor 1260	ND	NA	0.0355	NA	mg/Kg	09/29/15 7:47AM	09/30/15 6:57PM	PA/VA
Surr: Tetrachloro-m-xylene	67.2	NA	68.1-138	NA	S %REC	09/29/15 7:47AM	09/30/15 6:57PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 7:00:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-12A	Matrix:	Sludge
Client Sample ID:	C2	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Aroclor 1221	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Aroclor 1232	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Aroclor 1242	3.77	NA	0.473	NA	mg/Kg	09/29/15 7:47AM	10/08/15 1:26PM	PA/VA
Aroclor 1248	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Aroclor 1254	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Aroclor 1260	ND	NA	0.0237	NA	mg/Kg	09/29/15 7:47AM	09/30/15 7:11PM	PA/VA
Surr: Tetrachloro-m-xylene	15.7	NA	68.1-138	NA	S %REC	09/29/15 7:47AM	09/30/15 7:11PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 7:15:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-13A	Matrix:	Sludge
Client Sample ID:	C3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Aroclor 1221	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Aroclor 1232	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Aroclor 1242	70.9	NA	0.598	NA	mg/Kg	10/01/15 10:44AM	10/08/15 1:40PM	PA/VA
Aroclor 1248	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Aroclor 1254	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Aroclor 1260	ND	NA	0.0598	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:29PM	PA/VA
Surr: Tetrachloro-m-xylene	71.7	NA	68.1-138	NA	%REC	10/01/15 10:44AM	10/02/15 1:29PM	

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 7:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-14A	Matrix:	Sludge
Client Sample ID:	C4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Aroclor 1221	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Aroclor 1232	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Aroclor 1242	182	NA	2.04	NA	mg/Kg	10/01/15 10:44AM	10/08/15 1:54PM	PA/VA
Aroclor 1248	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Aroclor 1254	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Aroclor 1260	ND	NA	0.0204	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:43PM	PA/VA
Surr: Tetrachloro-m-xylene	17.2	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 1:43PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 7:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-15A	Matrix:	Sludge
Client Sample ID:	C5	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Aroclor 1221	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Aroclor 1232	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Aroclor 1242	15.5	NA	0.236	NA	mg/Kg	10/01/15 10:44AM	10/08/15 2:08PM	PA/VA
Aroclor 1248	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Aroclor 1254	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Aroclor 1260	ND	NA	0.0236	NA	mg/Kg	10/01/15 10:44AM	10/02/15 1:58PM	PA/VA
Surr: Tetrachloro-m-xylene	32.3	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 1:58PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 8:00:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-16A	Matrix:	Sludge
Client Sample ID:	D1	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Aroclor 1221	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Aroclor 1232	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Aroclor 1242	131	NA	2.45	NA	mg/Kg	10/01/15 10:44AM	10/08/15 3:44PM	PA/VA
Aroclor 1248	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Aroclor 1254	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Aroclor 1260	ND	NA	0.0245	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:12PM	PA/VA
Surr: Tetrachloro-m-xylene	39.4	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 2:12PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 8:15:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-17A	Matrix:	Sludge
Client Sample ID:	D2	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Aroclor 1221	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Aroclor 1232	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Aroclor 1242	24.4	NA	0.162	NA	mg/Kg	10/01/15 10:44AM	10/08/15 3:58PM	PA/VA
Aroclor 1248	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Aroclor 1254	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Aroclor 1260	ND	NA	0.0162	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:27PM	PA/VA
Surr: Tetrachloro-m-xylene	44.9	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 2:27PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 8:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-18A	Matrix:	Sludge
Client Sample ID:	D3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Aroclor 1221	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Aroclor 1232	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Aroclor 1242	15.7	NA	0.249	NA	mg/Kg	10/01/15 10:44AM	10/08/15 4:12PM	PA/VA
Aroclor 1248	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Aroclor 1254	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Aroclor 1260	ND	NA	0.0249	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:41PM	PA/VA
Surr: Tetrachloro-m-xylene	47.0	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 2:41PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 8:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-19A	Matrix:	Sludge
Client Sample ID:	D4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Aroclor 1221	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Aroclor 1232	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Aroclor 1242	152	NA	1.00	NA	mg/Kg	10/01/15 10:44AM	10/08/15 4:27PM	PA/VA
Aroclor 1248	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Aroclor 1254	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Aroclor 1260	ND	NA	0.0200	NA	mg/Kg	10/01/15 10:44AM	10/02/15 2:55PM	PA/VA
Surr: Tetrachloro-m-xylene	40.9	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 2:55PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 9:00:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-20A	Matrix:	Sludge
Client Sample ID:	D5	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Aroclor 1221	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Aroclor 1232	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Aroclor 1242	3.04	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/08/15 4:41PM	PA/VA
Aroclor 1248	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Aroclor 1254	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Aroclor 1260	ND	NA	0.0276	NA	mg/Kg	10/01/15 10:44AM	10/02/15 3:10PM	PA/VA
Surr: Tetrachloro-m-xylene	56.6	NA	68.1-138	NA	S %REC	10/01/15 10:44AM	10/02/15 3:10PM	

Notes:

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 9:15:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-21A	Matrix:	Sludge
Client Sample ID:	E1	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Aroclor 1221	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Aroclor 1232	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Aroclor 1242	555	NA	2.89	NA	mg/Kg	10/02/15 8:57AM	10/08/15 5:38PM	PA/VA
Aroclor 1248	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Aroclor 1254	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Aroclor 1260	ND	NA	0.0289	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:38PM	PA/VA
Surr: Tetrachloro-m-xylene	101	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 8:38PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 9:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-22A	Matrix:	Sludge
Client Sample ID:	E2	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Aroclor 1221	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Aroclor 1232	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Aroclor 1242	387	NA	3.30	NA	mg/Kg	10/02/15 8:57AM	10/09/15 9:03AM	PA/VA
Aroclor 1248	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Aroclor 1254	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Aroclor 1260	ND	NA	0.0165	NA	mg/Kg	10/02/15 8:57AM	10/02/15 8:53PM	PA/VA
Surr: Tetrachloro-m-xylene	82.8	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 8:53PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 9:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-23A	Matrix:	Sludge
Client Sample ID:	E3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Aroclor 1242	657	NA	3.33	NA	mg/Kg	10/02/15 8:57AM	10/09/15 10:01AM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:07PM	PA/VA
Surr: Tetrachloro-m-xylene	73.2	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 9:07PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 10:00:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-24A	Matrix:	Sludge
Client Sample ID:	E4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Aroclor 1242	184	NA	1.67	NA	mg/Kg	10/02/15 8:57AM	10/08/15 6:21PM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:21PM	PA/VA
Surr: Tetrachloro-m-xylene	91.9	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 9:21PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 10:15:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-25A	Matrix:	Sludge
Client Sample ID:	E5	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Aroclor 1242	193	NA	1.67	NA	mg/Kg	10/02/15 8:57AM	10/08/15 6:36PM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:36PM	PA/VA
Surr: Tetrachloro-m-xylene	96.0	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 9:36PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 10:30:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-26A	Matrix:	Sludge
Client Sample ID:	F3	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS								
Method: SW8082A (2/07)						Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Aroclor 1242	1,240	NA	6.67	NA	mg/Kg	10/02/15 8:57AM	10/09/15 10:15AM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 9:50PM	PA/VA
Surr: Tetrachloro-m-xylene	58.1	NA	68.1-138	NA	S %REC	10/02/15 8:57AM	10/02/15 9:50PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.

The surrogate recovery is outside laboratory control limits due to matrix interference.

REI Consultants, Inc. - Analytical Report

WO#: 1509U73

Date Reported: 10/9/2015

Client:	INSTITUTE FOR ADVANCED LEARNING AND RESEARCH	Collection Date:	9/18/2015 10:45:00 AM
Project:	APR	Date Received:	9/24/2015
Lab ID:	1509U73-27A	Matrix:	Sludge
Client Sample ID:	F4	Site ID:	

Analysis	Result	MDL	PQL	MCL Qual	Units	Prep Date	Date Analyzed	NELAC
PCBS		Method: SW8082A (2/07)				Analyst: NC		
Aroclor 1016	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Aroclor 1221	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Aroclor 1232	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Aroclor 1242	176	NA	1.67	NA	mg/Kg	10/02/15 8:57AM	10/08/15 7:04PM	PA/VA
Aroclor 1248	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Aroclor 1254	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Aroclor 1260	ND	NA	0.0167	NA	mg/Kg	10/02/15 8:57AM	10/02/15 10:04PM	PA/VA
Surr: Tetrachloro-m-xylene	86.9	NA	68.1-138	NA	%REC	10/02/15 8:57AM	10/02/15 10:04PM	

Notes:

The ending CCV for 1016 exceeds laboratory control limits, indicating a high bias. Since the analyte was not detected in the sample, the reported result is not affected by this bias.



Improving the environment, one client at a time...

REI Consultants, Inc.
PO Box 286
Beaver, WV 25813
TEL: (304)255-2500
Website: www.reiclabs.com

Sample Receipt Checklist

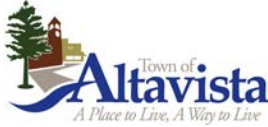
Client Name:	INS002			Work Order Number:	1509U73
RCPNo:	1	Date and Time Received:	9/24/2015 9:28:21 PM	Received by:	Curtis Primm
Completed By:	Brandon Cole	Reviewed By:	Billy Shirley		
Completed Date:	9/24/2015 9:31:45 PM	Reviewed Date:	9/25/2015 9:56 AM		

Carrier Name: REIC

1.	Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
2.	Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
3.	Are matrices correctly identified on Chain of custody?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
4.	Is it clear what analyses were requested?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
5.	Custody seals intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
6.	Samples in proper container type and preservative?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
7.	Were correct preservatives noted on COC?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
8.	Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
9.	Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
10.	Were container labels complete?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
11.	All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
12.	Was an attempt made to cool the samples?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	NA <input type="checkbox"/>
13.	Sample Temp. taken and recorded upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	To 3.1 °C
14.	Water - Were bubbles absent in VOC vials?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No Vials <input checked="" type="checkbox"/>
15.	Are Samples considered acceptable?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
16.	COC filled out properly?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Client Notification/Response

Client Name:	INS002			Work Order Number:	1509U73
Comment:					
Client Contacted:	Yes <input type="checkbox"/>	No <input type="checkbox"/>	NA <input checked="" type="checkbox"/>	Person Contacted:	
Contact Mode:	Phone <input type="checkbox"/>	Fax: <input type="checkbox"/>	Email: <input type="checkbox"/>	In Person: <input type="checkbox"/>	
Date Contacted:	Contacted By:				
Regarding:					
Client Instructions:					
Corrective Action:					



Town of Altavista, Virginia Work Session Agenda Form

Meeting Date: October 27, 2015

Agenda Item: Economic Development Office's Marketing Materials Update

Summary: Over the past few months, Council has been presented with the Marketing Plan proposed by the Economic Development Office. One of the components of the plan focused on the creation of a new "tagline". Several options were considered and then four were posted for the public to vote on. In addition, the marketing plan discussed additional marketing materials, including a brochure. The attached staff memo conveys the results of the "tagline" voting and sets forth the purpose and intent of the brochure. A prototype of the brochure will be available at the meeting.

At this point, staff is seeking Council's guidance on moving these two marketing efforts forward.

Budget/Funding: Cost of production of marketing materials.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Attachments: Staff memo regarding marketing materials

Council Recommendations:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action
Consensus Poll on Action ____ (Aye) ____ (Nay)



Memo

To: Altavista Town Council

From: Dennis Jarvis, II

A handwritten signature in black ink, appearing to read "D. Jarvis, II".

Cc: Waverly Coggsdale, III Town Manager

Re: Marketing Materials Update

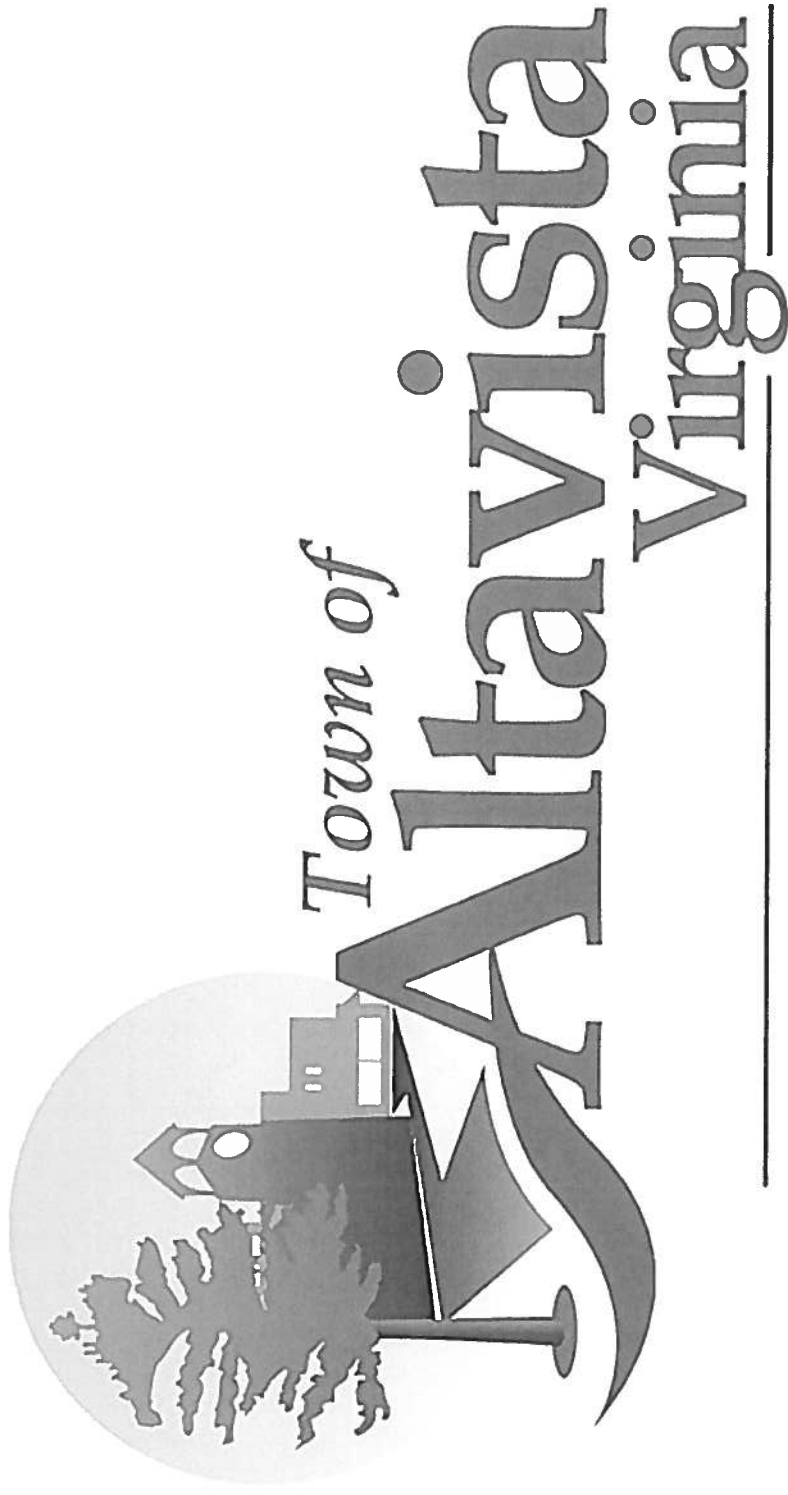
The final votes were cast on Friday October 16, 2015 for the proposed new tagline for the town of Altavista.

106 voters participated and the final results showed the respondents selected a town resident submission: ***"Treasured past, innovative future."*** Please see the bar graph attached for the final vote tallies. If the town council agrees the new tagline would be utilized for the marketing purposes and other items from the town. Here is the final data from the last round of voting for the new tagline:

- ***Moving forward with tradition and spirit 9 Votes 8.49%***
- ***Alive with the spirit of rivers and rail 19 votes 17.92%***
- ***Where tradition meets innovation 23 votes 21.70%***
- ***Treasured past, innovative future. 55 votes 51.89%***

With the assistance of Blair Marketing we are providing the first working draft of the marketing materials for the economic development office. The draft will reflect the following:

- The piece complements the color and style of the website for the Office of Economic Development.
- The marketing piece will be bound and can be customized to fit the needs of a specific client or an industrial sector.
- The marketing piece will reflect the pro-business climate of the town of Altavista, Campbell County, and Region 2000.
- The marketing piece will provide information on the following items: utility rates, tax rates for the town and county, additional demographic information
- The video included in the marketing program is completed and being edited. We will provide a preview of the video at the November town council meeting.
- The quality of life piece that is currently being designed and will be presented in draft form at the next town council meeting as well. This marketing brochure will highlight the shopping, eating, recreational, and cultural amenities in the Town of Altavista.
- The quality of life brochure will be placed in the state certified regional tourist/visitors centers in addition to the state of Virginia operated visitor centers.

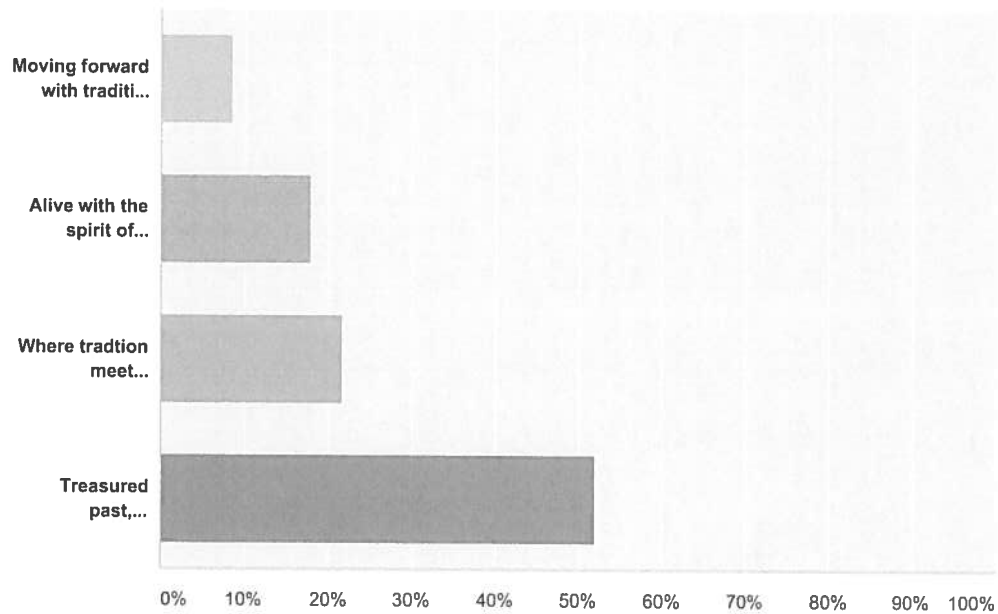


Treasured Past, Innovative Future.

New Tagline for Altavista, Virginia

Q1 Now is your time to vote! Thank you for your time and support!!

Answered: 106 Skipped: 0



Answer Choices	Responses
Moving forward with tradition and spirit.	8.49% 9
Alive with the spirit of rivers and rails.	17.92% 19
Where tradtion meet innovation.	21.70% 23
Treasured past, innovative future.	51.89% 55
Total	106



Town of Altavista, Virginia Work Session Agenda Form

Meeting Date: October 27, 2015

Agenda Item: Declaration of Surplus (Fire Hydrants)

Summary: Recently, the Town was contacted by a representative of the Altavista Fire Company (AFC) in regard to the scrap fire hydrants that were replaced as part of the Bedford Avenue water project. David Garrett, Director of Public Works/Utilities indicates that there are eight intact hydrants that can be deemed surplus and given to the AFC at “scrap” value (\$10.00 per unit).

Staff would ask that the eight hydrants be declared “surplus” and be conveyed to the AFC at “scrap” value (\$10.00).

Budget/Funding: Minimal revenue (\$80.00 for the eight hydrants)

Legal Evaluation: The Town Attorney will be available to address legal issues.

Attachments: Photo of scrap hydrants

Council Recommendations:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action
Consensus Poll on Action ____ (Aye) ____ (Nay)





Town of Altavista, Virginia Work Session Agenda Form

Meeting Date: October 27, 2015

Agenda Item: VDOT Route 43 “Gateway Project” update

Summary: Previously, staff updated Council on the awarding of several TAP grants from VDOT in regard to the “Gateway Project” on Bedford Avenue between 7th Street and Main Street. This project is an extension of the Downtown Streetscape Project and would improve pedestrian safety.

As you may recall, a few months back, Mr. Rick Youngblood updated Council on several VDOT projects and indicated that VDOT was looking at replacing the signalization at the Main Street/Bedford Avenue intersection. You may remember that this was the least expensive option that was recommended based on the STAR report presented by Mr. Youngblood, which also proposed the “peanut roundabout” at this location. VDOT has indicated that the funding source for the signalization project is no longer available and staff is working with VDOT to see if there are other options for getting the project funded prior to the Town moving forward with its “Gateway Project” in an effort to coordinate the improvements.

Staff will present any new information in regard to this item at the work session.

Budget/Funding: Undetermined At This Time.

Legal Evaluation: The Town Attorney will be available to address legal issues.

Attachments:

Council Recommendations:

☐ Additional Work Session ☐ Regular Meeting ☐ No Action
Consensus Poll on Action ____ (Aye) ____ (Nay)