



**Revitalizing Auto Communities
Environmental Response Trust**

**COLDWATER ROAD LANDFILL (11030)
2017 ANNUAL ENVIRONMENTAL ACTION (EA) BUDGET REQUEST
October 25, 2016**

INTRODUCTION

This 2017 Annual Environmental Action (EA) Budget Request is submitted pursuant to Paragraph 49 of the Settlement Agreement and has been prepared under the supervision of Elliott Laws, Managing Member of EPLET, LLC, Administrative Trustee of the Revitalizing Auto Communities Environmental Response Trust. The cost breakdown that resulted in the initial Settlement Agreement funding account amounts is presented in Attachment 1 for reference.

OVERVIEW OF 2017 ANNUAL EA BUDGET REQUEST

This 2017 Annual EA Budget Request is being submitted to request approval for establishing and reallocating task specific budgets for 2017. The general scope of work included in this request consists of the following:

- Continue Ongoing OMM
- Fe & Mn Delineation and Closure Certification
- Agency Coord./Negotiation & Reporting
- Project Management & Coordination
- Potential PFC Investigations/Evaluations

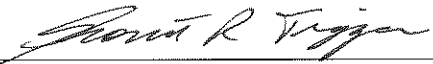
The tasks and requested 2017 budgets are:

- Task 1 Continue Ongoing OMM	\$113,696
- Task 4 Fe & Mn Delineation and Closure Certification	\$14,270
- Task 6 Agency Coord./Negotiation & Reporting	\$7,608
- Task 7 Project Management & Coordination	\$18,626
- Task 8 Agency Oversight	\$19,640
- Task 9 PFC Investigations/Evaluations	\$42,199
Total:	\$216,039

Please see Attachments 2 through 5 for more detailed information in support of this request.

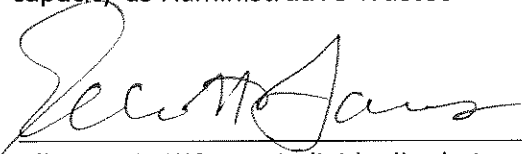
APPROVALS

Revitalizing Auto Communities Environmental Response Trust

By: 
Grant Trigger, Cleanup Manager - Michigan


11-1-16
Date

By: EPLET, LLC, acting solely in its representative capacity as Administrative Trustee

By: 
Elliott P. LAWS, not individually, but acting solely in his representative capacity as Managing Member

11-1-16
Date

Michigan Department of Environmental Quality

By: 
Allan B. Taylor, Lead Agency State of Michigan
MDEQ Authorized Representative for OWMRP

11-15-2016
Date

DETAILED SUPPORT FOR THE 2017 ANNUAL EA BUDGET REQUEST

- Attachment 1 - Cost Breakdown for Initial Site Funding Accounts
- Attachment 2 - Estimated Environmental Action Expenditures and Property Funding Account Balances
- Attachment 3 - 2017 Budget Summary, Scope of Work and Detailed Budget Estimate
- Attachment 4 - 2017 Project Schedule and Milestones
- Attachment 5 - 2017 and Future Years Cost Reallocation


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ATTACHMENT 1

Cost Breakdown for Initial Site Funding Accounts

Coldwater Road Landfill - 11030
Schedule of Cash Flows estimated by MLC

Year	Remediation Cost Estimate - Settlement Agreement																					
	Minimum	Reserve	Long-Term Operation, Monitoring and Maintenance (LTOMM)	Total Costs (NPV) Laddered Rates	Total Cost 2009 Dollars	Contingency Cost	Expected Cost	Continue Ongoing OMM	Contingency	Cell E Leakage Investigation	Contingency	Cell E Repairs and Permit Modification	Contingency	Fe & Mn Delineation	Contingency	Finalize Closure	Contingency	Agency Coord./ Negotiation & Reporting	Contingency	Project Management & Coordination	Contingency	Agency Oversight
2009	\$ 29,897	\$ -		\$ 29,897	\$ 29,897	\$ 18,569	\$ 11,327	\$ -	10%	\$ -	0%	\$ -	0%	\$ -	10%	\$ -	0%	\$ -	10%	\$ -	0%	\$ 11,327
2010	\$ 291,995	\$ -		\$ 291,995	\$ 285,151	\$ 22,260	\$ 262,891	\$ 68,847	10%	\$ 14,560	10%	\$ 87,250	10%	\$ 31,089	10%	\$ -	0%	\$ 20,855	10%	\$ 26,712	0%	\$ 13,579
2011	\$ 557,282	\$ -		\$ 557,282	\$ 542,125	\$ 42,320	\$ 499,805	\$ 76,728	10%	\$ 61,314	10%	\$ 187,750	10%	\$ 43,268	10%	\$ -	0%	\$ 54,145	10%	\$ 50,785	0%	\$ 25,815
2012	\$ 197,071	\$ -		\$ 197,071	\$ 193,175	\$ 15,080	\$ 178,095	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 25,000	10%	\$ 18,096	0%	\$ 9,199
2013	\$ 170,816	\$ -		\$ 170,816	\$ 170,373	\$ 13,300	\$ 157,073	\$ 133,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	10%	\$ 15,960	0%	\$ 8,113
2014	\$ 163,899	\$ -		\$ 163,899	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2015	\$ 153,736	\$ -		\$ 153,736	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2016	\$ 149,146	\$ -		\$ 149,146	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2017	\$ 115,382	\$ 35,981		\$ 151,363	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2018	\$ -	\$ 149,668		\$ 149,668	\$ 170,373	\$ 13,300	\$ 157,073	\$ 133,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,960	0%	\$ 8,113
2019	\$ -	\$ 137,156		\$ 137,156	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2020			\$ 139,178	\$ 139,178	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2021			\$ 130,442	\$ 130,442	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2022			\$ 126,920	\$ 126,920	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2023			\$ 135,266	\$ 135,266	\$ 176,778	\$ 13,800	\$ 162,978	\$ 138,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 16,560	0%	\$ 8,418
2024			\$ 119,616	\$ 119,616	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2025			\$ 115,861	\$ 115,861	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2026			\$ 199,346	\$ 199,346	\$ 286,688	\$ 22,380	\$ 264,308	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ 93,000	10%	\$ -	0%	\$ 26,856	0%	\$ 13,652	0%	\$ 7,074
2027			\$ 108,209	\$ 108,209	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2028			\$ 110,311	\$ 110,311	\$ 170,373	\$ 13,300	\$ 157,073	\$ 133,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,960	0%	\$ 8,113
2029			\$ 104,449	\$ 104,449	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2030			\$ 97,782	\$ 97,782	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2031			\$ 95,152	\$ 95,152	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2032			\$ 96,248	\$ 96,248	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2033			\$ 95,185	\$ 95,185	\$ 170,373	\$ 13,300	\$ 157,073	\$ 133,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,960	0%	\$ 8,113
2034			\$ 87,541	\$ 87,541	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2035			\$ 88,478	\$ 88,478	\$ 167,555	\$ 13,080	\$ 154,475	\$ 130,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,696	0%	\$ 7,979
2036			\$ 82,697	\$ 82,697	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2037			\$ 80,345	\$ 80,345	\$ 161,150	\$ 12,580	\$ 148,570	\$ 125,800	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 15,096	0%	\$ 7,674
2038			\$ 85,606	\$ 85,606	\$ 176,778	\$ 13,800	\$ 162,978	\$ 138,000	10%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ -	0%	\$ 16,560	0%	\$ 8,418
	\$ 1,829,223	\$ 322,804	\$ 2,098,634	\$ 4,250,661	\$ 5,472,360	\$ 443,430	\$ 5,028,930	\$ 3,630,375		\$ 75,874		\$ 275,000		\$ 74,357		\$ 93,000		\$ 100,000		\$ 509,833		\$ 270,492

ATTACHMENT 2

Estimated Environmental Action Expenditures and Property Funding Account
Balances

Attachment 2

**Table 2-1
Estimated Environmental Action Expenditures (since July 1, 2010)
and Agency Approved Annual Budgets**

Coldwater Road Landfill - 11030

Task Description	T01 - Continue Ongoing OMM	T02 - Cell E Leakage Investigation	T03 - Cell E Repairs and Permit Modification	T04 - Fe & Mn Delineation	T05 - Finalize Closure	T06 - Agency Coord./ Negotiation & Reporting	T07 - Project Management & Coordination	T08 - Agency Oversight	T09 - PFC Investigations/ Evaluations	Estimated Annual Expenditures	Agency Approved Annual Budget (1)
<i>Estimated Cost</i>											
2010 ⁽²⁾	\$ 67,376	\$ 14,572	\$ 90,432	\$ 1,364	\$ -	\$ 11,542	\$ 13,815	\$ -	\$ -	\$ 199,100	\$ 422,615
2011	\$ 102,820	\$ -	\$ 29,804	\$ 22,253	\$ -	\$ 31,192	\$ 19,479	\$ -	\$ -	\$ 205,548	\$ 240,307
2012	\$ 115,322	\$ -	\$ 15,156	\$ 36,088	\$ -	\$ 5,971	\$ 17,857	\$ 4,021	\$ -	\$ 194,415	\$ 234,900
2013	\$ 113,383	\$ -	\$ -	\$ 16,010	\$ -	\$ 7,328	\$ 15,955	\$ 7,315	\$ -	\$ 159,991	\$ 160,504
2014	\$ 104,932	\$ -	\$ -	\$ 6,171	\$ -	\$ 6,172	\$ 17,594	\$ 13,422	\$ -	\$ 148,290	\$ 159,779
2015	\$ 108,559	\$ -	\$ -	\$ 9,970	\$ -	\$ 7,391	\$ 15,920	\$ 8,526	\$ -	\$ 150,366	\$ 159,056
2016 ⁽³⁾	\$ 111,172	\$ -	\$ -	\$ 14,000	\$ -	\$ 7,500	\$ 18,092	\$ 15,076	\$ -	\$ 165,840	\$ 165,840
2017	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Cumulative	\$ 723,563	\$ 14,572	\$ 135,392	\$ 105,856	\$ -	\$ 77,095	\$ 118,713	\$ 48,360	\$ -	\$ 1,223,551	\$ -

Total Estimated Environmental Action Expenditures \$ 1,223,551

Notes

(1) Agency approved budget includes the approved annual budget and all approved amendments for this property for the identified year.

(2) July 2010 through December 2010.

(3) 2016 Estimated expenditures reflects actual spent from January 1, 2016 through August 31, 2016 (\$103,775.29) and projected spend (\$62,064.71) for September 1, 2016 through December 31, 2016.

Attachment 2
Table 2-2
Coldwater Road Landfill - 11030
Property Funding Accounts Balances

Coldwater Road Landfill - 11030

Property Funding Accounts Per Settlement Agreement	1-Jul-2010	1-Apr-2011	31-Dec-2011	31-Dec-2012	31-Dec-2013	30-Sep-2014	31-Dec-2014	31-Dec-2015	30-Sep-2016
Minimum Estimated Property Funding	\$ 1,829,223	\$ 1,527,451	\$ 1,508,806	\$ 1,290,748	\$ 1,133,547	\$ 1,059,512	\$ 1,016,974	\$ 856,865	\$ 755,398
Reserve Property Funding	\$ 322,804	\$ 316,025	\$ 321,140	\$ 326,732	\$ 338,280	\$ 341,024	\$ 340,771	\$ 342,133	\$ 345,441
Long Term OMM Property Funding	\$ 2,098,634	\$ 2,054,562	\$ 2,087,815	\$ 2,124,171	\$ 2,199,247	\$ 2,217,085	\$ 2,215,440	\$ 2,224,300	\$ 2,245,300
Total Property Funding	<u>\$ 4,250,661</u>	<u>\$ 3,898,038</u>	<u>\$ 3,917,761</u>	<u>\$ 3,741,651</u>	<u>\$ 3,671,074</u>	<u>\$ 3,617,621</u>	<u>\$ 3,573,185</u>	<u>\$ 3,423,299</u>	<u>\$ 3,346,138</u>

Note: Balances reflect all costs and all income as of the referenced date.

ATTACHMENT 3

2017 Budget Summary, Scope of Work and Detailed Budget Estimate

Attachment 3 - 2017 Budget Summary and Scope of Work

Coldwater Road Landfill - 11030**Summary by Task**

Task Descriptions	2017 Annual Budget
Task 1 <i>Continue Ongoing OMM</i>	\$113,696
Task 2 <i>Cell E Leakage Investigation</i>	\$0
Task 3 <i>Cell E Repairs and Permit Modification</i>	\$0
Task 4 <i>Fe & Mn Delineation</i>	\$14,270
Task 5 <i>Finalize Closure</i>	\$0
Task 6 <i>Agency Coord./Negotiation & Reporting</i>	\$7,608
Task 7 <i>Project Management & Coordination</i>	\$18,626
Task 8 <i>Agency Oversight</i>	\$19,640
Task 9 <i>PFC Investigations/Evaluations</i>	\$42,199
Totals	\$216,039

Footnotes:

**ATTACHMENT 3 - SCOPE OF WORK AND DETAILED BUDGET ESTIMATE
FOR THE 2017 ANNUAL EA BUDGET REQUEST**

COLDWATER ROAD LANDFILL - 11030

The scope of work associated with the 2017 annual EA budget request for the Coldwater Road Landfill site (#11030) is as follows:

TASK 1- CONTINUE ONGOING OMM

- Perform ongoing OMM for the site from January 1, 2017 through December 31, 2017, including:
 - » Scheduled and unscheduled site visits
 - » Landfill, property and leak detection system inspections
 - » Quarterly Landfill Cap Inspections
 - » Monthly monitoring and leak detection vault dewatering
 - » Leachate Tank Discharge (budget assumes two offsite disposals)
 - » Responses to alarm conditions
 - » Landscaping and vegetation control
 - » Burrowing animal control
 - » Scheduled maintenance
 - » Sampling
 - » Reporting:
 - › Monthly discharge summaries
 - › Quarterly status reports
 - › Quarterly periodic reports on continued compliance (PRCCs)
 - › Semi-annual groundwater monitoring reports
 - › Semi-annual leak detection system reports
 - › Annual inspection report
 - » Non-routine maintenance (budget assumes two days of electrical repairs, four days of other non-routine landfill maintenance activities, one day of excavation type subcontractor costs, and a sump pump repair)
- For cost estimating purposes, we have assumed that the negotiated rates between RACER Trust and Merit Laboratories will apply to the analytical services provided under this budget request

TASK 2- CELL E LEAKAGE INVESTIGATION

- No anticipated scope for 2017 at this time

TASK 3- CELL E REPAIRS AND PERMIT MODIFICATION

- No anticipated scope for 2017 at this time

TASK 4- FE & MN DELINEATION

- Address MDEQ comments on draft operating license application
- Provide support to RACER as needed to address any MDEQ comments on the draft supplemental restrictive covenant
- Abandon WWTP monitoring wells and two other wells not utilized for the routine monitoring well sampling activities

TASK 5- FINALIZE CLOSURE

- No anticipated scope for 2017 at this time

TASK 6- AGENCY COORD./NEGOTIATION & REPORTING

- Support RACER in the negotiations for the site and to address MDEQ comments concerning the site

TASK 7- PROJECT MANAGEMENT & COORDINATION

- Perform overall project management from January 1, 2017 through December 31, 2017, including:
 - » Staffing
 - » Budgeting
 - » Review and approval of expenditures and subcontractor invoices
 - » Invoicing
 - » Cost tracking
 - » Non-routine (*i.e.*, additional) site visits
 - » RACER project status reports
 - » Address RACER requests
 - » Subcontracting
 - » Compliance tracking

TASK 8- AGENCY OVERSIGHT

- Agency oversight of project work

TASK 9- PFC INVESTIGATIONS/EVALUATIONS:

- If additional Perfluorinated Compound (PFC) investigations/evaluations are determined necessary, then the specific scope of work and budget will be reviewed with the MDEQ prior to implementation. The following scope of work and associated budget provides an allowance to complete further investigations should such investigations be determined to be necessary:
 - » Two days of Geoprobe investigation, including collection of up to 7 groundwater samples for PFCs analysis, plus QC samples, to investigate PFCs at the Site.
 - » Installation and development of two up to 50-foot deep stainless steel groundwater monitoring wells.
 - » Collection of one round of groundwater samples from the 12 existing and two newly installed monitoring wells (assuming the sampling of the wells can be coordinated with one of the two semi-annual sampling events as a costs savings measure).

Coldwater Road Landfill - 11030

PERSONNEL CATEGORY HOURLY BILLING RATE ⁽¹⁾	OFF \$186	ME/MS \$163	Assoc \$151	SE/PM \$105	PE/PS \$93	DE/S \$83	SR TECH \$83	Staff \$70	PC \$73	SA \$52	Labor Costs	Direct Expenses	Sub	Total Cost
TASK DESCRIPTION														
Task 1: Continue Ongoing OMM	12	0	96	24	96	294	273	136	12	14	\$86,579	\$10,398	\$6,900	\$103,877
Task 1: Laboratories	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$9,819	\$9,819
Task 2: Cell E Leakage Investigation	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00	\$0
Task 3: Cell E Repairs and Permit Modification	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00	\$0
Task 4: Fe & Mn Delineation - Well Abandonment	1	0	4	0	0	20	16	0	2	4	\$4,146.47	\$299.54	\$4,475	\$8,921
Task 4: Fe & Mn Delin. - RC/Closure Cert./Post-Closure Agreeeme	4	0	8	16	0	8	4	0	4	4	\$5,136	\$213	\$0.00	\$5,349
Task 5: Finalize Closure	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00	\$0
Task 6: Agency Coord./Negotiation & Reporting	2	0	8	8	4	8	0	2	0	2	\$3,707	\$3,901	\$0.00	\$7,608
Task 7: Project Management & Coordination	12	0	55	15	12	24	0	18	12	18	\$18,336	\$291	\$0.00	\$18,626
Task 8: Agency Oversight (10% of Tasks 1 - 8 Budgets)	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$0.00	\$19,640
Task 9: PFC Investigations/Evaluations	4	0	24	12	8	62	62	0	8	8	\$17,716	\$1,350	\$13,300.00	\$32,366
Task 9: PFC Investigations/Evaluations - Laboratories	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0.00	\$9,832.50	\$9,833
TOTAL HOURS	35	0	195	75	120	416	355	156	38	50				
SUB TOTALS	\$6,524	\$0	\$29,531	\$7,863	\$11,183	\$34,647	\$29,566	\$10,904	\$2,780	\$2,621	\$135,619.75	\$16,452.30	\$44,326.50	<u>\$216,039</u>

- OFF - Officer
- ME/MS - Sr. Managing Engineer/Scientist, Manager
- Assoc - Project Associate
- SE/PM - Senior Engineer/Scientist/Project Manager
- PE/PS - Project Engineer/Project Scientist
- DE/S - Design Engineer/Scientist
- Staff - Staff Engineer/Scientist
- SR TECH - Sr Technician
- PC - Project Controls
- SA - Secretary

Subcontractor Costs:

Task 1 - Non-Routine OMM

PermAlert Technician	\$792 each	0	\$0
Perm Alert Cable	\$18.15 per foot	0	\$0
Perm Alert Connectors	\$72 each	0	\$0
Sump Pump Rebuilding	\$2,875 LS	1	\$2,875
Young's Environmental	\$2,645 LS	1	\$2,645
Deisler Electric	\$690 LS	2	\$1,380
Subtotal:			\$6,900

Notes:

(1) Anticipated 2017 contract rates with RACER

**Attachment 3 - Scope of Work and Detailed Budget Estimate
for the 2017 Annual EA Budget Authorization Request**

Privileged and Confidential

Coldwater Road Landfill - 11030

2017 Analytical Requirements

Item	Sample Matrix	Analytical Parameters	Analytical Methods	EQuIS Analytical Method Code	Unit Prices	Applicable Surcharge Multiplier ⁽¹⁾	Extended Prices	Estimated Sample Qty/Event	Field QC Samples							Total Sample Qty/Event	Number of Events	Total Billable Samples	Estimated Cost/Event
									MS	MSD	Lab Dup	Trip Blk	RBk	Fld Dup	Other				
1	WG	Conductivity	120.1	E120.1	\$ 5.00	1.15	\$ 5.75	12	0	0	0	0	1	1	0	14	2	22	\$126.51
2	WG	TOC*	415	SW9060	\$ 20.00	1.15	\$ 23.00	12	0	0	0	0	1	1	0	14	2	22	\$506.02
3	WG	TOX*	9020	SW9020	\$ 88.00	1.15	\$ 101.20	12	0	0	0	0	1	1	0	14	2	22	\$2,226.50
4	WG	Dissolved Metals (Cu, Cr, Ni, Zn)	200.8	E200.8	\$ 28.00	1.15	\$ 32.20	12	0	0	0	0	1	1	0	14	2	22	\$708.43
5	WG	Dissolved Iron	236.1	E236.1	\$ 7.00	1.15	\$ 8.05	12	0	0	0	0	1	1	0	14	1	14	\$112.70
6	WG	Dissolved Manganese	243.1	E243.1	\$ 7.00	1.15	\$ 8.05	12	0	0	0	0	1	1	0	14	1	14	\$112.70
7	WG	Dissolved Sodium	273.1	E273.1	\$ 7.00	1.15	\$ 8.05	12	0	0	0	0	1	1	0	14	1	14	\$112.70
8	WG	Chloride	325	E325	\$ 10.00	1.15	\$ 11.50	12	0	0	0	0	1	1	0	14	1	14	\$161.00
9	WG	Cyanide	335.2	E335.2	\$ 25.00	1.15	\$ 28.75	12	0	0	0	0	1	1	0	14	1	14	\$402.50
10	WG	Phenols	420.2	E420.2	\$ 20.00	1.15	\$ 23.00	12	0	0	0	0	1	1	0	14	1	14	\$322.00
11	WG	Sulfate	375.4	E375.4	\$ 12.00	1.15	\$ 13.80	12	0	0	0	0	1	1	0	14	1	14	\$193.20
12	WG	VOCs	8260	SW8260	\$ 55.00	1.15	\$ 63.25	12	0	0	0	2	1	1	0	16	1	16	\$1,012.00
		Shipping per Day			\$ 100.00	1.15	\$ 115.00	1	0	0	0	0	0	0	0	1	2	2	\$180.72
17	WL	Conductivity	120.1	E120.1	\$ 5.00	1.15	\$ 5.75	6	0	0	0	0	1	1	0	8	1	8	\$46.00
18	WL	TOC*	415	SW9060	\$ 20.00	1.15	\$ 23.00	6	0	0	0	0	1	1	0	8	1	8	\$184.00
19	WL	TSS	160.2	E160.2	\$ 10.00	1.15	\$ 11.50	6	0	0	0	0	1	1	0	8	1	8	\$92.00
20	WL	Dissolved Metals (Cu, Cr, Ni, Zn)	200.8	E200.8	\$ 28.00	1.15	\$ 32.20	6	0	0	0	0	1	1	0	8	1	8	\$257.60
21	WL	VOCs	8260	SW8260	\$ 55.00	1.15	\$ 63.25	6	0	0	0	1	1	1	0	9	1	9	\$569.25
		Shipping per Day			\$ 100.00	1.15	\$ 115.00	1	0	0	0	0	0	0	0	1	1	1	\$115.00
26	WIN	Conductivity	120.1	E120.1	\$ 5.00	1.15	\$ 5.75	6	0	0	0	0	1	1	0	8	2	16	\$92.00
27	WIN	TOC*	415	SW9060	\$ 20.00	1.15	\$ 23.00	6	0	0	0	0	1	1	0	8	2	16	\$368.00
28	WIN	TSS	160.2	E160.2	\$ 10.00	1.15	\$ 11.50	6	0	0	0	0	1	1	0	8	2	16	\$184.00
29	WIN	Dissolved Metals (Cu, Cr, Ni, Zn)	200.8	E200.8	\$ 28.00	1.15	\$ 32.20	6	0	0	0	0	1	1	0	8	2	16	\$515.20
		Shipping per Day			\$ 100.00	1.15	\$ 115.00	1	0	0	0	0	0	0	0	1	2	2	\$230.00
34	AQUEOUS	BOD	405.1	E405.1	\$ 20.00	1.15	\$ 23.00	1	0	0	0	0	0	0	0	1	4	4	\$92.00
36	AQUEOUS	Ammonia-Nitrogen	351.4	E351.4	\$ 10.00	1.15	\$ 11.50	1	0	0	0	0	0	0	0	1	4	4	\$46.00
37	AQUEOUS	Phosphorus	365.2	E365.2	\$ 15.00	1.15	\$ 17.25	1	0	0	0	0	0	0	0	1	4	4	\$69.00
38	AQUEOUS	TSS	160.2	E160.2	\$ 10.00	1.15	\$ 11.50	1	0	0	0	0	0	0	0	1	4	4	\$46.00
39	AQUEOUS	FOG	1664A	E1664A	\$ 30.00	1.15	\$ 34.50	1	0	0	0	0	0	0	0	1	4	4	\$138.00
40	AQUEOUS	Metals (As, Cr, Cu, Ni, Zn)	200.8	E200.8	\$ 50.00	1.15	\$ 57.50	1	0	0	0	0	0	0	0	1	4	4	\$230.00
41	AQUEOUS	Mercury	245.2	E245.2	\$ 40.00	1.15	\$ 46.00	1	0	0	0	0	0	0	0	1	4	4	\$184.00
42	AQUEOUS	Cyanide, amenable	335.1	E335.1	\$ 40.00	1.15	\$ 46.00	1	0	0	0	0	0	0	0	1	4	4	\$184.00
51	AQUEOUS	total iron	200.8	E200.8	\$ 10.00	1.30	\$ 13.00	0	0	0	0	0	0	0	0	0	0	0	
52	AQUEOUS	total manganese	200.8	E200.8	\$ 10.00	1.30	\$ 13.00	0	0	0	0	0	0	0	0	0	0	0	
29	WG	PFOS (PFCs) Analysis	537	N/A	\$ 300.00	1.15	\$ 345.00	14	1	1	1	0	1	1	0	19	1.5	29	\$9,832.50
⁽¹⁾ Explanation of Surcharges:															Estimated Total Costs: \$19,651.53				
* Subcontracted to . Shipping prices are approximate.															Task 1 = \$9,819				
* If less than 3 metals are run on a single digestion, a \$10.00 metal digestion fee applies.															Task 9 = \$9,832.50				

ATTACHMENT 4

2017 Project Schedule and Milestones

Attachment 4 - Projected 2017 Schedule and Milestones
2017 Annual EA Budget Authorization Request

ID	Task Name	Duration	Start	Finish	2017 Annual EA Budget Authorization Request											
					January	February	March	April	May	June	July	August	September	October	November	December
1	Routine Schedule OMM Activities	295.25 days	Mon 1/2/17	Wed 1/3/18	[Summary bar spanning from 1/2/17 to 1/3/18]											
2	Accumulation Tank/Containment Inspection	293 days	Mon 1/2/17	Mon 1/1/18	[Summary bar spanning from 1/2/17 to 1/1/18]											
3	Monthly Vault Dewatering	275 days	Mon 1/16/17	Fri 12/22/17	[Summary bar with periodic task blocks]											
16	Quarterly Inspections	226.63 days	Thu 3/2/17	Fri 12/8/17	[Summary bar with periodic task blocks]											
21	Trim Brush.Cut Grass	12 days	Mon 6/5/17	Mon 9/11/17	[Summary bar with task block]											
22	Cap Inspection/Tree Pulling	201.88 days	Thu 3/2/17	Wed 11/8/17	[Summary bar with periodic task blocks]											
32	Quarterly Accumulation Tank Discharge	226.63 days	Tue 3/28/17	Wed 1/3/18	[Summary bar with periodic task blocks]											
37	Compliance Monitoring	190.63 days	Fri 4/28/17	Thu 12/21/17	[Summary bar with task block]											
38	Semi-Annual Groundwater Monitoring	140 days	Thu 6/15/17	Wed 12/6/17	[Summary bar with task block]											
41	Semi-Annual LDS Monitoring	140 days	Thu 6/15/17	Wed 12/6/17	[Summary bar with task block]											
44	Quarterly Accumulation Tank Sampling	190.63 days	Fri 4/28/17	Thu 12/21/17	[Summary bar with task block]											
49	Reporting	304.75 days	Mon 1/2/17	Mon 1/15/18	[Summary bar spanning from 1/2/17 to 1/15/18]											
50	Monthly Discharge Summaries	272.13 days	Mon 1/2/17	Tue 12/5/17	[Summary bar with periodic task blocks]											
63	Quarterly PRCC Submission to City of Flint	221.5 days	Sat 1/28/17	Mon 10/30/17	[Summary bar with periodic task blocks]											
68	Quarterly Status Report Submission to MDEQ	221.5 days	Fri 4/14/17	Mon 1/15/18	[Summary bar with periodic task blocks]											
69	Quarterly Status Report Submission to MDEQ 1	1 day	Fri 4/14/17	Fri 4/14/17	[Task block]											
70	Quarterly Status Report Submission to MDEQ 2	1 day	Fri 7/14/17	Fri 7/14/17	[Task block]											
71	Quarterly Status Report Submission to MDEQ 3	1 day	Fri 10/13/17	Fri 10/13/17	[Task block]											
72	Quarterly Status Report Submission to MDEQ 4	1 day	Mon 1/15/18	Mon 1/15/18	[Task block]											
73	Semi-Annual Groundwater Report to MDEQ	149 days	Wed 3/1/17	Fri 9/1/17	[Milestone diamond]											
76	Semi-Annual LDS Report to MDEQ	149 days	Wed 3/1/17	Fri 9/1/17	[Milestone diamond]											
79	Annual Inspection Report Submission to MDEQ	0 days	Wed 3/1/17	Wed 3/1/17	[Milestone diamond]											
80	Fe and Mn Delineation	293.63 days	Mon 1/2/17	Mon 1/1/18	[Summary bar spanning from 1/2/17 to 1/1/18]											
81	Post-Closure Agreement Support	293.63 days	Mon 1/2/17	Mon 1/1/18	[Summary bar spanning from 1/2/17 to 1/1/18]											
82	Agency Negotiation	293.63 days	Mon 1/2/17	Mon 1/1/18	[Summary bar spanning from 1/2/17 to 1/1/18]											
83	Project Management	293.63 days	Mon 1/2/17	Mon 1/1/18	[Summary bar spanning from 1/2/17 to 1/1/18]											
84	PFC Investigation/Evaluation	148 days	Wed 3/1/17	Thu 8/31/17	[Summary bar with task blocks]											
85	PFC Geoprobe Investigation	2 wks	Wed 3/1/17	Mon 3/13/17	[Task block]											
86	New Monitoring Well Installation	2 wks	Mon 5/8/17	Fri 5/19/17	[Task block]											
87	Monitoring Well Sampling	2 wks	Wed 6/21/17	Tue 7/4/17	[Task block]											
88	PFC Investigation/Evaluation Reporting	6.9 mons	Mon 3/13/17	Thu 8/31/17	[Task block]											

Project: 11030 - 2012 Schedule
Date: Fri 10/21/16

Task		Summary		External Milestone		Inactive Milestone		Duration-only		Start-only		Deadline	
Split		Project Summary		Inactive Task		Inactive Summary		Manual Summary Rollup		Finish-only			
Milestone		External Tasks		Inactive Task		Manual Task		Manual Summary		Progress			

ATTACHMENT 5

2017 and Future Years Cost Reallocation

**Attachment 5 - Current and Future Years Cost Reallocation
for 2017 Annual EA Budget Authorization Request**

Privileged and Confidential

Coldwater Road Landfill - 11030

Year	Annual Cost	Continue Ongoing OMM	Cell E Leakage Investigation (5)	Cell E Repairs and Permit Modification	Fe & Mn Delineation	Finalize Closure	Agency Coord./ Negotiation & Reporting	Project Management & Coordination	Agency Oversight	PFC Investigations/ Evaluations
2009										
2010 ⁽¹⁾	\$ 199,100	\$ 67,376	\$ 14,572	\$ 90,432	\$ 1,364	\$ -	\$ 11,542	\$ 13,815	\$ -	\$ -
2011	\$ 205,548	\$ 102,820	\$ -	\$ 29,804	\$ 22,253	\$ -	\$ 31,192	\$ 19,479	\$ -	\$ -
2012	\$ 194,415	\$ 115,322	\$ -	\$ 15,156	\$ 36,088	\$ -	\$ 5,971	\$ 17,857	\$ 4,021	\$ -
2013	\$ 159,991	\$ 113,383	\$ -	\$ -	\$ 16,010	\$ -	\$ 7,328	\$ 15,955	\$ 7,315	\$ -
2014	\$ 148,290	\$ 104,932	\$ -	\$ -	\$ 6,171	\$ -	\$ 6,172	\$ 17,594	\$ 13,422	\$ -
2015	\$ 150,366	\$ 108,559	\$ -	\$ -	\$ 9,970	\$ -	\$ 7,391	\$ 15,920	\$ 8,526	\$ -
2016 ⁽²⁾ - estimated	\$ 165,840	\$ 111,172	\$ -	\$ -	\$ 14,000	\$ -	\$ 7,500	\$ 18,092	\$ 15,076	\$ -
2017	\$ 216,039	\$ 113,696	\$ -	\$ -	\$ 14,270	\$ -	\$ 7,608	\$ 18,626	\$ 19,640	\$ 42,199
2018	\$ 363,813	\$ 169,558	\$ 53,302	\$ 63,717	\$ -	\$ -	\$ 8,297	\$ 35,866	\$ 33,074	\$ -
2019	\$ 217,520	\$ 169,558	\$ -	\$ -	\$ -	\$ -	\$ 7,000	\$ 21,187	\$ 19,775	\$ -
Subtotals:	\$ 2,020,923	\$ 1,176,375	\$ 67,874	\$ 199,109	\$ 120,126	\$ -	\$ 100,000	\$ 194,392	\$ 120,848	\$ 42,199
Subtotal for Original Cost Breakdown ⁽³⁾	\$ 2,020,923	\$ 1,176,375	\$ 75,874	\$ 275,000	\$ 74,357	\$ -	\$ 100,000	\$ 204,193	\$ 115,125	\$ -
Variance	\$ 0	\$ -	\$ 8,000	\$ 75,891	\$ (45,769)	\$ -	\$ -	\$ 9,801	\$ (5,723)	\$ (42,199)

2020	\$ 154,475	\$ 130,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,696	\$ 7,978.80	\$ -
2021	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2022	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2023	\$ 162,978	\$ 138,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,560	\$ 8,418	\$ -
2024	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2025	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2026	\$ 264,308	\$ 130,800	\$ -	\$ -	\$ -	\$ 93,000	\$ -	\$ 26,856	\$ 13,652	\$ -
2027	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2028	\$ 157,073	\$ 133,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,960	\$ 8,113	\$ -
2029	\$ 154,475	\$ 130,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,696	\$ 7,979	\$ -
2030	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2031	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2032	\$ 154,475	\$ 130,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,696	\$ 7,979	\$ -
2033	\$ 157,073	\$ 133,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,960	\$ 8,113	\$ -
2034	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2035	\$ 154,475	\$ 130,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,696	\$ 7,979	\$ -
2036	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2037	\$ 148,570	\$ 125,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,096	\$ 7,674	\$ -
2038	\$ 162,978	\$ 138,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 16,560	\$ 8,417	\$ -

Totals \$ 5,028,930 \$ 3,630,375 \$ 67,874 \$ 199,109 \$ 120,126 \$ 93,000 \$ 100,000 \$ 500,032 \$ 276,215 \$ 42,199

Original Cost Breakdown⁽³⁾ \$ 5,028,930 \$ 3,630,375 \$ 75,874 \$ 275,000 \$ 74,357 \$ 93,000 \$ 100,000 \$ 509,833 \$ 270,492 \$ -

Variance \$ 0 \$ - \$ 8,000 \$ 75,891 \$ (45,769) \$ - \$ - \$ 9,801 \$ (5,723) \$ (42,199)
(value in parenthesis denotes cost is greater than in original cost breakdown)

Identifies cells/amounts that were revised from the most recent approved annual budget or amendment (2016 Amendment No. 1 approved on November 16, 2016).

Notes:

(1) July 1, 2010 through December 31, 2010

(2) 2016 Estimated reflects actual spent from January 1, 2016 through August 31, 2016 (\$103,775.29) and projected spend (\$62,064.71) for September 1, 2016 through December 31, 2016.

(3) The original cost breakdown and schedule of cash flow as established by MLC pursuant to the May 2010 RCES.