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May 9, 2018

Mr. Chad Hall
Georgia Department of Natural Resources
Environmental Protection Division (EPD)
Solid Waste Management Program
4244 International Parkway, Suite 104
Atlanta, Georgia 30354

RE: Pine Bluff Solid Waste Management Facility
Permit No. 028-39 (SL)
Annual Coal Combustion Residual (CCR) Management Plan and Dust Control Report

Dear Mr. Hall:

On behalf of Waste Management of Metro Atlanta, Atlantic Coast Consulting, Inc. (ACC) is submitting the enclosed annual update to the facility's CCR management and fugitive dust control plan. The current CCR management plan is authorized under a permit issued by Georgia EPD on May 22, 2017. As stated in the approval letter issued by EPD, this facility is allowed to accept CCR for a period of one (1) year or until May 21, 2018. The approval letter further states that the facility must submit an updated CCR Management Plan to EPD no later than March 1, 2018 if it plans to continue receiving CCR material. However, EPD decided to delay the plan submission deadline until it could conduct visits to sites accepting CCR material and determine the appropriate requirements for the CCR Management Plan updates. The deadline for submitting the annual reports was delayed on two occasions. These delays are documented in an email from you to Shawn Carroll of Waste Management on February 16, 2018 and from Rima Naji to myself on May 8, 2018. A copy of the emails are provided in the appendices of the attached Annual CCR Management Plan and Dust Control Report.

If you have any questions or need further information please call me at (912) 236-3471.

Sincerely,

ATLANTIC COAST CONSULTING, INC.

A handwritten signature in blue ink, appearing to read 'ML', is positioned above the name Marc Liverman.

Marc Liverman, P.E.
Project Engineer

cc: Shawn Carroll, John Workman, Tim Bassett (WM)
Chris Klamke (ACC)



WASTE MANAGEMENT OF METRO ATLANTA, INC.
1850 PARK PLACE | MARIETTA, GEORGIA 30067

**PINE BLUFF SOLID WASTE MANAGEMENT FACILITY
COAL COMBUSTION RESIDUAL (CCR) MANAGEMENT
PLAN ANNUAL UPDATE
PERMIT #: 028-039D (SL)**

**ANNUAL CCR MANAGEMENT PLAN AND DUST
CONTROL REPORT**



MAY 2018

Annual CCR Management Plan and Dust Control Report

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Annual CCR Management Plan and Dust Control Report



This CCR management and fugitive dust report was prepared in accordance with OCGA Solid Waste Management Rule 391-3-4-.07(5) and the Annual Coal Combustion Residuals (CCR) Management Plan and Dust Control Report Guidance Document dated May 2018.

SUMMARY:

The Pine Bluff Municipal Solid Waste (MSW) Landfill is comprised of an active Municipal Solid Waste Landfill (LF) unit that is separated into eighteen phases as shown on the current Design and Operation (D&O) plan approved by EPD on June 28, 2001. The facility's current CCR Management Plan was established through a minor modification approved by Georgia's Environmental Protection Division (EPD) on May 22, 2017.

FACILITY LOCATION AND DESCRIPTION:

The Pine Bluff Landfill is located at 13809 East Cherokee Drive, Ball Ground, Georgia. The landfill sits on a 955.3 acres tract of land located in Cherokee County, approximately 3.5 miles south of the Ball Ground city limits.

CCR MANAGEMENT ACTIVITIES:

CCR and Non-CCR Waste Volumes:

Pine Bluff currently receives CCR and non-CCR waste materials. The non-CCR waste materials may contain waste streams from municipal, industrial, commercial, and other special waste stream sources. All waste streams accepted at this facility are in accordance with OCGA Solid Waste Management Rule 391-3-4.

The facility is currently permitted to receive a maximum CCR to non-CCR waste ratio (by weight) of 1 to 10. This translates into an estimated annual weight of 90,025 tons of CCR material with an estimated daily maximum of 330 tons. These limits are defined in Section 1 of the current Operational Narrative shown on Sheet 43 of the Design and Operation (D&O) Plans. The CCR to non-CCR ratio limits were established by verifying that the facility's design is capable of withstanding the additional loads presented by the higher density CCR material. The basis of the design verification provided in the May 22, 2017 CCR Management Minor Modification was an overall waste mass density of 74.5 lb/CF (2,011.5 lb/CY). This density takes into account the elevated waste mass density with the introduction of the permitted upper limit of CCR into the waste stream.

The CCR material received at this facility between May 22, 2017 and December 31, 2017 had a total recorded weight of 4,341 tons. During this same period, the facility received 699,527 tons of non-CCR waste which translates into an overall CCR to non-CCR ratio (by weight) of 1 to 161. This ratio is below the upper limits established by the Operational Narrative and the facility's design calculations. Therefore, the presence of CCR material will not adversely affect the LF's global stability, base liner stability, leachate collection system capabilities or cause excessive base grade settlement.

Annual CCR Management Plan and Dust Control Report



The maximum amount of CCR received in any given day between May 22, 2017 and December 31, 2017 was 1,506 tons. This exceeds the estimated max daily weight of 330 tons shown in Section 1 of the Operational Narrative, but this single exceedance did not cause the overall ratios to exceed those used in the design verification. Therefore, no adjustments are needed to the plan or design components related to stability, leachate collection or base grade settlement.

CCR Source:

The only CCR material received at the facility was sourced from Southern Company facilities as required by Section 3 of the facility's Operational Narrative on Sheet 43 of the current Design and Operation (D&O) Plan. It should be noted that the CCR interned at the landfill is from the same Southern Company facility whose material was used as the basis of design for the original CCR Management Permit. Additionally, its 'as received' physical condition (i.e. moisture and grain size) has remained generally consistent throughout the disposal process and no new CCR waste streams were accepted by the facility during this reporting period.

CCR Characterization and Compatibility:

Section 3 of the Operational Narrative on Sheet 43 requires all CCR waste streams entering the facility to be tested for characterization and compatibility using the Toxicity Characteristic Leaching Procedure (TCLP) 8 RCRA Metals by SW-846 Method 1311 and a Paint Filter Test by SW-845 Method 9095.

As noted above, the material source and general physical characteristics have remained consistent since the CCR Management permit's initial issue date and the customer has not notified the facility of any significant process changes. Therefore, additional testing to verify characterization and compatibility have not been required. The original laboratory results upon which the CCR Management is based are repeated in Appendix A for reference. Please note that this laboratory analysis, although specific for Superior Landfill, represents typical analytical data found in CCR material across all of Waste Management facilities in Georgia.

CCR Placement, Compaction and Cover:

The facility is permitted to operate two independent working faces for a period of six months upon beginning of waste placement operations in a newly constructed cell. The individual working faces operated during this period did not exceed a combined footprint of 40,000 square feet and were limited to approximately 200 feet wide. The maximum area of the working face(s) and their management were conducted in accordance with Section 2 of the Operational Narrative on Sheet 43.

CCR material was co-mingled with non-CCR waste at the working face in ratios described above. The co-mingled CCR/non-CCR materials were placed in layers not exceeding five feet thickness and were compacted as required in Section 5 of the Operational Narrative on Sheet 43 of the Design and Operation Plan. The co-mingled wastes were covered at the end of each

Annual CCR Management Plan and Dust Control Report



day with six inches of earthen material or alternate daily cover as required by Section 6 of the Operational Narrative on Sheet 43.

No leachate outbreaks were observed in layers of waste containing co-mingled CCR/non-CCR.

Additionally, no CCR was co-mingled with non-CCR waste in the first eight feet of waste placed on the liner's protective cover, none of the previously placed CCR material was harvested for beneficial re-use and none of the CCR material was utilized in the facility's solidification process.

Record Keeping:

Records of all waste transported to the site along with daily logs and operational records are retained at the facility's site office building. All record keeping is in accordance with the Georgia Rules for Solid Waste Management 391-3-4-.07(3)(u).

Fugitive Dust Control:

The operators at the facility spread and compacted CCR material into the incoming waste stream as it was received. If the CCR material was not spread during operating hours on the day it was received, the operator would use the on-site water truck to maintain the CCR's moisture levels. This procedure was determined to be an efficient and effective method to avoid fugitive dust generation.

The facility did not receive any complaints related to dust between May 22, 2017 and December 31, 2017 and has remained compliant with requirements established by Air Quality Rule 391-3-1-.02(2)(n)1.

Leachate Collection and Removal System:

The facility's leachate collection, removal and storage system is in good working order with no known issues related to the disposal of co-mingled CCR/non-CCR wastes.

Stormwater Management System:

The working face(s) were managed to ensure that surface water contacting CCR and non-CCR waste was not discharged into the stormwater management system. This was accomplished by placing and compacting material away from the side slopes, using soil diversion berms near side slopes and by sloping the working face into the waste mass.

Environmental Monitoring:

The environmental monitoring program for the facility was modified during development of the CCR Management Plan to include appropriate Appendix III/IV analytical parameters in accordance with United States Environmental Protection Agency recommendations and Georgia Environmental Protection Division Regulations. The monitoring network (consisting of

Annual CCR Management Plan and Dust Control Report



groundwater wells, surface water, underdrain, and leachate monitoring points) and extended parameter list, based on data collected to date, remains suitable for detection of CCR related constituents. Current data does not suggest confirmed impacts at these monitoring points as a result of handling CCR material. The facility will continue implementing the CCR monitoring program and documenting results to EPD in semi-annual monitoring reports.

Emergencies:

The facility did not experience any events or circumstances that represented an operational or environmental emergency during this reporting period.

Documentation of Notification to Local Governments:

The operation of CCR disposal activities during this reporting period have been in compliance with the currently approved CCR management plans and design parameters. Therefore, no plan modifications or local government notifications are required at this time.

CONCLUSION:

The current CCR Management routines required by the facility's Design and Operation Plan has proven to be effective in governing the proper handling and placement of CCR material as required by OCGA's Solid Waste Management Rule 391-3-4-.07(5) and the Guidance Document for Coal Combustion Residuals (CCR) Management Plans dated December 22, 2016.

Annual CCR Management Plan and Dust Control Report

Appendices



CCR Compatibility and Characterization

IN THIS APPENDIX:

- CCR Analytical Report

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Tel: (912)354-7858

TestAmerica Job ID: 680-138279-1

Client Project/Site: Superior Landfill Waste Char.

For:

Waste Management

1809 West Highway 80

Garden City, Georgia 31408

Attn: Ms. Sarah Rafalowski

Kathryn Smith

Authorized for release by:

5/18/2017 12:54:49 PM

Kathryn Smith, Manager of Project Management

(912)354-7858

kathy.smith@testamericainc.com

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Definitions/Glossary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Sample Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-138279-1	Ash-Kraft	Solid	05/02/17 14:55	05/03/17 08:54
680-138279-2	Ash-Grumman	Solid	05/02/17 14:35	05/03/17 08:54

Case Narrative

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Job ID: 680-138279-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE **Client: Waste Management** **Project: Superior Landfill Waste Char.**

Report Number: 680-138279-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 05/03/2017; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 2.8 C.

TCLP VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for TCLP volatile organic compounds (GC-MS) in accordance with EPA SW-846 Methods 1311/8260B. The samples were leached on 05/11/2017 and analyzed on 05/14/2017.

4-Bromofluorobenzene (Surr) recovered low for LCSD 680-479788/4.

Samples Ash-Kraft (680-138279-1)[20X] and Ash-Grumman (680-138279-2)[20X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TCLP SEMIVOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for TCLP semivolatile organic compounds (GC-MS) in accordance with EPA SW846 Methods 1311 / 8270D. The samples were leached on 05/11/2017, prepared on 05/15/2017 and analyzed on 05/17/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

METALS (ICP) - TCLP

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for Metals (ICP) - TCLP in accordance with EPA SW-846 Methods 1311/6010C. The samples were leached on 05/11/2017, and prepared and analyzed on 05/12/2017.

Barium recovered high for the MS of sample Ash-Kraft (680-138279-1) in batch 680-479888.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

MERCURY - TCLP

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for mercury - TCLP in accordance with EPA SW-846 Methods 1311/7470A. The samples were leached on 05/11/2017, prepared on 05/12/2017 and analyzed on 05/15/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

IGNITABILITY FOR SOLIDS

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for ignitability for solids in accordance with EPA SW-846 Method 1030. The samples were analyzed on 05/10/2017.

The following sample did not ignite: Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2); therefore, an ignitability value could not

Case Narrative

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Job ID: 680-138279-1 (Continued)

Laboratory: TestAmerica Savannah (Continued)

be obtained. The result has been reported as "No Burn" (NB).

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

REACTIVE CYANIDE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for reactive cyanide in accordance with EPA SW-846 Method 9014. The samples were prepared on 05/08/2017 and analyzed on 05/09/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

REACTIVE SULFIDE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for reactive sulfide in accordance with EPA SW-846 Method 9034. The samples were prepared on 05/08/2017 and analyzed on 05/09/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CORROSIVITY (PH)

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for corrosivity (pH) in accordance with EPA SW-846 Method 9045D. The samples were analyzed on 05/11/2017.

This analysis is considered a field test and is to be performed within 15 minutes of collection. This analysis was performed in the laboratory outside the 15 minute timeframe.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GRAIN SIZE

Samples Ash-Kraft (680-138279-1) and Ash-Grumman (680-138279-2) were analyzed for grain size in accordance with ASTM D422. The samples were analyzed on 05/04/2017.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Client Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Kraft

Lab Sample ID: 680-138279-1

Date Collected: 05/02/17 14:55

Matrix: Solid

Date Received: 05/03/17 08:54

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020	mg/L			05/14/17 20:15	20
2-Butanone (MEK)	<0.20		0.20	mg/L			05/14/17 20:15	20
Carbon tetrachloride	<0.020		0.020	mg/L			05/14/17 20:15	20
Chlorobenzene	<0.020		0.020	mg/L			05/14/17 20:15	20
Chloroform	<0.020		0.020	mg/L			05/14/17 20:15	20
1,2-Dichloroethane	<0.020		0.020	mg/L			05/14/17 20:15	20
1,1-Dichloroethene	<0.020		0.020	mg/L			05/14/17 20:15	20
Tetrachloroethene	<0.020		0.020	mg/L			05/14/17 20:15	20
Trichloroethene	<0.020		0.020	mg/L			05/14/17 20:15	20
Vinyl chloride	<0.020		0.020	mg/L			05/14/17 20:15	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		80 - 120		05/14/17 20:15	20
Dibromofluoromethane (Surr)	96		80 - 122		05/14/17 20:15	20
1,2-Dichloroethane-d4 (Surr)	86		73 - 131		05/14/17 20:15	20
Toluene-d8 (Surr)	102		80 - 120		05/14/17 20:15	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4-Dinitrotoluene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachlorobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachlorobutadiene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
Hexachloroethane	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
2-Methylphenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
3 & 4 Methylphenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
Nitrobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
Pentachlorophenol	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:27	1
Pyridine	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4,5-Trichlorophenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1
2,4,6-Trichlorophenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 19:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	77		38 - 130	05/15/17 16:52	05/17/17 19:27	1
2-Fluorophenol (Surr)	66		25 - 130	05/15/17 16:52	05/17/17 19:27	1
Nitrobenzene-d5 (Surr)	85		39 - 130	05/15/17 16:52	05/17/17 19:27	1
Phenol-d5 (Surr)	70		25 - 130	05/15/17 16:52	05/17/17 19:27	1
Terphenyl-d14 (Surr)	83		10 - 143	05/15/17 16:52	05/17/17 19:27	1
2,4,6-Tribromophenol (Surr)	101		31 - 141	05/15/17 16:52	05/17/17 19:27	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:13	1
Barium	<1.0	F1	1.0	mg/L		05/12/17 12:11	05/12/17 19:13	1
Cadmium	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:13	1
Chromium	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:13	1
Lead	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:13	1
Selenium	<0.50		0.50	mg/L		05/12/17 12:11	05/12/17 19:13	1
Silver	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:13	1

TestAmerica Savannah

Client Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Kraft

Lab Sample ID: 680-138279-1

Date Collected: 05/02/17 14:55

Matrix: Solid

Date Received: 05/03/17 08:54

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/L		05/12/17 14:02	05/15/17 11:18	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	NB			mm/sec			05/10/17 08:38	1
Cyanide, Reactive	<0.25		0.25	mg/Kg		05/08/17 14:03	05/09/17 14:45	1
Sulfide, Reactive	<150		150	mg/Kg		05/08/17 14:03	05/09/17 12:02	1
pH	6.0	HF		SU			05/11/17 15:19	1

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	2.7			%			05/04/17 18:54	1
Sieve Size 3 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Sand	57.2			%			05/04/17 18:54	1
Sieve Size 2 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Coarse Sand	4.1			%			05/04/17 18:54	1
Sieve Size 1.5 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Medium Sand	17.0			%			05/04/17 18:54	1
Sieve Size 1 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Fine Sand	36.1			%			05/04/17 18:54	1
Sieve Size 0.75 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Fines	40.1			%			05/04/17 18:54	1
Sieve Size 0.375 inch - Percent Finer	100.0			% Passing			05/04/17 18:54	1
Sieve Size #4 - Percent Finer	97.3			% Passing			05/04/17 18:54	1
Sieve Size #10 - Percent Finer	93.2			% Passing			05/04/17 18:54	1
Sieve Size #20 - Percent Finer	86.0			% Passing			05/04/17 18:54	1
Sieve Size #40 - Percent Finer	76.2			% Passing			05/04/17 18:54	1
Sieve Size #60 - Percent Finer	66.3			% Passing			05/04/17 18:54	1
Sieve Size #80 - Percent Finer	60.1			% Passing			05/04/17 18:54	1
Sieve Size #100 - Percent Finer	55.4			% Passing			05/04/17 18:54	1
Sieve Size #200 - Percent Finer	40.1			% Passing			05/04/17 18:54	1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Method: 8260B - Volatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020	mg/L			05/14/17 20:40	20
2-Butanone (MEK)	<0.20		0.20	mg/L			05/14/17 20:40	20
Carbon tetrachloride	<0.020		0.020	mg/L			05/14/17 20:40	20
Chlorobenzene	<0.020		0.020	mg/L			05/14/17 20:40	20
Chloroform	<0.020		0.020	mg/L			05/14/17 20:40	20
1,2-Dichloroethane	<0.020		0.020	mg/L			05/14/17 20:40	20
1,1-Dichloroethene	<0.020		0.020	mg/L			05/14/17 20:40	20
Tetrachloroethene	<0.020		0.020	mg/L			05/14/17 20:40	20
Trichloroethene	<0.020		0.020	mg/L			05/14/17 20:40	20
Vinyl chloride	<0.020		0.020	mg/L			05/14/17 20:40	20

TestAmerica Savannah

Client Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	114		80 - 120		05/14/17 20:40	20
Dibromofluoromethane (Surr)	96		80 - 122		05/14/17 20:40	20
1,2-Dichloroethane-d4 (Surr)	87		73 - 131		05/14/17 20:40	20
Toluene-d8 (Surr)	99		80 - 120		05/14/17 20:40	20

Method: 8270D - Semivolatile Organic Compounds (GC/MS) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4-Dinitrotoluene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachlorobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachlorobutadiene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Hexachloroethane	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2-Methylphenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
3 & 4 Methylphenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Nitrobenzene	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
Pentachlorophenol	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:51	1
Pyridine	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4,5-Trichlorophenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1
2,4,6-Trichlorophenol	<0.049		0.049	mg/L		05/15/17 16:52	05/17/17 19:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	68		38 - 130	05/15/17 16:52	05/17/17 19:51	1
2-Fluorophenol (Surr)	57		25 - 130	05/15/17 16:52	05/17/17 19:51	1
Nitrobenzene-d5 (Surr)	73		39 - 130	05/15/17 16:52	05/17/17 19:51	1
Phenol-d5 (Surr)	59		25 - 130	05/15/17 16:52	05/17/17 19:51	1
Terphenyl-d14 (Surr)	69		10 - 143	05/15/17 16:52	05/17/17 19:51	1
2,4,6-Tribromophenol (Surr)	86		31 - 141	05/15/17 16:52	05/17/17 19:51	1

Method: 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Barium	5.7		1.0	mg/L		05/12/17 12:11	05/12/17 19:37	1
Cadmium	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:37	1
Chromium	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Lead	0.37		0.20	mg/L		05/12/17 12:11	05/12/17 19:37	1
Selenium	<0.50		0.50	mg/L		05/12/17 12:11	05/12/17 19:37	1
Silver	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:37	1

Method: 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/L		05/12/17 14:02	05/15/17 11:28	1

General Chemistry

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	NB			mm/sec			05/10/17 08:38	1
Cyanide, Reactive	<0.25		0.25	mg/Kg		05/08/17 15:20	05/09/17 14:45	1
Sulfide, Reactive	<150		150	mg/Kg		05/08/17 15:20	05/09/17 12:02	1
pH	8.0	HF		SU			05/11/17 15:19	1

TestAmerica Savannah

Client Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Method: D422 - Grain Size

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gravel	0.7			%			05/04/17 18:57	1
Sieve Size 3 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Sand	57.8			%			05/04/17 18:57	1
Sieve Size 2 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Coarse Sand	1.8			%			05/04/17 18:57	1
Sieve Size 1.5 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Medium Sand	15.3			%			05/04/17 18:57	1
Sieve Size 1 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Fine Sand	40.7			%			05/04/17 18:57	1
Sieve Size 0.75 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Fines	41.5			%			05/04/17 18:57	1
Sieve Size 0.375 inch - Percent Finer	100.0			% Passing			05/04/17 18:57	1
Sieve Size #4 - Percent Finer	99.3			% Passing			05/04/17 18:57	1
Sieve Size #10 - Percent Finer	97.5			% Passing			05/04/17 18:57	1
Sieve Size #20 - Percent Finer	94.1			% Passing			05/04/17 18:57	1
Sieve Size #40 - Percent Finer	82.2			% Passing			05/04/17 18:57	1
Sieve Size #60 - Percent Finer	70.4			% Passing			05/04/17 18:57	1
Sieve Size #80 - Percent Finer	63.4			% Passing			05/04/17 18:57	1
Sieve Size #100 - Percent Finer	57.4			% Passing			05/04/17 18:57	1
Sieve Size #200 - Percent Finer	41.5			% Passing			05/04/17 18:57	1

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-479788/8

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0010		0.0010	mg/L			05/14/17 14:42	1
2-Butanone (MEK)	<0.010		0.010	mg/L			05/14/17 14:42	1
Carbon tetrachloride	<0.0010		0.0010	mg/L			05/14/17 14:42	1
Chlorobenzene	<0.0010		0.0010	mg/L			05/14/17 14:42	1
Chloroform	<0.0010		0.0010	mg/L			05/14/17 14:42	1
1,2-Dichloroethane	<0.0010		0.0010	mg/L			05/14/17 14:42	1
1,1-Dichloroethene	<0.0010		0.0010	mg/L			05/14/17 14:42	1
Tetrachloroethene	<0.0010		0.0010	mg/L			05/14/17 14:42	1
Trichloroethene	<0.0010		0.0010	mg/L			05/14/17 14:42	1
Vinyl chloride	<0.0010		0.0010	mg/L			05/14/17 14:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		80 - 120		05/14/17 14:42	1
Dibromofluoromethane (Surr)	96		80 - 122		05/14/17 14:42	1
1,2-Dichloroethane-d4 (Surr)	85		73 - 131		05/14/17 14:42	1
Toluene-d8 (Surr)	101		80 - 120		05/14/17 14:42	1

Lab Sample ID: LCS 680-479788/3

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	0.0500	0.0486		mg/L		97	80 - 120
2-Butanone (MEK)	0.250	0.212		mg/L		85	79 - 125
Carbon tetrachloride	0.0500	0.0475		mg/L		95	67 - 125
Chlorobenzene	0.0500	0.0492		mg/L		98	80 - 120
Chloroform	0.0500	0.0454		mg/L		91	80 - 120
1,2-Dichloroethane	0.0500	0.0445		mg/L		89	72 - 128
1,1-Dichloroethene	0.0500	0.0459		mg/L		92	80 - 120
Tetrachloroethene	0.0500	0.0490		mg/L		98	71 - 123
Trichloroethene	0.0500	0.0485		mg/L		97	80 - 120
Vinyl chloride	0.0500	0.0498		mg/L		100	80 - 129

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	82		80 - 120
Dibromofluoromethane (Surr)	96		80 - 122
1,2-Dichloroethane-d4 (Surr)	85		73 - 131
Toluene-d8 (Surr)	96		80 - 120

Lab Sample ID: LCSD 680-479788/4

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Benzene	0.0500	0.0479		mg/L		96	80 - 120	1	20
2-Butanone (MEK)	0.250	0.210		mg/L		84	79 - 125	1	20
Carbon tetrachloride	0.0500	0.0480		mg/L		96	67 - 125	1	20

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 680-479788/4

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene	0.0500	0.0498		mg/L		100	80 - 120	1	20
Chloroform	0.0500	0.0446		mg/L		89	80 - 120	2	20
1,2-Dichloroethane	0.0500	0.0436		mg/L		87	72 - 128	2	50
1,1-Dichloroethene	0.0500	0.0441		mg/L		88	80 - 120	4	20
Tetrachloroethene	0.0500	0.0495		mg/L		99	71 - 123	1	20
Trichloroethene	0.0500	0.0479		mg/L		96	80 - 120	1	20
Vinyl chloride	0.0500	0.0488		mg/L		98	80 - 129	2	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	79	X	80 - 120
Dibromofluoromethane (Surr)	94		80 - 122
1,2-Dichloroethane-d4 (Surr)	83		73 - 131
Toluene-d8 (Surr)	100		80 - 120

Lab Sample ID: LB 680-479494/1-A

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Method Blank

Prep Type: TCLP

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.020		0.020	mg/L			05/14/17 16:24	20
2-Butanone (MEK)	<0.20		0.20	mg/L			05/14/17 16:24	20
Carbon tetrachloride	<0.020		0.020	mg/L			05/14/17 16:24	20
Chlorobenzene	<0.020		0.020	mg/L			05/14/17 16:24	20
Chloroform	<0.020		0.020	mg/L			05/14/17 16:24	20
1,2-Dichloroethane	<0.020		0.020	mg/L			05/14/17 16:24	20
1,1-Dichloroethene	<0.020		0.020	mg/L			05/14/17 16:24	20
Tetrachloroethene	<0.020		0.020	mg/L			05/14/17 16:24	20
Trichloroethene	<0.020		0.020	mg/L			05/14/17 16:24	20
Vinyl chloride	<0.020		0.020	mg/L			05/14/17 16:24	20

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		80 - 120		05/14/17 16:24	20
Dibromofluoromethane (Surr)	99		80 - 122		05/14/17 16:24	20
1,2-Dichloroethane-d4 (Surr)	87		73 - 131		05/14/17 16:24	20
Toluene-d8 (Surr)	100		80 - 120		05/14/17 16:24	20

Lab Sample ID: 680-138279-2 MS

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	<0.020		1.00	1.00		mg/L		100	80 - 120
2-Butanone (MEK)	<0.20		5.00	4.32		mg/L		86	79 - 125
Carbon tetrachloride	<0.020		1.00	1.03		mg/L		103	67 - 125
Chlorobenzene	<0.020		1.00	1.03		mg/L		103	80 - 120
Chloroform	<0.020		1.00	0.952		mg/L		95	80 - 120
1,2-Dichloroethane	<0.020		1.00	0.921		mg/L		92	72 - 128
1,1-Dichloroethene	<0.020		1.00	0.997		mg/L		100	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-138279-2 MS

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	<0.020		1.00	1.07		mg/L		107	71 - 123
Trichloroethene	<0.020		1.00	1.02		mg/L		102	80 - 120
Vinyl chloride	<0.020		1.00	1.08		mg/L		108	80 - 129

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	81		80 - 120
Dibromofluoromethane (Surr)	97		80 - 122
1,2-Dichloroethane-d4 (Surr)	87		73 - 131
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 680-138279-2 MSD

Matrix: Solid

Analysis Batch: 479788

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	<0.020		1.00	0.986		mg/L		99	80 - 120	2	20
2-Butanone (MEK)	<0.20		5.00	4.36		mg/L		87	79 - 125	1	20
Carbon tetrachloride	<0.020		1.00	1.01		mg/L		101	67 - 125	1	20
Chlorobenzene	<0.020		1.00	1.01		mg/L		101	80 - 120	2	20
Chloroform	<0.020		1.00	0.926		mg/L		93	80 - 120	3	20
1,2-Dichloroethane	<0.020		1.00	0.905		mg/L		90	72 - 128	2	50
1,1-Dichloroethene	<0.020		1.00	0.944		mg/L		94	80 - 120	5	20
Tetrachloroethene	<0.020		1.00	1.01		mg/L		101	71 - 123	5	20
Trichloroethene	<0.020		1.00	0.997		mg/L		100	80 - 120	2	20
Vinyl chloride	<0.020		1.00	1.07		mg/L		107	80 - 129	2	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	86		80 - 120
Dibromofluoromethane (Surr)	97		80 - 122
1,2-Dichloroethane-d4 (Surr)	86		73 - 131
Toluene-d8 (Surr)	97		80 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 680-479935/20-A

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479935

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4-Dinitrotoluene	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachlorobenzene	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachlorobutadiene	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
Hexachloroethane	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
2-Methylphenol	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
3 & 4 Methylphenol	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
Nitrobenzene	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 680-479935/20-A

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479935

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Pentachlorophenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:21	1
Pyridine	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4,5-Trichlorophenol	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1
2,4,6-Trichlorophenol	<0.010		0.010	mg/L		05/15/17 16:52	05/17/17 16:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	72		38 - 130	05/15/17 16:52	05/17/17 16:21	1
2-Fluorophenol (Surr)	61		25 - 130	05/15/17 16:52	05/17/17 16:21	1
Nitrobenzene-d5 (Surr)	73		39 - 130	05/15/17 16:52	05/17/17 16:21	1
Phenol-d5 (Surr)	70		25 - 130	05/15/17 16:52	05/17/17 16:21	1
Terphenyl-d14 (Surr)	95		10 - 143	05/15/17 16:52	05/17/17 16:21	1
2,4,6-Tribromophenol (Surr)	99		31 - 141	05/15/17 16:52	05/17/17 16:21	1

Lab Sample ID: LCS 680-479935/21-A

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 479935

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	0.100	0.0669		mg/L		67	31 - 130
2,4-Dinitrotoluene	0.100	0.0903		mg/L		90	52 - 130
Hexachlorobenzene	0.100	0.0909		mg/L		91	43 - 130
Hexachlorobutadiene	0.100	0.0732		mg/L		73	27 - 130
Hexachloroethane	0.100	0.0678		mg/L		68	29 - 130
2-Methylphenol	0.100	0.0807		mg/L		81	40 - 130
3 & 4 Methylphenol	0.100	0.0776		mg/L		78	42 - 130
Nitrobenzene	0.100	0.0796		mg/L		80	43 - 130
Pentachlorophenol	0.200	0.173		mg/L		86	33 - 130
Pyridine	0.100	0.0538		mg/L		54	10 - 130
2,4,5-Trichlorophenol	0.100	0.0928		mg/L		93	48 - 130
2,4,6-Trichlorophenol	0.100	0.0846		mg/L		85	47 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl (Surr)	73		38 - 130
2-Fluorophenol (Surr)	62		25 - 130
Nitrobenzene-d5 (Surr)	75		39 - 130
Phenol-d5 (Surr)	70		25 - 130
Terphenyl-d14 (Surr)	95		10 - 143
2,4,6-Tribromophenol (Surr)	95		31 - 141

Lab Sample ID: LB 680-479476/1-D

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 479935

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4-Dinitrotoluene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
Hexachlorobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
Hexachlorobutadiene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LB 680-479476/1-D

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 479935

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
2-Methylphenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
3 & 4 Methylphenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
Nitrobenzene	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
Pentachlorophenol	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 16:44	1
Pyridine	<0.25		0.25	mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4,5-Trichlorophenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1
2,4,6-Trichlorophenol	<0.050		0.050	mg/L		05/15/17 16:52	05/17/17 16:44	1

Surrogate	LB %Recovery	LB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	74		38 - 130	05/15/17 16:52	05/17/17 16:44	1
2-Fluorophenol (Surr)	66		25 - 130	05/15/17 16:52	05/17/17 16:44	1
Nitrobenzene-d5 (Surr)	80		39 - 130	05/15/17 16:52	05/17/17 16:44	1
Phenol-d5 (Surr)	68		25 - 130	05/15/17 16:52	05/17/17 16:44	1
Terphenyl-d14 (Surr)	93		10 - 143	05/15/17 16:52	05/17/17 16:44	1
2,4,6-Tribromophenol (Surr)	93		31 - 141	05/15/17 16:52	05/17/17 16:44	1

Lab Sample ID: 680-138279-2 MS

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Prep Batch: 479935

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	<0.049		0.498	0.284		mg/L		57	31 - 130
2,4-Dinitrotoluene	<0.049		0.498	0.354		mg/L		71	52 - 130
Hexachlorobenzene	<0.049		0.498	0.369		mg/L		74	43 - 130
Hexachlorobutadiene	<0.049		0.498	0.314		mg/L		63	27 - 130
Hexachloroethane	<0.049		0.498	0.279		mg/L		56	29 - 130
2-Methylphenol	<0.049		0.498	0.326		mg/L		65	40 - 130
3 & 4 Methylphenol	<0.049		0.498	0.286		mg/L		57	42 - 130
Nitrobenzene	<0.049		0.498	0.346		mg/L		70	43 - 130
Pentachlorophenol	<0.25		0.997	0.660		mg/L		66	33 - 130
Pyridine	<0.25		0.498	<0.25		mg/L		43	10 - 130
2,4,5-Trichlorophenol	<0.049		0.498	0.345		mg/L		69	48 - 130
2,4,6-Trichlorophenol	<0.049		0.498	0.333		mg/L		67	47 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl (Surr)	58		38 - 130
2-Fluorophenol (Surr)	52		25 - 130
Nitrobenzene-d5 (Surr)	63		39 - 130
Phenol-d5 (Surr)	57		25 - 130
Terphenyl-d14 (Surr)	75		10 - 143
2,4,6-Tribromophenol (Surr)	77		31 - 141

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 680-138279-2 MSD

Matrix: Solid

Analysis Batch: 480308

Client Sample ID: Ash-Grumman

Prep Type: TCLP

Prep Batch: 479935

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	<0.049		0.498	0.327		mg/L		66	31 - 130	14	50
2,4-Dinitrotoluene	<0.049		0.498	0.477		mg/L		96	52 - 130	30	50
Hexachlorobenzene	<0.049		0.498	0.460		mg/L		92	43 - 130	22	50
Hexachlorobutadiene	<0.049		0.498	0.343		mg/L		69	27 - 130	9	50
Hexachloroethane	<0.049		0.498	0.303		mg/L		61	29 - 130	8	50
2-Methylphenol	<0.049		0.498	0.379		mg/L		76	40 - 130	15	50
3 & 4 Methylphenol	<0.049		0.498	0.369		mg/L		74	42 - 130	25	50
Nitrobenzene	<0.049		0.498	0.401		mg/L		80	43 - 130	15	50
Pentachlorophenol	<0.25		0.997	0.825		mg/L		83	33 - 130	22	50
Pyridine	<0.25		0.498	0.291		mg/L		58	10 - 130	29	50
2,4,5-Trichlorophenol	<0.049		0.498	0.453		mg/L		91	48 - 130	27	50
2,4,6-Trichlorophenol	<0.049		0.498	0.428		mg/L		86	47 - 130	25	50

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl (Surr)	74		38 - 130
2-Fluorophenol (Surr)	62		25 - 130
Nitrobenzene-d5 (Surr)	73		39 - 130
Phenol-d5 (Surr)	68		25 - 130
Terphenyl-d14 (Surr)	89		10 - 143
2,4,6-Tribromophenol (Surr)	92		31 - 141

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 680-479683/1-A

Matrix: Solid

Analysis Batch: 479888

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479683

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.020		0.020	mg/L		05/12/17 12:11	05/12/17 18:59	1
Barium	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 18:59	1
Cadmium	<0.010		0.010	mg/L		05/12/17 12:11	05/12/17 18:59	1
Chromium	<0.020		0.020	mg/L		05/12/17 12:11	05/12/17 18:59	1
Lead	<0.020		0.020	mg/L		05/12/17 12:11	05/12/17 18:59	1
Selenium	<0.050		0.050	mg/L		05/12/17 12:11	05/12/17 18:59	1
Silver	<0.010		0.010	mg/L		05/12/17 12:11	05/12/17 18:59	1

Lab Sample ID: LCS 680-479683/2-A

Matrix: Solid

Analysis Batch: 479888

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 479683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	2.00	1.87		mg/L		94	80 - 120
Barium	2.00	1.86		mg/L		93	80 - 120
Cadmium	1.00	0.927		mg/L		93	80 - 120
Chromium	2.00	1.90		mg/L		95	80 - 120
Lead	10.0	8.95		mg/L		90	80 - 120
Selenium	2.00	1.71		mg/L		85	80 - 120
Silver	1.00	0.875		mg/L		88	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Lab Sample ID: LB 680-479476/1-B

Matrix: Solid

Analysis Batch: 479888

Client Sample ID: Method Blank

Prep Type: TCLP

Prep Batch: 479683

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:08	1
Barium	<1.0		1.0	mg/L		05/12/17 12:11	05/12/17 19:08	1
Cadmium	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:08	1
Chromium	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:08	1
Lead	<0.20		0.20	mg/L		05/12/17 12:11	05/12/17 19:08	1
Selenium	<0.50		0.50	mg/L		05/12/17 12:11	05/12/17 19:08	1
Silver	<0.10		0.10	mg/L		05/12/17 12:11	05/12/17 19:08	1

Lab Sample ID: 680-138279-1 MS

Matrix: Solid

Analysis Batch: 479888

Client Sample ID: Ash-Kraft

Prep Type: TCLP

Prep Batch: 479683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	<0.20		1.60	1.42		mg/L		89	75 - 125
Barium	<1.0	F1	1.60	2.04	F1	mg/L		127	75 - 125
Cadmium	<0.10		1.60	1.43		mg/L		89	75 - 125
Chromium	<0.20		1.60	1.47		mg/L		92	75 - 125
Lead	<0.20		1.60	1.38		mg/L		86	75 - 125
Selenium	<0.50		1.60	1.27		mg/L		79	75 - 125
Silver	<0.10		1.60	1.47		mg/L		92	75 - 125

Lab Sample ID: 680-138279-1 MSD

Matrix: Solid

Analysis Batch: 479888

Client Sample ID: Ash-Kraft

Prep Type: TCLP

Prep Batch: 479683

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	<0.20		1.60	1.38		mg/L		86	75 - 125	3	20
Barium	<1.0	F1	1.60	1.99		mg/L		124	75 - 125	3	20
Cadmium	<0.10		1.60	1.39		mg/L		87	75 - 125	3	20
Chromium	<0.20		1.60	1.43		mg/L		89	75 - 125	3	20
Lead	<0.20		1.60	1.33		mg/L		83	75 - 125	3	20
Selenium	<0.50		1.60	1.25		mg/L		78	75 - 125	1	20
Silver	<0.10		1.60	1.42		mg/L		89	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 680-479700/1-A

Matrix: Solid

Analysis Batch: 479930

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 479700

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	mg/L		05/12/17 14:02	05/15/17 10:45	1

Lab Sample ID: LCS 680-479700/2-A

Matrix: Solid

Analysis Batch: 479930

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 479700

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.250	0.252		mg/L		101	80 - 120

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LB 680-479476/1-C
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Method Blank
Prep Type: TCLP
Prep Batch: 479700

Analyte	LB Result	LB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.020		0.020	mg/L		05/12/17 14:02	05/15/17 11:08	1

Lab Sample ID: 680-138279-1 MS
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479700

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.020		0.0830	0.0742		mg/L		89	80 - 120

Lab Sample ID: 680-138279-1 MSD
Matrix: Solid
Analysis Batch: 479930

Client Sample ID: Ash-Kraft
Prep Type: TCLP
Prep Batch: 479700

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.020		0.0830	0.0753		mg/L		91	80 - 120	1	20

Method: 1030 - Ignitability, Solids

Lab Sample ID: MB 680-479260/2
Matrix: Solid
Analysis Batch: 479260

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ignitability	NB			mm/sec			05/10/17 08:38	1

Method: 9014 - Cyanide, Reactive

Lab Sample ID: MB 400-352497/1-A
Matrix: Solid
Analysis Batch: 352951

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 352497

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Reactive	<0.25		0.25	mg/Kg		05/08/17 14:03	05/09/17 14:45	1

Lab Sample ID: LCS 400-352497/2-A
Matrix: Solid
Analysis Batch: 352951

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 352497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyanide, Reactive	1.00	<0.25		mg/Kg		16	0 - 50

TestAmerica Savannah

QC Sample Results

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method: 9034 - Sulfide, Reactive

Lab Sample ID: MB 400-352498/1-A

Matrix: Solid

Analysis Batch: 352921

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352498

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide, Reactive	<150		150	mg/Kg		05/08/17 14:03	05/09/17 12:02	1

Lab Sample ID: LCS 400-352498/2-A

Matrix: Solid

Analysis Batch: 352921

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352498

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide, Reactive	1000	155		mg/Kg		15	0 - 80

Method: 9045D - pH

Lab Sample ID: LCS 680-479207/1

Matrix: Solid

Analysis Batch: 479207

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
pH	7.00	7.1		S.U.		101	79 - 126

Lab Sample ID: 680-138279-1 DU

Matrix: Solid

Analysis Batch: 479207

Client Sample ID: Ash-Kraft

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
pH	6.0	HF	6.1		SU		1	40

QC Association Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

GC/MS VOA

Leach Batch: 479494

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479494/1-A	Method Blank	TCLP	Solid	1311	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	1311	
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	1311	

Analysis Batch: 479788

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	8260B	479494
680-138279-2	Ash-Grumman	TCLP	Solid	8260B	479494
LB 680-479494/1-A	Method Blank	TCLP	Solid	8260B	479494
MB 680-479788/8	Method Blank	Total/NA	Solid	8260B	
LCS 680-479788/3	Lab Control Sample	Total/NA	Solid	8260B	
LCSD 680-479788/4	Lab Control Sample Dup	Total/NA	Solid	8260B	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	8260B	479494
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	8260B	479494

GC/MS Semi VOA

Leach Batch: 479476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479476/1-D	Method Blank	TCLP	Solid	1311	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	1311	
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	1311	

Prep Batch: 479935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	3520C	479476
680-138279-2	Ash-Grumman	TCLP	Solid	3520C	479476
LB 680-479476/1-D	Method Blank	TCLP	Solid	3520C	479476
MB 680-479935/20-A	Method Blank	Total/NA	Solid	3520C	
LCS 680-479935/21-A	Lab Control Sample	Total/NA	Solid	3520C	
680-138279-2 MS	Ash-Grumman	TCLP	Solid	3520C	479476
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	3520C	479476

Analysis Batch: 480308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	8270D	479935
680-138279-2	Ash-Grumman	TCLP	Solid	8270D	479935
LB 680-479476/1-D	Method Blank	TCLP	Solid	8270D	479935
MB 680-479935/20-A	Method Blank	Total/NA	Solid	8270D	479935
LCS 680-479935/21-A	Lab Control Sample	Total/NA	Solid	8270D	479935
680-138279-2 MS	Ash-Grumman	TCLP	Solid	8270D	479935
680-138279-2 MSD	Ash-Grumman	TCLP	Solid	8270D	479935

TestAmerica Savannah

QC Association Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Metals

Leach Batch: 479476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	1311	
680-138279-2	Ash-Grumman	TCLP	Solid	1311	
LB 680-479476/1-B	Method Blank	TCLP	Solid	1311	
LB 680-479476/1-C	Method Blank	TCLP	Solid	1311	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	1311	
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	1311	

Prep Batch: 479683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	3010A	479476
680-138279-2	Ash-Grumman	TCLP	Solid	3010A	479476
LB 680-479476/1-B	Method Blank	TCLP	Solid	3010A	479476
MB 680-479683/1-A	Method Blank	Total/NA	Solid	3010A	
LCS 680-479683/2-A	Lab Control Sample	Total/NA	Solid	3010A	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	3010A	479476
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	3010A	479476

Prep Batch: 479700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	7470A	479476
680-138279-2	Ash-Grumman	TCLP	Solid	7470A	479476
LB 680-479476/1-C	Method Blank	TCLP	Solid	7470A	479476
MB 680-479700/1-A	Method Blank	Total/NA	Solid	7470A	
LCS 680-479700/2-A	Lab Control Sample	Total/NA	Solid	7470A	
680-138279-1 MS	Ash-Kraft	TCLP	Solid	7470A	479476
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	7470A	479476

Analysis Batch: 479888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	6010C	479683
680-138279-2	Ash-Grumman	TCLP	Solid	6010C	479683
LB 680-479476/1-B	Method Blank	TCLP	Solid	6010C	479683
MB 680-479683/1-A	Method Blank	Total/NA	Solid	6010C	479683
LCS 680-479683/2-A	Lab Control Sample	Total/NA	Solid	6010C	479683
680-138279-1 MS	Ash-Kraft	TCLP	Solid	6010C	479683
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	6010C	479683

Analysis Batch: 479930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	TCLP	Solid	7470A	479700
680-138279-2	Ash-Grumman	TCLP	Solid	7470A	479700
LB 680-479476/1-C	Method Blank	TCLP	Solid	7470A	479700
MB 680-479700/1-A	Method Blank	Total/NA	Solid	7470A	479700
LCS 680-479700/2-A	Lab Control Sample	Total/NA	Solid	7470A	479700
680-138279-1 MS	Ash-Kraft	TCLP	Solid	7470A	479700
680-138279-1 MSD	Ash-Kraft	TCLP	Solid	7470A	479700

TestAmerica Savannah

QC Association Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

General Chemistry

Prep Batch: 352497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	7.3.3	
680-138279-2	Ash-Grumman	Total/NA	Solid	7.3.3	
MB 400-352497/1-A	Method Blank	Total/NA	Solid	7.3.3	
LCS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	7.3.3	

Prep Batch: 352498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	7.3.4	
680-138279-2	Ash-Grumman	Total/NA	Solid	7.3.4	
MB 400-352498/1-A	Method Blank	Total/NA	Solid	7.3.4	
LCS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	7.3.4	

Analysis Batch: 352921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9034	352498
680-138279-2	Ash-Grumman	Total/NA	Solid	9034	352498
MB 400-352498/1-A	Method Blank	Total/NA	Solid	9034	352498
LCS 400-352498/2-A	Lab Control Sample	Total/NA	Solid	9034	352498

Analysis Batch: 352951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9014	352497
680-138279-2	Ash-Grumman	Total/NA	Solid	9014	352497
MB 400-352497/1-A	Method Blank	Total/NA	Solid	9014	352497
LCS 400-352497/2-A	Lab Control Sample	Total/NA	Solid	9014	352497

Analysis Batch: 479207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	9045D	
680-138279-2	Ash-Grumman	Total/NA	Solid	9045D	
LCS 680-479207/1	Lab Control Sample	Total/NA	Solid	9045D	
680-138279-1 DU	Ash-Kraft	Total/NA	Solid	9045D	

Analysis Batch: 479260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	1030	
680-138279-2	Ash-Grumman	Total/NA	Solid	1030	
MB 680-479260/2	Method Blank	Total/NA	Solid	1030	

Geotechnical

Analysis Batch: 116526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-138279-1	Ash-Kraft	Total/NA	Solid	D422	
680-138279-2	Ash-Grumman	Total/NA	Solid	D422	

TestAmerica Savannah

Lab Chronicle

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Kraft

Date Collected: 05/02/17 14:55

Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			20.06 g	400 mL	479494	05/11/17 15:56	EDE	TAL SAV
TCLP	Analysis	8260B		20	5 mL	5 mL	479788	05/14/17 20:15	CEJ	TAL SAV
		Instrument ID: CMSB								
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3520C			201.4 mL	1 mL	479935	05/15/17 16:52	CEW	TAL SAV
TCLP	Analysis	8270D		1			480308	05/17/17 19:27	OK	TAL SAV
		Instrument ID: CMSE								
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3010A			5 mL	50 mL	479683	05/12/17 12:11	AJR	TAL SAV
TCLP	Analysis	6010C		1			479888	05/12/17 19:13	BCB	TAL SAV
		Instrument ID: ICPE								
TCLP	Leach	1311			100.05 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	7470A			0.5 mL	50 mL	479700	05/12/17 14:02	JKL	TAL SAV
TCLP	Analysis	7470A		1			479930	05/15/17 11:18	JKL	TAL SAV
		Instrument ID: LEEMAN2								
Total/NA	Analysis	1030		1			479260	05/10/17 08:38	LWB	TAL SAV
		Instrument ID: NOEQUIP								
Total/NA	Prep	7.3.3			10 g	100 mL	352497	05/08/17 14:03	CLM	TAL PEN
Total/NA	Analysis	9014		1	10 mL	10 mL	352951	05/09/17 14:45	CLM	TAL PEN
		Instrument ID: KONELAB								
Total/NA	Prep	7.3.4			10 g	100 mL	352498	05/08/17 14:03	CLM	TAL PEN
Total/NA	Analysis	9034		1	100 mL	100 mL	352921	05/09/17 12:02	CLM	TAL PEN
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045D		1	20.12 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
		Instrument ID: NOEQUIP								
Total/NA	Analysis	D422		1			116526	05/04/17 18:54	VTP	TAL BUR
		Instrument ID: D422_import								

Client Sample ID: Ash-Grumman

Date Collected: 05/02/17 14:35

Date Received: 05/03/17 08:54

Lab Sample ID: 680-138279-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			20.05 g	400 mL	479494	05/11/17 15:56	EDE	TAL SAV
TCLP	Analysis	8260B		20	5 mL	5 mL	479788	05/14/17 20:40	CEJ	TAL SAV
		Instrument ID: CMSB								
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3520C			203.1 mL	1 mL	479935	05/15/17 16:52	CEW	TAL SAV
TCLP	Analysis	8270D		1			480308	05/17/17 19:51	OK	TAL SAV
		Instrument ID: CMSE								
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	3010A			5 mL	50 mL	479683	05/12/17 12:11	AJR	TAL SAV
TCLP	Analysis	6010C		1			479888	05/12/17 19:37	BCB	TAL SAV
		Instrument ID: ICPE								

TestAmerica Savannah

Lab Chronicle

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Client Sample ID: Ash-Grumman

Lab Sample ID: 680-138279-2

Date Collected: 05/02/17 14:35

Matrix: Solid

Date Received: 05/03/17 08:54

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TCLP	Leach	1311			100.10 g	2000 mL	479476	05/11/17 15:57	EDE	TAL SAV
TCLP	Prep	7470A			0.5 mL	50 mL	479700	05/12/17 14:02	JKL	TAL SAV
TCLP	Analysis	7470A		1			479930	05/15/17 11:28	JKL	TAL SAV
		Instrument ID: LEEMAN2								
Total/NA	Analysis	1030		1			479260	05/10/17 08:38	LWB	TAL SAV
		Instrument ID: NOEQUIP								
Total/NA	Prep	7.3.3			10 g	100 mL	352497	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis	9014		1	10 mL	10 mL	352951	05/09/17 14:45	CLM	TAL PEN
		Instrument ID: KONELAB								
Total/NA	Prep	7.3.4			10 g	100 mL	352498	05/08/17 15:20	CLM	TAL PEN
Total/NA	Analysis	9034		1	100 mL	100 mL	352921	05/09/17 12:02	CLM	TAL PEN
		Instrument ID: NOEQUIP								
Total/NA	Analysis	9045D		1	19.70 g	20 mL	479207	05/11/17 15:19	LWB	TAL SAV
		Instrument ID: NOEQUIP								
Total/NA	Analysis	D422		1			116526	05/04/17 18:57	VTP	TAL BUR
		Instrument ID: D422_import								

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Accreditation/Certification Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Laboratory: TestAmerica Savannah

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Georgia	State Program	4	N/A	06-30-17 *

Laboratory: TestAmerica Burlington

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-17
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-18
Florida	NELAP	4	E87467	06-30-17 *
L-A-B	DoD ELAP		L2336	02-25-20
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-17
New Hampshire	NELAP	1	2006	12-18-17
New Jersey	NELAP	2	VT972	06-30-17 *
New York	NELAP	2	10391	04-01-18
Pennsylvania	NELAP	3	68-00489	04-30-18
Rhode Island	State Program	1	LAO00298	12-30-17
US Fish & Wildlife	Federal		LE-058448-0	10-31-17
USDA	Federal		P330-11-00093	12-05-19
Vermont	State Program	1	VT-4000	12-31-17
Virginia	NELAP	3	460209	12-14-17

Laboratory: TestAmerica Pensacola

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Accreditation/Certification Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Laboratory: TestAmerica Pensacola (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17 *
West Virginia DEP	State Program	3	136	06-30-17

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Savannah

Method Summary

Client: Waste Management
Project/Site: Superior Landfill Waste Char.

TestAmerica Job ID: 680-138279-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL SAV
6010C	Metals (ICP)	SW846	TAL SAV
7470A	Mercury (CVAA)	SW846	TAL SAV
1030	Ignitability, Solids	SW846	TAL SAV
9014	Cyanide, Reactive	SW846	TAL PEN
9034	Sulfide, Reactive	SW846	TAL PEN
9045D	pH	SW846	TAL SAV
D422	Grain Size	ASTM	TAL BUR

Protocol References:

ASTM = ASTM International

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL PEN = TestAmerica Pensacola, 3355 McLemore Drive, Pensacola, FL 32514, TEL (850)474-1001

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Savannah, GA 31404
Phone: 912.354.7858 Fax:

Regulatory Program: ☐ DW ☐ NPDES ☒ RCRA ☐ Other:

Client Contact Company Name: WM-Superior Address: 3001 Little Neck Rd. City/State/Zip: Savannah, GA 31419 Phone: 770-545-0339 Fax: Project Name: Ash Analysis Site: Superior Landfill PO #		Project Manager: Sarah Rafalowski Tel/Fax: 814.291.1111 Email: srafalowski@wm.com Analysis Turnaround Time ☒ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day		Site Contact: Lisa Haney Lab Contact: Lisa Haney Date: 5/2/17 Carrier: Client COC No: 1 of 1 COCs Sampler: For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.: Sample Specific Notes: Need analysis of grain size. This is for WM + NOT GP.		
Sample Identification Ash - Kraft Ash - Grumman		Filtered Sample (Y/N) Perform MS / MSD (Y/N) Reactive Cyanide Reactive Hydroxide Ignitability Grain Size	Sample Date 5/2/17 5/2/17	Sample Type (C=Comp, G=Grab) G G	Matrix Ash Ash	# of Cont. 3 3
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4= HNO3; 5= NaOH; 6= Other Possible Hazard Identification: Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample. ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown						
Special Instructions/OC Requirements & Comments: One week TAT, if possible.						
Relinquished by: [Signature] Relinquished by:		Custody Seal No.: Company: WM Date/Time: 5-3/8-54		Cooler Temp. (°C): Obs'd: 4.0/2.8 Company: TA Date/Time: 5-3-17 854		Therm ID No.:
Relinquished by:		Received by:		Received by:		Date/Time:
Relinquished by:		Received in Laboratory by:		Received in Laboratory by:		Date/Time:

TestAmerica Savannah

5102 LaRoche Avenue

Savannah, GA 31404

Phone (912) 354-7858 Fax (912) 352-0165

Chain of Custody Record

Client Information (Sub Contract Lab) Client Contact: Smith, Kathryn E Shipping/Receiving: kathryn.smith@testamericainc.com Company: TestAmerica Laboratories, Inc.		Lab PVI: Smith, Kathryn E E-Mail: kathryn.smith@testamericainc.com State of Origin: Georgia	
Address: 30 Community Drive, Suite 11, South Burlington, VT, 05403 Phone: 802-660-1990(Tel) 802-660-1919(Fax) Email: Superior Landfill Waste Char.		Accreditations Required (See note): State Program - Georgia Job #: 680-138279-1	
Due Date Requested: 5/9/2017 TAT Requested (days):		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project #: 68018153 SOW#:		Analysis Requested	
Sample Identification - Client ID (Lab ID)		Total Number of Containers	
Sample Type (C=comp, G=grab)	Sample Time (14:55 Eastern, 14:35 Eastern)	Matrix (W=water, S=solid, O=wastefoil, BT=tissue, A=air)	Special Instructions/Note:
Ash-Kraft (680-138279-1)	5/2/17	Solid	1
Ash-Grumman (680-138279-2)	5/2/17	Solid	1
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months	
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: TestAmerica		Date/Time: 5/2/17	
Relinquished by:		Date/Time: 5/2/17 @ 1030	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: Yes		Cooler Temperature(s) °C and Other Remarks: 1.3°C	

ORIGIN ID: SAVA (912) 354-7858
BERNARD KIRKLAND
TEST AMERICA
5102 LAROCHE AVE

SAVANNAH, GA 31404
UNITED STATES US

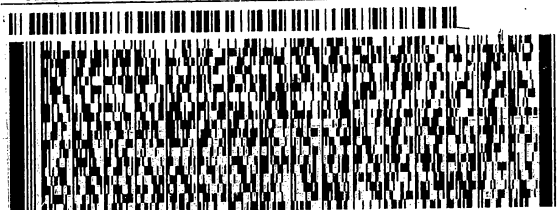
SHIP DATE: 03MAY17
ACTWGT: 20.00 LB MAN
CAD: 0622727/CAFE3011

BILL RECIPIENT

TO **CUSTODY**
TESTAMERICA LABORATORIES
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990

REF: SO 680 84035



FedEx
Express



TRK# 7201 3128 3163
0201

THU - 04 MAY 3:00P
STANDARD OVERNIGHT

XH BTVA

05403

VT-US BTV



[illegible]

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279

List Source: TestAmerica Savannah

List Number: 1

Creator: Jackson, Victor L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279

List Source: TestAmerica Burlington

List Number: 3

List Creation: 05/04/17 01:30 PM

Creator: Cota, Fred P

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	856857
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.3°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	No analysis requiring residual chlorine check assigned.

Login Sample Receipt Checklist

Client: Waste Management

Job Number: 680-138279-1

Login Number: 138279

List Source: TestAmerica Pensacola

List Number: 2

List Creation: 05/04/17 11:51 AM

Creator: Smith, Demetrius A

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.3°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Annual CCR Management Plan and Dust Control Report
Appendices



Report Submission Deadline Extensions

IN THIS APPENDIX:

- EPD Deadline Extension Email – May 8, 2018
- EPD Deadline Extension Email – February 16, 2018

From: Naji, Rima
To: [Marc Liverman](#)
Cc: [Bassett, Tim](#); [Carroll, Shawn](#)
Subject: RE: CCR Plan Update Submittal Date
Date: Tuesday, May 08, 2018 4:19:02 PM

Marc,

This email is to confirm that the Annual CCR Management and Dust Control Reports for WM sites can be submitted to EPD no later than May 11, 2018.

Thanks,

Rima Naji
Environmental Engineer
Solid Waste Management Program

4244 International Parkway Suite 104
Atlanta, GA 30354
Office: (404) 363-1584
Email: Rima.Naji@dnr.state.ga.us

From: Marc Liverman [<mailto:MLiverman@atlcc.net>]
Sent: Tuesday, May 08, 2018 3:59 PM
To: Naji, Rima
Cc: Bassett, Tim; Carroll, Shawn
Subject: CCR Plan Update Submittal Date

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Rima,

Per our discussion, please verify that we can submit the updates for WM sites no later than Friday May 11th, 2018. We will do everything we can to get them to you sooner.

Thanks,

Marc Liverman, P.E.
ATLANTIC COAST CONSULTING, INC.
7 E. Congress Street, Suite 801
Savannah, GA 31401
Mobile: 912-507-5755
Office: 912-236-3471

From: Hall, Chad
To: [Carroll, Shawn](#)
Subject: [EXTERNAL] RE: CCR management plans
Date: Friday, February 16, 2018 1:57:41 PM

Shawn,

Most important item: you are right the we fell behind schedule of making site visits to every site under a CCR management plan. I very much appreciate the early work you've put in to meet a 3/1 deadline, but you can dial that back. While I don't expect this, I would hate for our staff to see something on their final site visit that requires a change that makes ACC go back and re-do everything.

I spoke to John Workman on the phone after the first flurry of emails, not sure if you two connected afterward. I gave him notice of an discrepancy from last year where we realized that we had required some things of Waste Industries, with regards to sampling, that we hadn't asked of Waste Management. We'll be asking for WM's plans for sediment pond sampling to be more like those we approved for Taylor County. That said, you might want to (and have Chris / ACC) take a look here <https://epd.georgia.gov/coal-combustion-residuals-ccr-management-plans> to start getting a feel for what we approved there.

Thanks for helping get the word out and looking forward to meeting.

Chad Hall, PhD, PE
Manager
Solid Waste Permitting Unit

Georgia Environmental Protection Division
Solid Waste Management Program
Atlanta Tradeport, Suite 104
4244 International Parkway
Atlanta, GA 30354
(404) 362-4893

From: Carroll, Shawn [mailto:scarrol3@wm.com]
Sent: Friday, February 16, 2018 1:42 PM
To: Hall, Chad
Subject: RE: CCR management plans

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Ha, it has been a flurry of CCR activity this Friday!

As you may have heard from Rutu, we are well into the process of getting all the updates and annual reports prepared. We went ahead and started the process for all of our sites on February 1, planning to meet the March 1 deadline. GeoSyntec is doing Turkey Run, and ACC is covering

Superior, R&B and Pine Bluff. I actually reviewed the first ACC update/report this morning and Rutu was planning on submitting his draft next week.

I am trying to find a day the week of March 19 that ACC, GeoSyntec, and our folks can attend. Best if we can knock it out in one meeting to maintain consistency, and I will let you know. I just got off the phone with Workman, he said he would try to attend but to go ahead and schedule the meeting regardless.

In response to the email you sent Rutu at 12:42 this afternoon, I do offer the following comment followed by a request for clarification:

1. For each of the GA sites in our South Atlantic Area (Superior, Turkey Run, R&B and Pine Bluff), we will be reporting that the initial approved Plans were adequate and no changes are deemed necessary. For those four sites we have had no new waste streams, no changes in operational practices, no impacts to operations, no dust control challenges or complaints, and no environmental monitoring impacts due to CCR. As such, like you we feel that just submitted the Annual Report should meet the intent of the rule with no need to submit revised D&O Plan sheets.
2. In your email to Rutu, the second sentence indicates that EPD will not be expecting deliverables by March 1 and that we can hold off submitting until after our meeting the week of the 19th. Please confirm if we interpreted correctly.

Thanks Chad, appreciate you guidance, and I look forward to meeting you in March.

Regards,

Shawn

From: Hall, Chad [<mailto:Chad.Hall@dnr.ga.gov>]

Sent: Friday, February 16, 2018 12:40 PM

To: Carroll, Shawn <scarrol3@wm.com>; Bassett, Tim <tbassett@wm.com>; Workman, John <jworkman@wm.com>; Dolihite, Brian <BdoliHITE@wm.com>

Cc: Cook, William <William.Cook@dnr.ga.gov>; Barnes, Gene(Atlanta GA) <GBarnes4@wm.com>

Subject: [EXTERNAL] RE: CCR management plans

Thanks and also see the attached from Geosyntec – their ears must have been burning. You guys can decide if it's easier to have Geosyntec at the same meeting with ACC, or if you want to handle Turkey Run at a separate meeting.

Chad Hall, PhD, PE
Manager
Solid Waste Permitting Unit

Georgia Environmental Protection Division
Solid Waste Management Program

Atlanta Tradeport, Suite 104
4244 International Parkway
Atlanta, GA 30354
(404) 362-4893

From: Carroll, Shawn [<mailto:scarrol3@wm.com>]
Sent: Friday, February 16, 2018 12:24 PM
To: Hall, Chad; Bassett, Tim; Workman, John; Dolihite, Brian
Cc: Cook, William; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: RE: CCR management plans

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Chad, thanks for being flexible. Let me reach out to our folks, see what works for everyone, then I will send you an email with some proposed times/dates.

Thanks, and have a great weekend.

Shawn

Shawn P. Carroll
Area Environmental Protection Manager
scarrol3@wm.com

Waste Management - South Atlantic Area
3920 River Road
Wilmington, NC 28412
Cell 910 274 8869

From: Hall, Chad [<mailto:Chad.Hall@dnr.ga.gov>]
Sent: Friday, February 16, 2018 11:25 AM
To: Carroll, Shawn <scarrol3@wm.com>; Bassett, Tim <tbassett@wm.com>; Workman, John <jworkman@wm.com>; Dolihite, Brian <BdoliHITE@wm.com>
Cc: Cook, William <William.Cook@dnr.ga.gov>; Chris Klamke <cklamke@atlcc.net>; Barnes, Gene(Atlanta GA) <GBarnes4@wm.com>
Subject: [EXTERNAL] RE: CCR management plans

Shawn,

Absolutely, we can change weeks. I was just picking our first available dates after our visit to Superior. I think we're still in good shape bumping back one week.

That week is actually more open on our end, so we could probably find an open timeslot any day that week. Let us know one or two preferred dates/times and we can get this set.

Chad Hall, PhD, PE
Manager
Solid Waste Permitting Unit

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From: Carroll, Shawn [<mailto:scarrol3@wm.com>]
Sent: Friday, February 16, 2018 11:14 AM
To: Hall, Chad; Bassett, Tim; Workman, John; Dolihite, Brian
Cc: Cook, William; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: RE: CCR management plans

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Hey Chad, Shawn Carroll here.

John, Gene and I (and possibly Tim) have an Area staff meeting scheduled for the 14th and 15th of March.

Any chance we could do it during the week of March 19?

Thanks,

Shawn

Shawn P. Carroll
Area Environmental Protection Manager
scarrol3@wm.com

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From: Hall, Chad [<mailto:Chad.Hall@dnr.ga.gov>]
Sent: Friday, February 16, 2018 11:10 AM
To: Bassett, Tim <tbassett@wm.com>; Workman, John <jworkman@wm.com>; Dolihite, Brian <BdoliHITE@wm.com>
Cc: Cook, William <William.Cook@dnr.ga.gov>; Carroll, Shawn <scarrol3@wm.com>; Chris Klamke

<cklamke@atlcc.net>; Barnes, Gene(Atlanta GA) <GBarnes4@wm.com>

Subject: [EXTERNAL] RE: CCR management plans

Thanks Tim. I think we all agree we'd like to be under less time pressure this year, and I feel like a mid-March meeting puts us in a good position to get the reviews done by the late-May renewal dates.

Chad Hall, PhD, PE
Manager
Solid Waste Permitting Unit

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From: Bassett, Tim [<mailto:tbassett@wm.com>]
Sent: Friday, February 16, 2018 11:01 AM
To: Hall, Chad; Workman, John; Dolihite, Brian
Cc: Cook, William; Carroll, Shawn; Chris Klamke; Barnes, Gene(Atlanta GA)
Subject: Re: CCR management plans

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Chad,

You are correct - we will be renewing all 5 WM sites. The primary consultant for preparing the plans is ACC so we might want them in attendance. As for the 14th, I'm available but I need to check with John and ACC to make sure they can attend.

Tim Bassett, REM, CSEM
Environmental Protection Manager
Waste Management - Atlanta
Cell: 404-808-8098

From: Hall, Chad <Chad.Hall@dnr.ga.gov>
Sent: Friday, February 16, 2018 10:49:19 AM
To: Workman, John; Bassett, Tim; Dolihite, Brian
Cc: Cook, William
Subject: [EXTERNAL] CCR management plans

John, Tim, and Brian,

Would you be available to talk about renewals of CCR management plans on March 15 (14th could

work too.) That would be about 10 weeks before the renewal deadline. We could meet the week before, but people from our Program are planning to see Superior on the 3/9. I'd like to have their feedback before discussing whether revisions are needed to Superior's plan.

I am assuming, correct me if I'm wrong, that all five Waste Management sites in Georgia will be seeking renewal. We wouldn't necessarily have to meet the same day for Waste's northern and southern representatives, I was just thinking it might be easiest that way. If we need to divide meetings based on which consultants are working on given sites, we can do that too.

Let me know what might work.

Thanks,

Chad Hall, PhD, PE
Manager
Solid Waste Permitting Unit

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