# **REQUEST FOR PROPOSAL**

# RFP# 17-05

# **Solid Waste Transfer, Transport and Disposal Services**

City of Ann Arbor Public Services



**Due Date: March 16, 2017 by 2:00 p.m. (local time)** 

Issued By:

City of Ann Arbor Procurement Unit 301 E. Huron Street Ann Arbor, MI 48104

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# **SECTION I - GENERAL INFORMATION**

#### A. OBJECTIVE

The City of Ann Arbor is seeking the services of a firm to provide the labor, equipment and materials necessary to operate and maintain the City's Waste Transfer Station (TS), and to transport the waste materials to a permitted facility for disposal. The Transfer Station is located at 4130 Platt Road in Pittsfield Township, Washtenaw County, Michigan.

In addition, the City is seeking the services of a firm to provide the labor, equipment and materials necessary to transport and dispose of: 1) dewatered centrifuge cake from the City's Wastewater Treatment Plant (WWTP); and, 2) other materials from the WWTP (trash, scum, grit and screenings). These materials are picked up at the WWTP, which is located at 49 Old Dixboro Road in Ann Arbor, Michigan.

Finally, the City is seeking the services of a firm to provide disposal of: 1) street sweepings; and, 2) vactoring material and soil from City construction/maintenance projects. These materials will be transported by the City to the designated disposal facility.

The City is seeking these services for a period of five (5) years, with the City reserving an option to extend the contract term for up to two additional five-year periods.

# B. QUESTIONS ABOUT AND CLARIFICATIONS OF THE REQUEST FOR PROPOSAL

All questions regarding this Request for Proposal (RFP) shall be submitted via e-mail. Questions will be accepted and answered in accordance with the terms and conditions of this RFP.

# All questions shall be submitted on or before Friday, March 3, 2017 at 10:00 a.m., and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to Christina Gomes, Solid Waste & Recycling Program Coordinator at cgomes@a2gov.org.

RFP Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer at cspencer@a2gov.org.

Should any prospective proposer be in doubt as to the true meaning of any portion of this RFP, or should the proposer find any ambiguity, inconsistency, or omission therein, the proposer shall make a written request for an official

interpretation or correction by the due date for questions above.

All interpretations, corrections, or additions to this RFP will be made only as an official addendum that will be posted to a2gov.org and MITN.info and it shall be the proposer's responsibility to ensure they have received all addenda before submitting a proposal. Any addendum issued by the City shall become part of the RFP, and must be incorporated in the proposal where applicable.

# C. PRE-PROPOSAL MEETING

There will be a mandatory pre-proposal meeting at the TS site on Wednesday, March 1, 2017 at 1:30 p.m. Following the meeting at the TS site, a second meeting will be held at the WWTP site at 3:00 p.m. Vendors will be responsible for providing their own transportation between sites.

# D. PROPOSAL FORMAT

To be considered, each firm must submit a response to this RFP using the format provided in Section III. No other distribution of proposals is to be made by the proposer. An official authorized to bind the proposer to its provisions must sign the proposal in ink. Each proposal must remain valid for at least one hundred twenty (120) days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the proposer's ability to meet the requirements of the RFP. No erasures are permitted. Mistakes may be crossed out and corrected and must be initialed in ink by the person signing the proposal.

# **E. SELECTION CRITERIA**

Responses to this RFP will be evaluated using a point system as shown in Section III. A selection committee comprised of staff from the City will complete the evaluation.

The fee proposals will not be reviewed at the initial evaluation. After initial evaluation, the City will determine top proposers, and open only those fee proposals. The City will then determine which, if any, firms will be interviewed. During the interviews, the selected firms will be given the opportunity to discuss their proposal, qualifications, past experience, and their fee proposal in more detail. The City further reserves the right to interview the key personnel assigned by the selected proposer to this project. If the City chooses to interview any respondents, the interviews will be tentatively held the **week of March 20-24**, **2017**. Proposer must be available on these dates.

All proposals submitted may be subject to clarifications and further negotiation. All agreements resulting from negotiations that differ from what is represented within the RFP or in the proposer's response shall be documented and included as part of the final contract.

# F. SEALED PROPOSAL SUBMISSION

All proposals are due and must be delivered to the City Procurement Unit on, or before, March 16, 2017 at 2:00 p.m. (local time). Proposals submitted late or via oral, telephonic, telegraphic, electronic mail or facsimile will not be considered or accepted.

# Each respondent must submit in a sealed envelope:

- one (1) original proposal
- six (6) additional proposal copies
- one (1) digital copy of the proposal (<u>excluding the fee proposal</u>) preferably on a flash drive as one file in PDF format

Each respondent must submit in a single separate sealed envelope marked Fee Proposal:

• two (2) copies of the fee proposal

# The fee proposal and all costs must be separate from the rest of the proposal.

Proposals submitted must be clearly marked: "RFP# 17-05 – Solid Waste Transfer, Transport and Disposal Services" and list the proposer's name and address.

Proposals must be addressed and delivered to:

City of Ann Arbor c/o Customer Service 301 East Huron Street Ann Arbor, MI 48107

All proposals received on or before the due date will be publicly opened and recorded on the due date. No immediate decisions will be rendered.

Hand delivered proposals must be date/time stamped by the Customer Service Department at the address above in order to be considered. Delivery hours are 9:00 a.m. to 3:00 p.m. Monday through Friday, excluding Holidays.

The City will not be liable to any proposer for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal. Proposers are responsible for submission of their

proposal. Additional time will not be granted to a single proposer. However, additional time may be granted to all proposers at the discretion of the City.

# A proposal will be disqualified if:

- 1. The fee proposal is not contained within a separate sealed envelope.
- 2. The fee proposal is submitted as part of the digital copy. Provide fee proposal in hard copy only.
- 3. The forms provided as Attachment B City of Ann Arbor Non-Discrimination Declaration of Compliance, Attachment C City of Ann Arbor Living Wage Declaration of Compliance, Attachment D Vendor Conflict of Interest Disclosure Form of the RFP Document must be included in submitted proposals.

Proposals that fail to provide these completed forms listed above upon proposal opening will be deemed non-responsive and will not be considered for award.

#### G. DISCLOSURES

Under the Freedom of Information Act (Public Act 442), the City is obligated to permit review of its files, if requested by others. All information in a proposer's proposal is subject to disclosure under this provision. This act also provides for a complete disclosure of contracts and attachments thereto.

# H. TYPE OF CONTRACT

A sample of the Services Agreement is included as Appendix A. Those who wish to submit a proposal to the City are required to review this sample agreement carefully. **The City will not entertain changes to its Services Agreement.** 

The City reserves the right to award the total proposal, to reject any or all proposals in whole or in part, and to waive any informality or technical defects if, in the City's sole judgment, the best interests of the City will be so served.

This RFP and the selected proposer's response thereto, shall constitute the basis of the scope of services in the contract by reference.

#### I. HUMAN RIGHTS REQUIREMENTS

All contractors proposing to do business with the City shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the Section 9:158 of the Ann Arbor City Code. Breach of the obligation not to discriminate as outlined in Attachment B shall be a material breach of the contract. Contractors are required to post a copy of Ann Arbor's

Non-Discrimination Ordinance (Attachment E) at all work locations where its employees provide services under a contract with the City.

# J. WAGE REQUIREMENTS

Attachment C and Attachment F provided herein outline the requirements for payment of prevailing wages or of a "living wage" to employees providing service to the City under this contract. The successful proposer must comply with all applicable requirements and provide documentary proof of compliance when requested.

# K. CONFLICT OF INTEREST DISCLOSURE

The City of Ann Arbor Purchasing Policy requires that the proposer complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected proposer unless and until the Procurement Unit and the City Administrator have reviewed the Disclosure form and determined that no conflict exists under applicable federal, state, or local law or administrative regulation. Not every relationship or situation disclosed on the Disclosure Form may be a disqualifying conflict. Depending on applicable law and regulations, some contracts may be awarded on the recommendation of the City Administrator after full disclosure, where such action is allowed by law, if demonstrated competitive pricing exists and/or it is determined the award is in the best interest of the City. A copy of the Conflict of Interest Disclosure Form is provided in Attachment D.

# L. COST LIABILITY

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the proposer prior to the execution of a Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a proposal, proposer agrees to bear all costs incurred or related to the preparation, submission, and selection process for the proposal.

# M. DEBARMENT

Submission of a proposal in response to this RFP is certification that the Respondent is not currently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal departments or agency. Submission is also agreement that the City will be notified of any changes in this status.

#### N. PROPOSAL PROTEST

All proposal protests must be in writing and filed with the Purchasing Manager within five (5) business days of the award action. The proposer must clearly state the reasons for the protest. If a proposer contacts a City Service Area/Unit and indicates a desire to protest an award, the Service Area/Unit shall refer the proposer to the Purchasing Manager. The Purchasing Manager will provide the proposer with the appropriate instructions for filing the protest. The protest shall be reviewed by the City Administrator or designee, whose decision shall be final.

# O. SCHEDULE

The proposals submitted should define an appropriate schedule in accordance with the requirements of the Proposed Work Plan in Section III.

The following is the schedule for this RFP process.

# Activity/Event

Mandatory Pre-Proposal Meeting
Written Question Deadline
Proposal Due Date
Tentative Interviews (if needed)
Selection/Negotiations
Expected City Council Authorizations
Contractor Transition
Commencement of Services

# **Anticipated Date**

March 1, 2017, 1:30 p.m. March 3, 2017, 10:00 a.m. March 16, 2017, 2:00 p.m. Week of March 20-24, 2017 Late March, 2017 April/May 2017 June, 2017 July 1, 2017

The above schedule is for information purposes only and is subject to change at the City's discretion.

# P. IRS FORM W-9

The selected proposer will be required to provide the City of Ann Arbor an IRS form W-9.

# Q. RESERVATION OF RIGHTS

- 1. The City reserves the right in its sole and absolute discretion to accept or reject any or all proposals, or alternative proposals, in whole or in part, with or without cause.
- 2. The City reserves the right to waive, or not waive, informalities or irregularities in terms or conditions of any proposal if determined by the City to be in its best interest.
- 3. The City reserves the right to request additional information from any or all proposers.
- 4. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested within RFP.

- 5. The City reserves the right to determine whether the scope of the project will be entirely as described in the RFP, a portion of the scope, or a revised scope be implemented.
- 6. The City reserves the right to select one or more proposers to perform services.
- 7. The City reserves the right to retain all proposals submitted and to use any ideas in a proposal regardless of whether that proposal is selected. Submission of a proposal indicates acceptance by the firm of the conditions contained in this RFP, unless clearly and specifically noted in the proposal submitted.
- 8. The City reserves the right to disqualify proposals that fail to respond to any requirements outlined in the RFP, or failure to enclose copies of the required documents outlined within RFP.

# **SECTION II - SCOPE OF SERVICES**

#### A. BACKGROUND

#### 1. Overview

The City of Ann Arbor owns a Transfer Station (TS) located at 4130 Platt Road in Pittsfield Township, Washtenaw County, Michigan. The TS is located to the south of the City's Material Recovery Facility (MRF) as shown in Figure 1. The TS is operated under Operating License 9336, issued by the Michigan Department of Environmental Quality (refer to Appendix C).

The TS facility is currently operated by a private contractor under a short-term agreement. The City also contracts for disposal of the waste delivered from the TS and other City facilities under a separate disposal agreement, which expires on June 30, 2017. The intent of this RFP is to combine transfer station operations, transport and disposal services commencing July 1, 2017 under a single contract. In addition, the City desires to procure transport and disposal services for dewatered centrifuge cake and other materials from the City's Wastewater Treatment Plant (WWTP), and disposal services for street sweepings and vactor/soil materials. The MRF is not a part of this RFP.

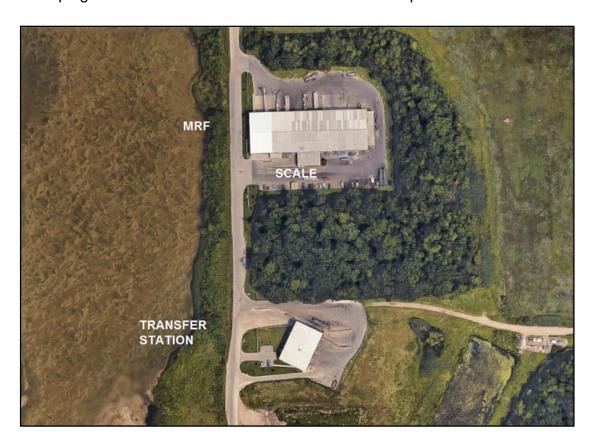


FIGURE 1. AERIAL VIEW OF TRANSFER STATION

# 2. Summary of Transfer Station Operations

The TS is an approximately 9,200 square foot facility located on a 5.7 acre site (refer to Appendix C). All incoming and outgoing TS loads are weighed at the scale facility located at the MRF. The scalehouse is staffed by City personnel, who perform all weighing functions.

The TS building is approximately 115 feet wide by 80 feet deep, and provides four unloading bays (see Figure 2). The TS has a single, drive-through bay for semi-truck transfer vehicles. An approximately 4-foot high parapet wall separates the drive-through bay from the tipping floor.



FIGURE 2. VIEW OF TRANSFER STATION BAYS

The TS normally operates Monday through Friday (7:00 a.m. - 4:30 p.m.). The TS also operates on Saturdays (7:00 a.m. - 4:30 p.m.), though typically receives waste only during those weeks that include a major holiday (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas); this is to accommodate catch-up waste collections performed by the City as the result of the holiday. On rare occasions (2 instances over a 3-year period), the TS has operated on non-holiday week Saturdays to accommodate special collection projects by the City. Historically, the TS has operated on a limited number of Sundays (13 instances over a 3-year period). Sunday operations are not included in this RFP.

The facility receives waste predominantly collected by City crews (residential waste, and commercial waste from the downtown business district) and the City's commercial waste franchise collector (other commercial waste generated

within the City). The TS has also received third-party waste, with the University of Michigan being the largest third-party customer. The TS does not serve residential self-haul customers, and waste is typically delivered in packer collection vehicles. Only non-hazardous municipal waste is handled at the TS - no construction/demolition debris, yard waste or special waste is processed at the facility.

Historical operating information (tonnage and vehicle counts) are provided in Appendix D. Annual TS tonnage has ranged from approximately 53,000 tons in 2013 to 59,000 tons in 2015 (the latest years for which complete data is available). This corresponds to an average daily throughput of 196 to 224 tons per day of waste.

City waste (i.e., waste collected by City crews or the City's contracted commercial waste franchise hauler) accounts for approximately 88 percent of the waste processed at the TS (refer to Appendix D). Third-party waste accounts for the other 12 percent, the majority of which is delivered by the University of Michigan.

Note that pursuant to this RFP, the City will commit to deliver all City-controlled waste (i.e., waste collected by City crews or the City's commercial waste franchise hauler), but will not guarantee a specified tonnage of waste. The selected Contractor will be allowed to receive third-party waste at the TS (subject to limits as specified in Section II.C below), but the City will not guarantee the delivery of any third-party waste. Further, the selected Contractor will be expected to extend the pricing for City-delivered waste to the University of Michigan, but the City does not guarantee waste deliveries from the University.

# 3. Summary of WWTP Materials and Quantities

The City of Ann Arbor owns a WWTP located at 49 Old Dixboro Road. Dewatered centrifuge cake is currently hauled from the plant on a seasonal basis, which runs from approximately December 1 to May 31 of each year (but may occur outside those months), and is disposed in a landfill. Hauling and disposal services are provided by a contractor. The contractor loads their own vehicles at the WWTP by pushing buttons to open and close hopper gates, which discharge the dewatered centrifuge cake.

Annual quantities of the dewatered centrifuge cake have ranged from 9,600 to 10,000 tons per season (refer to Appendix D). The material is hauled in double-tandem trailers. During the season, approximately 2-4 truckloads are hauled per day. Hauling generally occurs on weekdays, with occasional Saturday pick-ups. Next day trucking needs are arranged by email or phone with the contractor. Analytical laboratory data and waste profile information on the dewatered centrifuge cake material is provided in Appendix E.

In addition, the WWTP generates other by-product materials (scum, grit and screenings) which are hauled in 10-cubic yard roll-off dumpsters. The materials are hauled by a contractor as special waste. Service is scheduled on an on-call basis, with roll-off containers swapped out the next business day following notice from the City. Tonnage quantities are not available, but the scum container is serviced every 1.5-2 months, the grit container every month, and the two (2) screenings containers every 1-2 weeks. Approximately 56 container pulls are performed each year. Waste profile information on this material is provided in Appendix E.

Finally, the WWTP has a trash dumpster (8 cubic yard) which is serviced every two weeks by a contracted hauler.

All of the WWTP materials are collected at the plant, but at different locations within the plant.

4. Summary of Street Sweeping and Vactor Materials and Quantities

The City currently direct hauls street-sweeping material to a contracted landfill for disposal. Annual tonnage ranges from approximately 1,600 to 1,800 tons per year. Analytical laboratory data and waste profile information on the street-sweeping material is provided in Appendix E.

The City also direct hauls material collected by vactor trucks used to maintain the City's stormwater and sanitary infrastructure, and soil from ground excavation work on City projects. Annual tonnage is approximately 5,500 tons. Waste profile information on the vactoring material is provided in Appendix E.

# **B. OBJECTIVE**

The City of Ann Arbor is seeking proposals from qualified vendors to perform the following services (and as described further in Section II.C).

- 1. Transfer Station Operating and Maintenance, Transport and Disposal Services
  - a. Operation and maintenance of the City's Transfer Station, and transport and disposal of waste processed through the TS at a permitted disposal facility. Services to commence July 1, 2017.
  - b. In addition, the City is requesting beneficial reuse options (e.g., alternate daily cover or construction aggregate) for processed glass from the City's MRF at the permitted disposal facility. Contractor to provide beneficial reuse of material only, hauling to be performed by others. Services to commence July 1, 2017.

#### 2. WWTP Services

- a. Transport and disposal of dewatered centrifuge cake from the City's WWTP plant. Loading to be performed by Contractor, using push-button hopper gates, into Contractor-provided trailers. Contract to be effective July 1, 2017, with on-call services to commence on or about December, 2017 (as subsequently scheduled by the City), consistent with the seasonal (December - May) generation of dewatered centrifuge cake. Note that services may be required earlier than December or beyond May in any given contract year.
- b. Roll-off (10-cubic yard) service for other materials generated by the WWTP plant, including scum, grit and screenings. Contractor to provide on-call service including roll-off containers, container liners, hauling and disposal. Services to commence July 1, 2017.
- c. Dumpster service (8-cubic yard) for trash materials from the WWTP plant. Contractor to provide dumpster, collection (every 2 weeks), hauling and disposal of trash materials. Services to commence July 1, 2017.
- 3. Street Sweeping/Vactor Material Disposal Services
  - Disposal of street-sweeping and vactor/soil materials hauled by the City to the Contractor's disposal facility. Services to commence July 1, 2017.

All contracted services are to be provided for a five (5) year initial term, with the City reserving an option to extend the contract term for up to two additional five-year periods.

It is the City's objective to secure comprehensive services as enumerated above. However, the City reserves the right to make separate awards for the services described in Sections II.B.1, II.B.2, and II.B.3 based on the pricing and qualifications submitted by vendors, as best meets the needs of the City (refer to Section I.Q - Reservation of Rights).

# C. REQUIREMENTS

The selected Contractor is to provide all necessary labor, equipment, fuel and materials to perform the services listed below. Where applicable, services to be provided by the City are noted.

- Transfer Station Operating and Maintenance, Transport and Disposal Services
  - a. Operate and maintain the City's Transfer Station.
  - b. Receive and transfer all municipal solid waste (MSW) delivered by the

- City and/or its agents (e.g., commercial waste franchise hauler). The City commits to deliver all City-controlled waste (i.e., waste collected by City crews or the City's contracted commercial waste franchise hauler) to the TS. However, the City does not guarantee a specified tonnage amount. The City or its agents may also deliver process residue from the MRF.
- c. Receive and transfer all MSW delivered by the University of Michigan to the TS (or, alternatively, dispose of MSW direct-hauled by the University to the disposal facility). The City does not guarantee any delivery of waste by the University.
- d. The Contractor will be allowed to accept third-party waste materials (including Contractor hauling tonnage), provided that: priority is first given to collection vehicles from the City and/or its agents and then collection vehicles from the University; and, all waste transfer operations are conducted entirely within the TS building and in accordance with the TS's MDEQ Operating License, the facility's stormwater pollution prevention plan (SWPPP), regulatory requirements, and best-operating practices. Third-party waste may not include hazardous or special waste, construction and demolition debris, or yard waste.
- e. Load delivered waste material into transfer trailers supplied by the Contractor or their identified and approved transport sub-contractor. Contractor shall provide all mobile equipment (e.g., front-end loaders, grapple loaders, etc.) required to load waste into transfer vehicles.
- f. Transport the loaded MSW to a permitted disposal facility provided by the Contractor or their identified and approved sub-contractor.
- g. Dispose of the MSW processed through the TS at a permitted disposal facility owned by the Contractor or their identified and approved sub-contractor. Contractor must guarantee disposal capacity for the 5-year term of the contract; guaranteed disposal capacity for a 15-year term (including the two 5-year extension periods) is desirable.
- h. Operate TS during scheduled hours: Monday Friday (7:00 a.m. 4:30 p.m.), and Saturdays (7:00 a.m. 4:30p.m.) during holiday weeks (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas). Upon 48-hours advance notice from the City, Contractor shall operate TS on additional Saturdays to accommodate City special projects.
- i. Maintain the TS facility in a clean, orderly condition. Litter to be collected daily or more frequently as necessary, including removal of litter from trees, fencing, exterior grounds and surrounding woods. All waste is to be removed from the tipping floor at the end of each operating day. Four (4) loaded transfer vehicles may be staged on-site at the end of the operating day if the loads cannot be transported to the disposal facility prior to the closure time of the disposal facility.
- j. Perform snow clearing on the TS site. The City will be responsible for

- snow clearing along Platt Road.
- k. Building repairs will be completed by the City at the City's cost and discretion, and any electrical, concrete or building damage by the Contractor will be repaired at the Contractor's sole expense.
- I. Cooperate with the City, as necessary, in the preparation of any MDEQ Operating License renewals. The City shall be responsible for preparing and submitting the renewal applications.
- m. Provide all health and safety training for Contractor personnel at the TS, including compliance with the MDEQ operating license and SWPPP.
- n. Transfer, transport and disposal services shall be invoiced on a per ton basis. Pricing forms are attached in Appendix B. State surcharge fees shall be paid by the City but shall be quoted separately from the per ton fee for transfer, transport and disposal services. Pricing shall be applicable to all waste delivered by the City and/or its agents (including MRF residue). The City's pricing shall also apply to waste delivered by the University of Michigan (although the City does not guarantee delivery of material from the University).

Contractor shall set rates for third-party waste (except for the University of Michigan). Contractor shall be responsible for invoicing all third-party customers, including the University of Michigan. For use of the City's TS for this third-party tonnage, Contractor shall provide the City with a per ton credit on all third-party tonnage, not less than \$2.30 per ton (refer to pricing forms in Appendix B), to be applied against the TS service fees payable by the City. The third-party credit shall apply to tonnage delivered by the University of Michigan; the Contractor may add the amount of the credit to the service fee applicable to the University.

Contractor to provide a flat daily rate to operate TS on additional Saturdays beyond the designated holiday weeks (i.e., week of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas). Transport and disposal services for such additional Saturdays to be invoiced at the City's per ton rate.

City will operate scalehouse facility and will provide an electronic summary of all TS loads to the Contractor. Contractor shall use the load information provided by the City as the basis for preparing its invoice to the City. Monthly Contractor invoices shall be prepared in a format agreed upon by the City, but at a minimum shall show tonnage processed, service fee amounts, and State surcharge amounts. The invoice shall also show third-party tonnages handled during the month, and the credit to the City for third-party tonnage.

o. Optionally, Contractor to provide a beneficial reuse (e.g., alternate daily cover, construction aggregate) for processed glass from the City's MRF at the Contractor's disposal facility. A separate pricing schedule (per ton credit to City or fee) for this service is provided in the pricing forms in

# Appendix B.

#### WWTP Services

- a. Transport dewatered centrifuge cake to a permitted disposal facility provided by the Contractor or their identified and approved subcontractor. Contractor to load material onto Contractor-provided transport vehicles using push-button hopper gate system in use at the WWTP. Contractor to rake loaded material, cover the load, and place straw or other material along the rear gate to prevent leakage of material during transport.
- b. Dispose of the dewatered centrifuge cake at a permitted disposal facility owned by the Contractor or their identified and approved subcontractor. Contractor must guarantee disposal capacity for the 5-year term of the contract; guaranteed disposal capacity for a 15-year term (including the two 5-year extension periods) is desirable.
- c. Transport and disposal services to be performed on an on-call, next-day basis (including occasional Saturdays, as necessary). The City will provide phone or email notification to the Contractor of next-day trucking needs by 1:00 P.M. the previous day. The Contractor will provide a single point of contact and inform the WWTP staff of who to contact in the event the named person is unavailable. The Contractor will be responsible for any communication with sub-contractor(s) to ensure the WWTP's hauling needs are met. The City will cooperate with the Contractor in scheduling times for trucks to arrive (so that full loads of material are available). Season typically runs from approximately December 1 to May 31, but services may be required earlier than December or beyond May in any contract year.
- d. Transport and disposal services for dewatered centrifuge cake shall be invoiced on a per ton basis. Pricing forms are attached in Appendix B. State surcharge fees shall be paid by the City but shall be quoted separately from the per ton fee for transport and disposal services.

Demurrage charges for wait times exceeding 30 minutes and caused by the City (i.e., delay in receiving Contractor's vehicles or interruption of truck loading once started) shall be separately quoted on a cost per hour basis. Off-hour (5:00 p.m. to 4:00 a.m., Monday - Friday) hauling premiums, if any, shall be separately quoted on a per ton basis.

Contractor invoices shall be prepared in a format agreed upon by the City, but at a minimum shall show tonnage processed, service fee amounts, State surcharge amounts, demurrage charges and hauling premiums (if any).

e. Provide 4 roll-off containers (10 cubic yard capacity) with liners for other WWTP materials: scum (1), grit (1) and screenings (2). Dumpster service to include all costs of containers, liners, transport

and disposal. Service to be provided on an on-call basis with advance notice from the City; service calls made prior to 1:00 p.m. shall be performed the next business day. Containers are located within buildings and Contractor shall be responsible for removing full containers and placing new containers within the buildings. Approximate service schedules for the roll-off containers are as follows: scum (1.5 - 2 months), grit (monthly), and screenings (1-2 weeks).

- f. Transport and disposal services for roll-off containers for scum, grit and screenings shall be invoiced on a "per-pull" basis, inclusive of any State surcharge fees. Pricing forms are attached in Appendix B. Contractor invoices shall be prepared in a format agreed upon by the City, but at a minimum shall show number of loads pulled and service fee amounts.
- g. Provide one dumpster (8 cubic yard), to be serviced every two weeks, for trash materials.
- h. Collection, transport and disposal services for the trash dumpster to be invoiced on a fee per month basis, and shall be inclusive of any State surcharge fees.
- i. Contractor may submit a consolidated invoice for dewatered centrifuge cake, roll-off service (scum, grit, and screenings), and trash service, provided the invoice contains the information noted above for each type of service.
- j. City to provide analytical testing and/or waste profile information as required by the Contractor's waste acceptance protocols.

# 3. Street Sweeping and Vactor Material Disposal Services

- a. Dispose of street sweeping materials delivered by the City at a permitted disposal facility owned by the Contractor or their identified and approved sub-contractor. Contractor must guarantee disposal capacity for the 5-year term of the contract; guaranteed disposal capacity for a 15-year term (including the two 5-year extension periods) is desirable.
- b. Disposal services for street sweeping materials shall be invoiced on a per ton basis. Pricing forms are attached in Appendix B. State surcharge fees shall be paid by the City but shall be quoted separately from the per ton fee for disposal services.
- c. Dispose of vactor and soil materials delivered by the City at a permitted disposal facility owned by the Contractor or their identified and approved sub-contractor. Contractor must guarantee disposal capacity for the 5-year term of the contract; guaranteed disposal capacity for a 15-year term (including the two 5-year extension periods) is desirable.
- d. Disposal services for vactor and soil materials shall be invoiced on a per ton basis. Pricing forms are attached in Appendix B. State

- surcharge fees shall be paid by the City but shall be quoted separately from the per ton fee for disposal services.
- e. Contractor may submit a consolidated invoice for street sweeping and vactor/soil materials, provided the invoice contains the information noted above for each type of service.
- f. City to provide analytical testing and/or waste profile information as required by the Contractor's waste acceptance protocols.

# SECTION III - MINIMUM INFORMATION REQUIRED

# A. PROPOSAL FORMAT

Proposers should organize Proposals into the following Sections:

- 1. Professional Qualifications
- 2. Past Involvement with Similar Work
- 3. Proposed Work Plan
- 4. Fee Proposal (include in a separate sealed envelope clearly marked "Fee Proposal")
- 5. Authorized Negotiator
- 6. Attachments

The following describes the elements that should be included in each of the proposal sections and the weighted point system that will be used for evaluation of the proposals.

# 1. Professional Qualifications – 25 points

- a. State the full name and address of your organization and, if applicable, the branch office or other subsidiary element that will perform, or assist in performing, the work hereunder. Indicate whether it operates as an individual, partnership, or corporation. If as a corporation, include whether it is licensed to operate in the State of Michigan.
- b. State history of the firm, in terms of length of existence, types of services provided, etc. Identify the experience and technical details that make the firm uniquely qualified for this work.
- c. Provide information on the key management personnel that will be responsible for overseeing the implementation, administration and oversight of the services provided to the City. Provide the key contact person for TS services and, if different, the WWTP services.
- d. Provide an overview of the safety and training programs that the Proposer has in place or will implement if awarded a contract.

# 2. Past involvement with Similar Projects – 20 points

The written proposal must include a list of specific experience in: a) operating and maintaining transfer stations; and, b) transporting and disposing dewatered centrifuge cake and other WWTP materials.

For each project team company (Contractor and sub-contractor), provide a list of municipal or other government agency references, including name,

jurisdiction, phone number, and a description of the transfer station or other solid waste services provided under contract.

# 3. Proposed Work Plan – 30 points

Provide a narrative description of how the Proposer intends to provide the: a) Transfer Station Operating and Maintenance, Transport and Disposal services; and, b) WWTP services. The narrative description should include the following:

- a. Transfer Station Operating and Maintenance, Transport and Disposal Services
  - i. Brief narrative description of how the TS will be operated (e.g., onsite direction of incoming waste vehicles, rolling-stock equipment to be used, loading procedures, daily cleaning procedures, etc.)
  - ii. Proposed staffing of TS (number and type of personnel).
  - iii. Identification of primary disposal site, to include name of facility, address, hours of operation, holiday closures, and permit or license number. Additionally, information must be provided on the permitted capacity of the facility and a certification that the facility is authorized to receive waste from Washtenaw County.
  - iv. Identification of any backup disposal facilities the Proposer can provide, including the information in item iii above.
  - v. Description of how the TS work will be managed and scheduled, including communication and coordination with the City.

# b. WWTP Services

- i. Narrative description of the number and types of equipment to be provided by the Proposer to transport dewatered centrifuge cake.
- ii. Identification of primary disposal site, to include name of facility, address, hours of operation, holiday closures, permit or license number, and permit authorization to accept dewatered centrifuge cake and other WWTP materials. Additionally, information must be provided on the permitted capacity of the facility and a certification that the facility is authorized to take waste from Washtenaw County.
- iii. Identification of any backup disposal facilities the Proposer can provide, including the information in item ii above.
- iv. Description of any required analytical testing on WWTP waste streams that will be required of the City.
- v. Description of how the WWTP work will be managed and scheduled, including communication and coordination with the City. This discussion should specifically address the scheduling of on-call services for dewatered centrifuge cake and other WWTP materials.

Proposers shall be evaluated on the clarity, thoroughness, and content of their responses to the above items.

# 4. Fee Proposal - 25 points

Fee schedules shall be submitted in a separate, sealed, envelope as part of the proposal, using the forms provided in Appendix B.

# 5. Authorized Negotiator

Include the name, phone number, and e-mail address of persons(s) in your organization authorized to negotiate the agreement with the City

# 6. Attachments

Legal Status of Proposer Form (Attachment A), Non-Discrimination Declaration of Compliance Form (Attachment B), Living Wage Declaration of Compliance Form (Attachment C), and Vendor Conflict of Interest Disclosure Form (Attachment D) must be completed and returned with the proposal. These elements should be included as attachments to the proposal submission.

# **B. PROPOSAL EVALUATION**

- 1. The selection committee will evaluate each proposal by the above-described criteria and point system (1 through 3) to select a short-list of firms for further consideration. The City reserves the right to reject any proposal that it determines to be unresponsive and deficient in any of the information requested for evaluation. A proposal with all the requested information does not guarantee the proposing firm to be a candidate for an interview. The committee may contact references to verify material submitted by the proposers. The fee proposals of only the short-list firms will be opened at this time.
- The committee then will schedule interviews with the selected firms if necessary. The selected firms will be given the opportunity to discuss in more detail their qualifications, past experience, proposed work plan and fee proposal.
- 3. The interview must include the project team members expected to complete a majority of work on the project, but no more than six members total. The interview shall consist of a presentation of up to thirty minutes (or the length provided by the committee) by the proposer, including the person who will be the project manager on this contract, followed by approximately thirty minutes of questions and answers. Audiovisual aids may be used during the oral interviews. The committee may record the oral interviews.

4. The firms interviewed will then be re-evaluated by the above criteria (1 through 3), and adjustments to scoring will be made as appropriate. After evaluation of the proposals, further negotiation with the selected firm may be pursued leading to the award of a contract by City Council, if suitable proposals are received.

The City reserves the right to waive the interview process and evaluate the proposers based on their proposals and fee schedules alone and open fee schedules before or prior to interviews.

The City will determine whether the final scope of the project to be negotiated will be entirely as described in this RFP, a portion of the scope, or a revised scope.

Work to be done under this contract is generally described through the detailed specifications and must be completed fully in accordance with the contract documents.

Any proposal that does not conform fully to these instructions may be rejected.

# C. PREPARATION OF PROPOSALS

Proposals should have no plastic bindings but will not be rejected as non-responsive for being bound. Staples or binder clips are acceptable. Proposals should be printed double sided on recycled paper. Proposals should not be more than 30 sheets (60 sides), not including required attachments.

Each person signing the proposal certifies that he or she is the person in the proposer's firm/organization responsible for the decision as to the fees being offered in the Proposal and has not and will not participate in any action contrary to the terms of this provision.

# D. ADDENDA

If it becomes necessary to revise any part of the RFP, notice of the addendum will be posted to Michigan Inter-governmental Trade Network (MITN) www.mitn.info and/or the City of Ann Arbor web site www.A2gov.org for all parties to download.

Each proposer must acknowledge in its proposal all addenda it has received. The failure of a proposer to receive or acknowledge receipt of any addenda shall not relieve the proposer of the responsibility for complying with the terms thereof. The City will not be bound by oral responses to inquiries or written responses other than official written addenda.

# **SECTION IV - ATTACHMENTS**

Attachment A: Legal Status of Respondent

Attachment B: Non-Discrimination Ordinance Declaration of Compliance Form

Attachment C: Living Wage Declaration of Compliance Form

Attachment D: Vendor Conflict of Interest Disclosure Form

Attachment E: Non-Discrimination Ordinance Poster

Attachment F: Living Wage Ordinance Poster

Attachment G: Performance Bond (to be submitted by successful proposer after

acceptance)

# ATTACHMENT A LEGAL STATUS OF RESPONDENT

(The Respondent shall fill out the provision and strike out the remaining ones.)

# The Respondent is:

<ul> <li>A corporation organized and doing business under the laws of the state of</li></ul>
whose signature is affixed to this proposal, is authorized to execute contracts on behalf or respondent.*
*If not incorporated in Michigan, please attach the corporation's Certificate of Authority
A limited liability company doing business under the laws of the State of whom bearing the title of whose signature is affixed to this proposal, is authorized to execute contract on behalf of the LLC.
<ul> <li>A partnership organized under the laws of the State of and filed with the County of, whose members are (attach list including street and mailing address for each.)</li> </ul>
<ul> <li>An individual, whose signature with address, is affixed to this RFP.</li> </ul>
Respondent has examined the basic requirements of this RFP and its scope of services, including all Addendum (if applicable) and hereby agrees to offer the services as specified in the RFP.
Date:
Signature
(Print) NameTitle
Firm:
Address:
Contact Phone: Fax
Emails

# ATTACHMENT B CITY OF ANN ARBOR DECLARATION OF COMPLIANCE

#### **Non-Discrimination Ordinance**

The "non discrimination by city contractors" provision of the City of Ann Arbor Non-Discrimination Ordinance (Ann Arbor City Code Chapter 112, Section 9:158) requires all contractors proposing to do business with the City to treat employees in a manner which provides equal employment opportunity and does not discriminate against any of their employees, any City employee working with them, or any applicant for employment on the basis of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight. It also requires that the contractors include a similar provision in all subcontracts that they execute for City work or programs.

In addition the City Non-Discrimination Ordinance requires that all contractors proposing to do business with the City of Ann Arbor must satisfy the contract compliance administrative policy adopted by the City Administrator. A copy of that policy may be obtained from the Purchasing Manager

#### The Contractor agrees:

- (a) To comply with the terms of the City of Ann Arbor's Non-Discrimination Ordinance and contract compliance administrative policy.
- (b) To post the City of Ann Arbor's Non-Discrimination Ordinance Notice in every work place or other location in which employees or other persons are contracted to provide services under a contract with the City.
- (c) To provide documentation within the specified time frame in connection with any workforce verification, compliance review or complaint investigation.
- (d) To permit access to employees and work sites to City representatives for the purposes of monitoring compliance, or investigating complaints of non-compliance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services in accordance with the terms of the Ann Arbor Non-Discrimination Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Non-Discrimination Ordinance, obligates the Contractor to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract.

Company Name	
Signature of Authorized Representative	Date
Print Name and Title	
Address, City, State, Zip	
Phone/Email address	-

Questions about the Notice or the City Administrative Policy, Please contact:

Procurement Office of the City of Ann Arbor (734) 794-6500

Revised 3/31/15 Rev. 0 NDO-2

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# ATTACHMENT C CITY OF ANN ARBOR LIVING WAGE ORDINANCE DECLARATION OF COMPLIANCE

The Ann Arbor Living Wage Ordinance (Section 1:811-1:821 of Chapter 23 of Title I of the Code) requires that an employer who is (a) a contractor providing services to or for the City for a value greater than \$10,000 for any twelvemonth contract term, or (b) a recipient of federal, state, or local grant funding administered by the City for a value greater than \$10,000, or (c) a recipient of financial assistance awarded by the City for a value greater than \$10,000, shall pay its employees a prescribed minimum level of compensation (i.e., Living Wage) for the time those employees perform work on the contract or in connection with the grant or financial assistance. The Living Wage must be paid to these employees for the length of the contract/program.

Companies employing fewer than 5 persons and non-profits employing fewer than 10 persons are exempt from compliance with the Living Wage Ordinance. If this exemption applies to your company/non-profit agency please check here [ ] No. of employees The Contractor or Grantee agrees:

(a) To pay each of its employees whose wage level is not required to comply with federal, state or local prevailing wage law, for work covered or funded by a contract with or grant from the City, no less than the Living Wage. The current Living Wage is defined as \$12.93/hour for those employers that provide employee health care (as defined in the Ordinance at Section 1:815 Sec. 1 (a)), or no less than \$14.43/hour for those employers that do not provide health care. The Contractor or Grantor understands that the Living Wage is adjusted and established annually on April 30 in accordance with the Ordinance and covered employers shall be required to pay the adjusted amount thereafter to be in compliance (Section 1:815(3).

#### Check the applicable box below which applies to your workforce

[ ]	Employees who are assigned to any covered City contract/grant will be paid at or above the
	applicable living wage without health benefits

- [ ] Employees who are assigned to any covered City contract/grant will be paid at or above the applicable living wage with health benefits
- (b) To post a notice approved by the City regarding the applicability of the Living Wage Ordinance in every work place or other location in which employees or other persons contracting for employment are working.
- (c) To provide to the City payroll records or other documentation within ten (10) business days from the receipt of a request by the City.
- (d) To permit access to work sites to City representatives for the purposes of monitoring compliance, and investigating complaints or non-compliance.
- (e) To take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee covered by the Living Wage Ordinance or any person contracted for employment and covered by the Living Wage Ordinance in order to pay the living wage required by the Living Wage Ordinance.

The undersigned states that he/she has the requisite authority to act on behalf of his/her employer in these matters and has offered to provide the services or agrees to accept financial assistance in accordance with the terms of the Living Wage Ordinance. The undersigned certifies that he/she has read and is familiar with the terms of the Living Wage Ordinance, obligates the Employer/Grantee to those terms and acknowledges that if his/her employer is found to be in violation of Ordinance it may be subject to civil penalties and termination of the awarded contract or grant of financial assistance.

Company Name		<del></del>	
Signature of Authorized Representative	Date	_	
Print Name and Title		<u> </u>	
Address, City, State, Zip		<u> </u>	
Phone/Email address  Questions about this form? Cont	act Procurement O	office City of Ann Arbor	Phone: 734/794-6500

Revised 2/17/16 Rev 0

LW-2

#### ATTACHMENT D



# VENDOR CONFLICT OF INTEREST DISCLOSURE FORM

All vendors interested in conducting business with the City of Ann Arbor must complete and return the Vendor Conflict of Interest Disclosure Form in order to be eligible to be awarded a contract. Please note that all vendors are subject to comply with the City of Ann Arbor's conflict of interest policies as stated within the certification section below.

If a vendor has a relationship with a City of Ann Arbor official or employee, an immediate family member of a City of Ann Arbor official or employee, the vendor shall disclose the information required below.

- No City official or employee or City employee's immediate family member has an ownership interest in vendor's company or is deriving personal financial gain from this contract.
- 2. No retired or separated City official or employee who has been retired or separated from the City for less than one (1) year has an ownership interest in vendor's Company.
- 3. No City employee is contemporaneously employed or prospectively to be employed with the vendor.
- 4. Vendor hereby declares it has not and will not provide gifts or hospitality of any dollar value or any other gratuities to any City employee or elected official to obtain or maintain a contract.
- 5. Please note any exceptions below:

Conflict of Interest Disclosure*		
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	( ) Relationship to employee     ( ) Interest in vendor's company     ( ) Other (please describe in box below)	

I certify that this Conflict of Interest Disclosure has been examined by me and that its contents are true and correct to my knowledge and belief and I have the authority to so certify on behalf of the Vendor by my signature below:			
Vendor Name		Vendor Phone Number	
Signature of Vendor Authorized Representative	Date	Printed Name of Vendor Authorize Representative	d

<sup>\*</sup>Disclosing a potential conflict of interest does not disqualify vendors. In the event vendors do not disclose potential conflicts of interest and they are detected by the City, vendor will be exempt from doing business with the City.

# ATTACHMENT E CITY OF ANN ARBOR NON-DISCRIMINATION ORDINANCE

Relevant provisions of Chapter 112, Nondiscrimination, of the Ann Arbor City Code are included below. You can review the entire ordinance at www. a2gov.org/departments/city-clerk

<u>Intent</u>: It is the intent of the city that no individual be denied equal protection of the laws; nor shall any individual be denied the enjoyment of his or her civil or political rights or be discriminated against because of actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight.

<u>Discriminatory Employment Practices</u>: No person shall discriminate in the hire, employment, compensation, work classifications, conditions or terms, promotion or demotion, or termination of employment of any individual. No person shall discriminate in limiting membership, conditions of membership or termination of membership in any labor union or apprenticeship program.

<u>Discriminatory Effects:</u> No person shall adopt, enforce or employ any policy or requirement which has the effect of creating unequal opportunities according to actual or perceived age, arrest record, color, disability, educational association, familial status, family responsibilities, gender expression, gender identity, genetic information, height, HIV status, marital status, national origin, political beliefs, race, religion, sex, sexual orientation, source of income, veteran status, victim of domestic violence or stalking, or weight for an individual to obtain housing, employment or public accommodation, except for a bona fide business necessity. Such a necessity does not arise due to a mere inconvenience or because of suspected objection to such a person by neighbors, customers or other persons.

Nondiscrimination by City Contractors: All contractors proposing to do business with the City of Ann Arbor shall satisfy the contract compliance administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All city contractors shall ensure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity and tends to eliminate inequality based upon any classification protected by this chapter. All contractors shall agree not to discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of any applicable protected classification. All contractors shall be required to post a copy of Ann Arbor's Non-Discrimination Ordinance at all work locations where its employees provide services under a contract with the city.

Complaint Procedure: If any individual has a grievance alleging a violation of this chapter, he/she has 180 calendar days from the date of the individual's knowledge of the allegedly discriminatory action or 180 calendar days from the date when the individual should have known of the alleged discriminatory action to file a complaint with the city's Human Rights Commission. If an individual fails to file a complaint alleging a violation of this chapter within the specified time frame, the complaint will not be considered by the Human Rights Commission. The complaint should be made in writing to the Human Rights Commission. The complaint may be filed in person with the City Clerk, by e-mail (hrc@a2gov.org), by phone (734-794-6141) or by mail (Ann Arbor Human Rights Commission, PO Box 8647, Ann Arbor, MI 48107). The complaint must contain information about the alleged discrimination, such as name, address, phone number of the complainant and location, date and description of the alleged violation of this chapter.

<u>Private Actions For Damages or Injunctive Relief:</u> To the extent allowed by law, an individual who is the victim of discriminatory action in violation of this chapter may bring a civil action for appropriate injunctive relief or damages or both against the person(s) who acted in violation of this chapter.

#### ATTACHMENT F

# CITY OF ANN ARBOR LIVING WAGE ORDINANCE

RATE EFFECTIVE APRIL 30, 2016 - ENDING APRIL 29, 2017

\$12.93 per hour

If the employer provides health care benefits\*

**\$14.43** per hour

If the employer does **NOT** provide health care benefits\*

Employers providing services to or for the City of Ann Arbor or recipients of grants or financial assistance from the City of Ann Arbor for a value of more than \$10,000 in a twelve-month period of time must pay those employees performing work on a City of Ann Arbor contract or grant, the above living wage.

# **ENFORCEMENT**

The City of Ann Arbor may recover back wages either administratively or through court action for the employees that have been underpaid in violation of the law. Persons denied payment of the living wage have the right to bring a civil action for damages in addition to any action taken by the City.

Violation of this Ordinance is punishable by fines of not more than \$500/violation plus costs, with each day being considered a separate violation. Additionally, the City of Ann Arbor has the right to modify, terminate, cancel or suspend a contract in the event of a violation of the Ordinance.

\* Health Care benefits include those paid for by the employer or making an employer contribution toward the purchase of health care. The employee contribution must not exceed \$.50 an hour for an average work week; and the employer cost or contribution must equal no less than \$1/hr for the average work week.

The Law Requires Employers to Display This Poster Where Employees Can Readily See It.

For Additional Information or to File a Complaint Contact Colin Spencer at 734/794-6500 or cspencer@a2gov.org

Revised 2/17/16 Rev.0 LW-1

# ATTACHMENT G PERFORMANCE BOND

(1)		
	of	(referred to as
	"Principal"), and	, a corporation
	duly authorized to issue performance bonds in the State of Mi	
	are bound to the City of Ann Arbor, Michigan (	
	\$, the payment of themselves, their heirs, executors, administrators, success	core and assigns jointly and
	severally, by this bond.	sors and assigns, joining and
(2)	for:	
	and this bond is given f	or that Contract.
(3)	(3) Whenever the Principal is declared by the City to be in default may promptly remedy the default or shall promptly:	under the Contract, the Surety
	(a) complete the Contract in accordance with its terms and con	nditions; or
	(b) obtain a bid or bids for submission to the City for complet with its terms and conditions, and upon determination by S bidder, arrange for a Contract between such bidder and the work progresses, sufficient funds to pay the cost of come Contract price; but not exceeding, including other costs and be liable hereunder, the amount set forth in paragraph 1.	Surety of the lowest responsible ne City, and make available, as pletion less the balance of the
(4)	(4) Surety shall have no obligation to the City if the Principal fully a Contract.	nd promptly performs under the
(5)	(5) Surety agrees that no change, extension of time, alteration Contract or to the work to be performed thereunder, or the specin any way affect its obligations on this bond, and waives notice of time, alteration or addition to the terms of the Contract or to the	cifications accompanying it shall e of any such change, extension
SIG	SIGNED AND SEALED this day of, 20	1
(Na	(Name of Surety Company) (Name of	Principal)
Ву	By By	
-	(Signature)	_
	(Signat	ure)
lts	lts Its	
(	Its Its (Title of Office) (Title of	Office)
App	Approved as to form: Name and	address of agent:
Step	Stephen K. Postema, City Attorney	

# **SECTION V - APPENDICES**

Appendix A: Sample Services Agreement

Appendix B: Cost Proposal Forms

Appendix C: MDEQ Operating License

Appendix D: Historical Solid Waste Tonnage Data

Appendix E: Analytical Test Data

E1: Analytical Test Data and Waste Profile Information, Dewatered Centrifuge Cake

E2: Waste Profile Information, WWTP Materials (Scum/Grit/Screenings)

E3: Analytical Test Data and Waste Profile Information, Street Sweeping Material

E4: Waste Profile Information, Vactor/Soil Material

# **APPENDIX A**

# **SAMPLE SERVICES AGREEMENT**

#### APPENDIX A: GENERAL SERVICES AGREEMENT

If a contract is awarded, the selected Firm(s) will be required to adhere to a set of general contract provisions which will become a part of any formal agreement. These provisions are general principles which apply to all contractors/service providers to the City of Ann Arbor. The required provisions are:

GENERAL SERVICES AGREEMENT BETWEEN

AND THE CITY OF ANN ARBOR
FOR
The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St. Ann Arbor, Michigan 48104 ("City"), and("Contractor") a(n)
a(n)(State where organized) (Partnership, Sole Proprietorship, or Corporation) with its address atagree as follows on this day of, 2017.
The Contractor agrees to provide services to the City under the following terms and conditions:
I. DEFINITIONS
Administering Service Area/Unit means the Public Services Area.
Contract Administrator means Craig Hupy, acting personally or through any assistants authorized by the Administrator/Manager of the Administering Service Area/Unit.
Deliverables means all Plans, Specifications, Reports, Recommendations, and other materials developed for and delivered to City by Contractor under this Agreement
Project means RFP# Solid Waste Transfer, Transfer and Disposal Services.

#### II. DURATION

This Agreement shall become effective upon execution by both parties, and shall remain in effect until June 30, 2022, unless terminated as provided for in Article XII

The City shall have the option to renew this contract for two additional five-year terms on the same terms and conditions as the original term. The Contract Administrator shall provide notice to Contractor no less than sixty days prior to the end of current contract/renewal term informing the Contractor of the City's election to renew the contract. The parties agree to execute a renewal agreement for any renewal period exercised by the City/

# III. SERVICES

A. The Contractor agrees to provide solid waste transfer, transport and disposal services ("Services") and to furnish all materials, equipment and labor necessary

#### APPENDIX A: GENERAL SERVICES AGREEMENT

and to abide by all the duties and responsibilities applicable to it for the Project in accordance with the requirements and provisions of the following documents, including all written modifications incorporated into any of the documents, which are incorporated as part of this Agreement:

Proposal of Contractor, dated \_\_\_\_\_, as modified, restated and attached as Exhibit A.

The contract documents are complementary and what is called for by any one shall be binding. The intention of the documents is to include all labor and materials, equipment and transportation necessary for the proper execution of the Project. Materials or work described in words that so applied have a well-known technical or trade meaning have the meaning of those recognized standards.

The parties may mutually agree to make changes to the quantities of service within the general scope of the Agreement at any time by a written order signed by both parties. If the changes add to or deduct from the extent of the services, the contract sum shall be adjusted accordingly. All such changes shall be executed under the conditions of the original Agreement.

- B. Quality of Services under this Agreement shall be of the level of quality performed by persons regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Contractor shall perform its Services for the Project in compliance with all statutory, regulatory and contractual requirements now or hereafter in effect as may be applicable to the rights and obligations set forth in the Agreement, including but not limited to statutory, regulatory and contractual requirements regarding safety.
- D. The Contractor may rely upon the accuracy of reports and surveys provided to it by the City (if any) except when defects should have been apparent to a reasonably competent person regularly rendering this type of service or when the Contractor has actual notice of any defects in the reports and surveys.

#### IV. INDEPENDENT CONTRACTOR

The Parties agree that at all times and for all purposes under the terms of this Agreement each Party's relationship to any other Party shall be that of an independent contractor. Each Party will be solely responsible for the acts of its own employees, agents, and servants. No liability, right, or benefit arising out of any employer/employee relationship, either express or implied, shall arise or accrue to any Party as a result of this Agreement.

Contractor does not have any authority to execute any contract or agreement on behalf of the City, and is not granted any authority to assume or create any obligation or liability on the City's behalf, or to bind the City in any way.

#### APPENDIX A: GENERAL SERVICES AGREEMENT

# V. COMPENSATION OF CONTRACTOR

- A. The Contractor shall be paid on the basis of the unit prices stated in Exhibit B. The total fee to be paid the Contractor shall be an indefinite amount as it will be based on the total amount of material delivered to the Contractor by the City requiring the Contractor's Services provided under this Contract. Payment shall be made monthly (30 days after invoice), unless another payment term is specified in Exhibit B, following receipt of invoices submitted by the Contractor, and approved by the Contract Administrator.
- B. The Contractor will be compensated for Services performed in addition to the Services described in Section III, only when the scope of and compensation for those additional Services have received prior written approval of the Contract Administrator.
- C. The Contractor shall keep complete records of the Services provided, including all records necessary to support the compensation calculations in Exhibit B, so that the City may verify invoices submitted by the Contractor. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

#### VI. INSURANCE/INDEMNIFICATION

- A. The Contractor shall procure and maintain during the life of this contract such insurance policies, including those set forth in Exhibit C, as will protect itself and the City from all claims for bodily injuries, death or property damage which may arise under this contract; whether the act(s) or omission(s) giving rise to the claim were made by the Contractor, any subcontractor or anyone employed by them directly or indirectly. In the case of all contracts involving on-site work, the Contractor shall provide to the City, before the commencement of any work under this contract, documentation satisfactory to the City demonstrating it has obtained the policies and endorsements required by Exhibit C. When requested, Contractor shall provide the same documentation for its subcontractor(s) (if any).
- B. Any insurance provider of Contractor shall be admitted and authorized to do business in the State of Michigan and shall carry and maintain a minimum rating assigned by A.M. Best & Company's Key Rating Guide of "A-" Overall and a minimum Financial Size Category of "V". Insurance policies and certificates issued by non-admitted insurance companies are not acceptable unless approved in writing by the City.
- C. To the fullest extent permitted by law, Contractor shall indemnify, defend and hold the City, its officers, employees and agents harmless from all suits, claims, judgments and expenses, including attorney's fees, resulting or alleged to result, from any acts or omissions by Contractor or its employees and agents occurring in the performance of or breach in this Agreement, except to the extent that any suit, claim, judgment or expense are finally judicially determined to have resulted from the City's negligence or willful misconduct or its failure to comply with any of its material obligations set forth in this Agreement.

#### VII. PERFORMANCE BOND

A Performance Bond will be required from the successful bidder as follows:

A Perfoi	rmance	Bond to	the Ci	ty of	Ann	Arbor	for	50%	of the	he bic	l amount	accep	ted for
the first	year of	the Contra	act. Th	ne Cit	ty and	d Cont	tract	or ag	ree	that tl	ne amoui	nt of the	e bond
is \$													

The Performance Bond shall be executed on a form supplied by the City in a manner and by a Surety Company duly authorized to issue performance bonds in Michigan and satisfactory to the City Attorney.

#### VIII. WAGE REQUIREMENTS

If the Contractor is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code, the Contractor agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Contractor agrees to pay those employees providing Services to the City under this Agreement a "living wage," as defined in Section 1:815 of the Ann Arbor City Code, as adjusted in accordance with Section 1:815(3); to post a notice approved by the City of the applicability of Chapter 23 in every location in which regular or contract employees providing services under this Agreement are working; to maintain records of compliance; if requested by the City, to provide documentation to verify compliance; to take no action that would reduce the compensation, wages, fringe benefits, or leave available to any employee or person contracted for employment in order to pay the living wage required by Section 1:815; and otherwise to comply with the requirements of Chapter 23.

Contractor agrees that all subcontracts entered into by the Contractor shall contain similar wage provision covering subcontractor's employees who perform work on this contract.

#### IX. NON-DISCRIMINATION

The Contractor agrees to comply, and to require its subcontractor(s) to comply, with the nondiscrimination provisions of MCL 37.2209. The Contractor further agrees to comply with the provisions of Section 9:158 of Chapter 112 of Title IX of the Ann Arbor City Code, and to assure that applicants are employed and that employees are treated during employment in a manner which provides equal employment opportunity.

#### X. REPRESENTATIONS AND WARRANTIES BY THE CONTRACTOR

- A. The Contractor warrants that the quality of its Services under this Agreement shall conform to the level of quality performed by persons regularly rendering this type of service.
- B. The Contractor warrants that it has all the skills, experience and licenses (if applicable) necessary to perform the Services it is to provide pursuant to this Agreement.

- C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services it is to provide pursuant to this Agreement.
- D. The Contractor certifies that it has no personal or financial interest in the Project other than the fee it is to receive under this Agreement. The Contractor further certifies that it shall not acquire any such interest, direct or indirect, which would conflict in any manner with the performance of the Services it is to provide pursuant to this Agreement. Further Contractor agrees and certifies that it does not and will not employ or engage any person with a personal or financial interest in this Agreement.
- E. The Contractor certifies that it is not, and shall not become overdue or in default to the City for any contract, debt, or any other obligation to the City including real and personal property taxes. Further Contractor agrees that the City shall have the right to set off any such debt against compensation awarded for Services under this Agreement.
- F. The Contractor warrants that its proposal was made in good faith, it arrived at the costs of its proposal independently, without consultation, communication or agreement, for the purpose of restricting completion as to any matter relating to such fees with any competitor for these Services; and no attempt has been made or shall be made by the Contractor to induce any other perform or firm to submit or not to submit a proposal for the purpose of restricting competition.

### XI. OBLIGATIONS OF THE CITY

- A. The City agrees to give the Contractor access to the Project area and other Cityowned properties as required to perform the necessary Services under this Agreement.
- B. The City shall notify the Contractor of any defects in the Services of which the Contract Administrator has actual notice.

#### XII. ASSIGNMENT

- A. Notwithstanding current subcontracts of the Contractor in place at the time of execution of this Agreement, which are acknowledged and approved by City, the Contractor shall not subcontract or assign any portion of any right or obligation under this Agreement without prior written consent from the City. Notwithstanding any consent by the City to any assignment, Contractor shall at all times remain bound to all warranties, certifications, indemnifications, promises and performances, however described, as are required of it under the Agreement unless specifically released from the requirement, in writing, by the City.
- B. The Contractor shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

#### XIII. TERMINATION OF AGREEMENT

- A. If either party is in breach of this Agreement for a period of fifteen (15) days following receipt of notice from the non-breaching party with respect to a breach, the non-breaching party may pursue any remedies available to it against the breaching party under applicable law, including but not limited to, the right to terminate this Agreement without further notice. The waiver of any breach by any party to this Agreement shall not waive any subsequent breach by any party.
- B. The City my terminate this Agreement without providing the Contractor an opportunity to cure the breach if the City has previously provided notices of breach to the Contractor on multiple occasions, and/or if the breach is for Contractor's failure to comply with its safety obligations, even if the Contractor has cured the prior breaches for which notice was given.
- C. The City may terminate this Agreement, on at least thirty (30) days advance notice, for any reason, including convenience, without incurring any penalty, expense or liability to Contractor, except the obligation to pay for Services actually performed under the Agreement before the termination date.
- D. Contractor acknowledges that, if this Agreement extends for several fiscal years, continuation of this Agreement is subject to appropriation of funds for this Project. If funds to enable the City to effect continued payment under this Agreement are not appropriated or otherwise made available, the City shall have the right to terminate this Agreement without penalty at the end of the last period for which funds have been appropriated or otherwise made available by giving written notice of termination to Contractor. The Contract Administrator shall give Contractor written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- E. The provisions of Articles VI and IX shall survive the expiration or earlier termination of this Agreement for any reason. The expiration or termination of this Agreement, for any reason, shall not release either party from any obligation or liability to the other party, including any payment obligation that has already accrued and Contractor's obligation to deliver all Deliverables due as of the date of termination of the Agreement.

#### XIV. REMEDIES

- A. This Agreement does not, and is not intended to, impair, divest, delegate or contravene any constitutional, statutory and/or other legal right, privilege, power, obligation, duty or immunity of the Parties.
- B. All rights and remedies provided in this Agreement are cumulative and not exclusive, and the exercise by either party of any right or remedy does not preclude the exercise of any other rights or remedies that may now or subsequently be available at law, in equity, by statute, in any agreement between the parties or otherwise.

C. Absent a written waiver, no act, failure, or delay by a Party to pursue or enforce any rights or remedies under this Agreement shall constitute a waiver of those rights with regard to any existing or subsequent breach of this Agreement. No waiver of any term, condition, or provision of this Agreement, whether by conduct or otherwise, in one or more instances, shall be deemed or construed as a continuing waiver of any term, condition, or provision of this Agreement. No waiver by either Party shall subsequently effect its right to require strict performance of this Agreement.

#### XV. NOTICE

All notices and submissions required under this Agreement shall be delivered to the respective party in the manner described herein to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notices given under this Agreement shall be in writing and shall be personally delivered, sent by next day express delivery service, certified mail, or first class U.S. mail postage prepaid, and addressed to the person listed below. Notice will be deemed given on the date when one of the following first occur: (1) the date of actual receipt; (2) the next business day when notice is sent next day express delivery service or personal delivery; or (3) three days after mailing first class or certified U.S. mail.

If Notice is sent to the CONTRACTOR, it shall be addressed and sent to:

Company Name Attn: Title Address

If Notice is sent to the CITY, it shall be addressed and sent to:

City of Ann Arbor Attn: Craig A. Hupy, P.E. Public Services Administrator 301 E. Huron St. Ann Arbor, Michigan 48104

#### XVI. CHOICE OF LAW AND FORUM

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction, excepting the principles of conflicts of law. The parties submit to the jurisdiction and venue of the Circuit Court for Washtenaw County, State of Michigan, or, if original jurisdiction can be established, the United States District Court for the Eastern District of Michigan, Southern Division, with respect to any action arising, directly or indirectly, out of this Agreement or the performance or breach of this Agreement. The parties stipulate that the venues referenced in this Agreement are convenient and waive any claim of non-convenience.

#### XVII. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., Deliverables) prepared by or obtained by the Contractor as provided under the terms of this Agreement shall be delivered to and become the property of the City. Original basic survey notes, sketches, charts, drawings, partially completed drawings, computations, quantities and other data shall remain in the possession of the Contractor as instruments of service unless specifically incorporated in a deliverable, but shall be made available, upon request, to the City without restriction or limitation on their use.

#### XVIII. SEVERABILITY OF PROVISIONS

Whenever possible, each provision of this Agreement will be interpreted in a manner as to be effective and valid under applicable law. However, if any provision of this Agreement or the application of any provision to any party or circumstance will be prohibited by or invalid under applicable law, that provision will be ineffective to the extent of the prohibition or invalidity without invalidating the remainder of the provisions of this Agreement or the application of the provision to other parties and circumstances.

#### XIX. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Contractor with respect to the subject matter of the Agreement and it supersedes, unless otherwise incorporated by reference herein, all prior representations, negotiations, agreements or understandings whether written or oral. Neither party has relied on any prior representations, of any kind or nature, in entering into this Agreement. No terms or conditions of either party's invoice, purchase order or other administrative document shall modify the terms and conditions of this Agreement, regardless of the other party's failure to object to such form. This Agreement shall be binding on and shall inure to the benefit of the parties to this Agreement and their permitted successors and permitted assigns and nothing in this Agreement, express or implied, is intended to or shall confer on any other person or entity any legal or equitable right, benefit, or remedy of any nature whatsoever under or by reason of this Agreement. This Agreement may only be altered, amended or modified by written amendment signed by the Contractor and the City. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed to be one and the same agreement.

FOR CONTRACTOR	FOR THE CITY OF ANN ARBOR
Ву:	By:
	Christopher Taylor Mayor
lts	By:
	Jacqueline Beaudry, City Clerk
	Approved as to substance
	Howard S. Lazarus, City Administrator
	Craig A. Hupy, P.E.,
	Public Services Administrator
	Approved as to form and content
	Stephen K. Postema, City Attorney

# EXHIBIT A SCOPE OF SERVICES

# **EXHIBIT B COMPENSATION**

# EXHIBIT C INSURANCE REQUIREMENTS

Effective the date of this Agreement, and continuing without interruption during the term of this Agreement, Contractor shall provide certificates of insurance to the City on behalf of itself, and when requested any subcontractor(s). The certificates of insurance and required endorsements shall meet the following minimum requirements.

- A. The Contractor shall have insurance that meets the following minimum requirements:
  - 1. Worker's Compensation Insurance in accordance with all applicable state and federal statutes. Further, Employers Liability Coverage shall be obtained in the following minimum amounts:

Bodily Injury by Accident - \$500,000 each accident Bodily Injury by Disease - \$500,000 each employee Bodily Injury by Disease - \$500,000 each policy limit

2. Commercial General Liability Insurance equivalent to, as a minimum, Insurance Services Office form CG 00 01 07 98 or current equivalent. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy. Further, the following minimum limits of liability are required:

\$1,000,000 Each occurrence as respect Bodily Injury Liability or Property Damage Liability, or both combined \$2,000,000 Per Job General Aggregate \$1,000,000 Personal and Advertising Injury

- 3. Motor Vehicle Liability Insurance, including Michigan No-Fault Coverages, equivalent to, as a minimum, Insurance Services Office form CA 00 01 07 97 or current equivalent. Coverage shall include all owned vehicles, all non-owned vehicles and all hired vehicles. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements which diminish the City's protections as an additional insured under the policy Further, the limits of liability shall be \$1,000,000 for each occurrence as respects Bodily Injury Liability or Property Damage Liability, or both combined.
- 4. Contractor Pollution Liability Insurance with minimum limits per project and per occurrence of \$2,000,000. The City of Ann Arbor shall be an additional insured. The policy must provide Natural Resources Damages coverage either as part of the policy or by endorsement to the policy. A waste brokering endorsement must be provided.
- 5. Umbrella/Excess Liability Insurance shall be provided to apply in excess of the Commercial General Liability, Employers Liability and the Motor Vehicle coverage enumerated above, for each occurrence and for aggregate in the amount of \$1,000,000.

- B. Insurance required under A.2, A.3 and A.4 above shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.
- C. Insurance companies and policy forms are subject to approval of the City Attorney, which approval shall not be unreasonably withheld. Documentation must provide and demonstrate an unconditional 30 day written notice of cancellation in favor of the City of Ann Arbor. Further, the documentation must explicitly state the following: (a) the policy number; name of insurance company; name and address of the agent or authorized representative; name and address of insured; project name; policy expiration date; and specific coverage amounts; (b) any deductibles or self-insured retentions which shall be approved by the City, in its sole discretion; (c) that the policy conforms to the requirements specified. Contractor shall furnish the City with satisfactory certificates of insurance and endorsements prior to commencement of any work. Upon request, the Contractor shall provide within 30 days a copy of the policy(ies) to the City. If any of the above coverages expire by their terms during the term of this contract, the Contractor shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.

## **APPENDIX B**

## **COST PROPOSAL FORM**

# RFP # 17-05 FOR SOLID WASTE TRANSFER, TRANSPORT AND DISPOSAL SERVICES FOR THE CITY OF ANN ARBOR

1: COMPANY NAME:			
	ed the complete Request for Proposal itting the following Cost Proposal Form	•	
Signature:			
Name / Title:			
Date:			
2: DISPOSAL FACILITY INI	FORMATION		
Name:			
Address:			
County:			
DEQ Permit Number:			
Hours of Operation:			
Monday-Frida	ay		
Saturday		Sunday	<b>'</b>
Holiday Closures (List All Obs	erved Holidays):		
Permitted for Waste Streams		Yes	No
Identified in the RFP?	Municipal Waste		
	WWTP Dewatered Centrifuge Cake		
	WWTP Scum, Grit, Screenings		
	Street Sweepings		
	Vactor Material		
Authorized waste import volur	me from Washtenaw County		tons, or
(pursuant to County Solid Wa			gate cu. yds.

#### 3: PROPOSED RATE SCHEDULES

The proposed rates shall include all state and local fees unless otherwise noted.

# 3a: TRANSFER STATION OPERATING AND MAINTENANCE, TRANSPORT AND DISPOSAL SERVICES

1) Below rate schedule applies to City of Ann Arbor tonnage from University of Michigan. Contractor will facility (other than from the University).	• `	•
2) Specify State Surcharge Fee:	\$	per ton
(State Surcharge Fee will be added to Disposal ra Fee during the term of the contract.)	ate; City to pay actual va	alue of State Surcharge

Contract Year	Year Ending	Transfer Station Operation (\$/ton)	Transport (\$/ton)	Disposal (\$/ton)	Total (\$/ton)
1	6/30/2018				
2	6/30/2019				
3	6/30/2020				
4	6/30/2021				
5	6/30/2022				
6	6/30/2023				
7	6/30/2024				
8	6/30/2025				
9	6/30/2026				
10	6/30/2027				
11	6/30/2028				
12	6/30/2029				
13	6/30/2030				
14	6/30/2031				
15	6/30/2032				

3)	Specify 3rd Party Waste Credit:	\$ /ton

3rd Party Waste Credit will be deducted from charges due by the City to the Contractor for all 3rd Party tons (including the University of Michigan). Amount of credit to be not less than \$2.30/ton.

# 3b: TRANSFER STATION OPERATING AND MAINTENANCE, TRANSPORT AND DISPOSAL SERVICES (cont'd.)

1) Daily rate below is for operation of Transfer Station (7:00 a.m. - 4:30 p.m.) on additional Saturdays (other than holiday weeks) at the request of the City.

Contract Year	Year Ending	Daily Rate (\$/day)
1	6/30/2018	
2	6/30/2019	
3	6/30/2020	
4	6/30/2021	
5	6/30/2022	
6	6/30/2023	
7	6/30/2024	
8	6/30/2025	
9	6/30/2026	
10	6/30/2027	
11	6/30/2028	
12	6/30/2029	
13	6/30/2030	
14	6/30/2031	
15	6/30/2032	

### 3c: GLASS AGGREGATE FOR BENEFICIAL USE

(Alternative Daily Cover or Construction Aggregate)

- 1) Specify fixed unit payment by Contractor to City for glass aggregate delivered by City.
- 2) If payment is to be made by the City to Contractor for glass aggregate, indicate a negative amount.

Contract Year	Year Ending	Payment to City (\$/ton)
1	6/30/2018	
2	6/30/2019	
3	6/30/2020	
4	6/30/2021	
5	6/30/2022	
6	6/30/2023	
7	6/30/2024	
8	6/30/2025	
9	6/30/2026	
10	6/30/2027	
11	6/30/2028	
12	6/30/2029	
13	6/30/2030	
14	6/30/2031	
15	6/30/2032	

### 3d: WWTP DEWATERED CENTRIFUGE CAKE TRANSPORT AND DISPOSAL SERVICES

provided by the	unit cost for trans contractor. Pick- be completed the	ups will be sched			in vehicles ck-ups requested
2) Specify State	Surcharge Fee:			\$	per ton
•	arge Fee will be a e term of the con	• • • • • • • • • • • • • • • • • • •	rate; City to pa	y actual value of	State Surcharge
Contract Year	Year Ending	Transport (\$/ton)	Disposal (\$/ton)	Total (\$/ton)	Demurrage (\$/hour)
1	6/30/2018				
2	6/30/2019				
3	6/30/2020				
4	6/30/2021				
5	6/30/2022				
6	6/30/2023				
7	6/30/2024				
8	6/30/2025				
9	6/30/2026				
10	6/30/2027				
11	6/30/2028				
12	6/30/2029				
13	6/30/2030				
14	6/30/2031				
15	6/30/2032				
•	uling Premium (5 Increase Transpo		·	ay): \$	per ton
4) Contractor's '	Vehicle Information	on:			
a) Size / cap	acity of proposed	hauling vehicle:			cubic yards
b) Number of	f vehicles to be u	sed for hauling o	n daily basis:		vehicles
5\ D	1.2 2011	l - (( 00 ' (		0'1 (' -	Late 2a

5) Demurrage claims will be valid after 30 minutes of wait time caused by City (i.e., delay in receiving Contractor's vehicles or interruption of truck loading once started).

## 3e: WWTP MATERIALS (ROLL-OFF AND DUMPSTER SERVICE)

- 1) Specify fixed unit cost for transport and disposal of scum, grit, and screenings in 10-yard lined roll-off containers provided by the contractor. Pick-ups will be scheduled on an as-needed basis. Pick-ups requested by 1:00 PM will be completed the following business day.
- 2) Specify fixed unit cost for bi-weekly (every other week) collection, transport and disposal of general refuse in 8-yard dumpster.
- 3) All rates in this schedule are **inclusive** of any state surcharge fees.

Contract Year	Year Ending	Scum (\$/pull)	Grit (\$/pull)	Screenings (\$/pull)	Refuse (\$/month)
1	6/30/2018				
2	6/30/2019				
3	6/30/2020				
4	6/30/2021				
5	6/30/2022				
6	6/30/2023				
7	6/30/2024				
8	6/30/2025				
9	6/30/2026				
10	6/30/2027				
11	6/30/2028				
12	6/30/2029				
13	6/30/2030				
14	6/30/2031				
15	6/30/2032				

### 3f: STREET SWEEPINGS DISPOSAL SERVICES

- 1) Specify fixed unit cost for disposal of street sweepings.
- 2) Specify State Surcharge Fee:

\$ per t	or

(State Surcharge Fee will be added to Disposal rate; City to pay actual value of State Surcharge Fee during the term of the contract.)

Contract Year	Year Ending	Disposal (\$/ton)
1	6/30/2018	
2	6/30/2019	
3	6/30/2020	
4	6/30/2021	
5	6/30/2022	
6	6/30/2023	
7	6/30/2024	
8	6/30/2025	
9	6/30/2026	
10	6/30/2027	
11	6/30/2028	
12	6/30/2029	
13	6/30/2030	
14	6/30/2031	
15	6/30/2032	

# 3g: VACTOR/SOIL MATERIAL DISPOSAL SERVICES

- 1) Specify fixed unit cost for disposal of vactor/soil materials.
- 2) Specify State Surcharge Fee:

r	ton
	r

(State Surcharge Fee will be added to Disposal rate; City to pay actual value of State Surcharge Fee during the term of the contract.)

Contract Year	Year Ending	Disposal (\$/ton)
1	6/30/2018	
2	6/30/2019	
3	6/30/2020	
4	6/30/2021	
5	6/30/2022	
6	6/30/2023	
7	6/30/2024	
8	6/30/2025	
9	6/30/2026	
10	6/30/2027	
11	6/30/2028	
12	6/30/2029	
13	6/30/2030	
14	6/30/2031	
15	6/30/2032	

# APPENDIX C

## MDEQ OPERATING LICENSE

#### APPENDIX C: MDEQ OPERATING LICENSE



# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY



DAN WYANT DIRECTOR

LANSING

October 19, 2012

Mr. Tom McMurtrie, Solid Waste Coordinator City of Ann Arbor PO Box 8647 Ann Arbor, Michigan 48107-8647

Dear Mr. McMurtrie:

SUBJECT: Application for a Solid Waste Disposal Area Operating License

(Application); City of Ann Arbor, City of Ann Arbor Transfer Station; Waste

Data System Number 428008; Operating License Number 9336

Staff of the Department of Environmental Quality (DEQ) has reviewed your Application for the City of Ann Arbor Transfer Station, located in Pittsford Charter Township, Washtenaw County, Michigan. This review was conducted under the provisions of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

Based upon our review of your Application, your license is hereby granted. Enclosed is your license with operating stipulations.

Should you require further information, please contact Mr. Larry Bean, Jackson District Supervisor, Office of Waste Management and Radiological Protection, 517-780-7920; beanl@michigan.gov; or DEQ, State Office Building, 301 East Louis Glick Highway, Jackson, Michigan 49201.

Sincerely,

Steven R. Sliver, Chief Solid Waste Section

Office of Waste Management and Radiological Protection

517-373-1976

Enclosure

cc: Washtenaw County Department of Environmental Health Regulation Pittsford Charter Township Clerk

Mr. Lawrence Bean/Mr. Stan Idziak, DEQ - Jackson

Facility File



# Michigan Department of Environmental Quality Office of Waste Management and Radiological Protection

# SOLID WASTE DISPOSAL AREA OPERATING LICENSE

This license is issued under the provisions of Part 115, Solid Waste Management of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, MCL 324.11501 et seq., and authorizes the operation of this solid waste disposal area (Facility) in the state of Michigan. This license does not obviate the need to obtain other authorizations as may be required by state law.

FACILITY NAME: City of Ann Arbor Transfer Station

LICENSEE/OPERATOR: City of Ann Arbor

FACILITY OWNER: City of Ann Arbor PROPERTY OWNER: City of Ann Arbor

FACILITY TYPE(S): Solid Waste Transfer Facility

FACILITY ID NUMBER: 428008

COUNTY: Washtenaw LICENSE NUMBER: 9336

ISSUE DATE: October 19, 2012

EXPIRATION DATE: October 19, 2017

FACILITY DESCRIPTION: The City of Ann Arbor Transfer Station, a solid waste transfer facility, consists of 5.7 acres located

at 4130 Platt Road, Pittsfield Township, Washtenaw County, Michigan, as identified in

Attachment A, page 1 and 2, and fully described in this license.

AREA AUTHORIZED FOR DISPOSAL OF SOLID WASTE: 5.7 acres

RESPONSIBLE PARTY: Tom McMurtrie, Solid Waste Coordinator

City of Ann Arbor

301 East Huron Street, P.O. Box 8647

Ann Arbor, Michigan 48107

**NEW OPERATING LICENSE:** The previous Operating License Number 9155 for this Facility expired on March 7, 2012, prior to receipt of the application for this Operating License Number 9336. Therefore, this license is a new license issued to the licensee for the existing Facility.

This license is subject to revocation by the Director of the Michigan Department of Environmental Quality (Director) if the Director finds that this Facility is not being constructed or operated in accordance with the approved plans, the conditions of a permit or license, Part 115, or the rules promulgated under Part 115. Failure to comply with the terms and provisions of this license may result in legal action leading to civil and/or criminal penalties pursuant to Part 115. This license shall be available through the licensee during its term and remains the property of the Director.

THIS LICENSE IS NOT TRANSFERABLE.

Steven R. Sliver, Chief, Solid Waste Section

Office of Waste Management and Radiological Protection

#### **APPENDIX C: MDEQ OPERATING LICENSE**

Licensee: City of Ann Arbor Facility Name: City of Ann Arbor Operating License Number: 9336 Issue Date: October 19, 2012

The licensee shall comply with all terms of this license and the provisions of Part 115 and its administrative rules. This license includes the license application and any attachments to this license.

- 1. The licensee shall operate the Facility in a manner that will prevent violations of any state or federal law.
- 2. The attached map (Attachment A, pages 1-2) shows the Facility, the area permitted for construction and/or placement and acceptance of waste, monitoring points, leachate storage units, site roads, other disposal areas, and related appurtenances, as applicable.
- 3. Issuance of this license is conditioned on the accuracy of the information submitted by the Operator/Applicant in the Application for License to Operate a Solid Waste Disposal Area (Application) received by the Michigan Department of Environmental Quality (MDEQ) on July 23, 2012, and any subsequent amendments. Any material or intentional inaccuracies found in that information is grounds for the revocation or modification of this license, and may be grounds for enforcement action. The licensee shall inform the MDEQ's, Office of Waste Management and Radiological Protection (OWMRP), Jackson District Supervisor, of any inaccuracies in the information in the Application upon discovery.
- 4. This license is issued based on the MDEQ's review of the Application, submitted by the city of Ann Arbor, for the City of Ann Arbor Transfer Station, dated July 20, 2012, and revised July 27, 2012. The Application consists of the following:
  - a. Application Form EQP 5507.
  - b. Application fee in the amount of \$500.00.
  - c. Certification of construction by N/A.
  - d. Financial Assurance.

Financial Assurance Required:

The amount of financial assurance required for this Facility was calculated based on the requirements of Section 11523(1)(c), is indicated on the form EQP 5507A entitled, "Form A Financial Assurance Required," and is \$4,500.00.

The Facility has provided financial assurance totaling \$8,325.67, based on the requirements of Section 11523 of Part 115. The financial assurance mechanism used by the Facility is summarized below.

The following financial assurance has been received from the licensee to meet the amount of financial assurance required:

Cash Bond

\$8,325.67

Total Amount Received:

\$8,325.67

- 5. The following documents approved with Construction Permit Number(s) 4071 issued to the City of Ann Arbor on June 23, 2005, are incorporated in this license by reference:
  - a. City of Ann Arbor Solid Waste Transfer Station Application for Construction Permit, prepared by Resource Recycling Systems, Inc. and dated February 25, 2005.
  - b. Engineering drawings entitled "City of Ann Arbor Solid Waste Transfer Station Facility Construction Permit," dated February 25, 2005.
- 6. The following additional documents, approved since the issuance of the construction permit(s) referenced in Item 5, are incorporated in this license by reference:
  - a. City of Ann Arbor Transfer Station Operating License Construction Certification, prepared by Resource Recycling

#### APPENDIX C: MDEQ OPERATING LICENSE

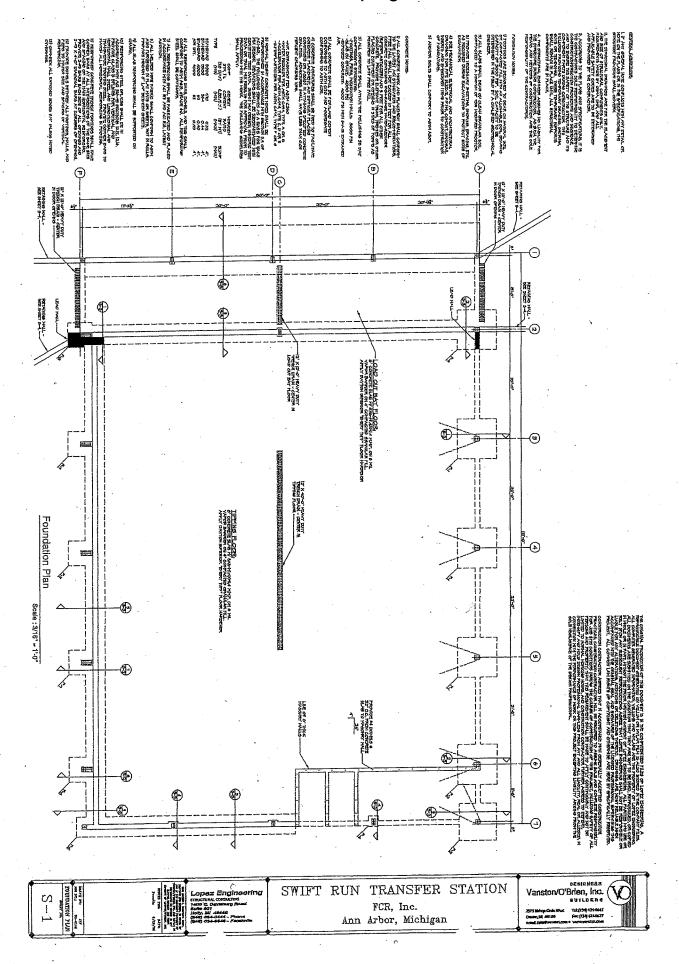
Licensee: City of Ann Arbor Facility Name: City of Ann Arbor Operating License Number: 9336 Issue Date: October 19, 2012

Systems, Inc., dated December 26, 2006.

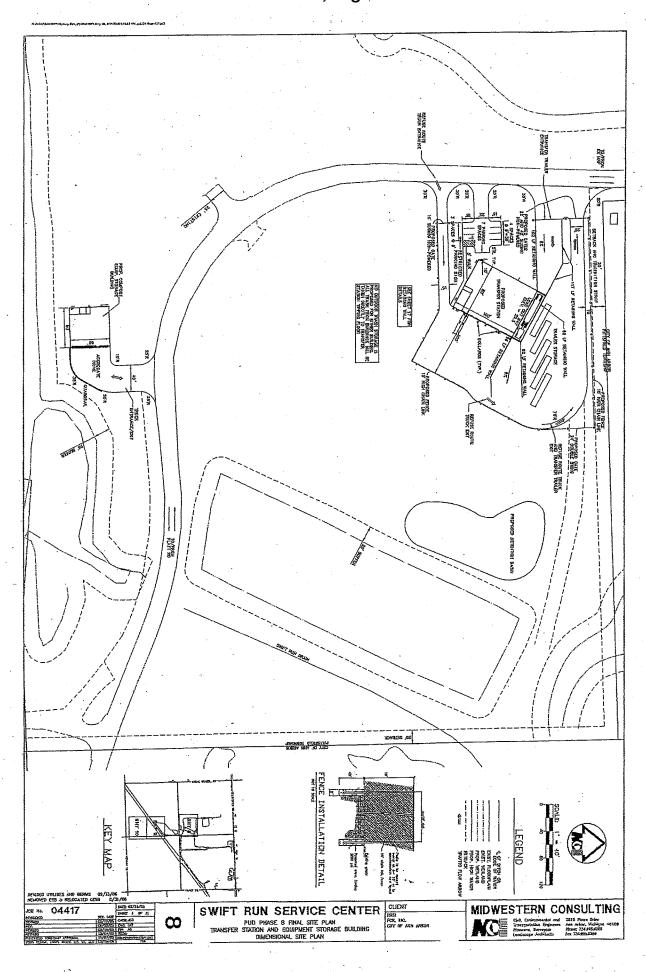
- b. Engineering drawings entitled: City of Ann Arbor Swift Run Service Center PUD Phase B Waste Transfer, Material Recovery and Composting Final Site Plan CSPA 304-30, prepared by Resource Recycling Systems, Inc., dated December 22, 2004, and revised September 25, 2006, sheets 1, 2, 8, 11, 16, 17, 18, and 19.
- c. Engineering drawings entitled "Swift Run Transfer Station FCR, Inc. Ann Arbor, Michigan," prepared by Lopez Engineering, dated May 26, 2006, and revised September 12, 2006, sheets S-1, S-2, S-3, A-2, A-3, E-1, FP-1, and P-1
- Consent Order: OWMRP Consent Order Number 115-4-12 entered on October 9, 2012, is incorporated into this license by reference.
- 8. The licensee shall conduct hydrogeological monitoring in accordance with the approved hydrogeological monitoring plan, dated N/A. The sampling analytical results shall be submitted to the MDEQ's, OWMRP, Jackson District Office.
- 9. Modifications to approved engineering plans that constitute an upgrading, as defined in R 299.4106a(e), may be approved, in writing, by the OWMRP, Jackson District Supervisor.
- 10. SPECIAL CONDITIONS: N/A.
- 11. **TERM**: This license shall remain in effect until its expiration date, unless revoked or continued in effect, as provided by the Administrative Procedures Act, 1969 PA 306, as amended, or unless superseded by the issuance of a subsequent license.

**END OF LICENSE** 

# APPENDIX C: MDEQ OPERATING LICENSE ATTACHMENT A, Page 1 of 2



# APPENDIX C: MDEQ OPERATING LICENSE ATTACHMENT A, Page 2 of 2



### **APPENDIX D**

## HISTORICAL SOLID WASTE TONNAGE DATA

Historical operating data for the Transfer Station for the period 2013-2015 (the most recent period for which full-year data are available) are provided in the tables below. Tonnage data for dewatered centrifuge cake from the City's WWTP are also provided.

- Table D1: Yearly and daily tonnage data on waste quantities received at the Transfer Station. Note that historically, some waste was processed on a limited number of Sundays. Sunday operations are not part of the requested services in the RFP.
- Table D2: Yearly and daily data on incoming vehicular loads received at the Transfer Station.
- Table D3: Weekday tonnage data by day of week (e.g., Monday, Tuesday, etc.). Monday waste deliveries historically have been 18-20 percent higher than the weekday average due to City waste collection schedules.
- Table D4: Annual tonnage data delivered by the City of Ann Arbor (including its commercial waste franchise hauler) and third-party customers. Historically, City waste has amounted to approximately 88 percent of incoming tonnage. Third-party tonnage has amounted to 12 percent of incoming waste, the majority of which is delivered by the University of Michigan. The selected Contractor will be expected to manage University of Michigan waste delivered to the Transfer Station; however, the City does not guarantee waste deliveries from the University. The City commits to deliver all waste collected by the City and its commercial waste franchise hauler -- however, no guarantee on the actual tonnage to be delivered by the City is made.
- Table D5: Average hourly distribution of incoming waste during weekday operating hours and Saturday operating hours.
- Table D6: Annual and monthly tonnage data for dewatered centrifuge cake from the WWTP.

This information is intended to facilitate preparation of vendor proposals. This summary is not intended to serve as a full and complete description of the scope of services. It shall be the responsibility of the vendor to thoroughly read and understand the information and instructions contained in the RFP and in the draft Services Agreement (Appendix A). Vendors are expected to fully inform themselves as to the conditions and requirements of the services to be provided. Failure to do so is at the vendor's own risk.

TABLE D1. YEARLY/DAILY TRANSFER STATION TONNAGE									
	2013	2014	2015						
All Operating Days									
Yearly Tonnage	53,192	56,937	59,007						
# Operating Days	272	264	263						
Average Daily (tons per day)	196	216	224						
Highest Daily (tons per day)	347	397	579						
Lowest Daily (tons per day)	27	92	49						
Weekdays (M-F)									
Yearly Tonnage	52,014	55,940	58,182						
# Operating Days	255	255	256						
Average Daily (tons per day)	204	219	227						
Highest Daily (tons per day)	347	397	579						
Lowest Daily (tons per day)	138	92	2 49						
Saturdays (see Note 1)									
Yearly Tonnage	990	924	817						
# Operating Days	8	6	6						
Average Daily (tons per day)	124	154	136						
Highest Daily (tons per day)	191	223	157						
Lowest Daily (tons per day)	27	115	111						
Sundays (see Note 2)									
Yearly Tonnage	188	72	7						
# Operating Days	9	3	1						
Average Daily (tons per day)	21	24	7						
Highest Daily (tons per day)	31	38	7						
Lowest Daily (tons per day)	8	6	7						

- 1. Saturday operations typically occur during weeks with a holiday to accommodate waste collection schedule. Saturday operations are included in the requested services in the RFP.

  2. The Transfer Station handled a small quantity of waste on Sundays during the above period.
- Sunday operations are not part of the requested services in the RFP.
- Calendar year data.

TABLE D2. YEARLY/DAILY INCOMING VEHICLES AT TRANSFER STATION										
	2013	2014	2015							
All Operating Days										
Yearly Vehicles	6,463	7,140	7,739							
# Operating Days	272	264	263							
Average Daily (vehicles per day)	24	27	29							
Highest Daily (vehicles per day)	43	47	47							
Lowest Daily (vehicles per day)	3	1	3							
Weekdays (M-F)										
Yearly Vehicles	6,315	7,031	7,644							
# Operating Days	255	255	256							
Average Daily (vehicles per day)	25	28	30							
Highest Daily (vehicles per day)	43	47	47							
Lowest Daily (vehicles per day)	18	14	5							
Saturdays (see Note 1)										
Yearly Vehicles	109	97	92							
# Operating Days	8	6	6							
Average Daily (vehicles per day)	14	16	15							
Highest Daily (vehicles per day)	20	21	17							
Lowest Daily (vehicles per day)	5	14	13							
Sundays (see Note 2)										
Yearly Vehicles	39	12	3							
# Operating Days	9	3	1							
Average Daily (vehicles per day)	4	4	3							
Highest Daily (vehicles per day)	6	6	3							
Lowest Daily (vehicles per day)	3	1	3							

- 1. Saturday operations typically occur during weeks with a holiday to accommodate waste collection schedule. Saturday operations are included in the requested services in the RFP.

  2. The Transfer Station handled a small quantity of waste on Sundays during the above period.
- Sunday operations are not part of the requested services in the RFP.
- Calendar year data.

	2013	2014	2015
Weekdays (M-F)			
Monday (average tons per day)	244	259	269
Tuesday (average tons per day)	188	208	213
Wednesday (average tons per day)	193	207	217
Thursday (average tons per day)	196	210	212
Friday (average tons per day)	200	215	226
Mon - Fri (average tons per day)	204	219	227
Percent Above (Below) Weekday Average			
Monday	19.6%	17.9%	18.5%
Tuesday	-7.8%	-5.2%	-6.3%
Wednesday	-5.3%	-5.7%	-4.4%
Thursday	-4.0%	-4.4%	-6.6%
Friday	-1.9%	-2.2%	-0.6%

TABLE D4. TRANSFER STATION THROUGHPUT BY CUSTOMER TYPE											
	2013	2014	2015								
City of Ann Arbor Waste											
City Collection	26,411	26,810	26,470								
Commercial Franchise Collection	20,633	23,278	25,257								
Subtotal	47,045	50,088	51,727								
% of Total	88.4%	87.7%									
Third-Party Waste											
University of Michigan (see Note 1)	5,689	6,174	4,479								
Other Haulers	458	674	2,801								
Subtotal	6,147	6,849	7,280								
% of Total	11.6%	12.0%	12.3%								
Total											
All Sources	53,192	56,937	59,007								
Notes											

#### Notes:

- 1. Contractor to manage University of Michigan waste delivered to the Transfer Station; however, the City does not guarantee waste deliveries from the University.
- 2. Calendar year data.

TABLE D5. HOURLY DISTRIBUTION OF TRANSFER STATION WASTE DELIVERIES (2013-2015)											
Operating Hour	Weekday (	(Mon - Fri)	Saturday								
Operating Hour	Within Hour	Cumulative	Within Hour	Cumulative							
6:00 AM	0.4%	0.4%	0.0%	0.0%							
7:00 AM	7.5%	8.0%	15.1%	15.1%							
8:00 AM	9.0%	17.0%	11.4%	26.5%							
9:00 AM	14.2%	31.2%	14.5%	41.0%							
10:00 AM	10.2%	41.5%	9.7%	50.7%							
11:00 AM	9.0%	50.5%	15.3%	66.0%							
12:00 PM	18.0%	68.5%	28.9%	94.9%							
1:00 PM	18.5%	87.0%	4.1%	99.0%							
2:00 PM	6.4%	93.4%	0.6%	99.6%							
3:00 PM	6.4%	99.8%	0.4%	100.0%							
4:00 PM	0.2%	100.0%	0.0%	100.0%							

TABLE D6. MONTHLY/ANNUAL WWTP TONNAGES (DEWATERED CENTRIFUGE CAKE)												
Mandh	FY20	)13	FY20	)14	FY20	015	FY2016					
Month	Tons	Loads	Tons	Loads	Tons	Loads	Tons	Loads				
July	-	-	-	-	-	-	1,271.6	29				
August	-	-	-		-	-	-	-				
September	-	-	-		-	-	-	-				
October	-	-	-	-	-	-	-	-				
November	-	-	-	-	268.5 6		-	-				
December	1,322.2	28	1,422.7	27	2,080.8	44	1,214.2	29				
January	1,935.5	41	1,347.1	29	1,513.2	32	1,208.2	28				
February	1,735.7	37	1,532.9	33	1,473.0	33	1,519.6	33				
March	2,016.5	43	2,011.3	42	1,587.7	34	1,948.9	43				
April	1,986.9	43	1,888.7	41	1,641.6	36	1,758.4	40				
May	999.8	22	1,372.1	27	1,217.2	28	687.5	16				
June	-	-	33.1	1	129.1	3	-	-				
Total	9,996.6	214	9,607.7	200	9,911.3	216	9,608.4	218				
Tons/Load	46.7		48.0		45.9		44.1					

#### Notes:

Tonnage data are shown on a seasonal/fiscal year basis. Season for dewatered centrifuge cake runs from approximately December 1 through May 30. The July, 2016 loads (shown under FY2016) were an extension of the prior season's material.

# APPENDIX E

### **ANALYTICAL TEST DATA**



1049 - 28th Street SE Grand Rapids, MI 49508

Ph: 616/248-4900 Toll Free: 800/362-LABS May 18, 2015

Fax: 616/248-4904

Kreg Huffman Waste Management of MI/OH 1006 Walnut Street Canal Winchester, OH 43110

TEL: (614) 833-5229

FAX

RE: Woodland Meadows - AAWWTP

Dear Kreg Huffman:

Order No.: 1505071

BIO-CHEM Laboratories, Inc. received 2 samples on 5/11/2015 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Please note that unless otherwise instructed, residual samples will be held for sixty (60) days from the original report date. At that time, all non-hazardous samples will be disposed of in accordance with federal, state and local regulations and ordinances, and hazardous samples shall be returned to you. Please contact the laboratory within thirty (30) days if other arrangements for sample retention need to be made.

Sincerely,

Cindy Euwema

Office Manager

Working with you to ensure a better tomorrow.

											•	a.			24					5		
50507   reet SE • Grand Rapids, MI 49508 8-4900 • Toll Free: 800-362-LABS Fax: (616) 248-4904	AAWWTD					Remarks			1,1,0								1 22					FRANKLIA PRESS SETELAZA
1049 28th Street SE Ph: (616) 248-4900	Project Number	Date 6-8/											70				Laboratory use only	□ Blue (ce	1	LE No Coolant	ē	× × ×
			a	189	S(L)	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	×	×								-	Time '	1750	5 9:20 pm			
stody	25	*		1	r of S19	Number Contain	_										Date	5/4/	51-11-9	)		
Chain of Custody		Turn around time	Projectivane with	State Samples Taken From	Contact Person	Samue Description (sample type: water, soil, other)	FIKCOKL	ביואו מות									-	( Well)	punst			
		Tumar	Project	State S	Contact	- G- G-									#I		ру	AMOS	र ने			
<b>1</b>	tman	madows	ctro Rd.			Date Time Taken Taken	J1-8-5	アーカーノ				1					Received by	V	Kate	-		
Ghem	- Hilly Huffma	3	* * * * * * * * * * * * * * * * * * *	Wayne, MI		Client Sample Number	AAWWTPI	AAUUTP			0)	•			2	*		( A. 4 A.	C. D.S.			
39.	mm	Firm Name Octobal	FILMANS ATTO	City, State, Zip	Phone	Ferm May	ur.	2	m	4	15	9	7	80	<b>්</b>	. 01	Released by	- J		3)		

# APPENDIX E1: ANALYTICAL TEST DATA, DEWATERED CENTRIFUGE CAKE

# **BIO-CHEM Laboratories, Inc.**

Date: 18-May-15

CLIENT:

Waste Management of MI/OH

Project:

Woodland Meadows - AAWWTP

Lab Order:

1505071

Work Order Sample Summary

Lab Sample ID Client Sample ID

Matrix

**Collection Date** 

**Date Received** 

1505071-01A

AAWWTP 1

Filter Cake

5/8/2015

5/11/2015

1505071-02A

AAWWTP 2

Filter Cake

5/8/2015

5/11/2015

## APPENDIX E1: ANALYTICAL TEST DATA, DEWATERED CENTRIFUGE CAKE

**BIO-CHEM Laboratories, Inc.** 

Date: 18-May-15

CLIENT:

Waste Management of MI/OH

Project:

Woodland Meadows - AAWWTP

Lab Order:

1505071

CASE NARRATIVE

Samples are routinely analyzed using methods outlined in the following references:

(SW) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Ed.

- (E) Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020.
- (A) Standard Methods for the Examination of Water and Wastewater, APHA, 18th Ed.
- (D) Annual Book of ASTM Standards.

Specific methods utilized for this project are provided in the analytical report and are identified by the reference document abbreviation () followed by the method number.

All QA/QC and sample analyses met method, laboratory and/or regulatory data quality objectives unless otherwise specified below.

No data qualifications required.

## APPENDIX E1: ANALYTICAL TEST DATA, DEWATERED CENTRIFUGE CAKE

## **BIO-CHEM Laboratories, Inc.**

Date: 5/18/2015

## ANALYTICAL REPORT

**CLIENT:** 

Waste Management of MI/OH

Project Number: AAWWTP

Lab Order:

1505071

Project:

Client Sample ID: AAWWTP 1 Collection Date: 5/8/2015

Woodland Meadows - AAWWTP

Matrix: FILTER CAKE

Lab Sample ID: 1505071-01A

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
TCLP Mercury by CVAA								
1 Mercury	SW1311/7470A	< 10		10	μg/L	1	RHS	5/15/2015
TCLP Metal(s) by ICP								
1. Arsenic	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
2. Barium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
3. Cadmium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
4. Chromium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
5. Lead	SW1311/6010B	< 250		250	µg/L	1	RHS	5/16/2015
6. Silver	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
TCLP Selenium by NaBHR								
1. Selenium	SW1311/7742	< 250		250	μg/L	1	RHS	5/16/2015
TCLP Volatiles by GC/MS								
1. 1,1-Dichloroethene	SW1311/8260B	< 10		10	µg/L	10	ATD	5/14/2015
2. 1,2-Dichloroethane	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
3. 1,4-Dichlorobenzene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
4. 2-Butanone	SW1311/8260B	430		100	μg/L	10	ATD	5/14/2015
5. Benzene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
6. Carbon tetrachloride	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
7. Chlorobenzene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
8. Chloroform	SW1311/8260B	< 10		10	µg/L	10	ATD	5/14/2015
9. Tetrachloroethene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
10. Trichloroethene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
11. Vinyl chloride	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015

Definitions:

PQL - Practical Quantitation Limit

DF - Dilution Factor

Qualifiers (Q):

J - Detected below PQL but above MDL: Estimated

S - Spike Recovery Outside Acceptance Limits

B - Analyte detected in associated Method Blank

N - See case narrative for explanation

## APPENDIX E1: ANALYTICAL TEST DATA, DEWATERED CENTRIFUGE CAKE

## **BIO-CHEM Laboratories, Inc.**

Date: 5/18/2015

## ANALYTICAL REPORT

**CLIENT:** 

Project:

Waste Management of MI/OH

1505071

Lab Order:

Woodland Meadows - AAWWTP

Lab Sample ID: 1505071-02A

Project Number: AAWWTP

Client Sample ID: AAWWTP 2 Collection Date: 5/8/2015

Matrix: FILTER CAKE

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
TCLP Mercury by CVAA								
1. Mercury	SW1311/7470A	< 10		10	μg/L	1	RHS	5/15/2015
TCLP Metal(s) by ICP								
1. Arsenic	SW1311/6010B	< 250		250	µg/L	1	RHS	5/16/2015
2. Barium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
3. Cadmium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
4. Chromium	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
5, Lead	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
6. Silver	SW1311/6010B	< 250		250	μg/L	1	RHS	5/16/2015
TCLP Selenium by NaBHR								
1. Selenium	SW1311/7742	< 250		250	μg/L	1	RHS	5/16/2015
TCLP Volatiles by GC/MS								
1. 1,1-Dichloroethene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
2. 1,2-Dichloroethane	SW1311/8260B	< 10		10	µg/L	10	ATD	5/14/2015
3. 1,4-Dichlorobenzene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
4. 2-Butanone	SW1311/8260B	480		100	μg/L	10	ATD	5/14/2015
5, Benzene	SW1311/8260B	< 10		10	µg/L	10	ATD	5/14/2015
6. Carbon tetrachloride	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
7. Chlorobenzene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
8. Chloroform	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
9. Tetrachloroethene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
10. Trichloroethene	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015
11. Vinyl chloride	SW1311/8260B	< 10		10	μg/L	10	ATD	5/14/2015

Definitions:

PQL - Practical Quantitation Limit

DF - Dilution Factor

Qualifiers (Q):

J - Detected below PQL but above MDL: Estimated

S - Spike Recovery Outside Acceptance Limits

B - Analyte detected in associated Method Blank

N - See case narrative for explanation

ANALYTICAL DETAIL REPORT

# BIO-CHEM Laboratories, Inc.

Lab Order: 1505071
Client: Waste Manage

Waste Management of MI/OH

Woodland Meadows - AAWWTP

Project:

Sample ID	Sample ID Client Sample ID	Matrix	Matrix Test Name	Date Sampled	ICLP/SPLP Date	Prep Date	Prep Date QC Batch	Analysis Date	Analytical Batch
1505071-01A	505071-01A AAWWTP	Filter Cak	Filter Cak TCLP Mercury by CVAA	5/8/2015	5/12/2015	5/14/2015	38008	5/15/2015	MTL_D_HY_150515B
	AAWWTP 1	Filter Cak	Filter Cak TCLP Metal(s) by ICP	5/8/2015	5/12/2015	5/15/2015	38012	5/16/2015	MTL_G_ICP_150516A
	AAWWTP 1	Filter Cak	Filter Cak TCLP Selenium by NaBHR	5/8/2015	5/12/2015	5/15/2015	38012	5/16/2015	MTL_C_FL_150516A
	AAWWTP 1	Filter Cak	Filter Cak TCLP Volatiles by GC/MS	5/8/2015	5/12/2015		R81609	5/14/2015	GCMS_Z_150513A
1505071-02A	505071-02A AAWWTP 2	Filter Cak	Filter Cak TCLP Mercury by CVAA	5/8/2015	5/12/2015	5/14/2015	38008	5/15/2015	MTL_D_HY_150515B
	AAWWTP 2	Filter Cak	Filter Cak TCLP Metal(s) by ICP	5/8/2015	5/12/2015	5/15/2015	38012	5/16/2015	MTL_G_ICP_150516A
	AAWWTP 2	Filter Cak	Filter Cak TCLP Selenium by NaBHR	5/8/2015	5/12/2015	5/15/2015	38012	5/16/2015	MTL_C_FL_150516A
	AAWWTP 2	Filter Cak	Filter Cak TCLP Volatiles by GC/MS	5/8/2015	5/12/2015		R81609	5/14/2015	GCMS_Z_150513A

Page: 1 of 1



EZ Profile™

1. centrifuge cake 2.	Requested Facility Woodland Meadows, Pine Tree, Vo	☐ Unsure Profile Number:					
1. Generator Name: Anni Arbor WWTP 2. Sirise Address: 49 (Disborn Road (City, State, 2IP) Anni Arbor, Mil 48105 3. County, Washkenaw 3. Contact Name: Kelth Sanders 5. Email: ksanders@a2gov.org 6. Prone: 724-734-6450 7. Fax: 734-971-9704 9. State ID  Common Name: Centrifuge cake  Describe Process Generating Material:  Common Name: Centrifuge cake  Describe Process Generating Material:  Common Name: Centrifuge cake  Describe Process Generating Material:  Common Name: Centrifuge ada  Describe Process Generating Material:  See Attached Residual solids from Primary and secondary clarifiers at municipal wastewater treatment plant that are develved using a centrifuge, polymer and Planet Breeze are added. Polymer for dewaterial pand Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:  See Attached 1. Centrifuge cake 1. Centrifuge ca	$\square$ Check if there are multiple generator locations. Atta	ch locations.	☐ COD ☑ Renewal? Original Profile Number: <u>13211M</u>	L			
2. Sith Address 49, Okt Dibboro Road City, State 2/P) Ann Arbor, Mil 48105 3. County: Washlenaw 4. Contact Name Keith Sanders 5. Simal issanders 6. Phone 734-794-6450 7. Fax: 734-971-9704 7. WA Hauled? 9. State ID: 9. REGULATORY INFORMATION 1. Common Name: Centrifuge cake Pescular Society of Primary and secondary clariflers at municipal wastewater treatment plant that are decewatered using a centrifuge, polymer and Planet Breeze are addice. Polymer for dewatering and Planet Breeze are addice.	A A F MANTE		1. Billing Name:				
(City, State, ZIP) Ann Arbor, MI 48105 3. Country, Washlenaw 4. Contact Name: Keth Sanders 5. Email Standers@a2gov.org 6. Phone: 23.47-24.4350 7. Fax: 734-971-9704 8. Generator EPA ID:   N/A 9. State ID:							
3. Contact Name: 4. Contact Name: 5. Email: <u>ksandarss@a2gov.org</u> 6. Phone: <u>734-794-8450</u> 7. Fax: <u>734-971-9704</u> 8. Repertator EPA ID: 9. State ID:							
4. Contact Name. Kelth Sanders 5. Email ksanders@a2gov.org 6. Phone: 234-734-8450	-						
5. Final islanders@2gov.org 6. Phone: 734-794-6450. 7. Fax: 734-971-9704. 9. Generator EPA ID.   N/A 9. State ID:   N/A 1. Common Name: Centifuge cake   N/A 1. Common Name: Centifuge cake   N/A 1. Contribuge polymer and Planet Breeze are added. Polymer for dewatering and Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:   See Attached   N/A 1. Centrifuge cake   100%   N/A 2.   N/A 2.   N/A 3. State Waste Codes:   N/A 5. State Waste Codes:   N/A 5. Physical State at 70 Ft:   1/2 Solid   Liquid   Other:   N/A 5. Physical State at 70 Ft:   1/2 Solid   Liquid   Other:   N/A 6. Free Liquid Range Percentage:   N	•						
6. Phone: 734-794-6450 7. Fax: 734-971-9704   7. WA Hauled?   8. P.O. Number:   9. P.O. Numb							
8. Sence For LD:   N/A							
9. State ID:							
1. Common Name: Centrifuge cake  Describe Process Generating Material:  Residual solids from Primary and secondary clariflers at municipal wastewater treatment plant that are dewatered using a centrifuge, polymer and Planet Breeze are added. Polymer for dewatering and Planet Breeze are added. Polymer for dewatering and Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:  See Attached  1. centrifuge cake  100%  2. 3. State Waste Codes:  3. Shate Waste Codes:  4. Color: brown  5. Physical State at 70°F:  10 Solid   Liquid   Other:    5. Physical State at 70°F:  10 Solid   Liquid   Other:    6. Free Liquid Range Percentage:   to   val N/A (Solid)    8. Strong Odor:   Ves val No Describe:    9. Flash Point:   <140°F   140°-199°F   ≥200° val N/A (Solid)    8. Strong Odor:   Ves val No Describe:    9. Flash Point:   <140°F   140°-199°F   ≥200° val N/A (Solid)    10. Analytical attached   val No Describe:    10. E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION  1. Analytical attached   val No Describe:    1. EPA Hazardous Waste?   val val No Codes:    1. EPA Hazardous Waste?   val val No No Poscribe:    2. Contains branch subject to 40 CFR 7613 captage val							
1. Common Name: Centrifuge cake  Describe Process Generating Material:  Residual solids from Primary and secondary clariflers at municipal wastewater treatment plant that are dewatered using a centrifuge, polymer and Planet Breeze are added. Polymer for dewatering and Planet Breeze are added. Polymer for dewatering and Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:  See Attached  1. centrifuge cake  100%  2. 3. State Waste Codes:  3. Shate Waste Codes:  4. Color: brown  5. Physical State at 70°F:  10 Solid   Liquid   Other:    5. Physical State at 70°F:  10 Solid   Liquid   Other:    6. Free Liquid Range Percentage:   to   val N/A (Solid)    8. Strong Odor:   Ves val No Describe:    9. Flash Point:   <140°F   140°-199°F   ≥200° val N/A (Solid)    8. Strong Odor:   Ves val No Describe:    9. Flash Point:   <140°F   140°-199°F   ≥200° val N/A (Solid)    10. Analytical attached   val No Describe:    10. E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION  1. Analytical attached   val No Describe:    1. EPA Hazardous Waste?   val val No Codes:    1. EPA Hazardous Waste?   val val No No Poscribe:    2. Contains branch subject to 40 CFR 7613 captage val	C. MATERIAL INFORMATION		D. REGULATORY INFORMATION		min Totalaniani		
Describe Process Generating Material: See Attached Residual solids from Primary and secondary clarifiers at ununicipal wastewater treatment plant that are dewatered using a centrifuge, polymer and Planet Breeze are added, Polymer for dewatering and Planet Breeze for landfill odor control.  Material Composition and Contaminants: See Attached 1.centrifuge cake 100% 2.  Material Composition and Contaminants: See Attached 1.centrifuge cake 100% 3.  State Waste Codes: See Attached 1.centrifuge cake 100% 3.  State Waste Codes: See Attached 100% 4. Color: brown 3. State Waste Codes: See Attached 100% 4. Color: brown 5. Physical State at 70°F: Solid Liquid Other: See Attached 100% 6. Free Liquid Range Percentage: Do Solid Solid State at 70°F: Solid Solid Solid State at 70°F: Solid Solid State at 70°F: Solid Solid Solid State at 70°F: Solid				☐ Yes*	☑ No		
Residual solids from Primary and secondary clarifiers at municipal wastewater treatment plant that are dewatered using a centifuge, polymer and Planet Breeze are added, Polymer for dewatering and Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:   See Attached		☐ See Attached					
a centrifuge, polymer and Planet Breeze are added. Polymer for dewatering and Planet Breeze for landfill odor control.  2. Material Composition and Contaminants:	Residual solids from Primary and secondary clarifiers at municipal wastewater treatment plant that are dewatered using		2, State Hazardous Waste?	☐ Yes	<b>☑</b> No		
2. Material Composition and Contaminants:	a centrifuge, polymer and Planet Breeze are add	ded, Polymer	Delisting, or an Exclusion?				
1. centrifuge cake   100%   2.   3.   4.   5.   5.   5.   5.   5.   5.   5	Material Composition and Contaminants:	☐ See Attached					
2.	1. centrifuge cake	100%					
3.   2.   2.   2.   3.   3.   3.   3.	2.						
**State Waste Codes:		NATIONAL MONTHUMBER THE PARTY OF THE PARTY O	•	☐ Yes*	<b>☑</b> No		
3. State Waste Codes:	4.	- 1000/	*If Yes, see Addendum (page 2) for additional questi	ons and	space.		
a. Regulated by 40 CFR 761?	2. State Warte Codes:		9. Contains PCBs? → If Yes, answer a, b and c.	☐ Yes	☑ No		
5. Physical State at 70°F:		UN/A	a. Regulated by 40 CFR 761?	Yes	☐ No		
6. Free Liquid Range Percentage:		oer'					
7. pH:	- · · · · · · · · · · · · · · · · · · ·		L MA	Yes	☐ No		
8. Strong Odor: □ Yes ☑ No Describe: □ 140*F □ 140*−199*F □ ≥200* ☑ N/A (Solid) 9. Flash Point: □ <140*F □ 140*−199*F □ ≥200* ☑ N/A (Solid)  11. Contains Asbestos? □ Yes ☑ Non-Friable □ Regulated □ Friable  E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION 1. Analytical attached Please identify applicable samples and/or lab reports: □ Analytical attached □ Yes □ Yes □ Non-Friable □ Non-Friable □ Regulated □ Friable  F. SHIPPING AND DOT INFORMATION 1. □ One-Time Event ☑ Repeat Event/Ongoing Business 2. Estimated Quantity/Unit of Measure: 11,000 □ Tons □ Yards □ Drums □ Gallons □ Other: □ 3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  2. Other information attached (such as MSDS)? ☑ Yes  G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE) By signing this E.2 Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.  Name (Print): KEITH SANNERS  Date: 5-22-15  Date: 5-22-15  Date: 5-22-15				☐ Yes	<b>☑</b> No		
9. Flash Point: □ <140°F □ 140°-199°F □ ≥200° ☑ N/A (Solid)  → If Yes: □ Non-Friable □ Non-Friable □ Regulated □ Friable  E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION  1. Analytical attached  Please identify applicable samples and/or lab reports:  □ One-Time Event ☑ Repeat Event/Ongoing Business  2. Estimated Quantity/Unit of Measure: 11,000  ☑ Tons □ Yards □ Drums □ Gallons □ Other: □ 3. Container Type and Size: gravel train 35 -50 tons  4. USDOT Proper Shipping Name: □ N/A  2. Other information attached (such as MSDS)? ☑ Yes  G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  By signing this EZ Profile™ form, I hereby certify that all information and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.  Name (Print): KEITH SANDERS Date: 5-22-15  Date: 5-22-15  Date: 5-22-15			·	□ Voc	M Na		
1. ☐ One—Time Event ☐ Repeat Event/Ongoing Business Please identify applicable samples and/or lab reports:  Lab order:1505071 Lab samples:1505071-01A & 1505071-02A  2. Other information attached (such as MSDS)?  G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE) By signing this EZ Profile™ form, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  FI I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.  Name (Print): KEITH SANDERS  Date: 5-22-15  Date: 5-22-15  Date: 5-22-15							
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Lab order:1505071 Lab samples:1505071-01A & 1505071-02A  2. Other information attached (such as MSDS)?  2. Other information attached (such as MSDS)?  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  2. Other information of attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  2. Other information of attached (such as MSDS)?  4. USDOT Proper Shipping Name:   N/A  2. Other information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  5.	1. Analytical attached	<b>⊻</b> Yes	1. ☐ One-Time Event ☑ Repeat Event/Ongoing Busine	ess			
Lab order:1505071 Lab samples:1505071-01A & 1505071-02A  2. Other information attached (such as MSDS)?  2. Other information attached (such as MSDS)?  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  4. USDOT Proper Shipping Name:   N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  4. USDOT Proper Shipping Name:   N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name:   N/A  4. USDOT Proper Shipping Name:   N/A  4. USDOT Proper Shipping Name:   N/A  5. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  6. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  7. AUSDOT Proper Shipping Name:   N/A  7. USDOT Proper Ship	Please identify applicable samples and/or lab reports	5:	2. Estimated Quantity/Unit of Measure: 11,000				
Lab samples:1505071-01A & 1505071-02A  2. Other information attached (such as MSDS)?  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  2. Other information attached (such as MSDS)?  4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  4. USDOT Proper Shipping Name: □ N/A  3. Container Type and Size: gravel train 35 -50 tons 4. USDOT Proper Shipping Name: □ N/A  4. USDOT Proper Shipping Name: □ N/A  5. Size of this material, and that attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  6. Certification Signature  6. Certification Signature  7. Signature  8. Signature  8. Signature  9. N/A  9. Signature  9. Signatur							
4. USDOT Proper Shipping Name:  2. Other information attached (such as MSDS)?  4. USDOT Proper Shipping Name:  4. USDOT Proper Shipping Name:  A. USDOT Proper Shipping Name:  4. USDOT Proper Shipping Name:  5. USDOT Proper Shipping Name:  6. USDOT Proper		-	3. Container Type and Size: gravel train 35 -50 tons				
2. Other information attached (such as MSDS)?  G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)  By signing this EZ Profile from, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.  Name (Print): KETTH SANDERS Date: 5-22-15  Date: 5-22-15  Date: 5-22-15			4. USDOT Proper Shipping Name:		□ N/A		
By signing this EZ Profile from, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 – Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.  If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.  Name (Print): KETTH SANDERS Date: 5-22-15  Date: 5-22-15  Date: 5-22-15	2. Other information attached (such as MSDS)?	<b>☑</b> Yes					
Name (Print): KEITH SANGERS Date: 5-22-15  Title:	By signing this EZ Profile <sup>IM</sup> form, I hereby certify that all information all relevant information necessary for proper material characterizat from a sample that is representative as defined in 40 CFR 261 – Ap in the process or new analytical) will be identified by the Generator If Lam an agent signing on behalf of the Generator, I have co	n submitted in this and ion and to identify kno pendix 1 or by using a and be disclosed to W onfirmed with the	wn and suspected hazards has been provided. Any analytical data attac n equivalent method. All changes occurring in the character of the mat aste Management prior to providing the material to Waste Managemer	ched was d terral (i.e., c	lerived		
Name (Print): NEITH SANGERS Date: J-aar S  Fitle:			11.000				
General City of Ann Arbor MANTD		e: 3-86-13	Kath Dandto				
			year -				

THINK GREEN:

Last Revised April 26, 2013 ©2013 Waste Management, Inc



# EZ Profile™ Addendum

Only complete this Addendum if prompted by responses on EZ Profi or to provide additional information. Sections and question number	
EZ Profile™.	
C. MATERIAL INFORMATION	If we are a second of along of the shoot distinct the second
Describe Process Generating Material (Continued from page 1):	If more space is needed, please attach additional page
Material Composition and Contaminants (Continued from page 1):	If more space is needed, please attach additional page
5.	
6.	
7.	
8.	
9.	
10.	≥100%
Only questions with a "Yes" response in Section D on the EZ Profile™ form (p  1. EPA Hazardous Waste a. Please list all USEPA listed and characteristic waste code numbers:	page 1) need to be answered here.
<ul> <li>b. Is the material subject to the Alternative Debris standards (40 CFR 268.45)?</li> <li>c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)? →</li> <li>d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.</li> <li>→ If Yes, please select one of the following:</li> <li>□ Waste has been determined to be LDR exempt [265.1083(c)(4) and 26 organic treatment standards (including UHCs for D-coded characteristic</li> <li>□ Waste does not qualify for a LDR exemption, but the average VOC at the was based on analytical testing (upload copy of analysis) or generator known</li> </ul>	1084)?
2. State Hazardous Waste → Please list all state waste codes:	, halauu
3. For material that is Treated, Delisted, or Excluded → Please indicate the category  ☐ Delisted Hazardous Waste ☐ Excluded Waste under 40 CFR 261.4	
☐ Treated Hazardous Waste Debris ☐ Treated Characteristic Hazardous Waste	
4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Consti	· · · ·
5. Benzene NESHAP $ ightarrow$ Please include percent water/moisture in chemical composit	
a. Are you a TSDF? $ ightarrow$ If yes, please complete Benzene NESHAP questionnaire. If	
b. What is your facility's current total annual benzene quantity in Megagrams?	□ <1 Mg □ 1-9.99 Mg □ ≥10 M
Flow weighted average benzene concentration is ppmw.	-
c. Is this waste soil from remediation at a closed facility?	☐ Yes ☐ N
Benzene concentration in remediation waste isppmw.  Has material been treated to remove 200% of the benzene or to achieve 410 pp.	mw2
<ul> <li>d. Has material been treated to remove 99% of the benzene or to achieve &lt;10 pp</li> <li>e. Is material exempt from controls in accordance with 40 CFR 61.342?</li> </ul>	
If yes, specify exemption:	☐ Yes ☐ N
f. Based on your knowledge of your waste and the BWON regulations, do you beli	eve that this waste stream is subject to
treatment and control requirements at an off-site TSDF?	Yes N

☐ Yes ☐ No

7. CERCLA or State-Mandated clean up  $\rightarrow$  Please submit the Record of Decision or other documentation to assist others in the evaluation for

6. 40 CFR 63 GGGGG → Does the material contain <500 ppmw VOHAPs at the point of determination?

8. NRC or state regulated radioactive or NORM Waste → Please identify Isotopes and pCi/g: \_



# Additional Profile Information

	Profile Number:			
c. MATERIAL INFORMATION  Waterial Composition and Contaminants (Continued from page 2):	If more space is needed, please attach additional pages			
11.	a more opace is modeled, please statem additional pages			
12.				
13.				
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22.	(i) (i) (i) (ii) (ii) (ii) (ii) (ii) (i			
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30.	CONTROL OF THE PROPERTY OF THE PARTY AND THE			
31.				
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34.				
35.				
36.				
37.				
38.				
39.				
40.				
	≥100%			
REGULATORY INFORMATION	Type control of the second of			
. EPA Hazardous Waste a. Please list all USEPA listed and characteristic waste code numbers (Continu	ed from page 2):			
el e e e e e e e e e e e e e e e e e e				



## MICHIGAN NON-HAZARDOUS WASTE PROFILE ADDENDUM

Profile Number 13211MI

F. Michigan Addendum	
<ol> <li>Is this Waste to be solidified by WM prior to disposal into the landfill?</li> <li>Does this exhibit any of the reactivity characteristics as defined by MI Part 111 R 299.9212(3)?</li> <li>Does this waste contain any RCRA herbicides or pesticides?</li> <li>Do you generate any regulated Hazardous Waste?         If "Yes," do you have procedures in place to prevent Hazardous Waste from being mixed with this was</li> </ol>	☐ Yes ☑
G. SOLVENTS <u>OR</u> PAINTS:	
☐ Not applicable, this waste does not contain any solvents or paints.  What solvent(s), if any, are in use and for what purpose?	
If this waste is from a Paint Spray Booth, please explain in detail how the spray guns are cleaned and what is  After a paint line and/or spray gun is cleaned, is the new paint purged through and disposed of separately?	done with that waste?
H. Complete this Section ONLY IF THIS WASTE IS PROPOSED FOR DISPOSAL AT WOOD	LAND MEADOWS
SPECIAL WASTE DECLARATION (Check below those Special Wastes that are proposed for disposal by Waste Management:)	
☐ a. Waste from an industrial process.	
☐ b. Waste from a pollution control process.	
☐ c. Waste containing free liquids.	
a. Residue and debris from a cleanup of a spill of a chemical or commercial product or a waste listed in a	-c. and ln. of this form.
• Contaminated residuals, or articles from the cleanup of a facility generating, storing, treating or recyclic disposing of chemical substances, commercial products or wastes listed in ad., f or g of this form.	ng or
☐ f. Any waste which is non-hazardous as a result of treatment pursuant to Subtitle C of the Resource Conse (R.C.R.A.).	rvation and Recovery Act
☐ g. Chemical containing equipment removed from service, which the chemical composition and concentration	on are unknown.
☐ h. Drums, or containers capable of holding greater than 25 gallons, whether empty, partially full or full.	
☐ i. Friable or non-friable asbestos containing waste from building demolition or cleanup, including wallboa coverings, pipe insulation, etc.	rd, wall, ceiling or spray
j. Commercial products or chemicals which are off-specification, outdated, unused or banned. Outdated or taminated food or beverage products in original consumer containers are not included in this category, containers is restricted by applicable regulations.	
k. Treated or untreated medical waste. Any waste which was once capable, or is capable of inducing infection source.	ion form a bio-medical
I. Residue / sludges from septic tanks, food service grease traps, or wash waters and wastewaters from corprivate or public wastewater treatment facilities.	nmercial laundries, and
m. Chemical containing equipment removed from service, in which the chemical concentrations are known cathode ray tubes, lab equipment, fluorescent lights, etc.)	(e.g., acetylene tanks,
<ul> <li>n. Waste produced from the dismantling or demolition of industrial process equipment, or facilities contamn the industrial process.</li> </ul>	inated with chemicals from
<ul> <li>o. Incinerator ash generated at a Resource Recovery Facility. A facility which burns only non-hazardous hor industrial and qualifies for the hazardous waste exclusion in 40CFR261.4(b).</li> </ul>	usehold, commercial or
□ p. Other, if not specified above.	
BY COMPLETING SECTION H., CUSTOMER WARRANTS THAT HE/SHE HAS DISCLOSED ALL OF THE TYPES OF SE TO BE DISPOSED BY WASTE MANAGEMENT	PECIAL WASTE PROPOSED



o include the following:							
-	) [ <b>7</b> ] D	: : : : :	t- D61-	(D)			
Amendment Type:  One Time Only Request (Event		it Addition	то Ргопіе	(Base)			
☑ Additional Analytical/MSDS to be added to profile		_	_		_	_	
☐ Volume Increase (specify volume)	☐ Tons	<b>□</b> Cubic Y	′ards 🖵	Drums	<b>□</b> Gallons	☐ Other (specify)	
☑ Constituent(s) to be added and/or modify current	range in chemi	cal compos	sition:				
Chemicals or constituents to be added/modi	•	Low	High	Units			
Planet Breeze		4.5	4.95	gpd to liquir			
☐ Change current ranges on profile (specify below)							
pH Range to Free Liquid	d Ranget	0					
Other (specify)							
by signing this form, the Generator hereby certifies: the information provided in this document, the refere		_					
By signing this form, the Generator hereby certifies: The information provided in this document, the reference that the secondary true and accurate descriptions of the waste make the secondary has been disclosed.		_					
By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste m Generator has been disclosed.	aterial. All infor	mation reg	jarding kn	own or s	uspected ha		
By signing this form, the Generator hereby certifies: The information provided in this document, the reference on tail true and accurate descriptions of the waste make the description of the description	aterial. All infor	mation reg	jarding kn	own or s	uspected ha: Date: <u>C</u>	zards in the possession of t	
by signing this form, the Generator hereby certifies: The information provided in this document, the refere Contain true and accurate descriptions of the waste me Senerator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP	aterial. All infor	mation reg	jarding kn	own or s	uspected ha: Date: <u>C</u>	zards in the possession of t	
by signing this form, the Generator hereby certifies: he information provided in this document, the refere ontain true and accurate descriptions of the waste m denerator has been disclosed. Generator/Customer Signature: Company Name: Ann Arbor WWTP Name (Print): Keith Sanders	aterial. All infor	mation reg	jarding kn	own or s	uspected ha: Date: <u>C</u>	zards in the possession of t	
By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste magnetator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY	aterial. All infor	mation reg	arding kn	own or s	uspected ha:  Date: <u>C</u> Title: <u>/</u>	zards in the possession of t	he
By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste make the Generator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)	aterial. All infor	mation reg	arding kn	own or s	Date: <u>C</u> Title: <u>/</u> Time:	zards in the possession of to 25/31/2015 Assistant Manager	he
By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste make the senerator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)  WM Approval:	aterial. All infor	mation reg	arding kn	own or s	Date: <u>C</u> Title: <u>/</u> Time:	zards in the possession of to 05/31/2015 Assistant Manager	he
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By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste make make the generator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)  WM Approval:  Agency Approval Required:  Profile Extension	aterial. All infor	mation reg  Date: _	xtension	own or s	Date: <u>C</u> Title: <u>f</u> Time:  Date:	zards in the possession of t	he
By signing this form, the Generator hereby certifies: The information provided in this document, the refere ontain true and accurate descriptions of the waste make make the Generator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)  WM Approval:  Agency Approval Required:  Profile Extension  Original Expiration Date	aterial. All infor	Date:nalytical Ex	xtension	own or s	Date: <u>C</u> Title: <u>F</u> Time:  Date: _	zards in the possession of t	he
By signing this form, the Generator hereby certifies: The information provided in this document, the refere contain true and accurate descriptions of the waste make the Generator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)  WM Approval:  Agency Approval Required:  Profile Extension	aterial. All infor	Date: _ Analytical Example Analytical Requeste	xtension I Due Date d Extensio	e	Date: <u>C</u> Title: <u>f</u> Time:  Date:	zards in the possession of t	he
By signing this form, the Generator hereby certifies: The information provided in this document, the reference contain true and accurate descriptions of the waste make the Generator has been disclosed.  Generator/Customer Signature:  Company Name: Ann Arbor WWTP  Name (Print): Keith Sanders  FOR WASTE MANAGEMENT USE ONLY  Submitted By:  (W.M. Initials)  WM Approval:  Agency Approval Required:  Profile Extension  Original Expiration Date  Requested Extension	aterial. All infor	Date: _ Analytical Ex Requeste New Anal	xtension I Due Date d Extensic	ee Date	Date: <u>C</u> Title: <u>J</u> Time:  Date: <u>1</u>	zards in the possession of t	he

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# D3W/Industries

## MATERIAL SAFETY DATA SHEET

#### 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

D3W Industries Inc. 777 Doheny Court Northville, MI. 48167

Product Information: 248-349-0904

Emergency Telephone #: 1-800-222-1222

(Poison Control Center)

PRODUCT NAME: PLANET BREEZE P **EPA PRODUCT REGISTRATION NO.: 86282-4** 

#### 2 - COMPOSITION/INGREDIENTS

#### **Active Ingredient**

CAS# WT.%

CHEMICAL NAME

7758-99-8

18.6%

Copper Sulfate Pentahydrate

Other

CAS#

WT.%

**CHEMICAL NAME** 

Proprietary

81.4%

Proprietary Blend

#### 3 - HAZARDS IDENTIFICATION

INHALATION: High vapor concentrations may produce nose, throat and respiratory irritation.

SKIN CONTACT: Prolonged skin contact may cause irritation.

EYE CONTACT: Eye contact may cause irritation.

INGESTION: May dull senses. EYE CONTACT: Non-hazardous. INGESTION: May dull senses.

EFFECTS OF LONG TERM EXPOSURE (CHRONIC EFFECTS): None known.

CARCINOGENIC INFORMATION: None of the components of this product are listed as carcinogens or potential

carcinogens by NTP, IARC, or OSHA.

MUTAGENIC INFORMATION: Mutagenic for mammalian body cells. [Copper Sulfate]

The substance may be toxic to the kidneys and liver.

#### **HMIS III HAZARD RATING:**

HEALTH: 2 FLAMMABILITY: 0 REACTIVITY: 1 PERSONAL PROTECTION: H



#### 4 - FIRST AID

**Emergency First Aid Procedures:** 

INHALATION: Move person(s) to fresh air for at least 15 minutes and seek medical attention if irritation persists.

SKIN CONTACT: Wash skin with soap and water. Get medical attention if irritation persists.

EYE CONTACT: Hold eyelids open and flush with plenty of water for at least 15 minutes. If wearing contact lenses, flush

for 5 minutes before removing them and then continue flushing. Seek medical attention if irritation persists. **INGESTION**: DO NOT INDUCE VOMITING: Contact a Poison Control Center and seek medical attention.

### 5 - FIRE FIGHTING MEASURES

Flash Point (method used): N/A

Flammable Limits in Air % by Volume: LEL: N/E UEL: N/E

Products of Combustion: N/A

Extinguishing Media: CO2, dry chemical, foam and water.

Special Fire Fighting Procedures: None Unusual Fire and Explosion Hazards: None

Special remarks on explosion hazards: Nitromethanes and copper salts spontaneously form explosive materials.

#### 6 - ACCIDENTAL RELEASE MEASURES

**Small spills**: Absorb with commercial absorbent material, place in drum for disposal. **Large spills**: Dike area and pump to liquid salvage tank for disposal or treatment

#### 7 - HANDLING AND STORAGE

**Handling and Storage**: Wash thoroughly after handling. Keep container closed and maintain original markings and labels. **Other Precautions**: Avoid wearing contact lenses while working with this product. Always obey hazard warnings and handle empty containers as if they were full.

#### 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

Respiratory Protection: Use NIOSH/OSHA approved respirators where high vapor concentrations are present.

Protective Gloves: Wear chemically resistant nitrile gloves.

Eye Protection: Splash goggles.

Other Protective Equipment: None required under normal conditions.

#### 9 - PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point (degrees Fahrenheit): 218 Specific Gravity (H2O = 1): 1.13 Solubility in Water: Miscible pH: 2.1 @ 25 degrees C.

Appearance and Odor: Dark green liquid with mild metallic odor.

#### 10 - STABILITY AND REACTIVITY

Stability: Stable.

Incompatibility (materials to avoid): No notable incompatibilities in diluted form.

Hazardous Decomposition Products: None. Hazardous Polymerization: Will not occur.



#### 11 - TOXICOLOGICAL INFORMATION

Copper Sulfate Pentahydrate: ORAL (LD50): Acute: 300 mg/kg [Rat]. DERMAL (LD50): The substance may be toxic to the kidneys and liver.

#### 12 - ECOLOGICAL INFORMATION

Ecotoxicity: N/A BOD5 and COD: N/A

**Products of biodegradation**: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

**Toxicity of the products of biodegradation**: The products of degradation are less toxic than the product itself. **Special remarks on the products of biodegradation**: If released to soil, copper sulfate may leach to groundwater, be partly oxidized, or bind to humic materials, clay, or hydrous of iron and manganese. In water, it will bind to carbonates as well as humic materials, clay and hydrous oxides of iron and manganese. Copper sulfate is accumulated by plants and animals, but it does not appear to biomagnify from plants to animals. In air, copper aerosols (in general) have a residence time of 2 to 10 days in an unpolluted atmosphere and 0.1 to > 4 in polluted urban areas.

#### 13 - DISPOSAL INFORMATION

Waste Disposal Method:

Dispose in accordance with all federal, state and local requirements.

#### 14 - TRANSPORT INFORMATION

NON-REGULATED UNDER D.O.T.

#### 15 - REGULATORY INFORMATION

SARA 313 Information: SARA 313 Information: Copper Sulfate Pentahydrate, 18.6%\*.

\* 5% Metallic copper equivalent, product contains 0.44 pounds copper per gallon.

#### 16 - OTHER INFORMATION

The technical information presented here is believed to be accurate. We rely on the information provided to us from our raw material suppliers to develop this MSDS. Raw material suppliers' MSDSs are available upon request. As our suppliers update their information, we will provide an updated MSDS. However, this MSDS is given without warranty or guarantee, expressed or implied, and we assume no responsibility for losses or damage, either direct or indirect as a result of product usage.

## APPENDIX E2: WASTE PROFILE INFORMATION, WWTP MATERIALS (SCUM/GRIT/SCREENINGS)



# Waste Management Profile

Re	quested Facility: WOODLAND MEADO	ws_	☐ Unsure Profile Number:		
	Check if there are multiple generator locations. Attack	h locations.	*Renewal? Original Profile Number: 104465 M	<u> </u>	
Α.	GENERATOR INFORMATION (MATERIAL ORIGIN) GENERATOR NAME: ANN ARBOR WASTEWATE	R TREATMENT A	B. BILLING INFORMATION XSAM	E AS GENE	RATOR
	Site Address: 49 OLA ATRORO POAD	1 manimor	2. Billing Address:		
2.	(City, State, ZIP) ANN ARPER MI 4810	16	이 그는 아이들이 그는 맛이 가는 데 있다면 그 아이들이 되었다면 하는데 하는데 그리고 있었다.	- P. C	
			(City, State, ZIP)		
	County: WASTIENAW		3. Contact Name:		
	Contact Name:	~~~~~	4. Email:		
	Email:	LOTAL	5. Phone: 6. Fax:	-	
	Phone: 734-794-6450 7. Fax: 734-97	1,444177.541	7. WM Hauled?	Yes	U No
	Generator EPA ID:	D N/A	8. P.O. Number:		-
9,	State ID: MIG 0000 29067	D N/A			
c.	MATERIAL INFORMATION		D. REGULATORY INFORMATION		
	Common Name: Got Screening, Sour		1. EPA Hazardous Waste?	☐ Yes*	DENO
		☐ See Attached	Code:		•
	ACCUMULATION THROUGH WASTEL	NATER	2. State Hazardous Waste?	☐ Yes	X No
		MILE	Code:		•
	TREATMENT	1	3. Excluded waste under 40 CFR 261.4 (a) or (b)?	☐ Yes*	W No
			4. Contains Underlying Hazardous Constituents?		NO NO
2	Material Composition and Contaminants:	☐ See Attached	5. Contains benzene and subject to Benzene NESHAP?		Ø No
	1. Got tub-inorganics	100%	6. Facility remediation subject to 40 CFR 63 GGGGG?		SE No
	2 Rag tub - rags	100%	7. CERCLA or State-mandated clean-up?		No.
	3. Soum tub - scum.	100%	8. NRC or State-regulated radioactive or NORM waste?		
	4.				
		≥100%	*If Yes, see Addendum (page 2) for additional quest	ions and	space.
	State Waste Codes	D N/A	<ol> <li>Contains PCBs? → If Yes, answer a, b and c.</li> </ol>	☐ Yes	No
4	Color: BLACK to GRAY		a. Regulated by 40 CFR 761?	☐ Yes	□ No
5.	Physical State at 70°F. Solid ☐ Liquid ☐ Other	er:	b. Remediation under 40 CFR 761.61 (a)?	Yes	□ No
6.	Free Liquid Range Percentage: to	N/A (Solid)	c. Were PCB imported into the US?	☐ Yes	□ No
7.	pH: to	N/A (Solid)	10. Regulated and/or Untreated		XNo
8	Strong Odor:  Yes X No Describe:		Medical/Infectious Waste?	☐ Yes	MNO
	Flash Point: □ <140°F □ 140°-199°F □ ≥200°	▼N/A (Solid)	11. Contains Asbestos?	ı-Friable	Мио
E.	ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION	N	F. SHIPPING AND DOT INFORMATION		
1.	Analytical attached	<b>⋊</b> Yes	1. One-Time Event Repeat Event/Ongoing Busin	ness	`
	Please identify applicable samples and/or lab reports		2. Estimated Quantity/Unit of Measure: 300 (o	ingual	4)_
	Paint filter test thru WM's perferen		☐ Tons X Yards ☐ Drums ☐ Gallons ☐ Other		3
	Tamil Time Poli Time Only a percent	a trio.	3. Container Type and Size: 10 yd Rdl off		
	1	-	4. USDOT Proper Shipping Name:		N/A
2	Other information attached (such as MSDS)?	☐ Yes			
By ar do	d that all relevant information necessary for proper material chara- crived from a sample that is representative as defined in 40 CFR 2	nformation submitted acterization and to ide 61 – Appendix 1 or b	in this and all attached documents contain true and accurate description entify known and suspected hazards has been provided. Any analytical y using an equivalent method. All changes occurring in the character or osed to Waste Management prior to providing the material to Waste M	data attac	hed was rial (i.e.,
If	I am an agent signing on behalf of the Generator, I have co	infirmed with the	Certification Signature	u.agemen	· 
G	enerator that information contained in this Profile is accura	ate and complete.	2 0 0		
N	arne (Print): Lynn Renaud Date	e: 6/28/12	PADO	1	
	tle Water Utility Supervisor	, , ,	Tym a. Former	1	
	ompany: City of Ann Arbor WWT	<u>-2</u>	4		
0	minary - 17 - 1 DAN #LPO. COM	<u> </u>			

THINK GREEN:

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

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## APPENDIX E2: WASTE PROFILE INFORMATION, WWTP MATERIALS (SCUM/GRIT/SCREENINGS)

## MICHIGAN NON-HAZARDOUS WASTE PROFILE ADDENDUM

rofile Number

F. Michigan Addendum		
1. Is this Waste to be solidified by WM prior to disposal into the landfill?	☐ Yes	No No
2. Does this exhibit any of the reactivity characteristics as defined by MI Part 111 R 299.9212(3)?	Yes	⊠ No
3. Does this waste contain any RCRA herbicides or pesticides?	Yes	X No
4. Do you generate any regulated Hazardous Waste?	Yes	DKN0
If "Yes," do you have procedures in place to prevent Hazardous Waste from being mixed with this waste?	☐ Yes	☐ No
G. SOLVENTS <u>OR</u> PAINTS:		
Not applicable, this waste does not contain any solvents or paints.		
What solvent(s), if any, are in use and for what purpose?		
If this waste is from a Paint Spray Booth, please explain in detail how the spray guns are cleaned and what is done	e with that wast	e?
After a paint line and/or spray gun is cleaned, is the new paint purged through and disposed of separately?		
H. Complete this Section ONLY IF THIS WASTE IS PROPOSED FOR DISPOSAL AT WOODLA	ND MEADOW	S
SPECIAL WASTE DECLARATION (Check below those Special Wastes that are proposed for disposal by Waste Management:)		
☐ a. Waste from an industrial process.		
☐ b. Waste from a pollution control process.		
☐ c. Waste containing free liquids.		
d. Residue and debris from a cleanup of a spill of a chemical or commercial product or a waste listed in ac. a	nd ln. of this i	form.
<ul> <li>e. Contaminated residuals, or articles from the cleanup of a facility generating, storing, treating or recycling o disposing of chemical substances, commercial products or wastes listed in ad., f or g of this form.</li> </ul>	r	
f. Any waste which is non-hazardous as a result of treatment pursuant to Subtitle C of the Resource Conservat (R.C.R.A.).	ion and Recover	y Act
g. Chemical containing equipment removed from service, which the chemical composition and concentration as	e unknown.	
☐ h. Drums, or containers capable of holding greater than 25 gallons, whether empty, partially full or full.		
<ul> <li>i. Friable or non-friable asbestos containing waste from building demolition or cleanup, including wallboard, v coverings, pipe insulation, etc.</li> </ul>	vall, ceiling or s	pray
<ul> <li>j. Commercial products or chemicals which are off-specification, outdated, unused or banned. Outdated or off taminated food or beverage products in original consumer containers are not included in this category, unle containers is restricted by applicable regulations.</li> </ul>		
k. Treated or untreated medical waste. Any waste which was once capable, or is capable of inducing infection is source.	orm a bio-medio	cal
<ol> <li>Residue / sludges from septic tanks, food service grease traps, or wash waters and wastewaters from comme private or public wastewater treatment facilities.</li> </ol>	rcial laundries, a	and
m. Chemical containing equipment removed from service, in which the chemical concentrations are known (e.g. cathode ray tubes, lab equipment, fluorescent lights, etc.)	, acetylene tank	KS,
<ul> <li>n. Waste produced from the dismantling or demolition of industrial process equipment, or facilities contaminat the industrial process.</li> </ul>	ed with chemica	als from
<ul> <li>o. Incinerator ash generated at a Resource Recovery Facility. A facility which burns only non-hazardous housel industrial and qualifies for the hazardous waste exclusion in 40CFR261.4(b).</li> </ul>	iold, commercial	l or
☐ p. Other, if not specified above.		
BY COMPLETING SECTION H., CUSTOMER WARRANTS THAT HE/SHE HAS DISCLOSED ALL OF THE TYPES OF SPECI TO BE DISPOSED BY WASTE MANAGEMENT	AL WASTE PROP	OSED

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Revised June 15, 2007



# Waste Management Profile Addendum

Only complete this Addendum if prompted by responses on Was (page 1) or to provide additional information. Sections and que			-
to Waste Management Profile.			
SECTION C			
Describe Process Generating Material (Continued from page 1):	If more space is needed, please attach	additional p	pages.
	3		
Material Composition and Contaminants (Continued from page 1):	If more space is needed, please attach	additional p	pages.
5			
6.			
7.			
8.			
9.			
10.		≥100	0/
Only questions with a "Yes" response on Waste Management Profile (part). EPA Hazardous Waste a Please list all USEPA listed and characteristic waste code numbers.	ge 1) need to be answered here.		
b. Is the material subject to the Alternative Debris standards (40 CFR 268.4) c. Is the material subject to the Alternative Soil standards (40 CFR 268.49)?		☐ Yes	
		☐ Yes	
<ul> <li>d. Is the material exempt from Subpart CC Controls (40 CFR 264.1083 and</li> <li>→ If Yes, please select one of the following:</li> </ul>	203.1084)?	- ies	<b>□</b> 100
☐ Waste has been determined to be LDR exempt (265.1083(c)(4) ar	nd 265 1084(c)(4)) based on the fact that it mee	ete all applic	able
organic treatment standards (including UHCs for D-coded characte	그리다 [ , ] : [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [ [		avie
<ul> <li>Waste does not qualify for a LDR exemption, but the average VOC was based on analytical testing (upload copy of analysis) or general</li> </ul>	at the point of origination is <500 ppmw and this		ion
2. State Hazardous Waste → Please list all state waste codes:			
3. Excluded Waste → Please select which of the following categories apply to			
☐ Delisted Hazardous Waste ☐ Excluded Waste under 40 CFR 26	s Waste → If checked, complete question 4.		_
☐ Treated Hazardous Waste Debris ☐ Treated Characteristic Hazardous  4. Underlying Hazardous Constituents → Please list all Underlying Hazardous Constituents	and the second time is a first of the contract		
a. Origeriying nazardous Constituents 9 Prease list all origeriying nazardous C	constituents.		
<ol> <li>Benzene NESHAP → Please include benzene concentration and percent wat</li> <li>a. Are you a TSDF? → If yes, please complete Benzene NESHAP questionna</li> </ol>			
b. What is your facility's current total annual benzene quantity in Megagrams		Mg □≥	10 Mg
c. Is this waste soil from remediation at a closed facility?	State County of the County of	☐ Yes	D No
d. Has material been treated to remove 99% of the benzene or to achieve <	:10 ppmw?	☐ Yes	□ No
e. Is material exempt from controls in accordance with 40 CFR 61.342?  → If yes, specify exemption:		☐ Yes	O No
f. Based on your knowledge of your waste and the BWON regulations, do yo treatment and control requirements at an off-site TSDF?		☐ Yes	
6. 40 CFR 63 GGGGG → Does the material contain <500 ppw VOHAPs at the	10. N.	☐ Yes	
<ol> <li>CERCLA or State-Mandated clean up -&gt; Please submit the Record of Decisi proper disposal.</li> </ol>	ion or other documentation to assist others in the	evaluation (	for

THINK GREEN:

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

8. NRC or state regulated radioactive or NORM Waste → Please identify isotopes and pCi/g: \_\_

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## Waste Management Profile Instructions

#### A. GENERATOR INFORMATION (MATERIAL ORIGIN)

The information in this section applies strictly to the generator of the material being profiled on this form. Please complete as much information as possible. If you are unsure about a question, call your technical service center at 800-963-4776.

#### C. MATERIAL INFORMATION

- Common Name: Enter the generally descriptive name of the material. Example: Paint sludge, Gasoline Impocted sail
  - Describe Process Generating Material: Describe the process and/or source of contamination generating this material. Identify the specific process/operation or source that generates the material Example: Sail from underground storage tank that contained gasoline
- Material Composition and Contaminants: List the general components of the material and any pertinent contaminants with the overall concentration in the material.
   Exomple: Soil 90% - 100%, Debris 0% - 10%
- State Waste Codes: If applicable, enter the appropriate state code assigned to this material. If there is no code, select N/A.
- Color: Describe the color(s) of the material. Example: Blue, brown, clear
- Physical State at 70°F: Select all that apply. You may select solid and liquid at the same time. If this material is neither, please choose other and describe in the space provided.
- Free Liquid Range Percentage: If the material has free liquids in it, identify the approximate percentage. If the material contains no free liquids, select N/A Solid.
- pH: Indicate the pH range of the waste. Most areas do not require a pH on solid. However, it may be a requirement for your facility. If you are unsure, contact your Technical Service Center for clarification.
- Strong Odor: Do not smell the waste. If the waste is known to have a strong odor please describe in the space provided. Example: Gasoline, Pungent, Rotten Eggs
- Flash Point: Indicate the flash point obtained using the appropriate test method. Solid material at most locations does not require a flash point. If this is true, select N/A Solid.

## E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

- Analytical: If you attach laboratory analysis to help characterize your material. Please indicate it here and identify which samples or entire reports are representative of the material.
- Other Information: If other information such as an MSDS or other product information will help characterize your material, indicate it here and attach the documentation.

#### B. BILLING INFORMATION

The information in this section applies to the person or company that will receive the invoice from Waste Management. If you are unsure about a question, call your technical service center at 800-963-4776.

#### D. REGULATORY INFORMATION

- EPA Hazardous Waste: Verify whether this material is a hazardous waste as defined by 40 CFR 261. If you select Yes, identify the applicable hazardous waste codes and answer corresponding Addendum questions (D.1.) on the second page. For assistance, contact your Technical Service Center at 800–963-4776.
- State Waste Codes: Verify whether this material is a hazardous waste as defined by the state. If you select Yes, identify the applicable hazardous waste codes. Additional space for codes is available on the Addendum form – question D.2. For assistance, contact your Technical Service Center at 800-963-4776.
- Excluded waste under 40 CFR 261.4 (a) or (b): If you select Yes, identify the applicable exclusion and answer corresponding Addendum questions (D.3.) on the second page.
- Contains Underlying Hazardous Constituents: Verify whether this material contains UHCs in 40 CFR 268.
- Contains Benzene and Subject to Benzene NESHAP: Verify whether material is subject to Benzene NESHAP in 40 CFR 61.
- Facility Remediation Subject to 40 CFR 63 GGGGG: Verify whether material is subject to 40 CFR 63 GGGGGG.
- CERCLA or State-mandated clean-up: If Yes, please attach the Record of Decision or other documentation to assist others in the evaluation for proper disposal.
- NRC or State-regulated radioactive or NORM waste: If you select Yes, answer the additional corresponding Addendum questions (D.8.) on the second page.
- Contains PCBs: If yes, answer questions a, b, & c concerning PCBs. For more information consult 40 CFR 761.
- Regulated and/or untreated Medical/Infectious Waste?: Indicate
  if the material contains anything that may qualify as Regulated and/or
  untreated medical/infectious waste.
- Contains Asbestos; Indicate whether the waste contains asbestos. If yes, indicate the type of asbestos.

#### F. SHIPPING AND DOT INFORMATION

- One-Time Event or Repeat Event/Ongoing Business: Identify if the material will be generated from a single event or if the material will be generated in an on-going process.
- Estimated Quantity / Unit of Measure: Give the approximate quantity and unit of measure for your material. If this is an on-going process, identify the annual quantity.
- Container Type and Size: Please identify the container type and size.
  If you are unsure, leave blank.
  Example: 40 yard roll-off, 55-gallon drums
- USDOT Proper Shipping Name: If applicable, enter the proper USDOT Shipping Name.

#### G. GENERATOR CERTIFICATION

Before submitting your profile form, read the Generator Certification and completed the information on the left and sign on the right.

THINK GREEN:

QUESTIONS? CALL 800 963 4776 FOR ASSISTANCE

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## APPENDIX E2: WASTE PROFILE INFORMATION, WWTP MATERIALS (SCUM/GRIT/SCREENINGS)

7343269245

02:10:35 p.m.

7/8

**BIO-CHEM Laboratories, Inc.** 

Date: 6/20/2012

ANALYTICAL REPORT

CLIENT:

Waste Management of MI/OH

Project Number: N/A

Lab Order:

1206070

Client Sample ID: 104465MI Collection Date: 6/12/2012

Project: Lab Sample ID: 1206070-04A

Woodland Meadows - AAWWTP

Matrix: SLUDGE

Q PQL Analyses Method Ref. Result Units DF Analyst Date Paint Filter Free Liquids 1. Free Liquid SW9095A Pass/Fail

Pass

0

RHS

6/20/2012

06-25-2012

Definitions:

PQL - Practical Quantitation Limit

DF - Dilution Factor

Qualifiers (Q):

J - Detected below PQL but above MDL: Estimated

S - Spike Recovery Outside Acceptance Limits

B - Analyte detected in associated Method Blank

N - See case narrative for explanation

# **ANALYTICAL REPORT**

TestAmerica Laboratories, Inc.

TestAmerica Canton 4101 Shuffel Street NW North Canton, OH 44720 Tel: (330)497-9396

TestAmerica Job ID: 240-16834-1

Client Project/Site: Leaf Composting - 117-105401016.4

For:

Tetra Tech GEO 710 Avis Drive Ann Arbor, Michigan 48108

Attn: Patti McCall

Authorized for release by:

11/15/2012 8:26:42 PM

Kris Brooks

Project Manager II

kris.brooks@testamericainc.com

..... LINKS .....

Review your project results through

Total Access

**Have a Question?** 



Visit us at: www.testamericainc.com

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.

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Client: Tetra Tech GEO
Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

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## **Definitions/Glossary**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

Qualifiers

**GC VOA** 

Qualifier **Qualifier Description** 

Ū Indicates the analyte was analyzed for but not detected.

**GC Semi VOA** 

Qualifier **Qualifier Description** J

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not

applicable.

Surrogate is outside control limits Χ

U Indicates the analyte was analyzed for but not detected.

**Metals** 

Qualifier **Qualifier Description** J

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

В Compound was found in the blank and sample.

Indicates the analyte was analyzed for but not detected.

**Glossary** 

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CNF Contains no Free Liquid

DER Duplicate error ratio (normalized absolute difference)

DL, RA, RE, IN Indicates a Dilution, Reanalysis, Re-extraction, or additional Initial metals/anion analysis of the sample

DLC Decision level concentration EDL **Estimated Detection Limit** 

FPA United States Environmental Protection Agency

MDA Minimum detectable activity

MDC Minimum detectable concentration

MDL Method Detection Limit

ML Minimum Level (Dioxin)

ND Not detected at the reporting limit (or MDL or EDL if shown)

**PQL Practical Quantitation Limit** 

QC **Quality Control** RER Relative error ratio

Reporting Limit or Requested Limit (Radiochemistry) RL

Relative Percent Difference, a measure of the relative difference between two points **RPD** 

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

## **Case Narrative**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

Job ID: 240-16834-1

**Laboratory: TestAmerica Canton** 

Narrative

#### **CASE NARRATIVE**

**Client: Tetra Tech GEO** 

Project: Leaf Composting - 117-105401016.4

Report Number: 240-16834-1

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 some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

#### **RECEIPT**

The samples were received on 10/25/2012; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 5.1 C.

#### **GASOLINE RANGE ORGANICS (GRO)**

Sample PILE 1 (240-16834-1) was analyzed for gasoline range organics (GRO) in accordance with EPA SW-846 Method 8015B - GRO. The samples were analyzed on 10/30/2012.

No difficulties were encountered during the GRO analysis. All quality control parameters were within the acceptance limits.

#### **DIESEL RANGE ORGANICS (DRO)**

Sample PILE 1 (240-16834-1) was analyzed for diesel range organics (DRO) in accordance with EPA SW-846 Method 8015B - DRO. The samples were prepared on 11/02/2012 and analyzed on 11/08/2012.

Surrogates are added during the extraction process prior to dilution. When the sample dilution is 5X or greater, surrogate recoveries are diluted out and no corrective action is required.

n-Nonane failed the surrogate recovery criteria low for PILE 1MS (240-16834-1MS). Diesel failed the recovery criteria high for the MS of sample PILE 1MS (240-16834-1) in batch 240-64337. Refer to the QC report for details.

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#### **Case Narrative**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

Job ID: 240-16834-1 (Continued)

#### Laboratory: TestAmerica Canton (Continued)

Due to the matrix, the following sample(s) could not be concentrated to the final method required volume: (240-16834-1 MS), PILE 1 (240-16834-1). The reporting limits (RLs) are elevated proportionately.

Sample PILE 1 (240-16834-1)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

No other difficulties were encountered during the DRO analysis. All other quality control parameters were within the acceptance limits.

#### **TOTAL METALS (ICPMS)**

Sample PILE 1 (240-16834-1) was analyzed for total metals (ICPMS) in accordance with EPA SW-846 Method 6020. The samples were prepared on 11/05/2012 and analyzed on 11/14/2012 and 11/15/2012.

Several analytes were detected in method blank MB 240-63782/1-A at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged "J". If the associated sample reported a result above the MDL and/or RL, the result has been "B" flagged. Refer to the QC report for details.

No other difficulties were encountered during the metals analysis. All other quality control parameters were within the acceptance limits.

#### **TOTAL MERCURY**

Sample PILE 1 (240-16834-1) was analyzed for total mercury in accordance with EPA SW-846 Method 7471A. The samples were prepared on 11/05/2012 and analyzed on 11/07/2012.

No difficulties were encountered during the mercury analysis. All quality control parameters were within the acceptance limits.

#### **PERCENT SOLIDS**

Sample PILE 1 (240-16834-1) was analyzed for percent solids in accordance with EPA Method 160.3 MOD. The samples were analyzed on 10/31/2012.

No difficulties were encountered during the % solids analysis. All quality control parameters were within the acceptance limits.

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## **Method Summary**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Method	Method Description	Protocol	Laboratory
8015B	Gasoline Range Organics - (GC)	SW846	TAL NC
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL NC
6020	Metals (ICP/MS)	SW846	TAL NC
7471A	Mercury (CVAA)	SW846	TAL NC
Moisture	Percent Moisture	EPA	TAL NC

#### Protocol References:

EPA = US Environmental Protection Agency

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

#### Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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## **Sample Summary**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-16834-1	PILE 1	Solid	10/24/12 13:20	10/25/12 09:00

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Q

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## **Detection Summary**

Client: Tetra Tech GEO

Mercury

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

1 🌣 7471A

Client Sample ID: PILE 1 Lab Sample ID: 240-16834-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
C6-C10	310		230	110	ug/Kg		₩	8015B	Total/NA
C10-C20	150	J	160	87	mg/Kg	5	₽	8015B	Total/NA
C20-C34	1300		160	87	mg/Kg	5	₩	8015B	Total/NA
Arsenic	2.2		0.15	0.12	mg/Kg	1	₩	6020	Total/NA
Barium	27	В	0.94	0.086	mg/Kg	1	₩	6020	Total/NA
Cadmium	0.24		0.19	0.015	mg/Kg	1	₩	6020	Total/NA
Chromium	13	В	0.37	0.075	mg/Kg	1	₩	6020	Total/NA
Copper	10	В	0.37	0.080	mg/Kg	1	₩	6020	Total/NA
Nickel	3.4		0.37	0.039	mg/Kg	1	₽	6020	Total/NA
Lead	13	В	0.19	0.024	mg/Kg	1	₩	6020	Total/NA
Selenium	0.18	J	0.30	0.17	mg/Kg	1	₩	6020	Total/NA
Zinc	48	В	1.5	0.37	mg/Kg	1	₽	6020	Total/NA

0.089

0.033 mg/Kg

0.069 J

Δ

4

5

7

0

9

10

Total/NA

11

13

14

## **Client Sample Results**

Client: Tetra Tech GEO

**Client Sample ID: PILE 1** 

Date Collected: 10/24/12 13:20

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Lab Sample ID: 240-16834-1

Matrix: Solid

ate Received: 10/25/12 09:00								Percent Soli	
Method: 8015B - Gasoline Range C <sup>Analyte</sup>		C) Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C6-C10	310		230	110	ug/Kg	— <del>-</del>		10/30/12 14:34	
C0-C10	310		200	110	ugritg			10/00/12 14:04	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
Trifluorotoluene (Surr)	37		10 - 150					10/30/12 14:34	
Method: 8015B - Diesel Range Org	anics (DRO)	(GC)							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fa
C10-C20	150	J	160	87	mg/Kg	<u> </u>	11/02/12 11:24	11/08/12 16:05	
C20-C34	1300		160	87	mg/Kg	₩	11/02/12 11:24	11/08/12 16:05	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fa
n-Nonane	24		10 - 110				11/02/12 11:24	11/08/12 16:05	
Analyte		Qualifier	RL	MDL		— <del>D</del>	Prepared	Analyzed	Dil Fa
•		Qualifier					<u>.</u>		Dil Fa
Arsenic	2.2	_	0.15		mg/Kg		11/05/12 10:38	11/14/12 04:27	
Barium	27	В	0.94		mg/Kg	φ.	11/05/12 10:38	11/14/12 04:27	
Cadmium	0.24		0.19		mg/Kg		11/05/12 10:38	11/14/12 04:27	
Chromium	13		0.37		mg/Kg	*	11/05/12 10:38	11/14/12 04:27	
Copper	10	В	0.37	0.080	mg/Kg	₩	11/05/12 10:38	11/14/12 04:27	
Nickel	3.4		0.37	0.039	mg/Kg	₩	11/05/12 10:38	11/15/12 00:35	
Lead	13	В	0.19	0.024	mg/Kg	₽	11/05/12 10:38	11/14/12 04:27	
Selenium	0.18	J	0.30	0.17	mg/Kg	₩	11/05/12 10:38	11/14/12 04:27	
Zinc	48	В	1.5	0.37	mg/Kg	₩	11/05/12 10:38	11/14/12 04:27	
Silver	0.030	U	0.15	0.030	mg/Kg	₽	11/05/12 10:38	11/14/12 04:27	
Method: 7471A - Mercury (CVAA)									
	Desuit	Qualifier	RL	MDI	Unit	D	Prepared	Analyzed	Dil Fa
Analyte	Result	Qualifier	KL	MDL	Ullit	U	riepaieu	Allalyzeu	ם ווע

## **Surrogate Summary**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Method: 8015B - Gasoline Range Organics - (GC)

Matrix: Solid Prep Type: Total/NA

_			Percent Surrogate Recovery (Acceptance Limits)
		TFT2	
Lab Sample ID	Client Sample ID	(10-150)	
240-16834-1	PILE 1	37	<del></del>
LCS 240-63212/7	Lab Control Sample	86	
MB 240-63212/6	Method Blank	71	
Surrogate Legend			
TFT = Trifluorotoluene	(Surr)		

Method: 8015B - Diesel Range Organics (DRO) (GC)

Matrix: Solid Prep Type: Total/NA

_			Percent Surrogate Recovery (Acceptance Limits)
		C91	
Lab Sample ID	Client Sample ID	(10-110)	
240-16834-1	PILE 1	24	
240-16834-1 MS	PILE 1	0 X	
LCS 240-63632/5-A	Lab Control Sample	40	
MB 240-63632/4-A	Method Blank	41	
Surrogate Legend			
C9 = n-Nonane			

TestAmerica Canton

## QC Sample Results

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

Method: 8015B - Gasoline Range Organics - (GC)

Lab Sample ID: MB 240-63212/6 **Matrix: Solid** 

**Analysis Batch: 63212** 

Analyte

C6-C10

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

мв мв Result Qualifier RL MDL Unit D Analyzed Dil Fac Prepared 100 10/30/12 13:19 46 U 46 ug/Kg

MB MB Qualifier Dil Fac Surrogate %Recovery Limits Prepared Analyzed 10 - 150 10/30/12 13:19 Trifluorotoluene (Surr) 71

Lab Sample ID: LCS 240-63212/7

**Matrix: Solid** 

Analysis Batch: 63212

LCS LCS Spike %Rec. Added Qualifier Analyte Result Unit Limits %Rec C6-C10 800 100 60 - 142 802 ug/Kg

LCS LCS Surrogate %Recovery Qualifier

Limits 10 - 150 Trifluorotoluene (Surr) 86

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 240-63632/4-A

**Matrix: Solid** 

C20-C34

Prep Type: Total/NA Prep Batch: 63632 Analysis Batch: 64337 MR MR MDL Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac C10-C20 3.3 11/02/12 11:24 11/08/12 17:05 1.9 Ū 1.9 mg/Kg

3.3

mg/Kg

1.9

MB MB Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac n-Nonane 10 - 110 11/02/12 11:24 11/08/12 17:05 41

Lab Sample ID: LCS 240-63632/5-A

Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 64176** Prep Batch: 63632

Spike LCS LCS %Rec. Added Analyte Result Qualifier Unit D %Rec Limits 16.7 Diesel 12.4 mg/Kg 74 47 - 138

LCS LCS

460

1.9 U

%Recovery Qualifier Limits Surrogate n-Nonane 40 10 - 110

Lab Sample ID: 240-16834-1 MS

**Matrix: Solid** 

Diesel

Prep Type: Total/NA **Analysis Batch: 64337** Prep Batch: 63632 Sample Sample Spike MS MS %Rec. Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

4

mg/Kg

1980

77.8

TestAmerica Canton

Client Sample ID: PILE 1

Client Sample ID: Lab Control Sample

Client Sample ID: Method Blank

11/08/12 17:05

11/02/12 11:24

1946

10 - 199

Prep Type: Total/NA

## **QC Sample Results**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: 240-16834-1 MS **Matrix: Solid** 

Analysis Batch: 64337

**Matrix: Solid** 

Matrix: Solid

Analysis Batch: 64974

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 240-63782/1-A

Lab Sample ID: LCS 240-63782/2-A

MS MS

Surrogate %Recovery Qualifier Limits n-Nonane 0 X 10 - 110 Client Sample ID: PILE 1 Prep Type: Total/NA

Prep Batch: 63632

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 63782

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	0.062	U	0.080	0.062	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Barium	0.0753	J	0.50	0.046	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Cadmium	0.0078	U	0.10	0.0078	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Chromium	0.0709	J	0.20	0.040	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Copper	0.116	J	0.20	0.043	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Nickel	0.0356	J	0.20	0.021	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Lead	0.0260	J	0.10	0.013	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Selenium	0.090	U	0.16	0.090	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Zinc	0.359	J	0.80	0.20	mg/Kg		11/05/12 10:38	11/14/12 02:09	1
Silver	0.016	U	0.080	0.016	mg/Kg		11/05/12 10:38	11/14/12 02:09	1

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Analysis Batch: 64974							Prep Ba	atch: 63782
	Spike	LCS	LCS				%Rec.	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	100	78.2		mg/Kg		78	73 - 110	
Barium	100	91.6		mg/Kg		92	70 - 110	
Cadmium	100	88.4		mg/Kg		88	74 - 110	
Chromium	100	88.0		mg/Kg		88	70 - 110	
Copper	100	83.8		mg/Kg		84	73 - 110	
Nickel	100	83.6		mg/Kg		84	75 _ 110	
Lead	100	102		mg/Kg		102	75 - 110	
Selenium	100	77.8		mg/Kg		78	65 - 110	
Zinc	100	86.3		mg/Kg		86	72 _ 113	
Silver	10.0	9.12		mg/Kg		91	60 - 114	

Method: 7471A - Mercury (CVAA)

Lab Sample ID: MB 240-63826/1-A

**Matrix: Solid** 

Analyte

Mercury

**Analysis Batch: 64158** 

MR MR

IVID	IVID
Result	Qualifie

0.015 U

RL 0.040

MDL Unit 0.015 mg/Kg

Prepared 11/05/12 15:05

Analyzed

Client Sample ID: Method Blank

Dil Fac 11/07/12 11:30

Prep Type: Total/NA

Prep Batch: 63826

TestAmerica Canton

## **QC Sample Results**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

Method: 7471A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 240-63826/2-A Matrix: Solid

Analysis Batch: 64158

**Client Sample ID: Lab Control Sample** Prep Type: Total/NA Prep Batch: 63826 Spike LCS LCS

Analyte Added Result Qualifier %Rec Limits Unit D Mercury 0.833 0.756 91 73 \_ 121 mg/Kg

## **QC Association Summary**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

**GC VOA** 

Analysis Batch: 63212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	8015B	
LCS 240-63212/7	Lab Control Sample	Total/NA	Solid	8015B	
MB 240-63212/6	Method Blank	Total/NA	Solid	8015B	

**GC Semi VOA** 

Prep Batch: 63632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	3540C
240-16834-1 MS	PILE 1	Total/NA	Solid	3540C
LCS 240-63632/5-A	Lab Control Sample	Total/NA	Solid	3540C
MB 240-63632/4-A	Method Blank	Total/NA	Solid	3540C

**Analysis Batch: 64176** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 240-63632/5-A	Lab Control Sample	Total/NA	Solid	8015B	63632

Analysis Batch: 64337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	8015B	63632
240-16834-1 MS	PILE 1	Total/NA	Solid	8015B	63632
MB 240-63632/4-A	Method Blank	Total/NA	Solid	8015B	63632

**Metals** 

Prep Batch: 63782

L	ab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
2	40-16834-1	PILE 1	Total/NA	Solid	3050B	
L	.CS 240-63782/2-A	Lab Control Sample	Total/NA	Solid	3050B	
N	MB 240-63782/1-A	Method Blank	Total/NA	Solid	3050B	

Prep Batch: 63826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	7471A	
LCS 240-63826/2-A	Lab Control Sample	Total/NA	Solid	7471A	
MB 240-63826/1-A	Method Blank	Total/NA	Solid	7471A	

**Analysis Batch: 64158** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	7471A	63826
LCS 240-63826/2-A	Lab Control Sample	Total/NA	Solid	7471A	63826
MB 240-63826/1-A	Method Blank	Total/NA	Solid	7471A	63826

Analysis Batch: 64974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	6020	63782
LCS 240-63782/2-A	Lab Control Sample	Total/NA	Solid	6020	63782
MB 240-63782/1-A	Method Blank	Total/NA	Solid	6020	63782

TestAmerica Canton

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## **QC Association Summary**

Client: Tetra Tech GEO TestAmerica Job ID: 240-16834-1

Project/Site: Leaf Composting - 117-105401016.4

**Metals (Continued)** 

Analysis Batch: 65141

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PILE 1	Total/NA	Solid	6020	63782

**General Chemistry** 

Analysis Batch: 63390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-16834-1	PII F 1	Total/NA	Solid	Moisture	

1

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## **Lab Chronicle**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

Client Sample ID: PILE 1

Date Collected: 10/24/12 13:20

Lab Sample ID: 240-16834-1

Matrix: Solid

Date Received: 10/25/12 09:00 Percent Solids: 42.7

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015B			63212	10/30/12 14:34	НМВ	TAL NC
Total/NA	Prep	3540C			63632	11/02/12 11:24	AC	TAL NC
Total/NA	Analysis	8015B		5	64337	11/08/12 16:05	CR	TAL NC
Total/NA	Prep	7471A			63826	11/05/12 15:05	DE	TAL NC
Total/NA	Analysis	7471A		1	64158	11/07/12 12:20	DH	TAL NC
Total/NA	Prep	3050B			63782	11/05/12 10:38	DE	TAL NC
Total/NA	Analysis	6020		1	64974	11/14/12 04:27	KC	TAL NC
Total/NA	Analysis	6020		1	65141	11/15/12 00:35	KC	TAL NC
Total/NA	Analysis	Moisture		1	63390	10/31/12 12:35	TH	TAL NC

#### Laboratory References:

TAL NC = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

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## **Certification Summary**

Client: Tetra Tech GEO

Project/Site: Leaf Composting - 117-105401016.4

TestAmerica Job ID: 240-16834-1

## **Laboratory: TestAmerica Canton**

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

Authority	Program	EPA Region	Certification ID	<b>Expiration Date</b>
California	NELAC	9	01144CA	06-30-13
Connecticut	State Program	1	PH-0590	12-31-13
Florida	NELAC	4	E87225	06-30-13
Georgia	State Program	4	N/A	06-30-13
Illinois	NELAC	5	200004	07-31-13
Kansas	NELAC	7	E-10336	01-31-13
Kentucky	State Program	4	58	11-16-12
L-A-B	DoD ELAP		L2315	02-28-13
Minnesota	NELAC	5	039-999-348	12-31-12
Nevada	State Program	9	OH-000482008A	07-31-13
New Jersey	NELAC	2	OH001	06-30-13
New York	NELAC	2	10975	04-01-13
Ohio VAP	State Program	5	CL0024	01-19-14
Pennsylvania	NELAC	3	68-00340	08-31-13
Texas	NELAC	6		08-03-13
USDA	Federal		P330-11-00328	08-26-14
Virginia	NELAC	3	460175	09-14-13
Washington	State Program	10	C971	01-12-13
West Virginia DEP	State Program	3	210	12-31-12
Wisconsin	State Program	5	999518190	08-31-13

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Date/1 ime: / 16/3-4/13

Company:

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/025472\_ Date/Time:

Company:

Received in Laboratory by:

163A

10/24/12

Company.

16:30

10/24/12

Company:

2552

Unknown

Poison B

Skin Irritant

Instructions/QC Requirements & Comments

: Hazard Identification

copperzine, nichter (mix bags px Cadmison, Chromison lead, mercury, Selenium sing THE LEADER IN ENVIRONMENTAL TESTING [estAmerica Laboratories, Inc. TestAmerica arsenic, barium, 035583 Sample Specific Notes | Special Instructions: COCs ПП (3 21010C baas of Valves anctals = or lab use bulk ٩ releptone: (230) 9 (66-9790 Lis Brooks Analyses Sample Disposal (A fee may be assessed if samples are retained longer than 1 mouth)

Return to Client Disposal By Lab Archive For \*51019W X Lab Contact: 10401 ہد 10/01 DKO Çomposüc=⊊7 Grah=Ç Other Filtered Sample (Y / N) Telephone: 406/74)213-406 TAT if different from below Chappedard Sile Contact Dath MCCal Analysis Turnaround Time (m Blisdays)  $\mathcal{C}$ səada<sub>(</sub> Chain of Custody Record ] week 2 days Containers & Preservati RCRA /οΛιιλ HO<sub>B</sub>ν day HOBN □ NPDES EONH

#OS7H

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pilos

tromiba?

suconby

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Sample Time

Sample Date

13.20

10/2412

Matrix

DΨ

Regulatory program:

TestAmerica Laboratory location:

Dath. mccall (0)

hyspate/Zip:

110 Aurs Dr

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COURCEY

hipping/Tracking No:

17-1054010/64

DU L'EMPRETT DO

"(74)213-40109

Aethod of Shipment/Carrier:

124725-4000

ient Project Manager:

etra Tech GEO

APPENDIX E3: ANALYTICAL TEST DATA, STREET SWEEPING MATERIAL

22008. TestAmence Laboratories, Inc. All rights meaned restAmerica & Design \*\* are trademarks of TestAmerica Labora

quished by:

TestAmerica Canton Sample Receipt Form/Narrative	Login #:	16834	
Client Tetra Tech. Site Name	By:	tt	
TestAmerica Cooler # Foam Box Client Gooler Box Packing material used: Bubble Wrap Foam Plastic Bag None COOLANT: Wet lee Blue Ice Dry Ice Water None		(Signatu	re)
IR GUN# 4G (CF -1°C) Observed Sample Temp. °C Correct IR GUN# 5G (CF -1°C) Observed Sample Temp. °C Correct Correct IR GUN# 5G (CF -1°C) Observed Sample Temp.	eted Sample Temp.		Multiple on Back
<ul> <li>6. Did all bottles arrive in good condition (Unbroken)?</li> <li>7. Could all bottle labels be reconciled with the COC?</li> <li>8. Were correct bottle(s) used for the test(s) indicated?</li> <li>9. Sufficient quantity received to perform indicated analyses?</li> <li>10. Were sample(s) at the correct pH upon receipt?</li> <li>11. Were VOAs on the COC?</li> <li>12. Were air bubbles &gt;6 mm in any VOA vials?</li> <li>13. Was a trip blank present in the cooler(s)?</li> </ul>	Yes No	JA	
Contacted PM Date by	via Verbal Voice Ma	il Other	:
14. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES			
			:
		V.	
15. SAMPLE CONDITION			
Sample(s) were received after the recor	nmended holding time were received in a br		
	were received in a broubble >6 mm in diame		
WOOD TOODING WITH D	soor o min in diamic	over (LIVILY LIVE)	

ALLEN	16 SAMPI	E PRESERVATION	WAILINAL	
Sample(s)		0 1	. 6 1 5 .	
recommended pH level(s) NaOH; Hydrochloric Acid time was preservative add	. Nitric Acid Lot# 031512-HNO3; S d Lot# 041911-HCl; Sodium Hydrox ed to sample(s)?	were further preserved ulfuric Acid Lot# 041911-H2SO4; s ide and Zinc Acetate Lot# 100108-(	O 1' TT ( ) (	
<u>Client ID</u>		pН	Date	Initials
			Date	111111118
				<del></del>
			<del>_</del>	
			+	
			<del>                                     </del>	
				· · · · · · · · · · · · · · · · · · ·
Cooler#	Observed Sample Temp. °C	Corrected Sample Temp. °C	IR#	Carlant
		gaireated dample remp. C	11/1	Coolant
				-

## **Login Sample Receipt Checklist**

Client: Tetra Tech GEO Job Number: 240-16834-1

Login Number: 16834 List Source: TestAmerica Canton

List Number: 1 Creator: Sutek, Nick

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

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## APPENDIX E3: WASTE PROFILE INFORMATION, STREET SWEEPING MATERIAL





Requested Facility: Check if there are multiple generator locations. Attach locations.		□ Unsure Profile Number:		
A. GENERATOR INFORMATION (MATERIAL ORIGIN)			AME AS GENERATOR	
1. Generator Name:		1. Billing Name:		
2. Site Address:		2. Billing Address:		
(City, State, ZIP)		(City, State, ZIP)		
3. County:		3. Contact Name:		
4. Contact Name:		4. Email:		
5. Email:		5. Phone: 6. Fax:		
6. Phone: 7. Fax:		7. WM Hauled?	☐ Yes	
8. Generator EPA ID:		8. P.O. Number:		
9. State ID:	□ N/A			
C. MATERIAL INFORMATION		D. REGULATORY INFORMATION		
1. Common Name:		1. EPA Hazardous Waste?	☐ Yes*	☐ No
Describe Process Generating Material:	☐ See Attached	Code:		
		2. State Hazardous Waste?	Yes	☐ No
		Code:		
		3. Excluded waste under 40 CFR 261.4 (a) or (b)?	☐ Yes*	☐ No
		4. Contains Underlying Hazardous Constituents?	☐ Yes*	☐ No
2. Material Composition and Contaminants:	☐ See Attached	5. Contains benzene <b>and</b> subject to Benzene NESHAP?	☐ Yes*	☐ No
1.		6. Facility remediation subject to 40 CFR 63 GGGGG?	☐ Yes*	☐ No
2.		7. CERCLA or State-mandated clean-up?	☐ Yes*	☐ No
3.		8. NRC or State-regulated radioactive or NORM waste?	' □ Yes*	☐ No
4.	> 1000/	*If Yes, see Addendum (page 2) for additional quest	ions and	space.
3. State Waste Codes:	≥100%	9. Contains PCBs? → If Yes, answer a, b and c.	☐ Yes	ПМо
		a. Regulated by 40 CFR 761?	☐ Yes	
4. Color: 5. Physical State at 70°F: ☐ Solid ☐ Liquid ☐ Li		b. Remediation under 40 CFR 761.61 (a)?	☐ Yes	
6. Free Liquid Range Percentage: to		c. Were PCB imported into the US?	☐ Yes	
7. pH: to		10. Regulated and/or Untreated	<b>—</b> 163	<b>—</b> 110
8. Strong Odor:		Medical/Infectious Waste?	Yes	☐ No
9. Flash Point: □ <140°F □ 140°−199°F □		11. Contains Asbestos?	ı-Friable	☐ No
E. ANALYTICAL AND OTHER REPRESENTATIVE INFOR		F. SHIPPING AND DOT INFORMATION		
1. Analytical attached	☐ Yes	1.  One-Time Event Repeat Event/Ongoing Business		
Please identify applicable samples and/or lab reports:		2. Estimated Quantity/Unit of Measure: Other:		
		3. Container Type and Size:		□ N/A
2. Other information attached (such as MSDS)?	☐ Yes	4. USDOT Proper Shipping Name:		■ N/A
2. Other information actuered (Sach as Wisbs).	163			
that all relevant information necessary for proper material c derived from a sample that is representative as defined in 40	nformation submitted in this a haracterization and to identif O CFR 261 - Appendix 1 or b	and all attached documents contain true and accurate descriptions of the yknown and suspected hazards has been provided. Any analytical data yusing an equivalent method. All changes occurring in the character of disclosed to Waste Management prior to providing the material to Was	a attached v f the mater	was ial
If I am an agent signing on behalf of the Generator, I h Generator that information contained in this Profile is	nave confirmed with the	Certification Signature —		
	·	Re Re met		
Name (Print):		Durke Do muto		
Title:		1 2 2 2		
Company:				

## APPENDIX E4: WASTE PROFILE INFORMATION, VACTOR/SOIL MATERIAL





Requested Facility: Woodland Meadows RDF	☐ Unsure Profile Number: 118183MI	
· ·	cate of Disposal 🔲 Renewal? Original Profile Number:	
A. GENERATOR INFORMATION (MATERIAL ORIGIN)	B. BILLING INFORMATION   ☑ SAME AS GENERAT	
1. Generator Name: City of Ann Arbor Field Operations	1. Billing Name: City of Ann Arbor Field Operations	
2. Site Address: 4251 Stone School Rd.	2. Billing Address:4251 Stone School Rd.	
(City, State, ZIP) Ann Arbor MI 48108	(City, State, ZIP) Ann Arbor MI 48108	
3. County: Washtenaw	3. Contact Name: Matt Waldsmith	
4. Contact Name: Matt Waldsmith		
5. Email: Mwaldsmith@A2gov.org	9 9	
6. Phone: <u>(734) 794-6350</u> 7. Fax: <u>(734) 994-0742</u>		
8. Generator EPA ID:		
9. State ID: <b>I</b> N/A		
C. MATERIAL INFORMATION	D. REGULATORY INFORMATION	
1. Common Name: Vactor Dirt Spoils	1. EPA Hazardous Waste? ☐ Yes* ☑	
Describe Process Generating Material:	Code:	
Vactoring dirt from stormwater, sanitary pipes. Debris removed from earth excavation using vactor equipment.	2. State Hazardous Waste? ☐ Yes ☐ Yes ☐	
	3. Is this material non-hazardous due to Treatment, Delisting, or an Exclusion?  ☐ Yes* ☑	
2. Material Composition and Contaminants: ☐ See Attached	4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑	
1. Dirt from ground excavation work 70 %	5. From an industry regulated under Benzene NESHAP? 🚨 Yes* 💆	
2. Stormwater sediment 20 %	6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑	
3. Sanitary pipe sediment. 10 %	7. CERCLA or State-mandated clean-up? ☐ Yes* ☑	
4.	8. NRC or State-regulated radioactive or NORM waste?	
Total comp. must be equal to or greater than 100% ≥100%	*If Yes, see Addendum (page 2) for additional questions and space	
3. State Waste Codes:   N/A	9. Contains PCBs? → If Yes, answer a, b and c.	
4. Color: Brown	a. Regulated by 40 CFR 761?	
5. Physical State at 70°F: ☑ Solid ☐ Liquid ☐ Other:	c. Were PCB imported into the US?	
6. Free Liquid Range Percentage: to to	10 Populated and for Untroated	
7. pH: to <b>1</b> N/A	Medical/Infectious Waste?	
8. Strong Odor:	11. Contains Asbestos?	
9. Flash Point: □ <140°F □ 140°−199°F □ ≥200° ☑ N/A	→ If Yes: □ Non-Friable □ Non-Friable – Regulated □ Frial	
E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION	F. SHIPPING AND DOT INFORMATION	
1. Analytical attached ☐ Yes	1. ☐ One-Time Event ☐ Repeat Event/Ongoing Business	
Please identify applicable samples and/or lab reports:	2. Estimated Quantity/Unit of Measure: <u>5500</u>	
	☑ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other:	
	3. Container Type and Size: 20 yard semi dump	
	4. USDOT Proper Shipping Name:	
2. Other information attached (such as MSDS)? ☐ Yes		
all relevant information necessary for proper material characterization and to identify kn	nd all attached documents contain true and accurate descriptions of this material, and tho nown and suspected hazards has been provided. Any analytical data attached was derive gan equivalent method. All changes occurring in the character of the material (i.e., chang	
If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.	Certification Signature	
Name (Print): Matt Waldsmith Date: 04/15/2016		
Title: Field Operations Supervisor	V V -	
Company: City of Ann Arbor		