

# REQUEST FOR PROPOSAL

RFP # 17-12

## 2018 ANN ARBOR LANDFILL MONITORING AND MAINTENANCE PROGRAM

City of Ann Arbor  
Project Management Services Unit



**Due Date: May 12, 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 1- GENERAL INFORMATION**

### **A. OBJECTIVE**

The City of Ann Arbor is seeking the services of a professional environmental consultant to perform the necessary task to satisfy the monitoring requirements of the Michigan Department of Environmental Quality (MDEQ) for groundwater and gas in the vicinity of the Ann Arbor Landfill. There are also several record keeping and reporting activities that are to be submitted to the MDEQ and the City of Ann Arbor. There are additional needs for environmental consulting services that occur episodically at the landfill and these are outlined in the RFP. This RFP seeks a two-year contract with an option to extend for one or two additional years at the city's discretion. The Project Management Services Unit will oversee the direction and quality of work of this consultant.

### **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, April 28, 2017 at 5:00 p.m.**, and should be addressed as follows:

Scope of Work/Proposal Content questions shall be e-mailed to Anne M. Warrow, P.E., Project Manager – [awarrow@a2gov.org](mailto:awarrow@a2gov.org)

RFP Process and Compliance questions shall be e-mailed to Colin Spencer, Buyer - [cspencer@a2gov.org](mailto:cspencer@a2gov.org)

Should any prospective consultant be in doubt as to the true meaning of any portion of this RFP, or should the consultant find any ambiguity, inconsistency, or omission therein, the consultant shall make a written request for an official interpretation or correction by the due date above.

All interpretations, corrections, or additions to this RFP will be made only as an official addendum that will be posted to [a2gov.org](http://a2gov.org) and [MITN.info](mailto:MITN.info) and it shall be the consultant'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**

A pre-proposal meeting will be held:

WHEN: Tuesday, April 25, 2017 at 2:00 p.m – 3:00 p.m.  
WHERE: City Hall Building, 2nd floor Council Chambers,  
301 East Huron Street, Ann Arbor, Michigan 48107

The meeting is not mandatory, however it is highly recommended that consultants attend the meeting. The purpose of this meeting is to discuss the project with prospective proposers and to answer any questions concerning RFP 17-12. Copies of landfill document and previous reports will be available to review at this meeting.

Any questions and answers furnished in the pre-proposal meeting will not be official until verified in writing through an addendum.

### **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 consultant. An official authorized to bind the consultant to its provisions must sign the proposal in ink. Each proposal must remain valid for at least ninety days from the due date of this RFP.

Proposals should be prepared simply and economically providing a straightforward, concise description of the consultant'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 consultants, 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 consultant to this project. If the City chooses to interview any respondents, the interviews will be tentatively held beginning **May 15<sup>th</sup> through May 24<sup>th</sup>**. Consultant 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 consultant'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, Friday, May 12, 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**
- **four (4) additional proposal copies**
- **one (1) digital copy of the proposal in PDF format, preferably on a flash drive**

**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 No. 17-12 – 2018 Ann Arbor Landfill Monitoring and Maintenance Program”** and list the consultant'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 consultant for any unforeseen circumstances, delivery, or postal delays. Postmarking on the due date will not substitute for receipt of the proposal. Consultants are responsible for submission of their proposal. Additional time

will not be granted to a single consultant. However, additional time may be granted to all consultants 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 Ordinance Declaration of Compliance, Attachment C - City of Ann Arbor Living Wage Declaration of Compliance, Attachment D - Vendor Conflict of Interest Disclosure 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 consultant'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 Professional 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 Professional 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 consultant'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, attached at all work locations where its employees provide services under a contract with the City.

## **J. WAGE REQUIREMENTS**

The Attachments 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 consultant 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 consultant complete a Conflict of Interest Disclosure form. A contract may not be awarded to the selected consultant 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 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 attached.

## **L. COST LIABILITY**

The City of Ann Arbor assumes no responsibility or liability for costs incurred by the consultant prior to the execution of a Professional Services Agreement. The liability of the City is limited to the terms and conditions outlined in the Agreement. By submitting a proposal, consultant 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 department 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 consultant must clearly state the reasons for the protest. If a consultant contacts a City Service Area/Unit and

indicates a desire to protest an award, the Service Area/Unit shall refer the consultant to the Purchasing Manager. The Purchasing Manager will provide the consultant with the appropriate instructions for filing the protest. The City Administrator or designee, whose decision shall be final, shall review the protest.

**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.

<b>Activity/Event</b>	<b>Anticipated Date</b>
Written Question Deadline	April 28, 2017, 5:00 p.m.
Addenda Published (if needed)	Week of May 1, 2017
Proposal Due Date	May 12, 2017, 2:00 p.m. (Local Time)
Tentative Interviews (if needed)	Beginning May 15 <sup>th</sup> through May 24 <sup>th</sup>
Selection/Negotiations	May 2017
City Council Authorizations	July 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 consultant 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 consultants.
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 consultants 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 consultant 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**

### **BACKGROUND**

The Ann Arbor Landfill (AALF), located south of Ellsworth Road, west of Platt Road and north of the railroad right-of-way, is separated into two phases (see attached *Figure 1, Groundwater Monitoring Well Location Map*). The older phase of the landfill (Phase I) originated as an old gravel pit, which later accepted municipal and industrial waste and is located on the eastern portion of the landfill parcel. Of the approximately 110 acres, which comprise Phase I, the western third of the landfill is clay lined. The remaining easterly two-thirds are unlined allowing groundwater to come in direct contact with the refuse. The City purchased this operation in 1959. In 1984, Phase I was closed and capped. The city then began landfilling efforts within the remaining 60 acres known as Phase II. Phase II is an engineered, lined landfill with leachate and gas collection systems. In 1992, Phase II was closed and capped. The Ann Arbor Landfill holds approximately 2.75 million tons of refuse.

In the early-1990s, the city completed an investigation that discovered elevated levels of certain chemicals, including vinyl chloride and 1,4-dioxane, in the groundwater near the Phase I landfill. In response, the city first installed several purge wells to pump up the affected groundwater and discharge it through the sanitary sewer to the Wastewater Treatment Plant. The purge wells effectively stopped the further migration of the contaminated water. In 1995-96 the city installed a 1.75-mile long "slurry wall" around 4/5ths of the closed landfill area. A slurry wall was constructed from ground level downwards until it reached impermeable clay. The slurry wall ranges from 20 to 70 feet deep and was constructed using hundreds of tons of specialized bentonite clay. The purge wells continue to remove water from the area outside the landfill. The slurry wall essentially diverts the groundwater around the landfill, instead of through the landfill. Reduction in the levels of contamination within the purge wells has been observed.

A Capture Zone Analysis demonstrates that the three purge wells effectively capture contamination leaving the landfill, which was summarized in the report titled, Capture Zone Analysis and Conceptual Site Model Update for the Ann Arbor Landfill, and dated March 10, 2009. Purge rates have been adjusted based on this analysis to focus capture efforts on vinyl chloride.

Landfill gas is actively being recovered at the AALF by a methane gas recovery facility, the collection system is owned by the city and the generator is owned and operated by Aria Energy. The gas recovery facility was installed in October 1996 and collects landfill gas that is used to fuel an electricity-producing engine. This generator is capable of producing 500 kilowatt/hour of electricity, which is then sold directly to DTE customers through power lines.

In addition, a methane control and collection system was installed in the spring of 2005, along a portion of the north side of the AALF. Operation of this facility began on July 19, 2005. The purpose of this system is to capture methane at the landfill property boundary and prevent off-site migration. There are a total of 10 perimeter extraction wells (PEW) that are designed to capture methane gas through a well screen at the property boundary. The gas is piped back to the system's blower skid, which contains a condensation tank, two 600 pound carbon tanks and a blower. The air from the wells is pushed through a condensation tank, where moisture in the air is condensed. The air then travels to the carbon tanks, where organic molecules adhere to the granulated active carbon before venting the cleaner air through a stack.

## **SCOPE OF SERVICES**

The Scope of Services for environmental monitoring and maintenance at the AALF will begin in July 2017, corresponding to start of the City's fiscal year and end on June 30, 2021, if the original two year contract is optioned for two more years.

### **TASK 1: GROUNDWATER MONITORING PROGRAM**

Groundwater monitoring consists of the collection of static groundwater elevations and groundwater samples from groundwater monitoring wells specific to individual contaminant plumes, i.e., 1,4 dioxane and vinyl chloride within the upper aquifer at the AALF. The frequency of monitoring varies from semi-annually to annually and may change based on future findings. Groundwater monitoring at the AALF shall be completed in accordance with the *Ann Arbor Landfill Revised Hydrogeological Monitoring Plan, dated December 18, 2015*, which can be found in Attachment G.

#### **Task 1.1: Collection of Static Groundwater Levels**

This task includes the work effort necessary to collect static water levels from 50 locations, listed in *Table 1 - Groundwater Monitoring Program*. The static water level measurement shall be obtained from each location with an electronic water level meter accurate to  $\pm 0.01$ -foot. The water level meter shall be thoroughly disinfected following each use to minimize the potential for cross contamination between sampling points. Static water levels are to be collected on a semi-annually basis in accordance with Table 1. At each monitor well, the depth-to-water shall be recorded, referenced to the top of the well casing and used with existing information to calculate the volume of standing water in each well.

Water level data shall be used to generate a groundwater elevation contour map. This contour map, as well as static water levels collected across the slurry wall, shall be used to demonstrate that the hydraulic barrier system (slurry wall and purge wells) is maintaining an inward hydraulic gradient. If new wells are installed as part of this contract, the contractor shall work with city staff to have the new well surveyed and added to the GIS database.

### Task 1.2: Sample Groundwater Monitoring Wells

Sampling shall occur in the months of April and October. Personnel conducting the sampling shall have completed the required Occupational Safety and Health Act (OSHA) safety 1910.120 training with annual refreshers. Groundwater samples that are representative of groundwater quality shall be collected at the frequencies noted from the wells identified on *Table 1 - Groundwater Monitoring Program*. A map of the sample locations is included as *Figure 1 - Groundwater Monitoring Well Location Map*.

All samples obtained shall be collected in a manner to ensure results are representative of actual groundwater quality. Prior to collection of groundwater samples, water will be evacuated from each well using low flow purging techniques until a stabilized water level is achieved. The majority of the wells will be purged using well wizard pumps dedicated to the wells however a few require a submersible pump. Well purging shall be accomplished with well wizard pumps dedicated to the wells, portable purge pumps or bailers. Following removal of at least three well volumes, field measurements of pH, specific conductance, oxidation reduction potential (ORP) and temperature shall be continuously recorded from water samples extracted from the well to determine if stable conditions have been achieved (i.e., two consecutive measurements of +/- 5-percent). After stable conditions have been achieved, samples representative of the groundwater shall then be collected. For wells that bail dry during purging, field measurements of pH, specific conductance, ORP and temperature shall be recorded after the well recharges.

### Task 1.3: Perform Laboratory Analysis

The groundwater samples shall be placed directly into clean laboratory provided containers and stored in ice-packed coolers. Upon completion of all sampling activities, samples for 1,4-dioxane analysis shall be submitted to a laboratory, approved by the Engineer and capable of analysis using Method 522, under chain-of-custody procedures for analysis. All other groundwater samples may be submitted to an approved and certified laboratory, under chain-of-custody procedures for analysis. Analytical laboratories shall serve as subcontractors to Consultant during the duration of this project. Fees for the laboratory analysis shall be included in the fee schedule.

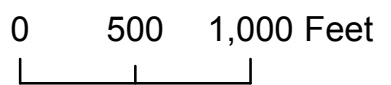
Analyses to be completed on groundwater samples collected from the monitoring wells shall include various inorganic and organic constituents as identified on *Table 1 - Groundwater Monitoring Program, List of Sample Locations and Analytical Parameters*. In addition to analysis of groundwater samples, various quality assurance/quality control (QA/QC) samples, including field blanks and trip blanks, shall be collected and submitted to the laboratories for analysis.

P:\Ann Arbor\Landfill\GIS\Figures\HMP\Figure 2\_Proposed Static Water Level Locations\_REV.mxd



Source: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

- ◆ Upper Aquifer Monitoring Well
- Slurry Wall\*
- PW-1R-12 Purge Well Location
- W-84-92 Monitoring Well Location
- OW-2 Observation Well Location
- P-1D Piezometer Well Location



\*Slurry Wall Location Is Approximate  
Scale is 1:10,000



ANN ARBOR LANDFILL  
ANN ARBOR, MICHIGAN  
Groundwater Monitoring Well Location Map

FIGURE  
1

CHECKED: PJM

DATE: 12/15/2015

**Table 1 - Groundwater Monitoring Program**

Sample Location	SWL	Field Parameters	VOCs	1,4-Dioxane
W-14-84	SA			
W-46-89	SA			
W-47-89	SA	SA	SA	SA
W-48-89	SA			
W-50-89	SA			
W-51-89	SA			
W-64-90	SA			
W-68-90	SA			
W-70-92	SA			
W-72-90	SA			
W-84-92	SA	SA	SA	
W-85-92	SA	SA	SA	
W-87-92	SA	SA	SA	SA
W-88-92	SA	SA	SA	
W-89-92	SA	SA	SA	
W-90-92	SA	SA	SA	
W-92-92	SA	SA	SA	
W-94-92	SA	SA	SA	
W-96-92	SA	SA	SA	
W-99-93	SA	SA	SA	
W-100-93	SA	SA	SA	
W-101-93	SA			
W-102-93	A*	A*	A*	
PW-1R-12	SA	SA	SA	SA
PW-2R-01	SA	SA	SA	SA
PW-3R-12	SA	SA	SA	SA
OW-31-08	SA			
OW-32-08	SA			
OW-33-08	SA			
P-0U	SA			
P-0D	SA			
P-1U	SA			
P-1D	SA			
P-2U	SA			
P-2D	SA			
P-3U	SA			
P-3D	SA			
P-4U	SA			
P-4D	SA			
P-5U	SA			
P-5D	SA			
P-6U	SA			
P-6D	SA			
P-7UR-05	SA			
P-7D	SA			
P-8U	SA			
P-8D	SA			
P-9U	SA			
P-9D	SA			
P-10U	SA			
P-10D	SA			
<b>Totals :</b>	<b>SWL</b>	<b>Field Parameters</b>	<b>VOCs</b>	<b>1,4- Dioxane</b>
<b>Semi Annually (April &amp; October)</b>	<b>50</b>	<b>15</b>	<b>15</b>	<b>5</b>
<b>Every 5 years</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

SA = Semi-annual event: April and October

A\* = Annual event: Monitoring well W-102-93 will be sampled as part of the SA in April every five years for VOCs. The first sample was collected in November 2015 and the next sampling shall be collected in April 2020.

#### Task 1.4: Review and Analysis of Results

The consultant shall evaluate analytical data, as well as QA/QC data, supplied by the analytical laboratories. Evaluations shall include an estimation of the direction of groundwater flow, determination of general groundwater quality trends and an evaluation pertaining to the hydraulic performance of the purge wells and slurry wall.

#### Task 1.5: Prepare and Submit Monitoring Report

A copy of each semi-annual report shall be submitted to the Michigan Department of Environmental Quality (MDEQ) within 60-days of sample collection. Two hard copies and one electronic copy shall also be submitted to the City. Data presented in the report shall include groundwater contour elevation map, isoconcentration maps, analytical data summary table(s) and an evaluation regarding the hydraulic gradient across the slurry wall. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies.

#### Task 1.6: Regulatory and/or Public Meetings

This task includes preparation for and attendance at either regulatory or public meetings. It is anticipated that a total of two meetings per year for the contract duration shall be necessary. It is anticipated that consultant will prepare various meeting agendas, overview documents, graphical representations of analytical data and prepare meeting minutes. Consultant's principal-in-charge and/or a project manager shall attend meetings.

#### Task 1.7: Update of Capture Zone Analysis

This task recognizes that a Capture Zone analysis was prepared and submitted to MDEQ in 2010. As a result, our monitoring and groundwater extraction program were modified. The Capture Zone Analysis shall be updated during the second year of this contract, following the delineation of 1,4-dioxane.

### **TASK 2: LANDFILL GAS MONITORING PROGRAM**

The City of Ann Arbor conducts quarterly gas monitoring surveys to fulfill the requirements of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended and the rules promulgated under Part 115 R 299.4433. Currently, quarterly gas monitoring at the AALF shall be completed in accordance with a *Gas Monitoring Plan Revision, dated March 28, 2008 and Addendum to Gas Monitoring Plan Revision, dated May 1, 2008*, which can be found in Attachment H. The gas monitoring locations at the AALF are depicted in *Figure 2 - Gas Monitoring Location Map*. In addition, the gas sampling locations are listed with the sample frequency in *Table 2 - Gas Sampling Location and Frequency*. The gas monitoring locations within buildings adjacent to the AALF are shown on *Figure 3 - Gas Monitoring Locations*

*Inside Buildings.* In addition, the Consultant shall also complete monthly landfill gas monitoring surveys in the vicinity of the Southeast Area Park, including the concession building and nearby utility manholes, as listed below in Table 3.

In addition, an annual methane gas monitoring survey shall be performed at three homes in the University Townhouses and two homes in the Forest Hills Cooperative, which are located north of the AALF.

**Task 2.1: Complete Field Monitoring**

Landfill gas monitoring occurs concurrently with the groundwater monitoring schedule in the months of January, April, July and October. Personnel conducting the monitoring shall have completed the required OSHA safety training. Landfill gas measurements shall be collected from the locations shown in *Figure 2 - Gas Monitoring Location Map* and *Figure 3 – Gas Monitoring Locations Inside Buildings* and described in Tables 2 and 3.

If necessary, and when requested by the City, consultant shall also perform methane monitoring at select locations that are not part of the normal routine quarterly monitoring locations.

**Table 2 - Gas Sampling Location and Frequency**

<b>Monitoring Location</b>	<b>Number of Monitoring Points</b>	<b>Location as Identified on Map</b>	<b>Frequency</b>
Sanitary Sewer	2	S1 and S3	January and July
	6	S1 through S6	April and October
Storm Sewer	2	R1 and R2	January and July
	3	R1, R2 and R6	October
	6	R1 through R6	April
Indoor Locations*	29	MP-1 through MP-29	January and July
	28	MP-1 through MP-29	April and October
Gas Probes	14	GP-1S/1D through GP-5S/5D; GP-7S-98; GP-7D-98; GP-8SR-05; and GP-8D-98	January and July
	22	GP-1S/1D though GP-5S/5D; GP-6SR-99; GP-7S-98; GP-7D-98; GP-8SR-05; GP-8D-98; GP-10-99 through GP-13-99 and GP-14-02 through GP-16-02	April
	19	GP-1S/1D through GP-5S/5D; GP-6SR-99; GP-7S-98; GP-7D-98; GP-8SR-05; GP-8D-98; GP-13-99; and GP-14-02 through GP-16-02	April and October
Temporary Gas Probes	1	TGP-2	January and July
	2	TGP-1 and TGP-2	April and October
Piezometers	1	P-3U	January and July
	1	P-3U	April and October
Water Manhole	1	W	April and October
Meter Pit	1	MP	April and October

\*Indoor Locations include: Materials Recovery Facility (MRF), Former Maintenance Building, Ann Arbor Drop-off Station and the Waste Transfer Station





P:\Projects\Ann Arbor\Landfill\GIS\Figures\Gas\Figure 1\_Semi-Annual Gas Monitoring Location Map\_Oct 2015.mxd

SOURCE: 2008 United States Geological Survey Aerial

- Semi-Annual Gas Monitoring Location (October)
- Slurry Wall\*

- R1 Storm Sewer Location
- S1 Sanitary Sewer Location
- GP-1S Gas Probe Location
- TGP-1 Temporary Gas Probe Location
- P-3U Piezometer Location
- W Water Manhole
- MP Meter Pit



0 225 450 900 Feet



\*Slurry Wall Location Is Approximate.



ANN ARBOR LANDFILL  
ANN ARBOR, MICHIGAN

## Gas Sampling Location and Frequency

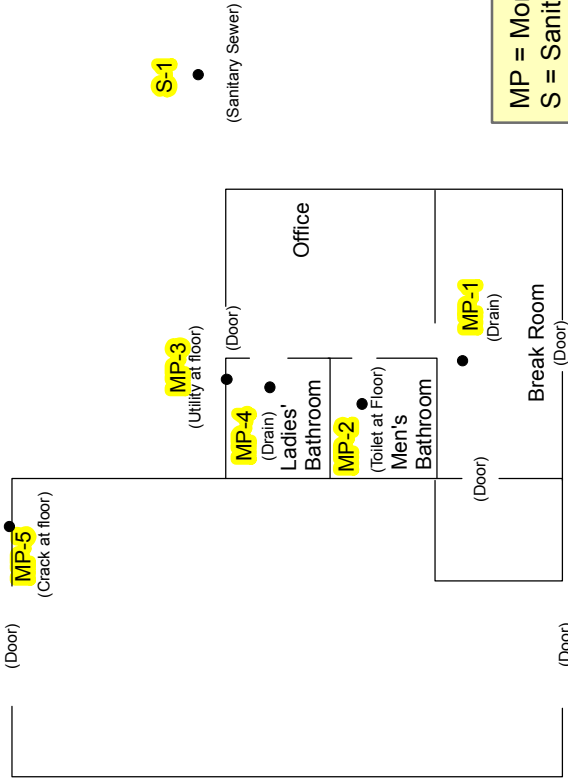
FIGURE

2

CHECKED: PJM

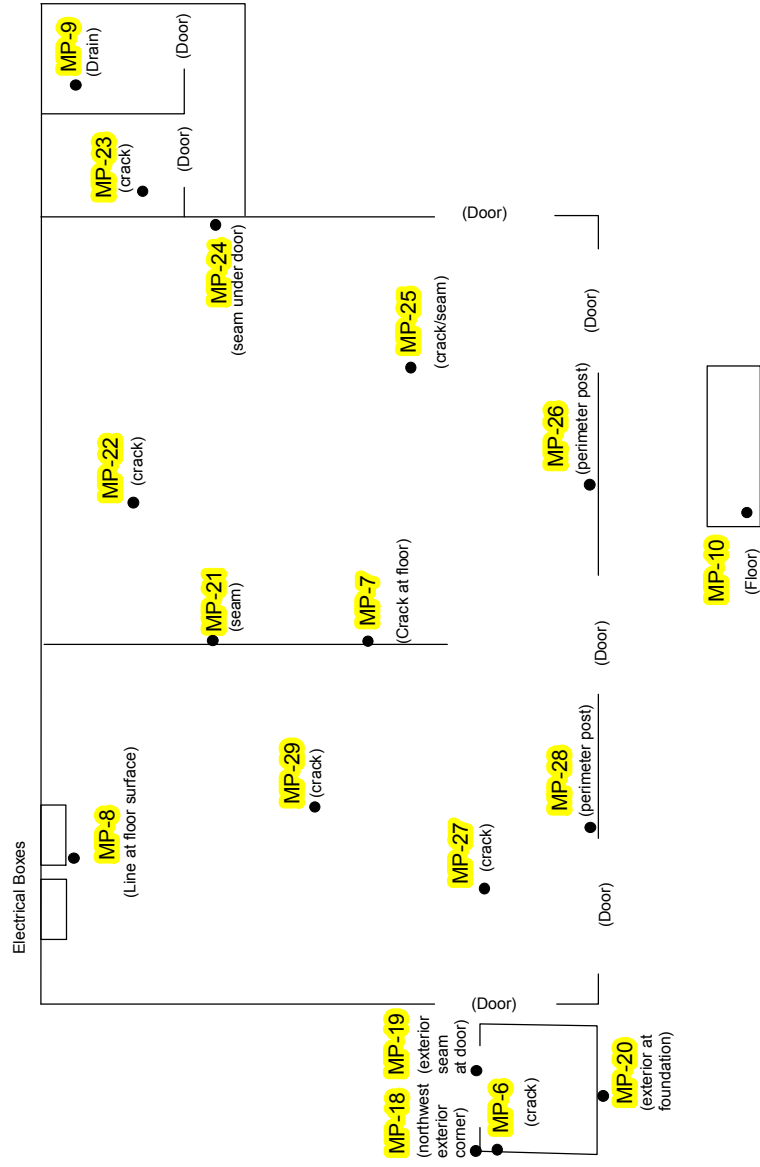
DATE: 12/08/2015

### Former Maintenance Building

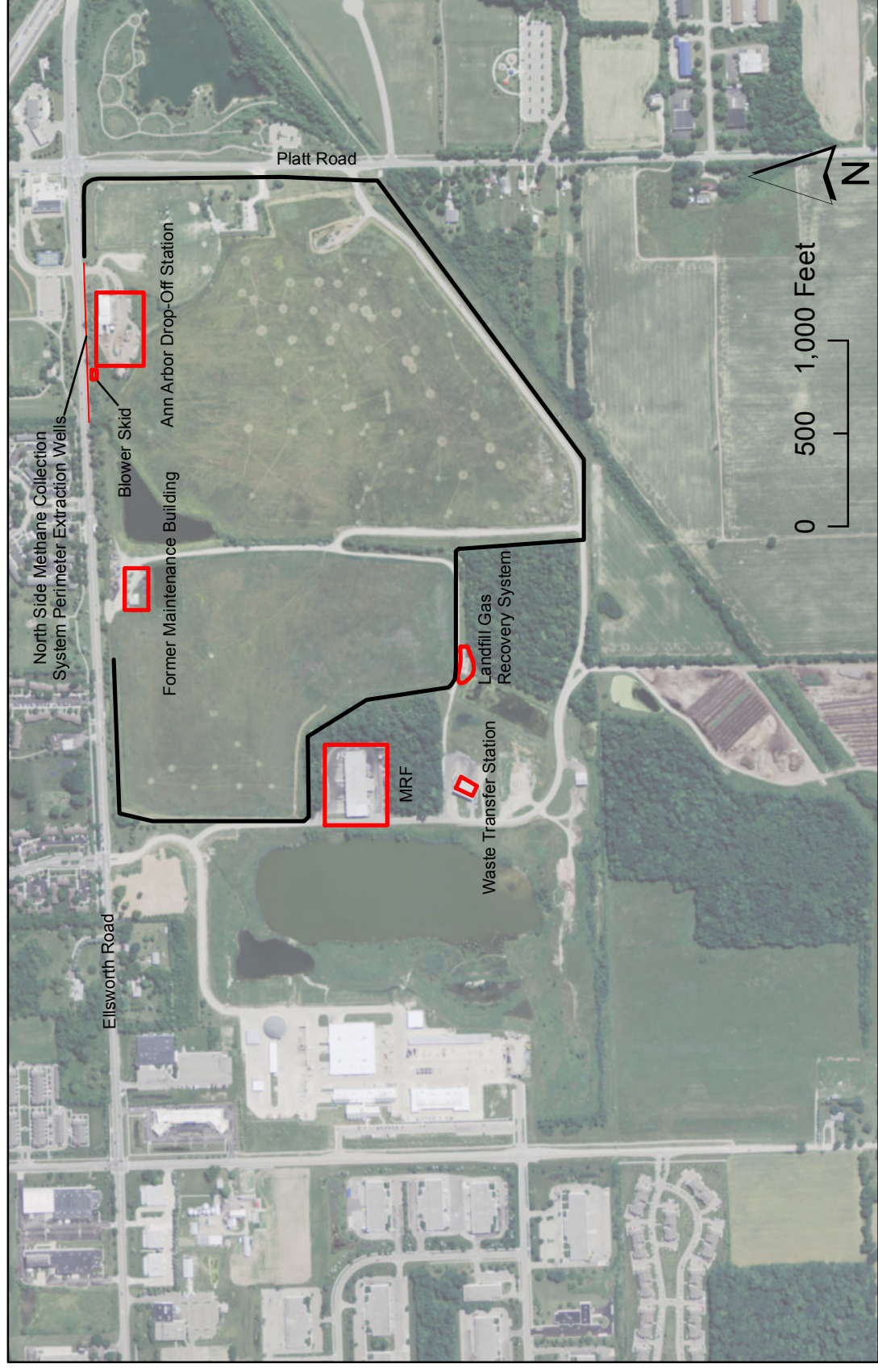


MP = Monitoring Point  
S = Sanitary Sewer Location

### Ann Arbor Drop-Off Station

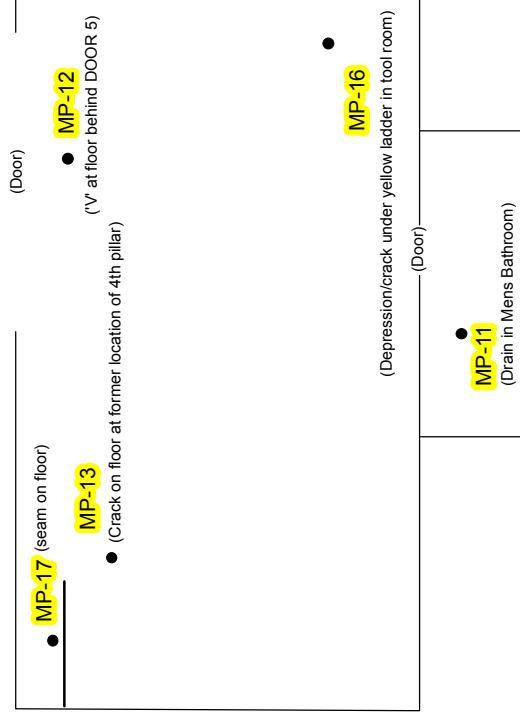


Note:  
MP-18 through MP-29 were added to the Monitoring Plan in April 2014.

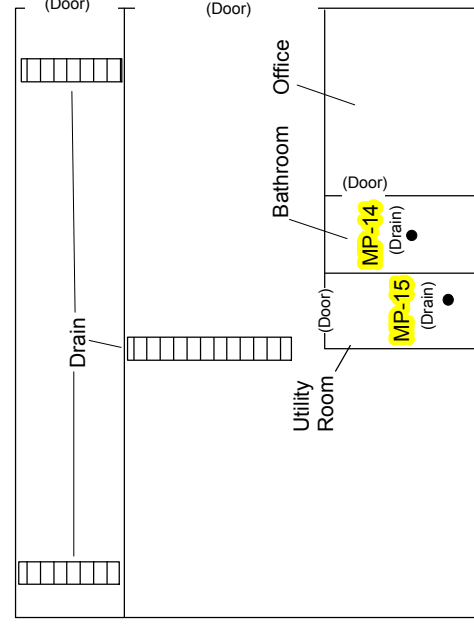


Base Map Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

### Materials Recovery Facility (MRF) Building



### Waste Transfer Station



ANN ARBOR LANDFILL  
ANN ARBOR, MICHIGAN

## Gas Monitoring Locations Inside Buildings

CHECKED: PJM

DATE: 09/21/2015

**Table 3 - Concession Building and Southeast Area Park Storm and Sanitary Manholes**

<b>Gas Monitoring Locations</b>
Women's Bathroom Drain
Men's Bathroom Drain
Utility Room Drain
Utility Room Sump
Kitchen Drain - East
Kitchen Drain - West
Sanitary Sewer - Outside
Storm Sewer - Outside West
Storm Sewer - Outside East, South
Storm Sewer - Outside East, North
Storm Sewer - Outside North
Storm Sewer - Outside South

Ambient methane concentrations shall be measured with a combustible gas indicator and infrared sensor. Instruments shall display the lower explosive limit (LEL) and percent by volume methane as calibrated to methane in ambient air. The meter shall be calibrated prior to each use with the accompanying calibration kit supplied by the manufacturer.

Gas monitoring data collected in the field shall be recorded on field data sheets. Information collected at each gas monitoring location shall include date, time, personnel, weather conditions, LEL, percent methane, carbon dioxide and oxygen readings. In addition, calibration information shall be recorded. In addition, to ensure the system is working, pressure readings with magnehelic gauges are taken during each methane sampling survey.

Federal and state regulations prohibit methane gas concentrations in landfill facility structures in excess of 25-percent of the LEL. The concentration of methane gas is to be measured and recorded in the site's operating record on a quarterly basis.

**Task 2.2: Prepare and Submit Monitoring Report**

Quarterly monitoring reports shall review and analyze the data collected and shall be submitted to the MDEQ within 60-days of gas monitoring data collection. Two hard copies and one electronic copy shall also be submitted to the City. Data presented in the report shall include field data sheets and a summary of current and previous gas monitoring data. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies.

### Task 2.3: Regulatory and/or Public Meetings

This task includes preparation for and attendance at either regulatory or public meetings. For budgetary purposes, it is anticipated that a total of four meetings per year for the contract duration shall be necessary. It is anticipated that the consultant shall prepare meeting agendas, overview documents, graphical representations of analytical data and meeting minutes. Meetings shall be attended by consultant's principal-in-charge and/or a project manager.

### Task 2.4: Southeast Park Landfill Gas Monitoring Survey

This task includes the completion of landfill gas monitoring survey quarterly within the vicinity of Southeast Area Park. The Consultant shall complete this survey within the concession stand and nearby utility manholes, as described in Table 3 - Concession Building and Southeast Area Park Utilities Annual Gas Monitoring Locations.

A monitoring report, complete with data tables and details regarding monitoring procedures, shall be prepared and submitted to the City.

### Task 2.5: Methane Gas Collection System Monitoring

The Consultant shall complete a monthly inspection of the blower skid, located at the north side methane extraction system, and perform routine operation and maintenance. In addition, the ten perimeter extraction wells shall be inspected and flow adjustments shall be performed quarterly. The Consultant shall provide technical assistance to the City of Ann Arbor regarding issues related to the north side methane gas collection system.

### Task 2.6: Michigan Air Emission Reporting System

The AALF has not been required to obtain an air permit, as landfills are exempt from permitting. However, MDEQ may require reporting an emission inventory using the Michigan Air Reporting System (MAERS). Consultant shall, if necessary, prepare annual MAERS reports.

### Task 2.7: Annual Methane Gas Monitoring Survey

An annual methane gas monitoring survey shall be performed at three homes in the University Townhouses and two homes in the Forest Hills Cooperative, which are located north of the AALF. It is the Consultants responsibility to contact the property owners and/or the property management to schedule a time to access these homes to conduct the survey. Measurements are obtained from the basements of the homes along electrical and/or heating conduits and floor drains.

### Task 2.8: Federal Greenhouse Gas Reporting

The AALF is currently required to report greenhouse gas emissions (GHG) annually to USEPA. The consultant shall obtain the information necessary for this reporting, review this information with city staff prior to submittal, and obtain the necessary access to the EPA electronic reporting site.

### **TASK 3: WASTEWATER MONITORING PROGRAM**

Wastewater monitoring sampling procedures and analytical requirements are provided within the *Revised Industrial User Permit No.: 07012014LF-A*, dated July 1, 2014, and the revision dated February 4, 2016 that removed molybdenum analysis, both of which can be found in Attachment I. Sampling consists of the collection of quarterly wastewater samples from five wastewater discharge locations identified as:

Outfall 001: Groundwater Purge Well PW-1R-01  
Outfall 003: Leachate Discharge from Manhole MH-A  
Outfall 004: Leachate Discharge from Manhole MH-B  
Outfall 005: Groundwater Purge Well PW-2R-01  
Outfall 006: Groundwater Purge Well PW-3R-01

These outfalls, which include three purge wells and two leachate manholes are depicted in *Figure 4 - Wastewater Sampling Location Map*. In addition, monthly manual discharge readings are obtained, data evaluated, discharge volume adjusted as necessary and 1,4-dioxane mass balance calculations performed.

#### Task 3.1: Collection of Monthly Discharge Readings

To assure that the purge wells are functioning properly, manual monthly discharge readings shall be obtained. These readings shall be compared to automated readings to assure that the wells are functioning and that the meters and purge wells are operating properly.

#### Task 3.2: Collection of Quarterly Wastewater Samples

Quarterly water samples shall be collected from the five outfalls. Field measurements of pH, specific conductance and temperature shall be recorded from water samples extracted from each sampling location.





#### Task 3.3: Laboratory Analysis

Samples for 1,4-dioxane analysis shall be submitted to a laboratory, approved by the Engineer and capable of Method 522, under chain-of-custody procedures for analysis.



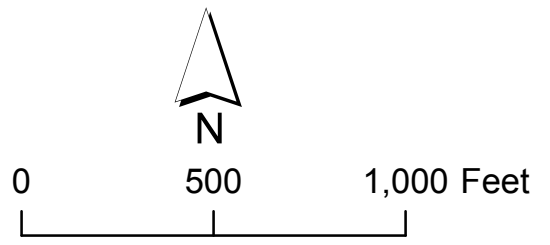
P:\Projects\Ann Arbor\Landfill\GIS\Figures\Water\WasteWater\WasteWater\_rev.mxd

SOURCE: 2008 United States Geological Survey Aerial

-  Sanitary Sewer
-  Outfall Location
-  Meter Pit (MP) for PW-2R-01
-  Slurry Wall\*

- MH-A Manhole Location
- PW-1R-12 Purge Well Location

- Notes:
1. MH-A, MH-B and PW-1R-12 discharge to S1.
  2. PW-2R-01 discharges to S2.
  3. PW-3R-12 discharges to S6.
  4. PW-1R-12 and PW-3R-12 meters are located adjacent to their wellhead.
  5. \*Slurry wall location is approximate.



ANN ARBOR LANDFILL  
ANN ARBOR, MICHIGAN  
WASTEWATER SAMPLING LOCATION MAP

FIGURE  
4

CHECKED: PJM

DATE: 04/20/2016

Analyses to be completed on wastewater samples collected from the outfalls shall include various inorganic and organic constituents as identified in the *Revised Industrial User Permit No.: 07012014LF-A, dated July 1, 2014*, which can be found in Attachment I. In addition, various QA/QC samples, including field blanks, trip blanks and duplicate samples shall be collected and submitted to analytical laboratories for analysis.

#### Task 3.4: Submittal of Quarterly Reports

Two hard copies and one electronic copy of the quarterly and annual monitoring reports shall be submitted to the City within 45-days of the sampling event. Data presented in the reports shall include field data sheets and a summary of current and previous monitoring data. These reports shall be reviewed in person with city staff prior to submittal to regulatory agencies. In addition, an annual report is due by July 31 of each year.

#### Task 3.5: Renewal of Industrial Use Permit

The Consultant shall prepare and coordinate the renewal of the Industrial Use Permit in 2019. In addition, an annual site inspection shall be coordinated with the City of Ann Arbor's Wastewater Treatment Plant staff and a laboratory of their choosing to collect representative samples for analysis. A report from this on-site inspection shall be directed to WWTP.

#### Task 3.6: Groundwater Remediation

The City of Ann Arbor has recently undertaken a pilot bioaugmentation project in SE Area Park to evaluate this method's potential effectiveness in destroying vinyl chloride in situ. The consultant must demonstrate knowledge and experience in situ remediation techniques including bioaugmentation that could support future remediation efforts for the landfill site.

### **TASK 4: ENVIRONMENTAL SYSTEM MAINTENANCE ACTIVITIES**

In addition to the periodic sampling, the purge wells, observation wells, test wells, monitoring wells and methane detection system wells associated with the AALF require periodic maintenance. During the course of on-site activities, the Consultant shall monitor all landfill systems, evaluate periodic system maintenance needs and communicate these needs in detail to City staff. In addition, the landfill gas monitoring and methane collection system requires periodic evaluation and maintenance, and waste removal. The Consultant shall identify all required maintenance, prepare detailed cost estimates and coordinate all necessary repairs. An annual maintenance report shall be prepared and submitted electronically to the City.

## **TASK 5: PROJECT ADMINISTRATION AND OVERSIGHT**

Consultant shall include the necessary fees to oversee and coordinate the entirety of the environmental monitoring program for the AALF. These tasks may include but are not limited to monthly progress meetings with City staff; periodic communication with the Project Manager(s) for the MDEQ; troubleshooting landfill issues; and preparation of future project work plans.

### **Task 5.1: Landfill Inspection**

City of Ann Arbor Field Service staff performs weekly inspections of the landfill, which are stored in the City Works. The consultant shall review these reports quarterly and incorporate them into the quarterly landfill monitoring reports, as needed. Periodically the Michigan Department of Environmental Quality (MDEQ) will conduct an inspection of the AALF. The Consultant shall coordinate this inspection and prepare a work plan to address any deficiencies. This may include follow-up visits with MDEQ staff. The Consultant shall also complete a landfill cap inspection annually, independent of the MDEQ, to identify any deficiencies.

### **Task 5.2: Health and Safety Plan**

The Consultant shall also be required to prepare and update a Health and Safety Plan. This Health and Safety Plan shall address all systems in operation at the AALF, list all emergency contact personnel and shall be updated annually.

### **Task 5.3: Project Manager**

The Consultant must propose a Project Manager who is available to respond in a timely matter, in the event of an emergency at the landfill. Due to the unpredictable nature of these events, the Consultant shall be reimbursed based on time and materials for required staff as bid in the contract.

### **Task 5.4: Deliverables**

The Consultant shall provide a flash drive with the electronic versions of program documents at the end of each fiscal year. These documents include but are not limited to: the annual, quarterly and monthly reports; meeting agendas; meeting minutes; outside correspondences; and project work plans. The consultant shall also establish a secure website to share electronic work products with city staff. In addition, the consultant shall assist the City in maintaining an accurate and up-to-date GIS layer of all landfill assets.



**TASK 6: ENVIRONMENTAL CONSULTING SERVICES**

The Consultant may be asked to assist the city under this contract with environmental tasks that are of an emergency or less predictable nature. These shall be negotiated on a case-by-case basis. Based on past experience, these may include: completing the steps necessary to obtain an approved Remedial Action Plan for the site; performing additional on-site or off-site monitoring of contamination or methane based on routine sampling results; developing additional off-site monitoring sites and managing well installations and sampling; developing additional on-site leachate collection systems; performing Phase I, Phase II, and baseline environmental assessments at existing or potential city owned properties; providing additional well or water sampling at city infrastructure locations including but not limited to the drinking water, stormwater, or wastewater systems; and providing consultation and document review of ACT 381 plans or other environmental remediation activities. For this proposal, the Consultant shall provide examples of the broader environmental capabilities of the firm.

## **SECTION III - MINIMUM INFORMATION REQUIRED**

### **PROPOSAL FORMAT**

Consultants should organize Proposals into the following Sections:

- A. Professional Qualifications
- B. Past Involvement with Similar Projects
- C. Proposed Work Plan
- D. Fee Proposal (include in a separate sealed envelope clearly marked "Fee Proposal")
- E. Authorized Negotiator
- F. 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.

#### A. Professional Qualifications – 15 points

1. State the full name and address of the organization and, if applicable, the branch office or other subordinate 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 the state in which it is incorporated. Indicate whether it is licensed to operate in the State of Michigan.
2. Include the name of executive and professional personnel by skill and qualification that will be employed in the work. Show where these personnel will be physically located during the time they are engaged in the work. Indicate which of these individuals you consider key to the successful completion of the project. Identify only individuals who will do the work on this project by name and title. Resumes and qualifications are required for all proposed project personnel, including all subcontractors. Qualifications and capabilities of any subcontractors must also be included. Also, identify a single point of contact at the firm for this project, and give a phone number and e-mail address for this person.

Résumés including qualifications and related project experience are required for **all** proposed project personnel who will be assigned to the project. Qualifications and capabilities of any subconsultants, shall also be included.

3. State history of firm, in terms of length of existence, types of services provided, etc. Identify the technical details that make the firm qualified for this work.

This section of the proposal will be scored based on the qualifications of the firm, its subcontractors and personnel as described in the proposal.

#### B. Past involvement with Similar Projects – 30 points

The written proposal must include a list of specific experience in the project area and indicate proven ability in implementing similar projects for the firm and the individuals to be involved in the project.

The proposal should also indicate the ability to have projects completed within the budgeted amounts. A summary of related projects with the original project deadline and cost estimate versus the actual project completion date and final cost is appropriate with this section.

A complete list of client references must be provided for similar projects recently completed. It shall include the firm/agency name, address, telephone number, project title, and contact person.

#### C. Proposed Work Plan – 40 points

A detailed work plan shall list all tasks determined to be necessary to accomplish the work of this project. The work plan shall define resources needed for each task (title and individual person hours) and the firm's staff person completing the project task. In addition, the work plan shall include a timeline schedule depicting the sequence and duration of tasks showing how the work will be organized and executed.

1. The work plan shall be sufficiently detailed and clear to identify the progress milestones (i.e., when project elements, measures, and deliverables are to be completed) and the extent and timing of the City personnel involvement. Additional project elements suggested by the Proposer are to be included in the work plan and identified as Proposer suggested elements.
2. The work plan must identify information the Proposer will need from City staff in order to complete the project. Include estimated time and resource commitment from City staff.
3. The work plan shall include any other information that the Proposer believes to be pertinent but not specifically asked for elsewhere.
4. Also include in the work plan proposed steps, if any, to expedite completion of the project. This will be given due consideration during evaluation of proposals.

Identify all of those, if any, who shall be subcontracted to assist you with this project, and the extent of work for which they shall be responsible. Include similar reference data for subcontractors and employees as requested above for the main proposer.

Include any other information that you believe to be pertinent but not specifically asked for elsewhere.

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

#### D. Fee Proposal - 15 points

Fee quotations shall be submitted in a separate sealed envelope as part of the proposal. Fee quotations are to include the names, title, hourly rates, overhead factors, and any other details, including hours of effort for each team member by task, by which the overall and project element costs have been derived. The fee quotation is to relate in detail to each item of the proposed work plan.

Consultants shall be capable of justifying the details of the fee proposal relative to personnel costs, overhead, how the overhead rate is derived, material and time.

The fee proposed must include the total estimated cost for the project when it is 100% complete. This total may be adjusted after negotiations with the City and prior to signing a formal contract, if justified.

#### E. 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

#### F. Attachments

Legal Status of Consultant, Conflict of Interest Form, Living Wage Compliance Form, and the Non-Discrimination Form must be completed and returned with the proposal. These elements should be included as attachments to the proposal submission.

### **PROPOSAL EVALUATION**

1. The selection committee will evaluate each proposal by the above-described criteria and point system (A through C) 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 consultants.

2. The selection committee shall open the sealed fee schedules for the short-list of firms. The fee schedules will be evaluated by the above-described criteria and point system for Item D. The selection committee shall then select a firm or firms that will be invited to interview.
3. 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.
4. 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 consultant, 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.
5. The firms interviewed will then be re-evaluated by the above criteria (A through D), 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 consultants 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.

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

## **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 and resumes.

Each person signing the proposal certifies that he or she is the person in the consultant'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.

## **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](http://www.mitn.info) and/or the City of Ann Arbor web site [www.A2gov.org](http://www.A2gov.org) for all parties to download.

Each consultant must acknowledge in its proposal all addenda it has received. The failure of a consultant to receive or acknowledge receipt of any addenda shall not relieve the consultant 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 – Ann Arbor Landfill Revised hydrogeological Monitoring Plan

Attachment H – Gas Monitoring Plan Revision, dated March 28, 2008 and Addendum to Gas Monitoring Plan Revision, dated May 1, 2008

Attachment I - Revised Industrial User Permit No. 07012014LF-A

**ATTACHMENT A  
LEGAL STATUS OF RESPONDENT**

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

The Respondent is:

- A corporation organized and doing business under the laws of the state of \_\_\_\_\_, for whom \_\_\_\_\_ bearing the office title of \_\_\_\_\_, whose signature is affixed to this proposal, is authorized to execute contracts on behalf of 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.
- 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.)
- An individual, whose signature with address, is affixed to this RFP.

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) Name \_\_\_\_\_ Title \_\_\_\_\_

Firm: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_





**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 twelve-month 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

\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name and Title

\_\_\_\_\_  
Address, City, State, Zip

\_\_\_\_\_  
Phone/Email address

\_\_\_\_\_  
Questions about this form? Contact Procurement Office City of Ann Arbor Phone: 734/794-6500  
Revised 2/17/16 Rev 0

LW-2



**ATTACHMENT D**

<b>VENDOR CONFLICT OF INTEREST DISCLOSURE FORM</b>
--

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.

1. 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:

<b>Conflict of Interest Disclosure*</b>	
Name of City of Ann Arbor employees, elected officials or immediate family members with whom there may be a potential conflict of interest.	<input type="checkbox"/> Relationship to employee <hr style="border: 0; border-top: 1px solid black;"/> <input type="checkbox"/> Interest in vendor's company <input type="checkbox"/> Other (please describe in box below)

\*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.

<b>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:</b>		
<b>Vendor Name</b>	<b>Vendor Phone Number</b>	
<b>Signature of Vendor Authorized Representative</b>	<b>Date</b>	<b>Printed Name of Vendor Authorized Representative</b>

**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](http://www.a2gov.org/departments/city-clerk)

Intent: 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.

Discriminatory Employment Practices: 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.

Discriminatory Effects: 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](mailto: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.

Private Actions For Damages or Injunctive Relief: 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](mailto:cspencer@a2gov.org)**

**ATTACHMENT G – ANN ARBOR LANDFILL REVISED HYDROGEOLOGICAL  
MONITORING PLAN**

# **Ann Arbor Landfill Revised Hydrogeological Monitoring Plan**

**City of Ann Arbor Landfill  
Ann Arbor, Michigan**



**December 18, 2015**



# Ann Arbor Landfill Revised Hydrogeological Monitoring Plan

City of Ann Arbor Landfill  
Ann Arbor, Michigan

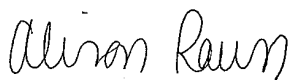
Prepared for:

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Environmental Coordinator  
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P.O. Box 8647  
Ann Arbor, Michigan 48107-8647

Prepared by:

Tetra Tech  
710 Avis Drive, Suite 100  
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**December 18, 2015**



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Alison D. Rauss  
Project Scientist



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Patti J. McCall  
Senior Geologist



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Appendix A Revised Hydrogeologic Monitoring Plan City of Ann Arbor Landfill Ann Arbor,  
Michigan, March 13, 2000 and correspondence with revisions.

## **1 INTRODUCTION AND CURRENT SAMPLING PLAN**

The City of Ann Arbor Landfill (AALF) is a closed Type II landfill located at the southwest corner of Ellsworth and Platt Roads. Since 2000, groundwater samples for the AALF have been collected and analyzed in accordance with the AALF *Revised Hydrogeologic Monitoring Plan* (HMP) dated March 13, 2000 (2000 HMP), and revised in August 2000 (**Appendix A**). A summary of the sample locations and analytical parameters analyzed is provided as **Table 1**. After the fourth quarter 2012 sampling event, chloride was removed from the sampling plan based on the Michigan Department of Environmental Quality (MDEQ) approved *Capture Zone Analysis and Conceptual Site Model Update for the Ann Arbor Landfill (CZA)* Approval Letter, dated November 3, 2011.

Detection monitoring has not been required for the interior of the AALF since the installation of the hydraulic barrier system. The hydraulic barrier system currently consists of a slurry wall and two purge wells. The slurry wall surrounds the entire landfill except approximately 2,100 feet at the north side of the landfill where the two purge wells are continuously operating and maintaining capture. A third purge well, PW-2R-01 is located in Southeast Area Park and is not currently operating. This purge well is an integral component of the City's contingency plan and can be turned on when necessary.

## **2 PROPOSED REVISION TO THE HYDROGEOLOGICAL MONITORING PLAN**

During discussions with the MDEQ regarding the *City of Ann Arbor Landfill Offsite Remedial Action Plan* (RAP) submitted March 18, 2013, it was recommended that the City submit proposed changes to the HMP and well abandonments during the RAP approval process. A draft version of the *Ann Arbor Landfill Revised Hydrogeological Monitoring Plan* was submitted on June 24, 2013 and wells proposed for abandonment were submitted in the draft *Well Abandonment Plan* dated June 17, 2013. This document replaces the draft document submitted in June 2013 and represents the final *Ann Arbor Revised Hydrogeological Monitoring Plan*. The final version of the *Well Abandonment Plan* is also being submitted on December 18, 2015.

The proposed changes to the hydrogeological monitoring program are outlined in **Table 2** and described below. The wells proposed for abandonment have been removed from **Table 2**.

## 2.1 Static Water Levels

In accordance with the 2000 HMP, static water levels are obtained quarterly from 72 locations: 37 groundwater monitoring wells, 22 piezometers, eight observation wells, four purge wells and one test well (**Table 1**). On June 17, 2013 the City of Ann Arbor submitted the draft *Well Abandonment Plan* requesting abandonment of 23 wells associated with the Ann Arbor Landfill. The 2000 HMP static water locations are included on **Figure 1**. The proposed HMP static water levels will be obtained semi-annually (April and October) from 50 locations: 22 groundwater monitoring wells, 22 piezometers, three observation wells and three purge wells. These static water levels will be used to calculate groundwater elevations and prepare groundwater contour maps to evaluate flow at the AALF and Southeast Area Park. Groundwater elevation data for the piezometers will be used to evaluate the effectiveness of the slurry wall; that is to ensure that the upgradient groundwater flows around the landfill rather than into the landfill.

In preparation for well abandonments Tetra Tech personnel reviewed historical and electronic databases to determine if any potential monitoring wells could exist that the City of Ann Arbor is unaware of; that is, monitoring wells that may have been installed decades ago that were either thought to have been abandoned or were forgotten about with the changes in personnel on the project. The location of historical wells in the database, for which there is not an abandonment log, were estimated in GIS or were located within the City's CAD database. The City of Ann Arbor surveyor and Tetra Tech personnel were onsite in October 2015 with survey equipment and located seven monitoring wells. Five of these were proposed for abandonment. The remaining two monitoring wells, W-99-93 and W-102-93 will be added to the HMP. A static water level measurement will be obtained from W-99-93 semi-annually (April and October). A static water level measurement will be attempted from monitoring well W-102-93 every five years in April for a total of 51 locations. This will begin in April 2020. The proposed static water level locations are included on **Figure 2**.

Static water levels will be measured using an electronic water level meter from the top of casing of each well. All water levels will be measured within a 24 hour timeframe. The water level meter will be thoroughly rinsed withalconox and distilled water following each use to minimize the potential for cross contamination between wells.

## 2.2 Hydrogeological Monitoring Plan

In accordance with the 2000 HMP, groundwater samples were collected quarterly (January, July) semi-annually (April) and annually (October). The current HMP sampling locations are depicted on **Table 1** and **Figure 1**. For the proposed revision to the HMP, the City of Ann Arbor requests a semi-annual (April and October) sampling schedule.

### 2.2.1 Chloride

In accordance with the 2000 HMP, 12 wells were sampled semi-annually and 15 wells annually for chloride. Based on the MDEQ approval letter dated November 3, 2011 for the CZA, chloride sampling was removed from the sampling plan after the fourth quarter 2012 groundwater sampling event. Based on MDEQ approval, chloride is not included in this revised HMP.

### 2.2.2 1,4-Dioxane

In accordance with the 2000 HMP, 15 wells were sampled semi-annually and 20 wells annually for 1,4-dioxane. The 1,4-dioxane plume is below all applicable MDEQ criteria offsite but is detected above the MDEQ Part 201 Residential Drinking Water (DW) Criteria of 85 micrograms/liter (ug/L) in the onsite purge well PW-1R-12. Based on discussions with the MDEQ and the current size and location of the 1,4-dioxane plume, the revised HMP will include sampling of 1,4-dioxane at PW-1R-12 semi-annually. This purge well generally has concentrations of 1,4-dioxane between 120 and 150 ug/L and appears to have a consistent source. The CZA demonstrated full capture at the landfill boundary with PW-1R-12 and PW-3R-12 pumping at a combined rate of approximately 20 gallons per minute (gpm). The combined rate is currently 70-gpm in order to remediate Southeast Area Park.

Since submittal of the draft HMP in 2013, concentrations of 1,4-dioxane have been increasing in PW-3R-12. The October 2014 and April 2015 data exceeded the Part 201 DW Criteria. The increase is believed to be from increased capture of the 1,4-dioxane plume by PW-3R-12 due to well replacement and recent maintenance activities. Due to the increases in 1,4-dioxane concentrations, purge well PW-3R-12 will be added to the HMP for semi-annual sampling of 1,4-dioxane.

At the MDEQ's request, the City will continue to sample 1,4-dioxane at three additional locations north of the AALF as a contingency plan to detect if capture is lost at the landfill boundary. These locations are W-47-89, W-87-92, and PW-2R-01. A map depicting the 2000 HMP sample locations is included as **Figure 3**. Changes to the plan are depicted including proposed well

abandonments and proposed 1,4-dioxane sample locations. The most recent annual 1,4-dioxane sampling data (October 2014) are included with the three most recent data points for each well location. Depending on the sampling frequency (semi-annual or annual) of the well location, the data ranges from October 2011 to October 2014.

In addition to the compliance sampling, the two monitoring wells (W-99-93 and W-102-93) that were located with survey equipment in October 2015 were sampled in November 2015 for 1,4-dioxane. Both well locations are included on **Figure 3** and were non-detect.

### **2.2.3 Volatile Organic Compounds**

In accordance with the 2000 HMP, ten wells are sampled quarterly for volatile organic compounds (VOCs). Vinyl chloride comprises the majority of the VOC detections related to the AALF. Based on discussions with the MDEQ and the current vinyl chloride concentrations, 15 wells are proposed for semi-annual VOC sampling. These wells are included on **Table 2** and **Figure 4**. Changes to the plan include adding monitoring wells W-47-89, W-85-92, W-88-92, W-92-92, W-94-92 and the newly located monitoring well W-99-93. Monitoring well W-102-93 that was also recently discovered, will be sampled every five years in April due to its location. Monitoring well W-86-92 that has been sampled per the 2000 HMP, is proposed for abandonment. A figure depicting the proposed VOC sample locations is included on **Figure 4**. This figure includes recent historical data for monitoring wells currently sampled. In addition to routine compliance monitoring data, **Figure 4** includes information that was collected from non-compliance locations for activities related to the RAP. In September 2013, existing monitoring wells W-92-92 and W-94-92 were sampled for VOCs to demonstrate the extent of the vinyl chloride plume. Also included are the results of three temporary monitoring wells (GP-02-13, GP-03-13 and GP-04-13) that were installed and sampled in September 2013 to determine if restrictive deed covenants were needed north of the temporary monitoring well locations. In November 2015, the two monitoring wells that were located during survey, W-99-93 and W-102-93 were sampled for VOCs. All seven sample locations were non-detect for VOCs. Monitoring wells selected for VOC sampling will serve as sentinel wells or for sampling the recovery efforts within the vinyl chloride plume.

## **3 CONTINGENCY PLANNING AND REVISIONS TO THE HYDROGEOLOGICAL MONITORING PLAN**

This revised HMP will adequately monitor the 1,4-dioxane and vinyl chloride plumes. If monitoring wells selected as sentinel locations have two consecutive sampling events with

detections, the monitoring plan will be adjusted to include additional wells to monitor the plume. The City requests the ability to adjust the monitoring plan as necessary based on the data evaluation. Prior to adjusting the monitoring plan, the City will consult with and obtain approval from the MDEQ. The contingency plan may include installing monitoring wells beyond the existing sentinel wells.

Purge well PW-2R-01, located within Southeast Area Park is currently not an active pumping well. However, if the vinyl chloride plume were to migrate or PW-1R-12 or PW-3R-12 were inoperable, PW-2R-01 can be turned on to recover groundwater. Prior to 2009 when the CZA demonstrated that PW-2R-01 was not needed for recovery of the vinyl chloride plume, it was operating at 50 to 55-gpm.

If continued monitoring indicates the RAP is achieving the cleanup objectives, the City will request modifications to the sampling plan and monitoring well abandonment as appropriate.

#### **4 GROUNDWATER MONITORING WELL SAMPLE COLLECTION**

Groundwater samples will continue to be collected using the current techniques at the AALF. The majority of the AALF monitoring wells have dedicated well wizard micropurge pumps for low-flow sampling. Water is purged until a stabilized water level and stabilized field parameters are achieved. Field parameters, including pH, specific conductance, temperature, oxidation-reduction potential (ORP) and dissolved oxygen are recorded until the readings are within 10-percent of one another. When stabilized field parameters are achieved, groundwater samples are collected.

For wells without dedicated well wizard pumps, samples will be collected with peristaltic pumps or bailers. Field measurements will be recorded and purging will continue until readings stabilize to within 10-percent of one another.

Purge wells PW-1R-12, PW-2R-01 and PW-3R-12 contain gate valves that are connected to the effluent groundwater discharges. These gate valves allow for a diversion of a portion of the effluent groundwater from the sanitary discharge pipe to a sample port for sample collection.

The groundwater samples will be placed directly into clean laboratory provided containers and placed into ice-packed coolers. Upon completion of all sampling activities, the sample

containers will be picked up by a laboratory courier or delivered to the laboratory for appropriate analysis. All samples will be handled under the proper chain-of-custody procedures. The proposed HMP is illustrated on **Figure 5**, including wells for static water level measurements, 1,4-dioxane analysis and VOC analysis.

For each sampling event, one field blank will be collected and one trip blank will be provided and analyzed for VOCs by the laboratory.

## **5 SUMMARY**

This revised HMP will allow the City of Ann Arbor to monitor the appropriate wells and parameters related to the existing 1,4-dioxane and VOC plumes from the AALF. Approval of this sampling plan was granted by MDEQ for implementation in July 2014, while the RAP is still under MDEQ review.

AALF groundwater reports will be produced and submitted to the MDEQ after each semi-annual sampling event (April and October). The reports will be submitted no later than 30 days after the end of the calendar quarter, in accordance with R299.4907(11) of Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 Public Act 451, as amended.

## **TABLES**



**TABLE 1**

**Current Groundwater Monitoring Program**

Ann Arbor Landfill  
Ann Arbor, Michigan

Monitoring Wells	SWL	Field Parameters	VOCs	Chloride	1,4-Dioxane
W-14-84	Q				
W-37A-88	Q				
W-44-89	Q				
W-46-89	Q				
W-47-89	Q	SA			SA
W-48-89	Q	SA		SA	SA
W-49-89**	Q	A		A	A
W-50-89	Q	A		A	A
W-51-89	Q	A		A	A
W-55-90	Q				
W-64-90	Q				
W-68-90	Q	SA		SA	SA
W-70-92	Q				
W-72-90	Q				
W-76-91	Q	SA		SA	SA
W-77-91	Q	SA		SA	SA
W-78-91	Q				
W-81-91	Q				
W-83-91**	Q	A			A
W-84-92	Q	Q	Q		
W-85-92	Q				
W-86-92	Q	Q	Q	SA	SA
W-87-92	Q	Q	Q		
W-88-92	Q				
W-89-92	Q	Q	Q		SA
W-90-92	Q	Q	Q	SA	SA
W-91-92	Q				
W-92-92	Q				
W-93-92	Q				
W-94-92	Q	SA		SA	SA
W-95-92	Q	SA		SA	SA
W-96-92	Q	Q	Q	SA	SA
W-100-93	Q	Q	Q		SA
W-101-93	Q				
W-104-94**	Q	A			A
PW-1R-12	Q	Q	Q	SA	SA
PW-2R-01	Q	Q	Q	SA	SA
PW-3R-12	Q	Q	Q	SA	SA
PW-4	Q				
TW-1	Q				
OW-2	Q				
OW-7	Q				
OW-15	Q				
OW-24	Q				
OW-25	Q				
OW-31-08	Q				
OW-32-08	Q				
OW-33-08	Q				
P-0U	Q				
P-0D	Q				
P-1U	Q				
P-1D	Q				
P-2U	Q				
P-2D	Q				
P-3U	Q				
P-3D	Q				
P-4U	Q				
P-4D	Q				
P-5U	Q				
P-5D	Q				
P-6U	Q				
P-6D	Q				
P-7UR-05	Q				
P-7D	Q				
P-8U	Q				
P-8D	Q				
P-9U	Q				
P-9D	Q				
P-10U	Q				
P-10D	Q				
MW-500-07	Q				
MW-501-07	Q				
<b>Totals :</b>			<b>VOCs</b>	<b>Chloride</b>	<b>1,4- Dioxane</b>
<b>Quarterly</b>			<b>10</b>	<b>0</b>	<b>0</b>
<b>Semi Annually</b>			<b>10</b>	<b>12</b>	<b>15</b>
<b>Annually</b>			<b>10</b>	<b>15</b>	<b>20</b>

\*\* Well is screened in the lower aquifer.  
Q = Quarterly event: January and July  
SA = Semi-annual event: April and October  
A = Annual event: October

Chloride sampling was discontinued based on the MDEQ approval letter dated November 3, 2011 for the Capture Zone Analysis and Conceptual Site Model Update for the City of Ann Arbor Landfill following the 4th quarter 2012 sampling event.

**TABLE 2**

**Proposed Revisions to Hydrogeological Monitoring Program**

Ann Arbor Landfill  
Ann Arbor, Michigan

Monitoring Wells	SWL	Field Parameters	VOCs	1,4-Dioxane
W-14-84	SA			
W-46-89	SA			
W-47-89	SA	SA	SA	SA
W-48-89	SA			
W-50-89	SA			
W-51-89	SA			
W-64-90	SA			
W-68-90	SA			
W-70-92	SA			
W-72-90	SA			
W-84-92	SA	SA	SA	
W-85-92	SA	SA	SA	
W-87-92	SA	SA	SA	SA
W-88-92	SA	SA	SA	
W-89-92	SA	SA	SA	
W-90-92	SA	SA	SA	
W-92-92	SA	SA	SA	
W-94-92	SA	SA	SA	
W-96-92	SA	SA	SA	
W-99-93	SA	SA	SA	
W-100-93	SA	SA	SA	
W-101-93	SA			
W-102-93	A <sup>1</sup>	A <sup>1</sup>	A <sup>1</sup>	
PW-1R-12	SA	SA	SA	SA
PW-2R-01	SA	SA	SA	SA
PW-3R-12	SA	SA	SA	SA
OW-31-08	SA			
OW-32-08	SA			
OW-33-08	SA			
P-0U	SA			
P-0D	SA			
P-1U	SA			
P-1D	SA			
P-2U	SA			
P-2D	SA			
P-3U	SA			
P-3D	SA			
P-4U	SA			
P-4D	SA			
P-5U	SA			
P-5D	SA			
P-6U	SA			
P-6D	SA			
P-7UR-05	SA			
P-7D	SA			
P-8U	SA			
P-8D	SA			
P-9U	SA			
P-9D	SA			
P-10U	SA			
P-10D	SA			
<b>Totals :</b>	<b>SWL</b>		<b>VOCs</b>	<b>1,4-Dioxane</b>
<b>Semi Annually</b>	<b>50</b>		<b>15</b>	<b>4</b>
<b>Every 5 Years</b>	<b>51</b>		<b>16</b>	<b>4</b>

SA = Semi-annual event: April and October

A<sup>1</sup> = Monitoring well W-102-93 will be sampled annually in April every five years for VOCs. The first sample was collected in November, 2015. The next sampling is April, 2020.

**ATTACHMENT H – GAS MONITORING PLAN REVISION, DATED MARCH 28, 2008 AND  
ADDENDUM TO GAS MONITORING PLAN REVISION, DATED MAY 1, 2008**

March 28, 2008

Lawrence Bean  
Michigan Department of Environmental Quality – Jackson Office  
Waste and Hazardous Materials Division  
301 East Louis Glick Highway  
Jackson, Michigan 49201

RE: City of Ann Arbor Landfill  
Gas Monitoring Plan Revisions

Dear Mr. Bean,

The City of Ann Arbor conducts quarterly gas monitoring surveys to fulfill the requirements of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended and the rules promulgated under Part 115 R 299.4433. Quarterly gas monitoring surveys have been completed for the Ann Arbor landfill (AALF) since April 1997, in accordance with the Landfill Gas Monitoring Program (LGMP) authored by RMT, Inc. of Ann Arbor, Michigan in October 1997 and the subsequent Addendum #1 submitted on October 27, 1997. The LGMP identified 23 sample locations with an additional 12 gas probes proposed for the perimeter of the landfill. These locations are illustrated in the figures located in **Attachment A**. Currently, there are 72 sampling locations monitored quarterly for the AALF as depicted in **Figures 1 and 2** located in **Attachment B**. GeoTrans, Inc. (GeoTrans) personnel have reviewed historical monitoring data at each sample location and are proposing changes to the current gas sampling plan to replace the LGMP from 1997.

Historical data has been compiled in **Table 1** located in **Attachment C** and reviewed. Prior to the installation of the north side methane collection system (system), concentrations of methane were detected in the Southeast Area Park in the following locations: monitoring wells W-84-92, W-85-92; gas probes GP-6SR-99, GP-12-99, GP-13-99; and temporary gas probe TGP-1. On July 19, 2005, the system became operational.

The purpose of this system is to capture methane at the landfill property boundary and prevent off-site migration. There are a total of 10 perimeter extraction wells (PEW) that are designed to capture methane gas through a well screen at the property boundary. The gas is piped back to the system's blower skid, which contains a condensation tank, two 600 pound carbon tanks and a blower. The air from the wells is pushed through a condensation tank where moisture in the air is condensed. The air then travels to the carbon tanks where organic molecules adhere to the granulated active carbon before venting the cleaner air through a stack.

Since the installation of this system, off-site migration has only occurred when the system has been inoperable. When this has occurred, concentrations of methane have been detected in gas probe GP-6SR-99. There has not been a detection of methane in an off-site monitoring location above 0.2 percent methane by volume since the installation of the system, when it is operational.

For a period of time in December 2006 and from January 16, 2007 through March 13, 2007, the system was not operating due to ice build up in the condensation tank that automatically shut the

## Gas Monitoring Plan Revisions

March 28, 2008

Page 2 of 3

system down. During the time the system was down, weekly monitoring was completed in the Southeast Area Park. Methane was detected in gas probe GP-6SR-99 as high as 17 percent, but methane was not detected in any other monitoring locations.

To resolve the freezing problem, the condensation tank was wrapped with insulation and thermostat-controlled heat tracing material in the spring of 2007. Since mid-March 2007, the system has not had an automatic shut down. A full evaluation of the system was completed in the fall of 2007 by a Landfill Gas Systems Engineer at GeoTrans to ensure the system was functioning optimally and to provide guidance and troubleshooting for operation and maintenance of the system. To service the system monthly, GeoTrans personnel manually shut the system down for approximately 15 minutes. If routine repairs are required, the system is shut down for no longer than 1 hour. Also during the monthly maintenance check on the system, each PEW is monitored for methane, carbon dioxide and lower explosive limit. The flow to each individual PEW is measured and adjusted if necessary. Since the system became operational again in mid-March 2007, there have been no detections of methane in any off-site monitoring locations.

As a result of the effectiveness of this system, GeoTrans is proposing a modification to the current gas monitoring completed quarterly at the AALF on behalf of the City of Ann Arbor. **Figure 3 in Attachment B** illustrates quarterly, semi-annual and annual monitoring locations. The following gas monitoring plan is requested:

- Quarterly sampling will include 33 on-site monitoring locations including: gas probes GP-1S/1D through GP-5S/5D, GP-7S/7D-99 and GP-8SR-05/GP-8D-98, the former maintenance building and Ann Arbor Drop-Off Station monitoring points MP-1 through MP-13, piezometer P-3U, on-site sanitary sewer locations S1 and S3, on-site stormwater locations R1 and R2 and sentinel temporary gas probe TGP-3. Quarterly event is proposed for January and July.
- Semi-Annual event will include the 33 quarterly monitoring locations plus 12 utility and gas monitoring locations within the Ellsworth Road right of way and Southeast Area Park. This includes the following: sanitary sewer locations S2, S4 and S5, stormwater location R6, water manhole W, meter pit MP, temporary gas probe TGP-1 and gas probes GP-6SR-99, GP-13-99 and GP-14-02 through GP-16-02. Semi-annual sampling is proposed for October.
- Annual event will include the 33 quarterly, 12 semi-annual monitoring locations plus 18 utility, concession building and gas monitoring locations including: stormwater locations R3 through R5, GP-10-99 through GP-12-99 and the 12 monitoring locations in and around the concession building located in Southeast Area Park. Annual event is proposed for April.

This proposed gas monitoring plan consists of 63 monitoring locations. The remaining nine monitoring locations that are currently in the plan include the groundwater monitoring wells located in Southeast Area Park (W-84-92 through W-90-92) and in the residential area north of I-94 (W-93-92 and W-95-92). These groundwater monitoring wells became part of the gas monitoring plan before gas probes were installed in the park and were not intended to be permanent gas monitoring locations.

As part of the revision to the gas monitoring plan, GeoTrans proposes that if the system becomes inoperable or if methane is detected in any off-site monitoring locations, the next set of monitoring points will be monitored. For example, if during a quarterly monitoring event the system is off, both the quarterly and semi-annual locations will be monitored. If the data collected suggests further monitoring is required, the annual locations will also be monitored. Additionally, the groundwater

**Gas Monitoring Plan Revisions**

**March 28, 2008**

**Page 3 of 3**

wells located in Southeast Area Park can be monitored if field data indicates methane may be migrating in the direction of one or any of these monitoring wells.

On behalf of the City of Ann Arbor, GeoTrans, Inc. is requesting agreement from the Michigan Department of Environmental Quality (MDEQ) to implement these revisions to the gas sampling plan. If MDEQ concurs, implementation of these revisions will occur with the next quarterly monitoring event at the AALF.

If you have additional questions, please do not hesitate to contact us.

Sincerely,



Patti McCall  
Project Geologist



Tammy Rabideau, CPG  
Senior Hydrogeologist

Attachment A – Landfill Gas Monitoring Program 1997 Figures

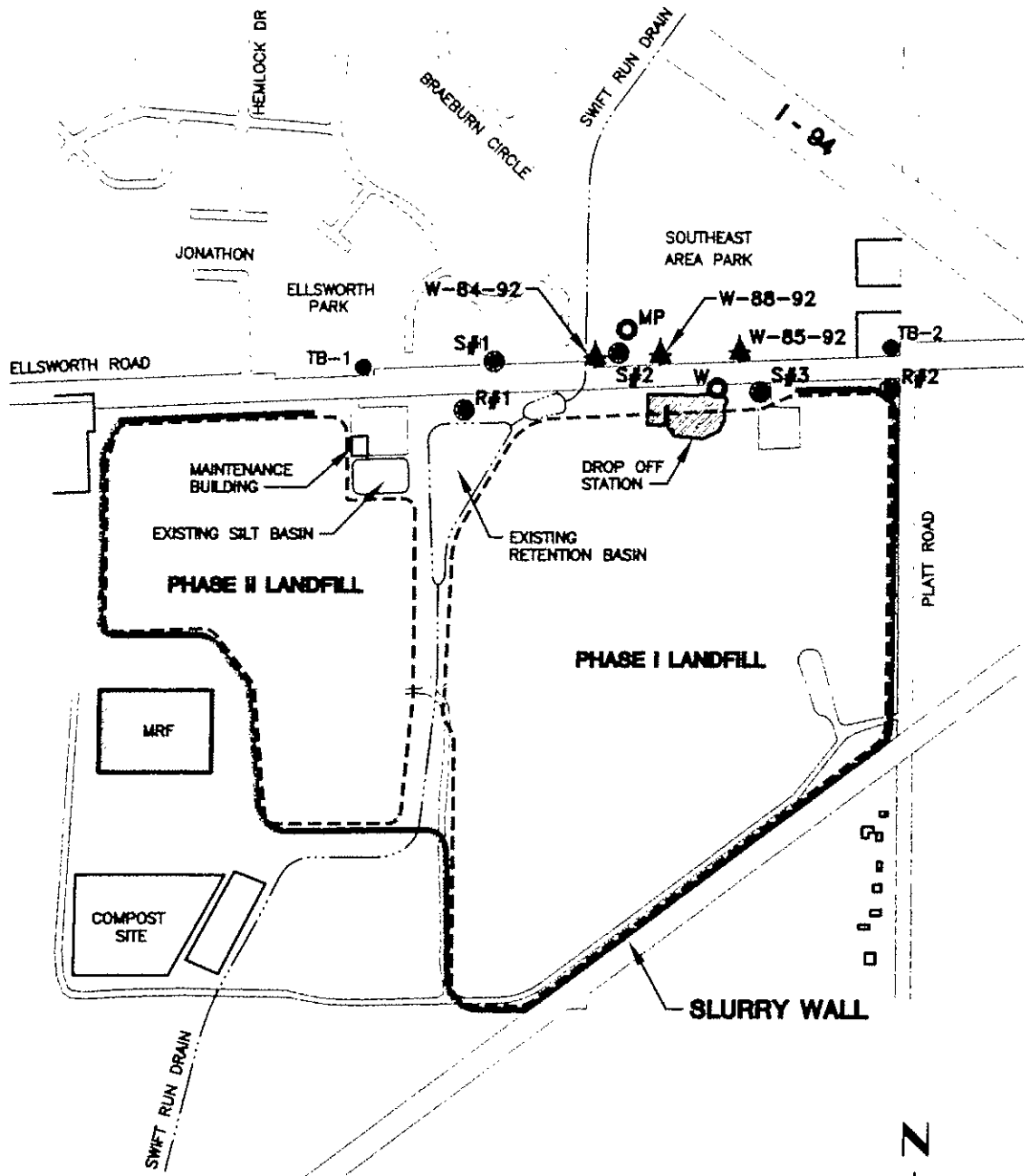
Attachment B – Gas Monitoring Plan Figures

Attachment C – Historical Gas Monitoring Data

cc: Matt Naud, Environmental Coordinator; City of Ann Arbor  
Anne Warrow, Project Manager; City of Ann Arbor

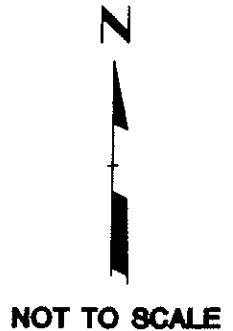
**ATTACHMENT A**

**Landfill Gas Monitoring Program October 1997 Figures**



**LEGEND**

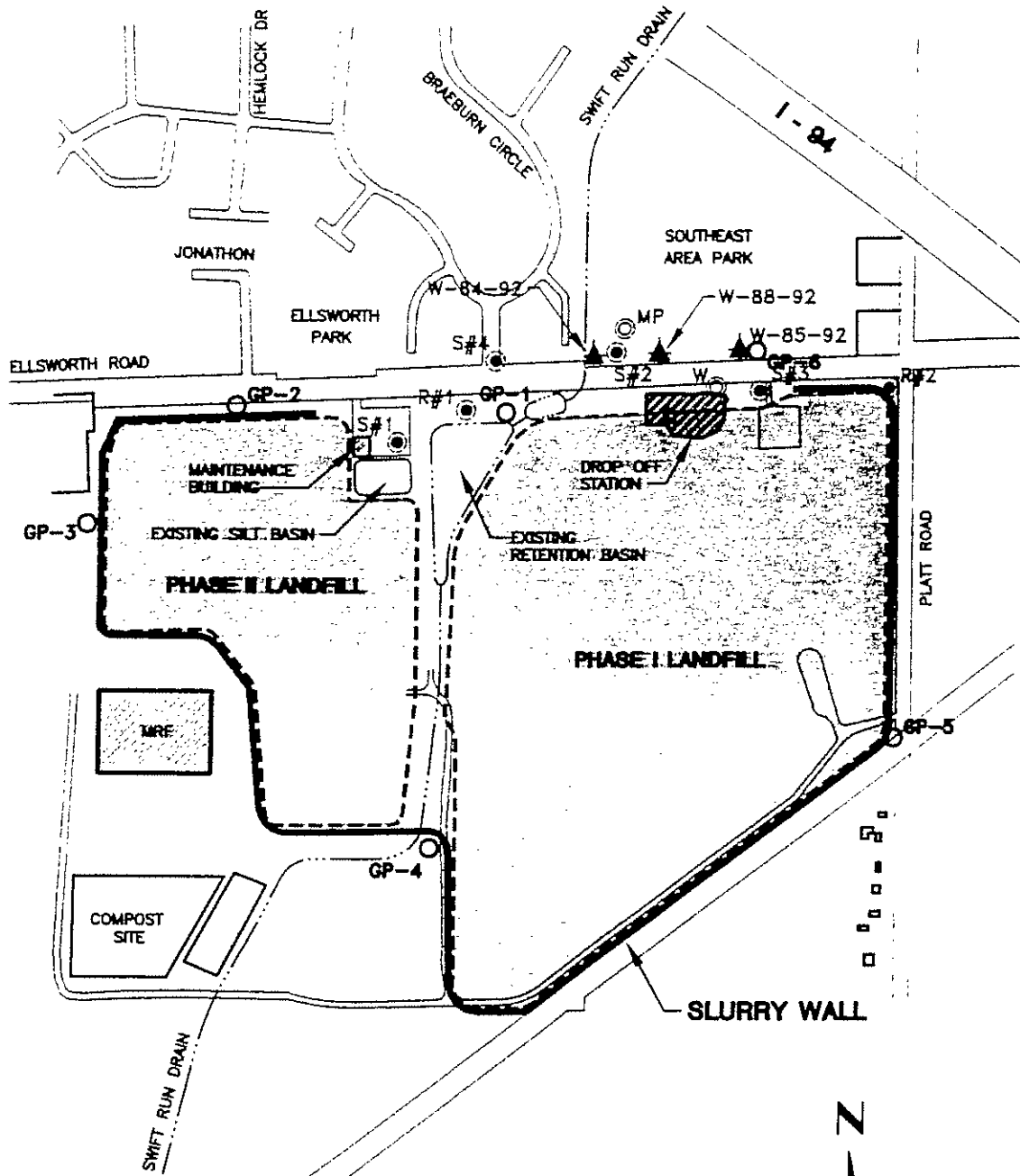
- W ○ WATER MAIN MANHOLE LOCATION
- MP ○ METER PIT MANHOLE LOCATION
- S#1 ● SANITARY SEWER MANHOLE LOCATION AND NUMBER
- R#1 ● STORM SEWER MANHOLE LOCATION AND NUMBER
- W-84-92 ▲ GROUNDWATER MONITOR WELL LOCATION AND NUMBER
- TB-1 ● TEST BORING LOCATION AND NUMBER



**FIGURE 2**

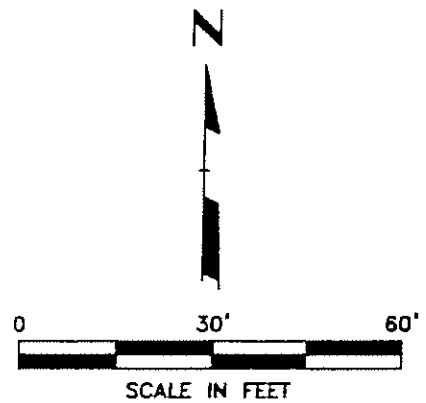
<b>CITY OF ANN ARBOR LANDFILL CITY OF ANN ARBOR ENGINEERING DEPARTMENT ANN ARBOR, MICHIGAN</b>	DRAWN BY: SJL	PROJ. NO. 4054.02
	CHECKED BY: JTB	FILE NO. 40540207
	APPROVED BY:	DATE: OCTOBER 1997
<b>SITE PLAN AND LANDFILL GAS MONITORING LOCATIONS</b>		1143 HIGHLAND DRIVE, SUITE B ANN ARBOR, MI 48106-2237 P.O. BOX 991 48106-0991 PHONE: 313-971-7080





**LEGEND**

- W ○ WATER MAIN MANHOLE LOCATION
- MP ○ METER PIT MANHOLE LOCATION
- S#1 ○ SANITARY SEWER MANHOLE LOCATION AND NUMBER
- R#1 ○ STORM SEWER MANHOLE LOCATION AND NUMBER
- W-84-92 ▲ GROUNDWATER MONITOR WELL LOCATION AND NUMBER
- GP-1 ○ PROPOSED GAS MONITORING PROBE LOCATION AND NUMBER



**FIGURE 3**

**CITY OF ANN ARBOR LANDFILL  
CITY OF ANN ARBOR ENGINEERING DEPARTMENT  
ANN ARBOR, MICHIGAN**

**PROPOSED LANDFILL GAS MONITORING  
PROBE LOCATIONS**

DRAWN BY: SJL	PROJ. NO. 4054.02
CHECKED BY: JTB	FILE NO. 40540208
APPROVED BY:	DATE: AUGUST 1997



1143 HIGHLAND DRIVE, SUITE B  
ANN ARBOR, MI 48106-2237  
P.O. BOX 991 48106-0991  
PHONE: 313-971-7080

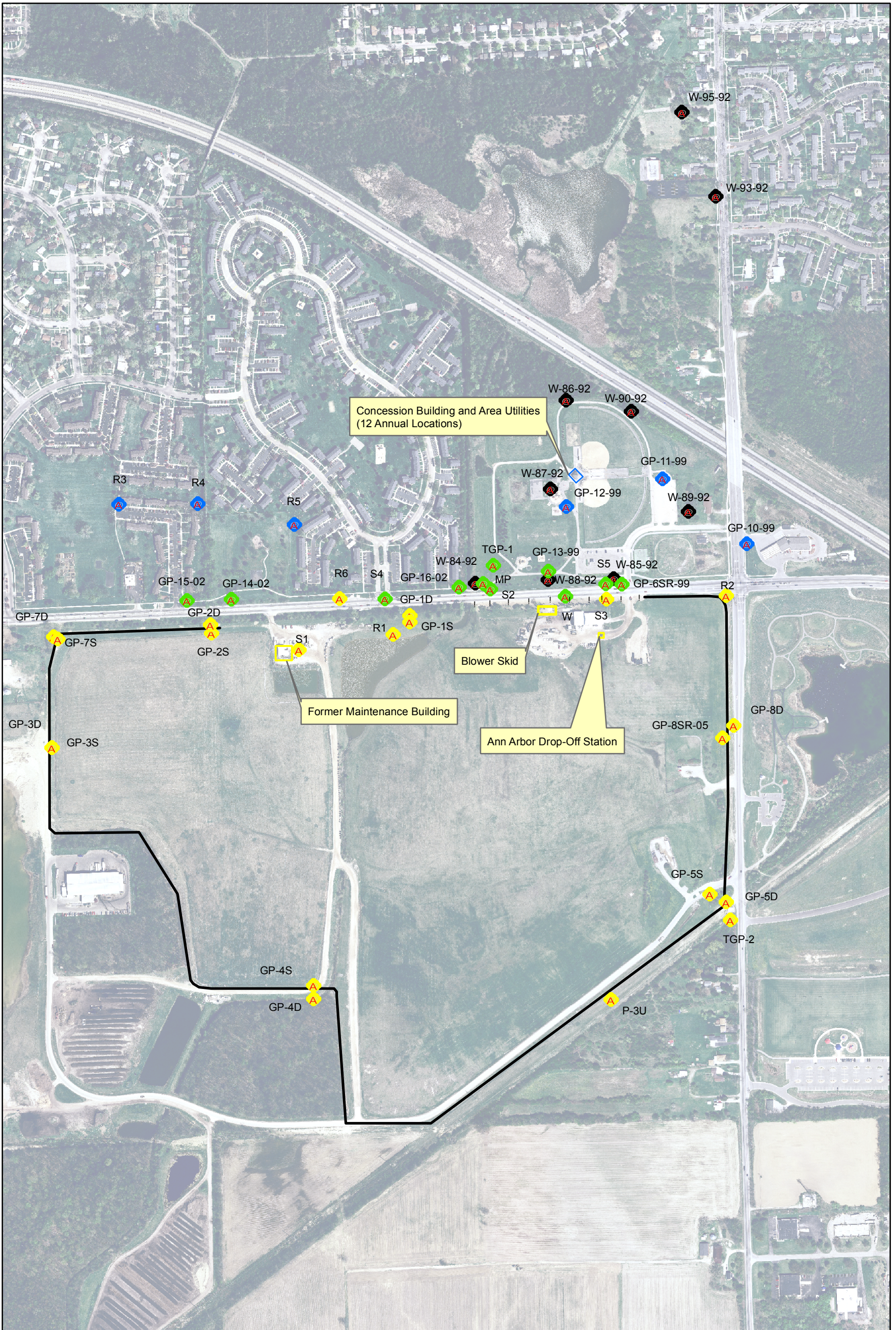
**ATTACHMENT B**

**Gas Monitoring Plan Figures**





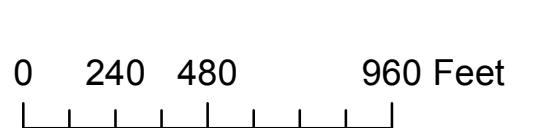
P:\Projects\Ann Arbor\Landfill\Gas Monitoring\Gas Plan Evaluation\Figure 3\_ Proposed Gas Monitoring Plan Revisions.mxd



SOURCE: WASHTENAW COUNTY, 2005

- ! PEW-1 - PEW-10 Sequentially Numbered West to East
- ⊙ Proposed Annual Gas Monitoring Location
- ⊙ Water Monitoring Well Proposed For Removal From Gas Monitoring Plan
- ⊙ Proposed Quarterly Gas Monitoring Location
- ⊙ Proposed Semi-Annual Gas Monitoring Location
- SlurryWall\*

- R1 Storm Sewer Location
- S1 Sanitary Sewer Location
- GP-1S Gas Probe Location
- TGP-3 Temporary Gas Probe Location
- W-84-92 Monitoring Well Location



\*Slurry Wall Location Is Approximate.  
Scale is 1:6000



ANN ARBOR LANDFILL  
ANN ARBOR, MICHIGAN  
**PROPOSED GAS MONITORING PLAN REVISION**

FIGURE

**3**

CHECKED: PJM

DATE: 3/28/2008

**ATTACHMENT C**

**Historic Gas Monitoring Data**



**Table 1**  
**Historical Gas Monitoring Data**  
**December 8, 1997 through January 8, 2008**  
 Ann Arbor Landfill  
 Ann Arbor, Michigan

Sampling Location	Quarter Sampling Event	November 3, 2000	January 16, 2001	April 24, 2001	July 17, 2001	October 24, 2001	January 15 - 18, 2002	April 15, 2002	July 25, 2002	October 11, 2002	January 17, 2003	April 25, 2003	July 17, 2003	October 20, 2003	January 28 & 29, 2004	April 05, 2004
		Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume	Percent of Methane by Volume
Atmospheric Pressure	Maintenance Building	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mon PT.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Water Main Manhole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sanitary Sewer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
S5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
R6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
NP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Water Meter Pit Manhole	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Groundwater Monitoring Wells	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
W-84-92	31	>100	5	>100	14	>100	9	>100	1.8	60	4	83	5	>100	13	0
W-85-92	0	0	4	>100	0	0	0	0	0	0	0	0	0	0	0	0
W-86-92	0.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-87-92	1.3	36	1.9	57	NM	NM	NM	NM	0.2	3	0	1	0	0	0	0
W-88-92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
W-89-92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-90-92	0.2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-91-92	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-92-92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
W-93-92	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-94-92	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W-95-92	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
GP-1S	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-1D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-2S	13	>100	2.1	76	0.6	23	6	>100	11	>100	8	>100	17	>100	5	>100
GP-2D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-3S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-3D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-4S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-4D	0.2	0	0.2	3	0.4	3	0	0	0.3	0	0	0	0	0	0	0
GP-5S	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-5D	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-6S	0.2	0	15	>100	0.2	4	0	0	0.2	1	0.3	0	0.3	0	0.3	0
GP-6D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-7S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-7D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-8S	0.4	7	0	3	0	1	0.4	0	0	0	0	0	0	0	0	0
GP-8D	0.6	10	0	2	0	0	0.2	0	0	0	0	0	0	0	0	0
GP-9S	0.2	0	0.2	0	0	0	0.2	0	0	0	0	0	0	0	0	0
GP-9D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-10S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-10D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-11S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-11D	6	>100	1.8	62	NM	NM	0	0	0	0	0	0	0	0	0	0
GP-12S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-12D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-13S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-13D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-14S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-14D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-15S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-15D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-16S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-16D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-17S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-17D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-18S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-18D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-19S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-19D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-20S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-20D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-21S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-21D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-22S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-22D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-23S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-23D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-24S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-24D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-25S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-25D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GP-26S	0	0	0	0												





May 1, 2008

Lawrence Bean  
Michigan Department of Environmental Quality – Jackson Office  
Waste and Hazardous Materials Division  
301 East Louis Glick Highway  
Jackson, Michigan 49201

RE: City of Ann Arbor Landfill  
Addendum to Gas Monitoring Plan Revisions letter

Dear Mr. Bean,

This letter is to serve as an addendum to the proposed Gas Plan Revision letter dated March 28, 2008. As a follow-up to our conversation on April 23, 2008, the Waste Transfer Station (WTS) located in the Ann Arbor Landfill (AALF) will be included in the quarterly gas monitoring plan. The location of the WTS has been added to the revised Figure 2.

On April 24, 2008 GeoTrans personnel were on-site to investigate the location of floor drains and cracks in the WTS. Particular attention was paid to the closed office space located within the building. There are no obvious cracks in the floor or the wall of the office space. A floor drain is located in the bathroom at the west end of the office. The utility closet, accessed on the north from inside the main garage also has a floor drain. As these are potential methane migration points, they will become monitoring points MP-14 and MP-15 in the quarterly gas sampling plan, bringing the total number of quarterly monitoring locations to 35.

The majority of the WTS is open to the east where waste haulers enter to unload trash. One large floor grate extends across the floor. The ramp, located on the north side of the building has large floor grates on both the east and west ends. As this portion of the building is open and well ventilated, these drains will not be part of the gas sampling plan. However, if methane is ever detected in MP-14 or MP-15, these grates will be checked as potential migration pathways.

If you have additional questions, please do not hesitate to contact us.

Sincerely,



Patti McCall  
Project Geologist

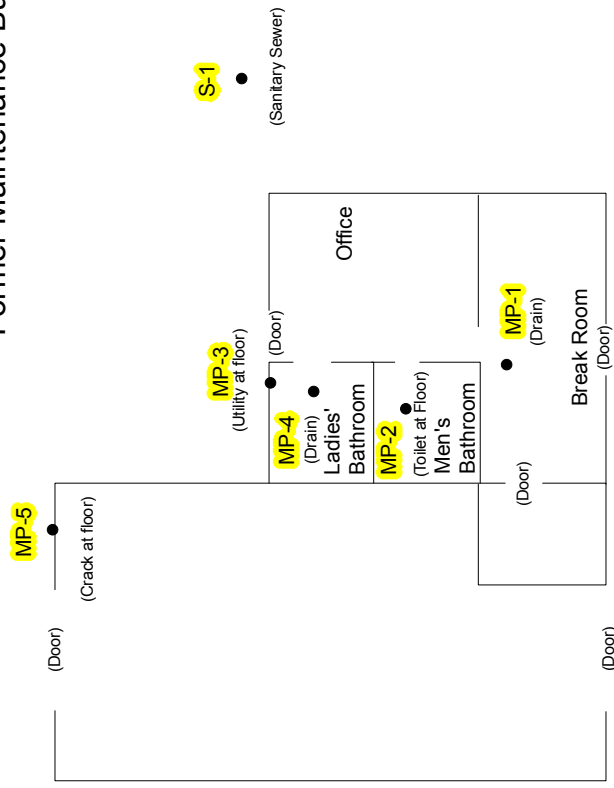


Tammy Rabideau, CPG  
Senior Hydrogeologist

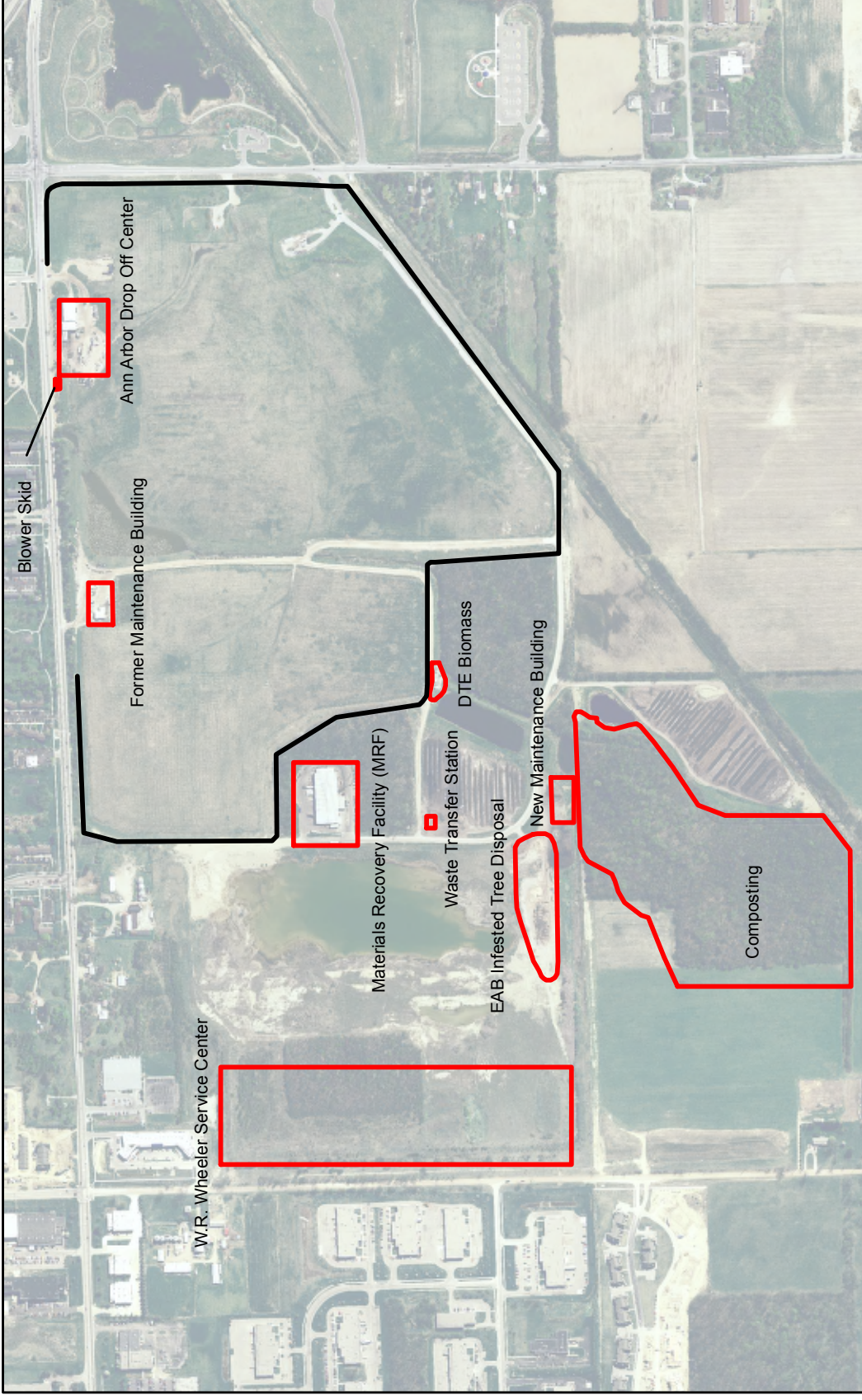
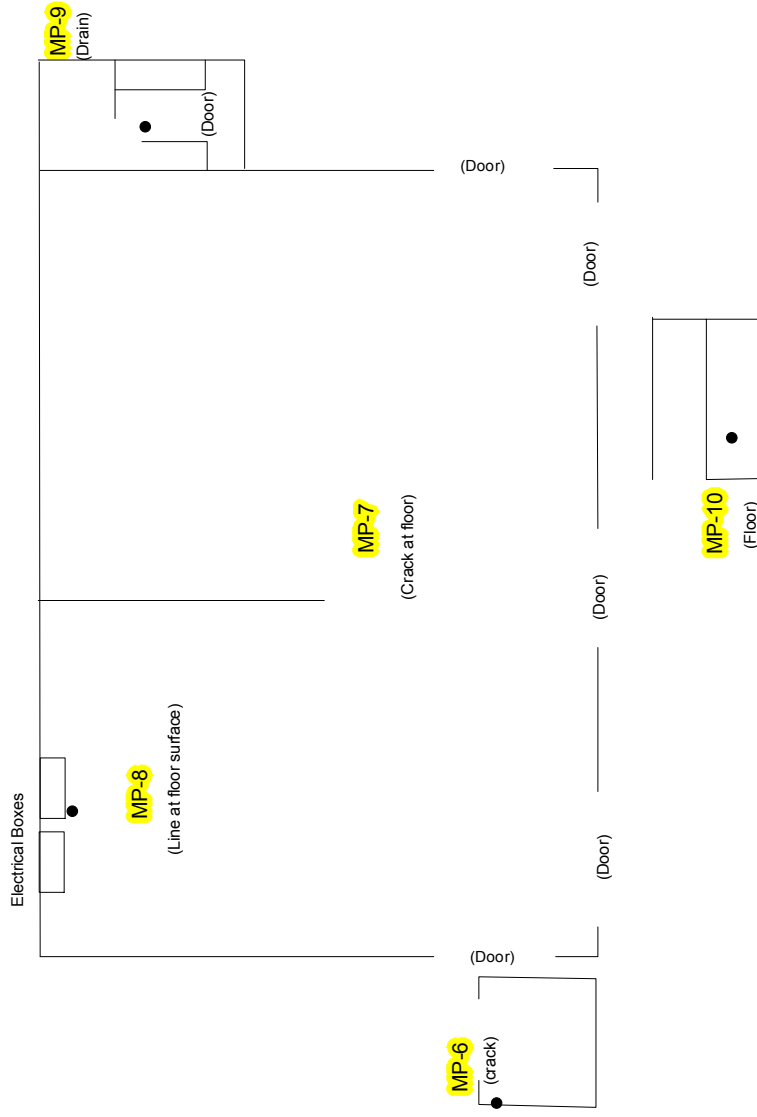
Attachment A – Revised Figure 2 Gas Monitoring Locations Inside Buildings

cc: Matt Naud, Environmental Coordinator; City of Ann Arbor  
Anne Warrow, Project Manager; City of Ann Arbor

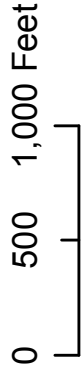
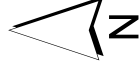
Former Maintenance Building



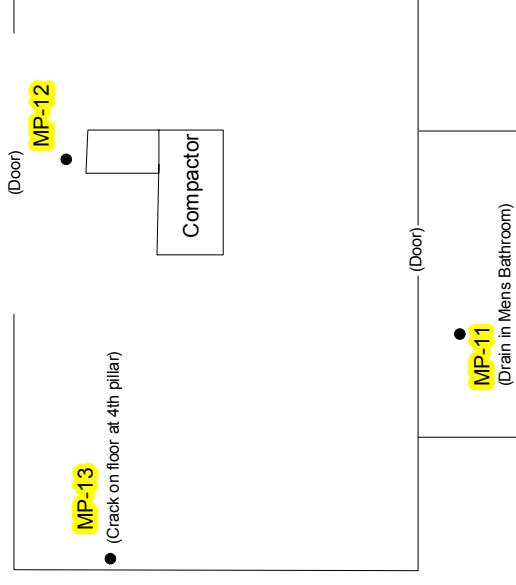
Ann Arbor Drop Off Center



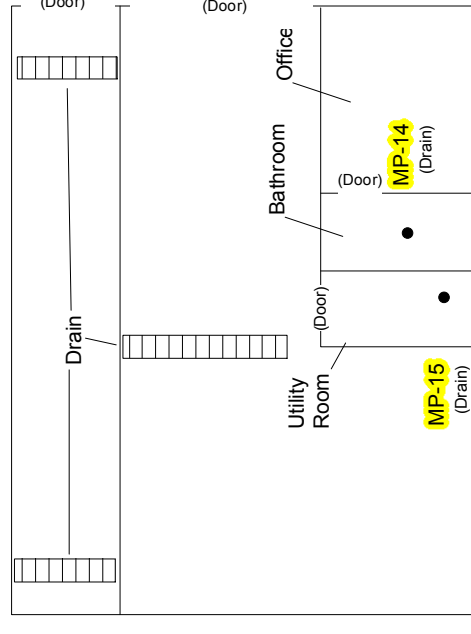
SOURCE: WASHTENAW COUNTY 2005 AERIAL PHOTOGRAPH



MRF Building



Waste Transfer Station



**ATTACHMENT I - REVISED INDUSTRIAL USER PERMIT NO. 07012014LF-A**



# CITY OF ANN ARBOR, MICHIGAN

Public Services Area  
Wastewater Treatment Services  
49 Old Dixboro Road  
Ann Arbor, Michigan 48105-9405  
Phone: (734) 794-6450 Fax: (734) 971-9704

February 4, 2016

Mr. Matthew Naud  
Environmental Coordinator, City of Ann Arbor  
301 East Huron Street / P.O. Box 8647  
Ann Arbor, MI 48107-8647

RE: Ann Arbor Wastewater Treatment Plant  
Industrial Pretreatment Program  
Industrial User Permit

Dear Mr. Naud:

Enclosed is a revised Industrial User Permit No. 07012014LF-A for the City of Ann Arbor Landfill, which contains the following changes:

- Appendix A -- Removal of quarterly monitoring requirements for molybdenum in Outfall 001
- Appendix A -- Removal of quarterly monitoring requirements for molybdenum in Outfall 004
- Appendix A -- Removal of quarterly monitoring requirements for molybdenum in Outfall 005

The permit is effective immediately. While this represents a minor permit revision, please re-review the document in its entirety to ensure compliance with all terms and conditions.

Feel free to contact me at (734) 794-6450, extension 43822, if you have any questions or desire to further discuss this matter.

Sincerely,

Keith Sanders

Assistant Manager, Wastewater Treatment Plant

cc w/ att: Jerald O. Thaler, P.E. / Fishbeck, Thompson, Carr & Huber, Inc.



## INDUSTRIAL USER PERMIT No. 07012014LF-A

### City of Ann Arbor Landfill

2800 Ellsworth Road  
Ann Arbor, MI 48108

Mailing address: 301 East Huron Street, P.O. Box 8647  
Ann Arbor, MI 48107-8647

The above-named User is hereby authorized to discharge industrial wastewater from the above-named facility and through the outfalls identified herein into the City of Ann Arbor Publicly Owned Treatment Works (POTW) in accordance with the conditions set forth in this Permit and Chapter 28 of the Ann Arbor City Code (Sewer Use Ordinance). Compliance with this Permit does not relieve the User of its obligation to comply with any or all applicable pretreatment regulations, standards, or requirements under local, State, and Federal laws, including any such laws, regulations, standards, or requirements that may become effective during the term of this Permit.

Non-compliance with any term or condition of this Permit shall constitute a violation of the City of Ann Arbor Sewer Use Ordinance.

This Permit was previously issued with an effective date of **July 1, 2014**, and is now modified with a new effective date of **February 04, 2016**; all previous versions are hereby superceded. This permit shall expire at midnight on **June 30, 2019**.

If the User wishes to continue to discharge after the expiration date of this Permit, a complete application must be filed for reissuance of this Permit in accordance with the requirements of the sewer use ordinance, a minimum of 180 days prior to the expiration date of this Permit.

By: Carl J. Kenzie

Earl J. Kenzie, P.E.  
Manager, Wastewater Treatment Services

Issued this fourth day of February, 2016.

## PART 1. EFFLUENT LIMITATIONS

- A. From the effective date until the expiration date of this Permit, the User is authorized to discharge wastewater to the City's POTW from the outfalls listed below.

<u>Outfall</u>	<u>Discharge Location and Description</u>
<b>001</b>	<b>Groundwater Purge Well PW-1R-12</b> (Permit based on average flow of 25,000 gallons per day.)
<b>003</b>	<b>Leachate Discharge from Manhole MH-A</b> (Permit based on average flow of <100 gallons per day.)
<b>004</b>	<b>Leachate Discharge from Manhole MH-B</b> (Permit based on average flow of <100 gallons per day.)
<b>005</b>	<b>Groundwater Purge Well PW-2R-01</b> (Permit based on temporary average flow of up to 88,500 gallons per day, applicable when Outfalls 001 and/or 006 are out of service.)
<b>006</b>	<b>Groundwater Purge Well PW-3R-12</b> (Permit based on average of 63,500 gallons per day.)

- B. From the effective date until the expiration date of this Permit, the outfall(s) described in Section A of this Part shall comply with all applicable laws, regulations, standards, and requirements contained in the Sewer Use Ordinance and any applicable State and Federal pre-treatment laws, regulations, standards, and requirements, including any such laws, regulations, standards, or requirements that may become effective during the term of this Permit.

From the effective date until the expiration date of this Permit, the outfall(s) described in Section A of this Part shall not exceed the following limitations:

- **Discharge limits are set forth in Appendix A which is attached hereto and made part hereof.**

### C. General Prohibited Discharges

Pursuant to the Sewer Use Ordinance, the User shall not discharge, cause to be discharged, or allow to be discharged into the POTW any of the following from any outfall:

1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, pollutants with a closed cup flashpoint of less than 140 degrees Fahrenheit (60 degrees Centigrade), as determined by a Pensky-Martens Closed Cup Tester, using the test method specified in ATSM standard D-93-79 or D-93-80k (incorporated by reference, see 40 CFR S 260.11) or a Setaflash Closed Cup Tester, using the test method specified in ATSM Standard D-3278-78 (incorporated by reference, see 40 CFR § 260.11) and pollutants which cause an exceedance of 10% of the lower explosive limit (LEL) at any point within the POTW.

2. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute or chronic health and safety problems for workers.
3. Pollutants which cause or may cause corrosive structural damage to the POTW or having a pH less than 5.0 standard units or more than 10.0 standard units.
4. Solid or viscous pollutants in amounts which could cause or do cause either obstruction to flow or interference in the POTW.
5. Any pollutant, including oxygen-demanding pollutants, released in a discharge at a flow rate and/or pollutant concentration which will cause or may cause interference in the POTW.
6. Pollutants which may cause or do cause:
  - a. Impairment of the strength or durability of structures in the POTW.
  - b. Restriction of hydraulic capacity of structures in the POTW.
  - c. Unsafe conditions to personnel in the inspection or maintenance of structures of the POTW.
  - d. Unsafe conditions to the general public, with respect to the collection system.
7. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature of the flow at the POTW treatment plant headworks exceeds 40 degrees Centigrade (104 degrees Fahrenheit) unless the Michigan Department of Environmental Quality (MDEQ), upon request of the City, approves alternate temperature limits.
8. Pollutants which cause or may cause pass through or interference.
9. Any pollutants which exceed the limitations set forth in a Federal Categorical Pretreatment Standard.
10. Any noxious or malodorous liquids, gases, or solids which either singly or by interaction are capable of creating a public nuisance or a hazard to life.
11. Any pollutant introducing colors not removed in the POTW treatment process, such as but not limited to, dye wastes and vegetable tanning solutions.
12. Any discharge from any environmental cleanup that is regulated under the Michigan Environmental Response Act (1982 Public Act 307, as amended) unless approved by city council.
13. Any non-contact cooling water, stormwater, groundwater, or surface water, unless separate POTW facilities are available and identified for the discharges or unless the administrator gives written permission to the user for a temporary discharge of the waters based on hydraulic capacity and treatment impacts. Whether or not permission is given for a temporary discharge and its scope and duration shall be at the sole discretion of the administrator.
14. Any radioactive wastes in quantities defined by applicable state and federal regulations as harmful.
15. Any grease or other pollutants that will become solid or viscous at a temperature of 60 degrees Centigrade or below after being discharged into the POTW.



16. An insoluble substance retained by a standard No. 8 sieve or having any dimension greater than 1/2-inch (1.27 centimeters).
17. Insoluble substances having a specific gravity greater than 2.65.
18. Improperly shredded garbage.
19. Sludge, screenings or other residues which result from a treatment process unless the administrator has determined that it is amenable to treatment by the POTW without application of unusual means or expense.
20. Any petroleum oil or grease, non-biodegradable cutting oil, mineral oil, whether or not the oils or grease are used oils or grease.
21. A 7-day average flow which exceeds 2 percent of the average daily influent to the entire POTW for the previous calendar year.
22. Wastewater causing, alone or in combination with wastewater from other users, the POTW's treatment plant effluent to fail a toxicity test, violate its NPDES permit, or violate its residuals disposal program (PERM).

## PART 2. MONITORING REQUIREMENTS.

- A. From the period beginning on the effective date of this Permit and lasting until the expiration date of this Permit, the User shall sample and analyze the outfalls described in Section A of Part 1 as follows:
  - **Monitoring requirements are set forth in Appendix A which is attached hereto and made part hereof.**
- B. Special Monitoring Provisions. From the period beginning on the effective date of this Permit and lasting until the expiration date of this Permit, the following additional monitoring requirements shall apply to the User:
  - **Outfall 001 and Outfall 006 shall be annually monitored and reported for the City's Priority Pollutants/Critical Materials and Other Pollutants of Concern listed in Appendix B. Samples shall be grabs which are representative of the discharge, analyzed in accordance with the EPA-approved procedures contained in 40 CFR Part 136 using the lowest practical level of quantification, and collected no more than 6 months prior to the report due date (see Part 3.D.1).**
- C. All measurements, tests, and analyses of the characteristics of the discharge shall be determined in accordance with the EPA-approved procedures contained in 40 CFR Part 136 using the lowest practical level of quantification or, upon approval of the City, any validated methods from recognized authority in cases where the above referenced procedures are not available or do not apply to the characteristic involved.
- D. Sampling and Flow Monitoring Equipment.
  1. Samples shall be collected as follows:

- a. Unless approved otherwise by the City, composite samples shall be collected during a 24-hour period via automatic sampler at a rate proportional to the sampled stream flow.
  - b. Unless approved otherwise by the City, grab samples for all but pH shall represent the average of at least four (4) grab samples collected at intervals spaced appropriately for the discharge during a 24-hour period.
  - c. Unless approved otherwise by the City, grab samples for pH shall represent the minimum and maximum of at least four (4) grab samples collected at intervals spaced appropriately for the discharge during a 24-hour period.
  - d. Multiple grab samples collected during a 24-hour period may be composited prior to analysis as follows: in the laboratory or in the field for cyanides; only in the laboratory for fats, oil & grease; and not composited for pH.
2. The User shall provide, at its expense, an approved flow meter where required. Meters for measuring flow shall meet a City-approved standard of accuracy, and may be either temporary or permanent as approved by the City.

### PART 3. REPORTING REQUIREMENTS.

A. Periodic Monitoring Reports. From the period beginning on the effective date of this Permit and lasting until the expiration date of this Permit, the User shall report monitoring results as follows in addition to the general reporting requirements specified herein:

- **Reporting frequencies are set forth in Part 3.D, and in Appendix A which is attached hereto and made part hereof.**

The monitoring report shall indicate the nature and concentration of all pollutants in the effluent for which sampling and analyses were performed, including flow measurements if required. The report shall include the following at a minimum:

1. The date of sampling or measurements;
2. The method(s) of sampling or measurements;
3. Name of laboratory that performed the analyses;
4. The analytical techniques or methods used; and
5. The results of such analyses.

Where required by the City, the monitoring report shall also include the exact place and time of sampling or measurements; who performed the sampling or measurements; sample preservation techniques or procedures; completed chain-of-custody forms; the date(s) analyses were performed; and copies of quality assurance/quality control (QA/QC) reports for the laboratory that performed the analyses.

B. Additional Monitoring Data. If the User monitors any pollutant more frequently than required by this Permit, using procedures described in Parts 2.C and 2.D, the results of such monitoring shall be included in any calculations of compliance with effluent limitations and shall be reported in the periodic monitoring report submitted to the City. Such increased monitoring frequency shall also be indicated in the periodic report.

- C. Certification. All reports required by this Part shall include a cover letter signed by the User's authorized representative and containing the following certification statement:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

- D. Reporting.

1. Surveillance Reports. The User shall submit the reports which are checked below:

\_\_\_ Initial Report -- due by: \_\_\_\_\_

\_\_\_ Monthly Reports -- due by the 15th day of the month for the preceding month, beginning on: \_\_\_\_\_

Quarterly Reports -- due by January 31st, April 30th, July 31st, and October 31st for the quarter ending on the last day of the preceding month, beginning on: **Effective date of this permit.**

\_\_\_ Semi-Annual Monitoring Reports -- due by June 30th and December 31st of each year for the preceding six calendar months, beginning on: \_\_\_\_\_

Annual Reports -- due by July 31<sup>st</sup> of each year for the preceding twelve calendar months, beginning on: **Effective date of this permit.**

2. Exceedance Notification. The User shall verbally notify the City of any exceedance of discharge limits contained in this Permit, or any noncompliance with applicable pretreatment standards and requirements contained in the Sewer Use Ordinance, within twenty-four (24) hours of becoming aware of the exceedance. The User shall then submit a written follow-up report to the City within five (5) days of becoming aware of the exceedance. This report shall include the following:

- a. Description of the exceedance, the cause thereof, and known or estimated impact on the User's compliance status.
- b. Duration of the exceedance including exact dates and times; concentrations of violating constituents; known or estimated loads of violating constituents; and, if not already corrected, the anticipated time the exceedance is expected to continue.
- c. All steps taken or intended to be taken to reduce, eliminate and prevent reoccurrence of such an exceedance.

The User shall repeat sampling and analysis of all violating constituents and submit, in writing, the results of this second analysis to the City within thirty (30) days after becoming aware of the exceedance.

3. Accidental Discharge Notification. The User shall verbally notify the City immediately upon occurrence of an accidental discharge of substances prohibited by the Sewer Use Ordinance, or release of any slug loads or spills that may enter the public sewer system or the "Surface Waters of the State." The notification shall include location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken. Within 5 days following an accidental discharge the User shall submit a written report to the City. That report shall contain the description and cause of the discharge, the impact on the User's compliance status, the discharge location, concentration and volume of the discharge, duration of the discharge, date and time of the discharge, steps taken to reduce or eliminate the discharge. The User's notification of accidental releases in accordance with this section does not relieve it of other reporting requirements that arise under local, State, or Federal laws.
4. Bypass Notification. Bypass means the intentional diversion of waste streams from any portion of the User's pretreatment facility. Bypass is strictly prohibited, unless all three of the following conditions are met: the Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; there were no feasible alternatives to the Bypass such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime, except where the Bypass occurred during normal periods of equipment downtime or preventative maintenance and where adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment; and the User submitted the following required notifications:
  - a. If the need for a Bypass is known in advance, the User shall submit a written prior notice to the City at least ten (10) days before the date of the planned Bypass. The City may, at its discretion, approve or reject the planned Bypass after considering potential effects on the POTW.
  - b. In the case of an unanticipated Bypass, the User shall submit a verbal notification to the City within twenty four (24) hours of becoming aware of the Bypass. The User shall then submit a written follow-up report to the City within five (5) days of becoming aware of the Bypass. This report shall include the following:
    - (1) Description of the Bypass, the cause thereof, and known or estimated impact on the User's compliance status.
    - (2) Duration of the Bypass including exact dates and times; measured concentrations of affected constituents; known or estimated loadings of affected constituents; and, if not already corrected, the anticipated time the Bypass is expected to continue.
    - (3) All steps taken or intended to be taken to reduce, eliminate and prevent reoccurrence of such a Bypass.

If the unanticipated Bypass results in an exceedance of discharge limits contained in this Permit, or any noncompliance with applicable pretreatment standards and requirements contained in the Sewer Use Ordinance, the User shall also comply with the Exceedance Notification requirements of this Part.

5. Changed Discharge Notification. The User shall notify the City as soon as possible in advance of the introduction of new wastewater pollutants or any substantial change in the volume or character of pollutants in the User's discharge, including hazardous wastes. This requirement includes discharge of a pollutant or wastewater not described in the Permit Application, or in amounts in excess of the amounts described in the Permit Application.
6. New Pretreatment Equipment Notification. The User shall notify the City in writing within five (5) days after completion of a new installation of pretreatment facilities or continuous monitoring equipment, and the time it intends to commence operation thereof. The User shall notify the City when start-up of such facilities will occur and the person who will conduct any tests to be performed.
7. New Process Notification. The User shall notify the City prior to the introduction of new wastewater pollutants or any substantial change in the volume or characteristics of the wastewater being introduced into the POTW from the User's industrial process. Formal written notification shall follow within 30 days of such introduction.
8. Federal Categorical Pretreatment Standards ("FCPS") Reports, As Applicable.
  - a. Baseline Monitoring Report
    - (1) Where the User is subject to a FCPS and defined as an Existing Source pursuant to 40 CFR 403, a Baseline Monitoring Report meeting the requirements of 40 CFR 403.12(b) shall be submitted to the City at least one hundred eighty (180) days after the effective date of the corresponding FCPS or at least one hundred eighty (180) days after a City or MDEQ determination that the User is subject to an already effective FCPS, whichever is later.
    - (2) Where the User is subject to a FCPS and defined as a New Source pursuant to 40 CFR 403, a Baseline Monitoring Report meeting the requirements of 40 CFR 403.12(b) shall be submitted to the City at least ninety (90) days prior to commencement of discharge into the POTW.
  - b. Report on Compliance
    - (1) Where the User is subject to a FCPS and defined as an Existing Source pursuant to 40 CFR 403, a Report on Compliance meeting the requirements of 40 CFR 403.12(d) shall be submitted to the City within ninety (90) days following the final compliance date of the corresponding FCPS or within ninety (90) days following the compliance date established by the City or MDEQ after determining that the User is subject to an already effective FCPS, whichever is later.
    - (2) Where the User is subject to a FCPS and defined as a New Source pursuant to 40 CFR 403, a Report on Compliance meeting the requirements of 40 CFR 403.12(d) shall be submitted to the City within ninety (90) days following commencement of the discharge into the POTW.

#### PART 4. OTHER CONDITIONS OF DISCHARGE.

- A. Contacts. All references made herein to the City shall mean the City of Ann Arbor and, specifically, the Manager of Wastewater Treatment Services or his/her designee.

Notifications, reports, and other communications required by this permit shall be submitted as follows:

1. All written communications:

*Assistant Manager of Wastewater Treatment Services  
City of Ann Arbor Wastewater Treatment Plant  
49 South Dixboro Road  
Ann Arbor, MI 48105*

2. Verbal communications that occur during normal working hours (8:00 AM to 4:30 PM on Monday through Friday, excluding holidays):

*Assistant Manager of Wastewater Treatment Services  
(734) 794-6450, ext. 43822*

3. Verbal Communications that occur outside of normal working hours:

*Plant Control Room  
(734) 845-0781*

B. Maintenance of Records.

1. The User shall maintain copies of the reports required by this Permit and records pertaining to those reports. Such reports and records shall be retained by the User for at least three (3) years.
2. The User shall also maintain for at least three (3) years records regarding the User's generation, treatment, storage, or disposal of solid waste or hazardous waste, and make them available to the City for inspection and copying subject to the Confidential Information provisions in the Sewer Use Ordinance. The terms "solid waste" and "hazardous waste" shall have the same definition as provided in the Michigan Hazardous Waste Management Act, as amended, and rules promulgated thereunder.
3. These record maintenance periods shall be extended during the course of any unresolved litigation regarding the discharges of the User or when requested by the City, the MDEQ, or USEPA.

C. Upsets. An Upset means an exceptional incident in which there is unintentional and temporary exceedance of any discharge limits contained in this Permit, or any noncompliance with applicable pretreatment standards and requirements contained in the Sewer Use Ordinance, because of factors beyond the reasonable control of the User. After an affirmative defense of an Upset, the User will not be liable for enforcement penalties but may still be required to pay the City for extra-strength surcharges and damages.

An Upset shall not include exceedances or noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless operation, or improper operation. It is the User's responsibility to control production and/or discharges to the extent necessary to maintain compliance with all applicable limits, pretreatment standards, and requirements upon reduction, loss, or failure of its treatment facility until the facility is restored or an alternative method of treatment or disposal is provided. This requirement applies in the

situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

In an enforcement proceeding, the User shall have the burden of proof by clear and convincing evidence to establish the occurrence of an Upset. The User seeking to establish the affirmative defense of an Upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

1. An Upset occurred and the User can identify the cause(s) of the Upset;
2. The facility was at the time being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures;
3. The User has submitted the following information to the City within 24 hours of becoming aware of the Upset (if this information is provided orally, a written submission must be provided within five (5) days):
  - a. A description of the discharge and cause of non-compliance;
  - b. The period of non-compliance, including exact dates and times or, if not corrected, the anticipated time over which the non-compliance is expected to continue; and
  - c. Steps being taken and/or planned to reduce, eliminate, and prevent recurrence of the non-compliance.

D. Special Terms and Conditions. The following additional provisions shall apply to the User under this Permit:

- **Based on a demonstration submitted on May 8, 2014, the User is authorized to use single grab sampling in lieu of flow-proportional composite and/or multiple grab sample requirements unless notified otherwise by the City.**

## PART 5. GENERAL.

- A. Special Agreement Provision. If this Permit contains effluent limits which are less restrictive than the limits set forth in the Sewer Use Ordinance, "Prohibited Discharges", such less restrictive effluent limits and this Permit do not create any vested rights or property rights for the User to continue discharging under such less restrictive effluent limits. The City may terminate or modify such less restrictive effluent limits at will at any time by providing notice to the User.
- B. Inspection and Entry. The User shall allow an authorized representative of the City, upon the presentation of credentials and other documents as may be required by law, to:
  1. Enter upon the User's premises where a discharge originates, or where records must be kept under the conditions of this Permit;
  2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;
  3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit;

4. Sample or monitor, for the purposes of assuring Permit compliance, any substances or parameters at any location; and
  5. Inspect any production, manufacturing, fabricating, or storage area where pollutants, regulated under the Permit, could originate, be stored, or be discharged to the POTW.
- C. Dilution. The User shall not increase the use of potable or process water or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this Permit.
- D. Duty To Comply. The User must comply with all conditions of this Permit. Failure to comply with the requirements of this Permit may be grounds for administrative action, or enforcement proceedings including civil or criminal penalties and injunctive relief.
- E. Duty To Mitigate. The User shall take all reasonable steps to minimize or correct any adverse impact to the POTW or the environment resulting from non-compliance with this Permit, including accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
- F. Permit Modifications. The City shall have the right to amend any Permit issued hereunder in order to:
1. Assure compliance by the POTW with applicable laws, regulations, and the POTW NPDES Permit;
  2. Account for substantial changes in discharges by the User;
  3. Account for new information concerning the pollutants discharged by the User;
  4. Reflect changes in Federal or State laws and regulations or in City ordinances;
  5. In the event there are operational changes at the POTW that, as determined by the City, require revision of the Permit;
  6. Modify or terminate any special agreement provision contained in a Permit;
  7. Correct typographical or other errors in the Permit; or
  8. Reflect a transfer of the Permit.

The User shall be informed of any changes in the Permit at least thirty (30) days prior to the effective date of change, unless a shorter time is necessary to meet applicable law or to protect human health or the environment.

- G. Permit Revocation. The City may revoke this Permit during its term or deny renewal of this Permit if:
1. The User has failed to comply with any condition of the Permit.
  2. The User fails, in the Permit application or during the Permit issuance process, to disclose fully all relevant facts, or the User misrepresents any relevant fact at any time.
  3. The City determines that the permitted discharge endangers human health or the environment and the threat can only be abated by revocation of the Permit.



4. A change in any condition that requires either a temporary or permanent reduction or elimination of the discharge.
5. The User is in default, after having received written notice of such default, in the payment of fees or other amounts owed to the City related to wastewater matters.
6. Non-compliance by the User with any provision of the Sewer Use Ordinance.

Upon revocation of its Permit, the User shall immediately terminate its discharge to the POTW.

- H. Duty To Provide Information. The User shall furnish to the City within ten (10) days any information which the City may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The User shall also, upon request, furnish to the City within five (5) days copies of any records required to be kept by this Permit.
- I. Civil and Criminal Penalties and Other Liability. The Sewer Use Ordinance provides that any User who violates a Use Permit is subject to administrative civil penalties up to \$1,000.00 per day per violation, judicial civil penalties as allowed for home rule cities per day per violation, and criminal penalties of a fine of up to \$500.00 per day per violation or by imprisonment for 90 days or both. The penalties may be cumulative. The User may also be subject to penalties and sanctions under State and Federal law. In addition to civil and criminal penalties, the User may be subjected to administrative and judicial orders and may be liable for costs, damages, and surcharges.
- J. Limitations of Permit Transfer. This Permit is not assignable to another User or transferable to any other location without prior written approval of the City. The City shall approve a Use Permit transfer and make the necessary minor modifications to the Use Permit to show the transferee as the User, if the following conditions exist:
1. The transferor has not violated any provision of the Use Permit or of the Sewer Use Ordinance during the six (6) month period preceding the date of the transfer. The User, in the event of a transfer, shall provide a copy of this Permit to the transferee prior to the date of transfer. The transferee shall provide a written statement to the City acknowledging receipt of a copy of the Permit and stating the transferee's agreement to be bound by the terms of the Permit.
  2. As of the date of the transfer, there are no unpaid charges or fees due to the City from the User related to use of the POTW.
  3. The application for the Use Permit filed by the User remains the same with respect to the discharge, facilities, and activities of the transferee, except as to the identity of the discharger.
  4. The transferor provides written evidence to the City that a copy of the Use Permit has been provided to the transferee.
- K. Falsifying Information. It is a crime to knowingly make any false statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained pursuant to this Use Permit, or to falsify, tamper with, or knowingly render inaccurate any monitoring device or method required under this Permit.

- L. Severability. The provisions of this Permit are severable, and if any provision of this Permit, or the application of any provision of this Permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this Permit, shall not be affected thereby.

**APPENDIX A**  
**DISCHARGE LIMITS, SELF-MONITORING REQUIREMENTS, AND SPECIAL CONDITIONS**  
**CITY OF ANN ARBOR LANDFILL**

For the period beginning upon the effective date of this Permit until the expiration date of this Permit, the User shall operate, maintain, and monitor the discharge from the indicated outfall(s) in accordance with the following requirements:

**OUTFALL 001:**

Parameter (Units)	Daily Limit	Sample Location	Sample Type	Monitoring Frequency	Reporting Frequency	Miscellaneous Instructions
<i>Flow:</i>						
<b>Discharge Volume (gallons)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Meter</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Also report calculated average discharge rate (gallons per day)</b>
<i>Compatible Pollutants of Concern:</i>						
<b>Ammonia, as Nitrogen (mg/L)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>pH (s.u.)</b>	<b>5.0 min 10.0 max</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<i>Toxic Pollutants of Concern:</i>						
<b>Arsenic (µg/L)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Copper (µg/L)</b>	<b>4,000</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Lead (µg/L)</b>	<b>500</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Nickel (µg/L)</b>	<b>3,000</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Selenium (µg/L)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Zinc (µg/L)</b>	<b>3,000</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	

mg/L milligrams per liter  
 µg/L micrograms per liter  
 s.u. standard units

Special Conditions

- 1,4-Dioxane shall be monitored and reported quarterly using grab samples collected at wellhead. Analysis shall be via a USEPA-approved method with target quantification level at or below 1.0 µg/L.**
- Annual pollutant scan required in accordance with Part 2.B.**

APPENDIX A (continued)

**OUTFALL 003:**

Parameter (Units)	Daily Limit	Sample Location	Sample Type	Monitoring Frequency	Reporting Frequency	Miscellaneous Instructions
<i>Flow:</i>						
Discharge Volume (gallons)	Report	Wellhead	Meter	Quarterly	Quarterly	Also report calculated average discharge rate (gallons per day)

Special Conditions

1. Permittee shall immediately notify the WWTP whenever it is determined that a daily average flow exceeds 7.5 gallons per minute or 10,000 gallons per day.

APPENDIX A (continued)

**OUTFALL 004:**

Parameter (Units)	Daily Limit	Sample Location	Sample Type	Monitoring Frequency	Reporting Frequency	Miscellaneous Instructions
<i>Flow:</i>						
<b>Discharge Volume (gallons)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Meter</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Also report calculated average discharge rate (gallons per day)</b>

Special Conditions

1. Permittee shall immediately notify the WWTP whenever it is determined that a daily average flow exceeds 7.5 gallons per minute or 10,000 gallons per day.

APPENDIX A (continued)

**OUTFALL 005:**

Parameter (Units)	Daily Limit	Sample Location	Sample Type	Monitoring Frequency	Reporting Frequency	Miscellaneous Instructions
<i>Flow:</i>						
<b>Discharge Volume (gallons)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Meter</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Also report calculated average discharge rate (gallons per day)</b>
<i>Compatible Pollutants of Concern:</i>						
<b>Total Suspended Solids (mg/L)</b>	<b>250</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Note 1</b>
<b>Ammonia, as Nitrogen (mg/L)</b>	<b>Report</b>					<b>Note 1</b>
<b>pH (s.u.)</b>	<b>5.0 min 10.0 max</b>					<b>Note 1</b>
<i>Toxic Pollutants of Concern:</i>						
<b>Arsenic (µg/L)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Note 1</b>
<b>Cadmium (µg/L)</b>	<b>1,000</b>					<b>Note 1</b>
<b>Copper (µg/L)</b>	<b>4,000</b>					<b>Note 1</b>
<b>Cyanides, Total (µg/L)</b>	<b>1,000</b>					<b>Note 1</b>
<b>Lead (µg/L)</b>	<b>500</b>					<b>Note 1</b>
<b>Nickel (µg/L)</b>	<b>3,000</b>					<b>Note 1</b>
<b>Selenium (µg/L)</b>	<b>Report</b>					<b>Note 1</b>
<b>Zinc (µg/L)</b>	<b>3,000</b>					<b>Note 1</b>
mg/L	milligrams per liter					
µg/L	micrograms per liter					
s.u.	standard units					

Special Conditions

1. Whenever daily average flow exceeds 17.5 gallons per minute or 25,000 gallons per day, the indicated monitoring/reporting requirements apply and the following requirements also apply:
  - a. 1,4-Dioxane shall be monitored and reported quarterly using grab samples collected at wellhead. Analysis shall be via a USEPA-approved method with target quantification level at or below 1.0 µg/L.
  - b. Vinyl chloride shall be monitored and reported quarterly using grab samples collected at wellhead. Analysis shall be via a USEPA-approved method with target quantification level at or below 1.0 µg/L.

APPENDIX A (continued)

**OUTFALL 006:**

Parameter (Units)	Daily Limit	Sample Location	Sample Type	Monitoring Frequency	Reporting Frequency	Miscellaneous Instructions
<i>Flow:</i>						
<b>Discharge Volume (gallons)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Meter</b>	<b>Quarterly</b>	<b>Quarterly</b>	<b>Also report calculated average discharge rate (gallons per day)</b>
<i>Compatible Pollutants of Concern:</i>						
<b>Total Suspended Solids (mg/L)</b>	<b>250</b>					
<b>Ammonia Nitrogen (mg/L)</b>	<b>Report</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>pH (s.u.)</b>	<b>5.0 min 10.0 max</b>					
<i>Toxic Pollutants of Concern:</i>						
<b>Arsenic (µg/L)</b>	<b>Report</b>					
<b>Cadmium (µg/L)</b>	<b>1,000</b>					
<b>Cyanides, Total (µg/L)</b>	<b>1,000</b>					
<b>Lead (µg/L)</b>	<b>500</b>	<b>Wellhead</b>	<b>Grab</b>	<b>Quarterly</b>	<b>Quarterly</b>	
<b>Nickel (µg/L)</b>	<b>3,000</b>					
<b>Selenium (µg/L)</b>	<b>Report</b>					
<b>Zinc (µg/L)</b>	<b>3,000</b>					

mg/L milligrams per liter  
µg/L micrograms per liter  
s.u. standard units

Special Conditions

1. 1,4-Dioxane shall be monitored and reported quarterly using grab samples collected at wellhead. Analysis shall be via a USEPA-approved method with target quantification level at or below 1.0 µg/L.
2. Vinyl chloride shall be monitored and reported quarterly using grab samples collected at wellhead. Analysis shall be via a USEPA-approved method with target quantification level at or below 1.0 µg/L.
3. Annual pollutant scan required in accordance with Part 2.B.

**APPENDIX B**  
**CITY OF ANN ARBOR INDUSTRIAL PRETREATMENT PROGRAM**  
**PRIORITY POLLUTANTS/CRITICAL MATERIALS**

001 Acenaphthene	046 Methyl Bromide [Bromomethane]	088 Vinyl Chloride [Chloroethylene]
002 Acrolein	047 Bromoform [Tribromomethane]	089 Aldrin
003 Acrylonitrile	048 Dichlorobromomethane	090 Dieldrin
004 Benzene	051 Chlorodibromomethane	091 Chlordane (technical mixture and metabolites)
005 Benzidine	052 Hexachlorobutadiene	092 4,4-DDT
006 Carbon Tetrachloride [Tetrachloromethane]	053 Hexachloromyclopentadiene	093 4,4-DDE [p,p-DDX]
007 Chlorobenzene	054 Isophorone	094 4,4-DDD [p,p-TDE]
008 1,2,4-Trichlorobenzene	055 Naphthalene	095 alpha-Endosulfan
009 Hexachlorobenzene	056 Nitrobenzene	096 beta-Endosulfan
010 1,2-Dichloroethane	057 2-Nitrophenol	097 Endosulfan Sulfate
011 1,1,1-Trichloroethane	058 4-Nitrophenol	098 Endrin
012 Hexachloroethane	059 2,4-Dinitrophenol	099 Endrin Aldehyde
013 1,1-Dichloroethane	060 4,6-Dinitro-o-Cresol	100 Heptachlor
014 1,1,2-Trichloroethane	061 N-Nitrosodimethylamine	101 Heptachlor Epoxide [BHC; hexachlorocyclohexane]
015 1,1,2,2-Tetrachloroethane	062 N-Nitrosodiphenylamine	102 alpha-BHC
016 Chloroethane	063 N-Nitrosodi-n-propylamin	103 beta-BHC
018 bis (2-Chloroethyl) Ether	064 Pentachlorophenol	104 gamma-BHC [Lindane]
019 2-Chloroethyl Vinyl Ether	065 Phenol	105 delta-BHC [PCB; poly-chlorinated biphenyls]
020 2-Chloronaphthalene	066 bis (2-Ethylhexyl) Phthalate	106 PCB-1242 [Arochlor 1242]
021 2,4, 6-Trichlorophenol	067 Butyl Benzyl Phthalate	107 PCB-1254 [Arochlor 1254]
022 Parachlorometa Cresol	068 Di-n-butyl Phthalate	108 PCB-1221 [Arochlor 1221]
023 Chloroform [Trichloromethane]	069 Di-n-octyl Phthalate	109 PCB-1232 [Arochlor 1232]
024 2-Chlorophenol	070 Diethyl Phthalate	110 PCB-1248 [Arochlor 1248]
025 1,2-Dichlorobenzene	071 Dimethyl phthalate	111 PCB-1260 [Arochlor 1260]
026 1,3-Dichlorobenzene	072 1,2-Benzanthracene [Benzo(a)-anthracene]	112 PCB-1016 [Arochlor 1016]
027 1,4-Dichlorobenzene	073 Benzo(a)pyrene [3,4-Benzo-pyrene]	113 Toxaphene
028 3,3-Ddichlorobenzidine	074 3,4-Benzofluoranthene [Benzo-(b)fluoranthene]	114 Antimony
029 1,1-Ddichloroethylene	075 11,12-benzofluoranthene [Benzo-(b)fluoranthene]	115 Arsenic
030 1,2-trans-Dichloroethylene	076 Chrysene	116 Asbestos
031 2,4-Ddichlorophenol	077 Acenaphthylene	117 Beryllium
032 1,2-Dichloropropane	078 Anthracene	118 Cadmium
033 1,2-Dichloropropylene [1,3-Dichloropropene]	079 1,1,2-Benzoperylene [Benzo-(ghi)perylene]	119 Chromium
034 2,4-Dimethylphenol	080 Fluorene	120 Copper
035 2,4-Dinitrotoluene	081 Phenanthrene	121 Cyanides
036 2,6-Ddinitrotoluene	082 1,2,5,6-Dibenzanthracene [Dibenzo(h)anthracene]	122 Lead
037 1,2-Diphenylhydrazine	083 Indeno (1,2,3-cd) pyrene [2,3-o-pheynylene pyrene]	123 Mercury
038 Ethylbenzene	084 Pyrene	124 Nickel
039 Fluoranthene	085 Tetrachloroethylene	125 Selenium
040 4-Chlorophenyl Phenyl Ether	086 Toluene	126 Silver
041 4-Bromophenyl Phenyl Ether	087 Trichloroethylene	127 Thallium
042 bis (2-Chloroisopropyl) Ether		128 Zinc
043 bis (2-Chloroethoxy) Methane		129 2,3,7,8-Tetrachloro-dibenzo-p-dioxin [TCDD]
044 Methylene Chloride [Dichloromethane]		
045 Methyl Chloride [Chloro- methane]		

**OTHER POLLUTANTS OF CONCERN**

A 5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	D Ammonia Nitrogen	H Chemical Oxygen Demand (COD)
B Total Suspended Solids (TSS)	E Total Fats, Oils & Grease (FOG)	I Total Dissolved Solids (TDS)
C Total Phosphorus	F pH	J Nonpolar FOG (petroleum-based)
	G Molybdenum	K Temperature



**APPENDIX A: SAMPLE PROFESSIONAL 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:*

**SAMPLE PROFESSIONAL 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 48103 ("City"), and \_\_\_\_\_

("Contractor") a(n) \_\_\_\_\_  
(State where organized) (Partnership, Sole Proprietorship, or Corporation)

with its address at \_\_\_\_\_  
agree as follows on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

The Contractor agrees to provide services to the City under the following terms and conditions:

**I. DEFINITIONS**

Administering Service Area/Unit means \_\_\_\_\_.

Contract Administrator means \_\_\_\_\_, 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 \_\_\_\_\_.  
Project name

**II. DURATION**

This Agreement shall become effective on \_\_\_\_\_, 20\_\_\_\_, and shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in Article XI.

**III. SERVICES**

A. The Contractor agrees to provide \_\_\_\_\_  
type of service

("Services") in connection with the Project as described in Exhibit A. The City retains the right to make changes to the quantities of service within the general scope of the Agreement at any time by a written order. 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.
- 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 professional or when it 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.

#### **V. COMPENSATION OF CONTRACTOR**

- A. The Contractor shall be paid in the manner set forth in Exhibit B. Payment shall be made monthly, 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 work performed (e.g. tasks performed/hours allocated) 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.

- 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. COMPLIANCE REQUIREMENTS**

- A. Nondiscrimination. 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 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.
- B. Living Wage. 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.

## **VIII. 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 professional licenses necessary to perform the Services specified in this Agreement.
- C. The Contractor warrants that it has available, or will engage, at its own expense, sufficient trained employees to provide the Services specified in this Agreement.
- D. The Contractor warrants 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.
- E. The Contractor warrants that its proposal for services 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.

**IX. OBLIGATIONS OF THE CITY**

- A. The City agrees to give the Contractor access to the Project area and other City-owned 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.

**X. ASSIGNMENT**

- A. 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.

**XI. 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 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.

- C. 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.
- D. The provisions of Articles VI and VIII 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.

## **XII. 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.

### **XIII. 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:

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

City of Ann Arbor

\_\_\_\_\_  
(insert name of Administering Service Area Administrator)

301 E. Huron St.  
Ann Arbor, Michigan 48103

### **XIV. 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.

### **XV. 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. The City acknowledges that the documents are prepared only for the Project. Prior to completion of the contracted Services the City shall have a recognized proprietary interest in the work product of the Contractor.

Unless otherwise stated in this Agreement, any intellectual property owned by Contractor prior to the effective date of this Agreement (i.e., Preexisting Information) shall remain the exclusive property of Contractor even if such Preexisting Information is embedded or otherwise incorporated in materials or products first produced as a result of this Agreement or used to develop Deliverables. The City's right under this provision shall not apply to any Preexisting Information or any component thereof regardless of form or media.

#### **XV. CONFLICTS OF INTEREST OR REPRESENTATION**

Contractor certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Contractor further certifies that it presently has no personal or financial interest, and shall not acquire any such interest, direct or indirect, which would conflict in any manner with its performance of the Services under this Agreement.

Contractor agrees to advise the City if Contractor has been or is retained to handle any matter in which its representation is adverse to the City. The City's prospective consent to the Contractor's representation of a client in matters adverse to the City, as identified above, will not apply in any instance where, as the result of Contractor's representation, the Contractor has obtained sensitive, proprietary or otherwise confidential information of a non-public nature that, if known to another client of the Contractor, could be used in any such other matter by the other client to the material disadvantage of the City. Each matter will be reviewed on a case by case basis.

#### **XVII. 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.

#### **XVIII. 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**

By \_\_\_\_\_  
Type Name  
Its

**FOR THE CITY OF ANN ARBOR**

By \_\_\_\_\_  
Christopher Taylor, Mayor

By \_\_\_\_\_  
Jacqueline Beaudry, City Clerk

**Approved as to substance**

\_\_\_\_\_  
City Administrator

\_\_\_\_\_  
Type Name  
Service Area Administrator

**Approved as to form and content**

\_\_\_\_\_  
Stephen K. Postema, City Attorney



**EXHIBIT A  
SCOPE OF SERVICES**

**(Insert/Attach Scope of Work & Deliverables Schedule)**

## **EXHIBIT B COMPENSATION**

### General

Contractor shall be paid for those Services performed pursuant to this Agreement inclusive of all reimbursable expenses (if applicable), in accordance with the terms and conditions herein. The Compensation Schedule below/attached states nature and amount of compensation the Contractor may charge the City:

(insert/Attach Negotiated Fee Arrangement)

**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 shall meet the following minimum requirements.

A. The Contractor shall have insurance that meets the following minimum requirements:

1. Professional Liability Insurance or Errors and Omissions Insurance protecting the Contractor and its employees in an amount not less than \$1,000,000.
  
2. 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
  
3. 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
  
4. 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. 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.
  
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.3 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.
  
- B. 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.