# AGREEMENT BETWEEN TETRA TECH GEO, INC. AND THE CITY OF ANN ARBOR FOR PROFESSIONAL SERVICES

The City of Ann Arbor, a Michigan municipal corporation, having its offices at 301 E. Huron St., Ann Arbor, Michigan 48104 ("City"), and Tetra Tech GEO, Inc., a Virginia Corporation with its address at 710 Avis Drive, Ann Arbor, Michigan 48108 ("Consultant") agrees as follows on this  $2^{nd}$  day of July, 2012.

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

#### I. **DEFINITIONS**

Administering Service Area/Unit means Project Management Unit.

Contract Administrator means <u>Homayoon Pirooz</u>, <u>P.E.</u>, 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 or delivered to City by Consultant under this Agreement

Project means Ann Arbor Landfill Monitoring and Maintenance Program 2012-2017; File No.: 2012-024.

#### II. DURATION

This Agreement shall become effective on July 2, 2012, and shall remain in effect until satisfactory completion of the Services specified below unless terminated as provided for in this Agreement.

# III. SERVICES

A. The Consultant agrees to provide professional services ("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 professional quality performed by experts regularly rendering this type of service. Determination of acceptable quality shall be made solely by the Contract Administrator.
- C. The Consultant 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 Consultant may rely upon the accuracy of reports and surveys provided to it by the City 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. COMPENSATION OF CONSULTANT

- A. The Consultant 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 Consultant, and approved by the Contract Administrator.
- B. The Consultant will be compensated for Services performed in addition to the Services described in Section III, only when those additional Services have received prior written approval of the Contract Administrator. Compensation will be on the basis of reasonable time spent and reasonable quantities of materials used, according to the schedule of rates in Exhibit B. The Contract Administrator shall be the sole arbitrator of what shall be considered "reasonable" under this provision.
- C. The Consultant shall keep complete records of time spent and materials used on the Project so that the City may verify invoices submitted by the Consultant. Such records shall be made available to the City upon request and submitted in summary form with each invoice.

# V. INSURANCE/INDEMNIFICATION

- A. The Consultant shall procure and maintain during the life of this contract, such insurance policies, including those set forth below, 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 acts were made by the Consultant or by any subcontractor or anyone employed by them directly or indirectly. The following insurance policies are required:
  - 1. Professional Liability Insurance protecting the Consultant 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. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements including, but not limited to: Products and Completed Operations, Explosion, Collapse and Underground Coverage or Pollution. 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. The City of Ann Arbor shall be an additional insured. There shall be no added exclusions or limiting endorsements. 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 V.A.3 and V.A.4 of this contract shall be considered primary as respects any other valid or collectible insurance that the City may possess, including any self-insured retentions the City may have; and any other insurance the City does possess shall be considered excess insurance only and shall not be required to contribute with this insurance. Further, the Contractor agrees to waive any right of recovery by its insurer against the City.

- C. In the case of all contracts involving on-site work, the Consultant shall provide to the City, before the commencement of any work under this contract, documentation demonstrating it has obtained the above mentioned policies. 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. An original certificate of insurance may be provided as an initial indication of the required insurance, provided that no later than 21 calendar days after commencement of any work the Consultant supplies a copy of the endorsements required on the policies. Upon request, the Consultant 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 Consultant shall deliver proof of renewal and/or new policies to the Administering Service Area/Unit at least ten days prior to the expiration date.
- D. Any insurance provider of Consultant 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.
- E. To the fullest extent permitted by law, for any loss not covered by insurance under this contract, the Consultant 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, to its proportionate extent, from any negligent, grossly negligent, reckless and/or intentional wrongful or tortious acts or omissions by the Consultant or its employees and agents occurring in the performance of this Agreement.

# VI. COMPLIANCE REQUIREMENTS

A. <u>Nondiscrimination</u>. The Consultant agrees to comply with the nondiscrimination provisions 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 and tends to eliminate any inequality based upon race, national origin or sex. The Consultant agrees to comply with the provisions of Section 9:161 of Chapter 112 of the Ann Arbor City Code, Exhibit C.

B. Living Wage. The Consultant is a "covered employer" as defined in Chapter 23 of the Ann Arbor City Code and agrees to comply with the living wage provisions of Chapter 23 of the Ann Arbor City Code. The Consultant 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) and specified in Exhibit D; 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. A copy of selected provisions of Chapter 23 of the Ann Arbor City Code is attached as Exhibit D.

#### VII. WARRANTIES BY THE CONSULTANT

- A. The Consultant warrants that the quality of its Services under this Agreement shall conform to the level of professional quality performed by experts regularly rendering this type of service.
- B. The Consultant warrants that it has all the skills, experience, and professional licenses necessary to perform the Services specified in this Agreement.
- C. The Consultant 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 Consultant 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.

#### VIII. 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.
- B. The City may terminate this Agreement if it decides not to proceed with the Project by notice pursuant to Article XII. If the Project is terminated for reasons other than the breach of the Agreement by the Consultant, the Consultant shall be compensated for reasonable time spent and reasonable quantities of materials used prior to notification of termination.

- C. Consultant 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 the Consultant. The Contract Administrator shall give the Consultant written notice of such non-appropriation within thirty (30) days after it receives notice of such non-appropriation.
- D. The remedies provided in this Agreement will be cumulative, and the assertion by a party of any right or remedy will not preclude the assertion by such party of any other rights or the seeking of any other remedies.

#### IX. OBLIGATIONS OF THE CITY

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

#### X. ASSIGNMENT

- A. The Consultant 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, Consultant 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 Consultant shall retain the right to pledge payment(s) due and payable under this Agreement to third parties.

#### XI. NOTICE

All notices and submissions required under this Agreement shall be by personal delivery or by first-class mail, postage prepaid, to the address stated in this Agreement or such other address as either party may designate by prior written notice to the other. Notice shall be considered delivered under this Agreement when personally delivered to the Contract Administrator or placed in the U.S. mail, postage prepaid to the Administering Service Area/Unit, care of the Contract Administrator.

#### XII. CHOICE OF LAW

This Agreement will be governed and controlled in all respects by the laws of the State of Michigan, including interpretation, enforceability, validity and construction. 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.

#### XIII. OWNERSHIP OF DOCUMENTS

Upon completion or termination of this Agreement, all documents (i.e., deliverables) prepared by or obtained by the Consultant 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 Consultant 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 Consultant.

Unless otherwise stated in this Agreement, any intellectual property owned by Consultant prior to the effective date of this Agreement (i.e., preexisting information) shall remain the exclusive property of Consultant 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.

#### XIV. CONFLICT OF INTEREST

Consultant certifies it has no financial interest in the Services to be provided under this Agreement other than the compensation specified herein. Consultant 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.

#### XV. 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.

#### XVI. EXTENT OF AGREEMENT

This Agreement, together with any affixed exhibits, schedules or other documentation, constitutes the entire understanding between the City and the Consultant 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. This Agreement may be altered, amended or modified only by written amendment signed by the Consultant and the City.

FOR TETRA TECH GEO, INC.	FOR THE CITY OF ANN ARBOR
Ву	By John Hieftje, Mayor
	Ву
	Jacqueline Beaudry, City Clerk
	Approved as to substance
	Ву
	Steven D. Powers, City Administrator
	Ву
	Craig Hupy, P.E. Interim Public Service Area Administrator
	Approved as to Form and Content
	Stephen K. Postema, City Attorney

# EXHIBIT A 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 recent 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. In 2011, the city performed a pilot bioaugmentation project to see if this technique would destroy vinyl chloride in an area outside of the landfill. This pilot is expected to continue thru the spring of 2012.

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 Landfill Energy Systems. The gas recovery facility was installed in October 1996 and collects nearly one million cubic feet of landfill gas (55% methane) each day. Since 1997, the landfill gas has been used to fuel a large electricity-producing engine. This generator is capable of producing 800 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 on July 1, 2012, corresponding to start of the City's fiscal year and end on June 30, 2017, if the original three 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. Limited monitoring of the lower aquifer is also to be completed. The frequency of monitoring varies from quarterly to annually and may change based on future findings. Groundwater monitoring at the AALF shall be completed in accordance with the Ann Arbor Landfill Hydrogeologic Monitoring Plan, dated March 13, 2000, (as amended August 2000).

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

This task includes the work effort necessary to collect static water levels from 72 locations: 37 groundwater monitoring wells, 22 piezometers, eight observation wells, four purge wells and one test well, listed in *Table 1 - Groundwater Monitoring Program, List of Sample Locations and Analytical Parameters*. 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 quarterly basis. 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 an added to the GIS database.

#### **Task 1.2:** Sample Groundwater Monitoring Wells

Sampling shall occur in the months of January, April, July 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, List of Sample Locations and Analytical Parameters*. 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 representative of actual groundwater quality. To ensure that all samples obtained are representative of the groundwater, all wells sampled shall be purged to a minimum of three well volumes. 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 Ann Arbor Technical Services (ATS) of Ann Arbor, Michigan, 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.

# **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 quarterly 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 for signature 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. Meetings shall be attended by consultant's principal-in-charge and/or a project manager.

# **Task 1.7:** 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 was modified. There may be a need to update this analysis as part of RAP compliance.

#### 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 is being completed in accordance with a Landfill Gas Monitoring Program (LGMP), revised in March 2008 and subsequent addendum dated May 1, 2008. The gas monitoring locations at the AALF are depicted in *Figure 2 - Annual 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 described in *Table 3 - Concession Building and Southeast Area Park Utilities Annual Gas Monitoring Locations*.

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.

Table 1 Groundwater Monitoring Program, List of Sample Locations and Analytical Parameters

Well Identification	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, A			SA, A
W-48-89	Q	SA, A		SA, A	SA, A
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, A		SA, A	SA, A
W-70-92	Q				
W-72-90	Q				
W-76-91	Q	SA, A		SA, A	SA, A
W-77-91	Q	SA, A		SA, A	SA, A
W-78-91	Q	,			,
W-81-91	Q				
W-83-91**	Q	A			A
W-84-92	Q	Q, SA, A	Q, SA, A		
W-85-92	Q	, ,	, ,		
W-86-92	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
W-87-92	Q	Q, SA, A	Q, SA, A		· · · · · · · · · · · · · · · · · · ·
W-88-92	Q		,		
W-89-92	Q	Q, SA, A	Q, SA, A		SA, A
W-90-92	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
W-91-92	Q		,		· · · · · · · · · · · · · · · · · · ·
W-92-92	Q				
W-93-92	Q				
W-94-92	Q	SA, A		SA, A	SA, A
W-95-92	Q	SA, A		SA, A	SA, A
W-96-92	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
W-100-93	Q	Q, SA, A	Q, SA, A		SA, A
W-101-93	Q				
W-104-94**	Q	A			A
PW-1R-01	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
PW-2R-01	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
PW-3R-01	Q	Q, SA, A	Q, SA, A	SA, A	SA, A
PW-4	Q				
TW-1	Q				
OW-2	Q				
OW-7	Q				
OW-15	Q				
OW-24	Q				
OW-25	Q				

 $\begin{tabular}{ll} \textbf{Table 1}\\ \textbf{Groundwater Monitoring Program, List of Sample Locations and Analytical Parameters}\\ & (continued) \end{tabular}$ 

Well Identification	SWL	Field Parameters	VOCs	Chloride	1,4-Dioxane
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				

Sampling Event	Total	VOCs	Chloride	1,4- Dioxane
Quarterly (January, July)	73	10	0	0
Semi Annually (April)	73	10	12	15
Annually (October)	73	10	15	20

#### Legend

\* Well screen location is not distinguished between upper and lower.

\*\* Well is screened in the lower aquifer.

Q = Quarterly event: January and July

SA = Semi-annual event: April A = Annual event: October

# **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 - Annual Gas Monitoring Location Map* and *Figure 3 - Gas Monitoring Locations Inside Buildings* and described in *Table 2 - Gas Sampling Location and Frequency* and *Table 3 - Concession Building and Southeast Area Park Utilities Annual Gas Monitoring Locations*.

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.

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.

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 for signature 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.

Table 2
Gas Sampling Location and Frequency

Monitoring Location	Sampling Event	Monitoring Location	Sampling Event
MP-1	Q, SA, A	W (Water Manhole)	SA, A
MP-2	Q, SA, A	MP (Meter Pit)	SA, A
MP-3	Q, SA, A	GP-1S	Q, SA, A
MP-4	Q, SA, A	GP-1D	Q, SA, A
MP-5	Q, SA, A	GP-2S	Q, SA, A
MP-6	Q, SA, A	GP-2D	Q, SA, A
MP-7	Q, SA, A	GP-3S	Q, SA, A
MP-8	Q, SA, A	GP-3D	Q, SA, A
MP-9	Q, SA, A	GP-4S	Q, SA, A
MP-10	Q, SA, A	GP-4D	Q, SA, A
MP-11	Q, SA, A	GP-5S	Q, SA, A
MP-12	Q, SA, A	GP-5D	Q, SA, A
MP-13	Q, SA, A	GP-6SR-99	SA, A
MP-14	Q, SA, A	GP-7S-98	Q, SA, A
MP-15	Q, SA, A	GP-7D-98	Q, SA, A
MP-16	Q, SA, A	GP-8SR-05	Q, SA, A
MP-17	Q, SA, A	GP-8D-98	Q, SA, A
S1 (Sanitary Sewer)	Q, SA, A	GP-10-99	A
S2	SA, A	GP-11-99	A
S3	Q, SA, A	GP-12-99	A
S4	SA, A	GP-13-99	SA, A
S5	SA, A	GP-14-02	SA, A
R1 (Storm Sewer)	Q, SA, A	GP-15-02	SA, A
R2	Q, SA, A	GP-16-02	SA, A
R3	A	TGP-1	SA, A
R4	A	TGP-2	Q, SA, A
R5	A	P-3U	Q, SA, A
R6	SA, A		
Indoor Locations (17)	Q, SA, A	(see Figure 3- Gas Monitoring Loc	ations Inside Buildings)
Concession Building & South East Area Park (12)	A	(see Table 3 - Concession Building of Utilities Annual Gas Monito	

Sampling Event	Total Samples
Quarterly (January, July)	54
Semi Annually (October)	66
Annually (April)	84

Legend:

Q = Quarterly event: January and July SA = Semi-annual event: October

A = Annual event: April

Table 3 Concession Building and Southeast Area Park Utilities Annual Gas Monitoring Locations

Gas Monitoring Locations						
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						

# Task 2.4: Southeast Park Landfill Gas Monitoring Survey

This task includes the completion of landfill gas monitoring survey monthly 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 Industrial User Permit No.: 063099A, dated June 30, 2009. 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. In addition, the Consultant shall provide DTE Energy with a picture of the electrical meter on a monthly basis at MH-B.

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

Quarterly water samples shall be collected from three purge wells and two leachate manholes. Field measurements of pH, specific conductance and temperature shall be recorded from water samples extracted from each sampling location.

Table 4
Quarterly Wastewater Sampling (January, April, October)

	Outfall	COD	TSS	1,4-Dioxane	Fats, Oil and Grease	Ammonia	VC	Total Hg
PW-1R-01	001	X	X	X	X			
PW-2R-01	005			X				
PW-3R-01	006	X		X	X	X	X	
MH-A	003	X	X	X	X	X		X
МН-В	004	X	X	X	X	X		X
Totals		4	3	5	4	3	1	2

Table 5
Annual Wastewater Sampling (July)

	Outfall	COD	TSS	1,4-Dioxane	Fats, Oil and Grease	Ammonia	CN	Total Phenols
PW-1R-01	001	X	X	X	X	X	X	X
PW-2R-01	005			X				
PW-3R-01	006	X	X	X	X	X	X	X
MH-A	003	X	X	X	X	X	X	X
MH-B	004	X	X	X	X	X	X	X
Totals		4	4	5	4	4	4	4

	Phosphates	BOD	Total Metals	VOCs	SVOCs	PCBs	Pesticides
PW-1R-01	X	X	X	X	X	X	X
PW-2R-01							
PW-3R-01	X	X	X	X	X	X	X
MH-A	X	X	X	X	X	X	X
MH-B	X	X	X	X	X	X	X
Totals	4	4	4	4	4	4	4

**Task 3.3:** Laboratory Analysis

Samples for 1,4-dioxane analysis shall be submitted to ATS under chain-of-custody procedures for analysis.

Analyses to be completed on wastewater samples collected from the purge wells and leachate manholes A and B shall include various inorganic and organic constituents as identified in the City's current wastewater discharge permit, which are presented in Tables 4 & 5. 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 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 for signature prior to submittal to regulatory agencies.

# **Task 3.5: Groundwater Pre-treatment**

The City of Ann Arbor has pursued advanced oxidation treatment of groundwater and leachate contaminants. Discussions would be required with MDEQ and other agencies about potential discharges to surface or groundwater. The Consultant must demonstrate experience with NPDES permit application development and compliance testing and reporting to MDEQ. The Consultant shall provide examples of pretreatment experience at landfills or other contaminated sites prior to discharges to surface or groundwater.

# Task 3.6: Renewal of Industrial Use Permit

The Consultant shall prepare and coordinate the renewal of the Industrial Use Permit in 2014. 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.

# **Task 3.7: Groundwater Remediation**

The City of Ann Arbor has recently undertaken a pilot bioaugmentaqtion 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. 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.

# 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 two copies of a CD 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 assists.

#### 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 achieve landfill closure; 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.

# EXHIBIT B FEE SCHEDULE

kdown Structure (WBS)	Task Number	Cost - Fiscal Year: July 1, 2012 to June 30, 2013	Cost - Fiscal Year: July 1, 2013 to June 30, 2014	Cost - Fiscal Year: July 1, 2014 to June 30, 2015	Option Yr. 4 July 1 2015 - June 30, 2016	Option Yr. 5 July 1, 2016 - June 30, 2017	Total Project Cost 2012 - 2015	Total Proje of Option 2017
ANN ARBOR LANDFILL								201
GROUNDWATER MONITORING PROGRAM	1							
Collection of Static Groundwater Levels - Quarterly (January, April, July & October)	1.1	\$4,948.00	\$4,948.00	\$4,948.00	\$4,948.00	\$4,948.00	\$14,844.00	\$
Sample Groundwater Monitoring Wells - Quarterly (January & July)	1.2	\$3,466.00	\$3,466.00	\$3,466.00	\$3,466.00	\$3,466.00	\$10,398.00	\$
Sample Groundwater Monitoring Wells - Semi-Annual (April)	1.2	\$2,919.00	\$2,919.00	\$2,919.00	\$2,919.00	\$2,919.00	\$8,757.00	Ş
Sample Groundwater Monitoring Wells - Annual (October)	1.2	\$3,881.00	\$3,881.00	\$3,881.00	\$3,881.00	\$3,881.00	\$11,643.00	
Perform Laboratory Analysis (January, April, July & October)	1.3	\$5,722.20	\$5,722.20	\$5,722.20	\$5,722.20	\$5,722.20	\$17,166.60	\$
Review and Analysis of Results	1.4	\$3,800.00	\$3,800.00	\$3,800.00	\$3,800.00	\$3,800.00	\$11,400.00	
Prepare and Submit Monitoring Report	1.5	\$7,980.00	\$7,980.00	\$7,980.00	\$7,980.00	\$7,980.00	\$23,940.00	\$
Regulatory and/or Public Meetings	1.6	\$5,858.00	\$5,858.00	\$5,858.00	\$5,858.00		\$17,574.00	\$
Capture Zone Analysis	1.7	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	,	
				Task 1 - Subtotal			\$115,722.60	\$
LANDFILL GAS MONITORING PROGRAM	2							
Complete Field Monitoring - Quarterly (January, April, July and October)	2.1	\$5,356.00	\$5,356.00	\$5,356.00	\$5,356.00		\$16,068.00	\$
Prepare and Submit Monitoring Report	2.2	\$6,152.00	\$6,152.00	\$6,152.00	\$6,152.00		\$18,456.00	\$
Regulatory and/or Public Meetings	2.3	\$6,972.00	\$6,972.00	\$6,972.00	\$6,972.00	\$6,972.00	\$20,916.00	\$
Southeast Area Park Landfill Gas Monitoring Survey	2.4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	
Methane Gas Collection System Monitoring	2.5	\$7,308.00	\$7,308.00	\$7,308.00	\$7,308.00	\$7,308.00	\$21,924.00	\$
Michigan Air Emissions Reporting System	2.6	\$4,614.00	\$0.00	\$0.00	\$0.00	\$0.00	\$4,614.00	
Annual Methane Gas Monitoring Survey	2.7	\$727.00	\$727.00	\$727.00	\$727.00	\$727.00	\$2,181.00	
Federal Greenhouse Gas Reporting	2.8	\$4,078.00	\$4,078.00	\$4,078.00 <b>Task 2 - Subtotal</b>	\$4,078.00	\$4,078.00	\$12,234.00 \$96,393.00	
				Task 2 - Subtotal			\$90,393.00	\$
WASTEWATER MONITORING PROGRAM	3	<b>\$4.554.00</b>	<b>#</b> 4.664.00	<b>0.1.664.00</b>	<b>#</b> 4.664.00	<b>#</b> 4.554.00	#12.002.00	
Collection of Monthly Discharge Readings	3.1	\$4,664.00	\$4,664.00	\$4,664.00	\$4,664.00		\$13,992.00	
Collection of Quarterly Wastewater Samples	3.2	\$3,274.00	\$3,274.00	\$3,274.00	\$3,274.00		\$9,822.00	_
Perform Laboratory Analysis - 3 Quarterly (January, April & October) & 1 Annual	3.3	\$8,080.95	\$8,080.95	\$8,080.95	\$8,080.95	\$8,080.95	\$24,242.85	\$
Review and Analysis of Results, Prepare and Submit Monitoring Reports	3.4	\$3,804.00	\$3,804.00	\$3,804.00	\$3,804.00		\$11,412.00	
Groundwater Pre-treatment	3.5	\$0.00	\$0.00	\$0.00	\$0.00		\$0.00	
Renewal of Industrial User Permit	3.6	\$0.00	\$1,442.00	\$0.00	\$0.00		\$1,442.00	
Groundwater Remediation	3.7	\$0.00	\$0.00	\$0.00 Task 3 - Subtotal	\$0.00	\$0.00	\$0.00 \$60,910.85	
							700,12000	
ENVIRONMENTAL SYSTEM MAINTENANCE ACTIVITIES	4				**	** **	40.4-400	
Evaluation of Systems - Methane Collection System	4.1	\$2,758.00	\$2,758.00	\$2,758.00	\$2,758.00		\$8,274.00	
Evaluation of Systems - Purge, Observation, Test & Monitoring Wells	4.2	\$2,603.00	\$2,603.00	\$2,603.00	\$2,603.00		\$7,809.00	
Evaluation of Systems - Perform/Contract Maintenance	4.3	\$2,911.00	\$2,911.00	\$2,911.00	\$2,911.00		\$8,733.00	
Evaluation of Systems - Annual Maintenance Report	4.4	\$979.00	\$979.00	\$979.00	\$979.00		•	
Replacement of Purge wells, meter pits and additional pipe installation	4.5	\$40,500.00	\$0.00	\$0.00 Task 4 - Subtotal	\$0.00	\$0.00	\$40,500.00 \$68,253.00	Ş
				Tush 4 - Sustotui			φου,233.00	
PROJECT Landfill Inspection	5 5.1	\$0.00	\$890.00	\$0.00	\$0.00	\$0.00	\$890.00	
Health and Safety Plan	5.1 5.2	\$636.00 \$636.00	\$636.00 \$636.00	\$636.00 \$636.00				
•	5.2				\$636.00		\$1,908.00	¢
Project Management (emergency onsite; budgeting, invoicing, procurement and project i	5.3	\$6,041.00	\$6,041.00	\$6,041.00	\$6,041.00		\$18,123.00	\$
Deliverables - annual document control	5.4	\$863.00	\$863.00	\$863.00 <b>Task 5 - Subtotal</b>	\$863.00	\$863.00	\$2,589.00 \$23,510.00	\$
	6	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	·	
ENVIRONMENTAL CONSULTING SERVICES								
		\$150,895.15	\$108,113.15	\$105,781.15	\$105,781.15	\$105,781.15		
			TASK 1 - 6 TOTAL				\$364,789.45	\$

# EXHIBIT C FAIR EMPLOYMENT PRACTICE

The consultant, its agents or sub-contractors, shall comply with all requirements of Chapter 112 of Title IX of the Code of the City of Ann Arbor and in particular the following excerpts therefrom:

#### 9:161 NONDISCRIMINATION BY CITY CONTRACTORS

- (1) All contractors proposing to do business with the City of Ann Arbor shall satisfy the nondiscrimination administrative policy adopted by the City Administrator in accordance with the guidelines of this section. All contractors shall receive approval from the Director prior to entering into a contract with the City, unless specifically exempted by administrative policy. All City contractors shall take affirmative action to insure 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 race, national origin or sex.
- (2) Each prospective contractor shall submit to the City data showing current total employment by occupational category, sex and minority group. If, after verifying this data, the Director concludes that it indicates total minority and female employment commensurate with their availability within the contractor's labor recruitment area, i.e., the area from which the contractor can reasonably be expected to recruit, said contractor shall be accepted by the Director as having fulfilled affirmative action requirements for a period of one year at which time the Director shall conduct another review. Other contractors shall develop an affirmative action program in conjunction with the Director. Said program shall include specific goals and timetables for the hiring and promotion of minorities and females. Said goals shall reflect the availability of minorities and females within the contractor's labor recruitment area. In the case of construction contractors, the Director shall use for employment verification the labor recruitment area of the Ann Arbor-Ypsilanti standard metropolitan statistical area. Construction contractors determined to be in compliance shall be accepted by the Director as having fulfilled affirmative action requirements for a period of six (6) months at which time the Director shall conduct another review.
- (3) In hiring for construction projects, contractors shall make good faith efforts to employ local persons, so as to enhance the local economy.
- (4) All contracts shall include provisions through which the contractor agrees, in addition to any other applicable Federal or State labor laws:
  - (a) To set goals, in conference with the Human Resources Director, for each job category or division of the work force used in the completion of the City work;

- (b) To provide periodic reports concerning the progress the contractor has made in meeting the affirmative action goals it has agreed to;
- (c) To permit the Director access to all books, records and accounts pertaining to its employment practices for the purpose of determining compliance with the affirmative action requirements.
- (5) The Director shall monitor the compliance of each contractor with the nondiscrimination provisions of each contract. The Director shall develop procedures and regulations consistent with the administrative policy adopted by the City Administrator for notice and enforcement of non-compliance. Such procedures and regulations shall include a provision for the posting of contractors not in compliance.
- (6) All City contracts shall provide further that breach of the obligation not to discriminate shall be a material breach of the contract for which the City shall be entitled, at its option, to do any or all of the following:
  - (a) To cancel, terminate, or suspend the contract in whole or part and/or refuse to make any required periodic payments under the contract;
  - (b) Declare the contractor ineligible for the award of any future contracts with the City for a specified length of time;
  - (c) To recover liquidated damages of a specified sum, said sum to be that percentage of the labor expenditure for the time period involved which would have accrued to minority group members had the affirmative action not been breached;
  - (d) Impose for each day of non-compliance, liquidated damages of a specified sum, based upon the following schedule:

	Assessed Damages
	Per Day of
Contract Amount	Non-Compliance
\$ 10,000 - 24,999	\$25.00
25,000 - 99,999	50.00
100,000 - 199,999	100.00
200,000 - 499,999	150.00
500,000 - 1,499,999	200.00
1,500,000 - 2,999,999	250.00
3,000,000 - 4,999,999	300.00
5,000,000 - and above	500.00

(e) In addition the contractor shall be liable for any costs or expenses incurred by the City of Ann Arbor in obtaining from other sources the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under this contract.

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# EXHIBIT D LIVING WAGE REQUIREMENTS

If a "covered employer," Contractor will comply with all the requirements of Chapter 23 of the Ann Arbor City Code (Sections 1:811 B 1:821), in particular but not limited to the following sections thereof:

#### 1:813. Definitions.

For purposes of this Chapter, the following definitions shall apply:

- (1) "Contractor/vendor" is a person or entity that has a contract with the City primarily for the furnishing of services where the total amount of the contract or contracts with the City exceeds \$10,000 for any 12month period. "Contractor/vendor" does not include a person or entity that has a contract with the City primarily for the purchase of goods or property, or for the lease of goods or property to or from the City.
- (2) "Covered Employee" means a person employed by a covered employer to perform services which are covered or funded by the contract with or grant from the City; provided, however, that persons who are employed pursuant to federal, state or local laws relating to prevailing wages shall be exempt from this Chapter.
- (3) "Covered Employer" means a contractor/vendor or grantee that has not been granted an exemption from this Chapter pursuant to Section 1:817.
- (4) "Employee" means an individual who provides personal services performed for wages under any contract calling for the performance of personal services, whether written or oral, express or implied. The term "employee" does not include any individual who volunteers to perform services for an employer if
  - (a) The individual receives no compensation or is paid expenses, reasonable benefits, or a nominal fee to perform the services for which the individual volunteered; and
  - (b) Such services are not the same type of services which the individual is employed to perform for such employer.
- (5) "Employee Health Benefits" or "Health Benefits" means providing health care benefits for employees (or employees and their dependents) at employer cost or making an employer contribution toward the purchase of such health care benefits for employees (or employees and their dependents), provided that the employer cost or contribution equals no less than \$1 an hour for the average work week of such employee, and provided further that any employee payment or contribution toward health care shall not exceed 50 cents an hour for the average work week for such employee.

- (6) "Grant" means any form of financial assistance to a "Grantee" as set forth and defined in Section 1:813(7). "Grant" does not include financial assistance used for the purchase or lease of property or other nonpersonnel costs.
- (7) "Grantee" is a person or entity that is a recipient of any financial assistance from the City in the form of any federal, state or local grant program administered by the City, revenue bond financing, tax increment financing, tax abatement, tax credit, direct grant, or any other form of financial assistance that exceeds \$10,000 for any 12month period, including any contractors, subcontractors, or leaseholders of the grantee whose contract, subcontract or lease with the grantee exceeds \$10,000 for any 12month period.
- (8) "Living Wage" means a wage equal to the levels established in Section 1:815.
- (9) "Person" means any individual, copartnership, corporation, association, club, joint adventure, estate, trust, and any other group or combination acting as a unit, and the individuals constituting such group or unit.
- (10) "\$10,000 for any 12 month period" is computed by taking the total amount of the contract, grant or loan and dividing it by the number of months the contract, grant or loan covers.

# 1:814. Applicability.

- (1) This Chapter shall apply to any person that is a contractor/vendor or grantee as defined in Section 1:813 that employs or contracts with five (5) or more individuals; provided, however, that this Chapter shall not apply to a nonprofit contractor/vendor or nonprofit grantee unless it employs or contracts with ten (10) or more individuals.
- (2) This Chapter shall apply to any grant, contract, or subcontract or other form of financial assistance awarded to or entered into with a contractor/vendor or grantee after the effective date of this Chapter and to the extension or renewal after the effective date of this Chapter of any grant, contract, or subcontract or other form of financial assistance with a contractor/vendor or grantee.

# 1:815. Living Wages Required.

- (1) Every contractor/vendor or grantee, as defined in Section 1:813, shall pay its covered employees a living wage as established in this Section.
  - (a) For a covered employer that provides employee health care to its employees, the living wage shall be \$8.70 an hour, or the adjusted amount hereafter established under Section 1:815(3).

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- (b) For a covered employer that does not provide health care to its employees, the living wage shall be \$10.20 a hour, or the adjusted amount hereafter established under Section 1:815(3).
- (2) In order to qualify to pay the living wage rate for covered employers providing employee health care under subsection 1:815(1)(a), a covered employer shall furnish proof of said health care coverage and payment therefor to the City Administrator or his/her designee.
- The amount of the living wage established in this Section shall be adjusted (3) upward no later than April 30, 2002, and every year thereafter by a percentage equal to the percentage increase, if any, in the federal poverty guidelines as published by the United States Department of Health and Human Services for the years 2001 and 2002. Subsequent annual adjustments shall be based upon the percentage increase, if any, in the United States Department of Health and Human Services poverty guidelines when comparing the prior calendar year's poverty guidelines to the present calendar year's guidelines. The applicable percentage amount will be converted to an amount in cents by multiplying the existing wage under Section 1.815(1)(b) by said percentage, rounding upward to the next cent, and adding this amount of cents to the existing living wage levels established under Sections 1:815(1)(a) and 1:815(1)(b). Prior to April 1 of each calendar year, the City will notify any covered employer of this adjustment by posting a written notice in a prominent place in City Hall, and, in the case of a covered employer that has provided an address of record to the City, by a written letter to each such covered employer.

# 1:816. Employees Covered.

A covered employer shall pay each of its employees performing work on any covered contract or grant with the City no less than a living wage as defined in Section 1:815.

#### 1:817. Exemptions.

Notwithstanding any other provisions in this Chapter, the following exemptions shall apply:

- (1) Sweat equity contracts for home construction or rehabilitation grant will not subject the grantee to coverage under this Chapter. Housing construction or rehabilitation grants or contracts that are passed through to a contractor in their entirety are exempt from the provisions of this Chapter, even when the City participates in the selection of the contractor.
- (2) For any contract or grant, the City Council may grant a partial or complete exemption from the requirements of this Chapter if it determines one of the following:

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- (a) To avoid any application of this Chapter that would violate federal, state or local law(s); or
- (b) The application of this Chapter would cause demonstrated economic harm to an otherwise covered employer that is a nonprofit organization, and the City Council finds that said harm outweighs the benefits of this Chapter; provided further that the otherwise covered nonprofit employer shall provide a written plan to fully comply with this Chapter within a reasonable period of time, not to exceed three years, and the City Council then agrees that granting a partial or complete exemption is necessary to ameliorate the harm and permit the nonprofit organization sufficient time to reach full compliance with this Chapter.
- (3) A loan shall be considered a grant under this ordinance only to the extent that a loan is provided at below market interest rates and then only the difference between the amount of the loan and the present value of the payments thereunder, discounted over the life of the loan, shall be treated as financial assistance under this ordinance.
- (4) A payment of funds for the purpose of purchasing services, property, or goods on behalf of individuals being assisted by a covered employer or potentially covered employer (sometimes known as a "pass through" grant) that is used for said purchases shall not be considered a grant; such funds shall be considered a grant only to the extent that any such funds are retained by the covered employer or potentially covered employer to provide financial assistance and support to its own operations.

#### 1:818. Monitoring and Enforcement.

- (1) Every covered employer shall agree to the payment of a living wage as a condition of entering into or renewing a covered contract or grant with the City, shall agree to post a notice regarding the applicability of this Chapter in every work place or other location in which employees or other persons contracted for employment are working, and shall agree to provide payroll records or other documentation as deemed necessary within ten (10) business days from the receipt of the City's request. All City contracts and grants covered by this Chapter shall provide that a violation of the living wage requirements of this Chapter shall be a material breach of the contract or grant. The Human Rights Office of the City shall monitor the compliance of each contractor/vendor or grantee under procedures developed by the Human Rights Office and approved by the City Administrator.
- (2) Each covered employer shall submit to the Human Rights Office of the City information regarding number of employees and applicable wage rates of its employees covered by this Chapter in such manner as requested by that office. At the request of the Human Rights Office, any contractor/vendor or grantee shall

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- provide satisfactory proof of compliance with the living wage provisions of this Chapter.
- (3) Any person may submit a complaint or report of a violation of this Chapter to the Human Rights Office. Upon receipt of such a complaint or report, the Human Rights Office shall investigate to determine if there has been a violation.

#### 1:819. Penalties and Enforcement.

- (1) A violation of any provision of this Chapter is a civil infraction punishable by a fine of not more than \$500.00 plus all costs of the action. The Court may issue and enforce any judgment, writ, or order necessary to enforce this Chapter, including payment to the affected employee or employees of the difference between wages actually paid and the living wage that should have been paid, interest, and other relief deemed appropriate.
- (2) Each day upon which a violation occurs shall constitute a separate violation.
- (3) In addition to enforcement under Subsections (1) and (2), the City shall have the right to modify, terminate, and/or seek specific performance of any contract or grant with an affected covered employer or to cancel, terminate or suspend the contract in whole or in part and/or to refuse any further payments under the contract or grant;
- (4) Nothing contained in this Chapter shall be construed to limit in any way the remedies, legal or equitable, which are available to the City or any other person for the correction of violations of this Chapter

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#### 1:821. Other Provisions.

(1) No affected covered employer shall reduce the compensation, wages, fringe benefits, or leave available to any covered employee or person contracted for employment in order to pay the living wage required by this Chapter.

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- (3) No employee covered by a federal, state or local law requiring the payment of prevailing wages shall be covered by this Chapter.
- (4) This Chapter shall not be construed to apply to any person or entity that is a tax exempt religious, educational or charitable organization under state or federal law, but is not a contractor/vendor or grantee as defined in Section 1:813.
- (5) This Chapter shall not be applicable to the establishment and/or continuation of the following if developed specifically for high school and/or college students:

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- (a)
- (b)
- A bona fide training program; A summer or youth employment program; A work study, volunteer/public service, or internship program. (c)

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