U.S. ENVIRONMENTAL PROTECTION AGENCY

UNDERGROUND INJECTION CONTROL PERMIT

CLASS I HAZARDOUS COMMERCIAL

PERMIT NUMBER MI-163-1W-C011

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

ROMULUS, MICHIGAN

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

U.S. ENVIRONMENTAL PROTECTION AGENCY
UNDERGROUND INJECTION CONTROL PERMIT: CLASS I NON-HAZARDOUS

Permit Number: MI-163-1W-C011

Facility Name: Well #2-12

Pursuant to the Safe Drinking Water Act and Underground Injection Control regulations of the United States Environmental Protection Agency (EPA) codified at Title 40 of the Code of Federal Regulations (40 C.F.R.), Parts 124, 144, 146, 147 and 148,

Environmental Geo-Technologies, LLC of Detroit, Michigan

hereinafter, the permittee, is hereby authorized to operate an existing Class I hazardous waste injection well located in Michigan, Wayne County, T3S, R9E, Section 12, SE Quarter Section, subject to the conditions of this permit. The injection zone, or zone which will contain the hazardous constituents, for this well includes the Mt. Simon, Eau Claire, Franconia-Galesville, Trempealeau, Glenwood, and lower Black River Formations between the depths of 3369 and 4550 feet. Injection is permitted into the interval of the Mt. Simon, Eau Claire, and Franconia-Galesville Formations between the depths of 3937 and 4550 feet upon the express condition that the permittee meets the restrictions set forth in this permit. The designated confining zone for this injection well includes the upper Black River, Trenton, and Utica Formations. Injection shall not commence until the operator has received written authorization from the Director of the Water Division of EPA Region 5, to inject.

References to 40 C.F.R. are to all regulations that are in effect on the date that this permit is effective. The following attachments are incorporated into this permit: A, B, C, D, and E.

This permit shall become effective on _____, and shall remain in full force and effect during the life of the permit, unless: 1) the statutory provisions of Section 3004(f), (g) or (m) of the Resource Conservation and Recovery Act, 42 U.S.C. § 6924(f), (g) or (m), ban or otherwise condition the authorization in this permit; 2) EPA promulgates rules pursuant to these sections which withdraw or otherwise condition the authorization in this permit; or 3) this permit is otherwise revoked, terminated, modified or reissued pursuant to 40 C.F.R. §§ 144.39, 144.40, or 144.41. This permit and the authorization to inject shall expire at midnight, _____, unless terminated prior to the expiration date.

Signed and Dated:_____

_____
Tinka G. Hyde
Director, Water Division

PART I
GENERAL PERMIT COMPLIANCE

A. EFFECT OF PERMIT

The permittee is allowed to engage in underground injection in accordance with the conditions of this permit. Notwithstanding any other provisions of this permit, the permittee authorized by this permit shall not construct, operate, maintain, convert, plug, abandon, or conduct any other injection activity in a manner that allows the movement of injection, annulus or formation fluids into underground sources of drinking water (USDWs). The objective of this permit is to prevent the introduction of contaminants into USDWs if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 C.F.R. Part 141 or may otherwise adversely affect the health of persons. Any underground injection activity not specifically authorized in this permit is prohibited. Compliance with this permit during its term constitutes compliance, for purposes of enforcement, with Part C of the Safe Drinking Water Act (SDWA). Such compliance is not a defense to any action brought under Section 1431 of the SDWA, or any other common or statutory law other than Part C of the SDWA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Nothing in this permit shall relieve the permittee of any duties under applicable regulations.

This permit does not relieve owners and operators of hazardous waste injection wells of their obligation to comply with any additional regulations or requirements under the Resource Conservation and Recovery Act (RCRA). This permit does not authorize any above ground generating, handling, storage, treatment or disposal facilities. Such activities must receive authorization under the regulations promulgated pursuant to Part C of RCRA, if required.

B. PERMIT ACTIONS

1. Modification, Revocation, Reissuance and Termination - The Director of the Water Division of Region 5 of EPA, hereinafter, the Director, may, for cause upon his or her initiative or upon request from any interested person, including the permittee, modify, revoke and reissue, or terminate this permit in accordance with 40 C.F.R. §§124.5, 144.12, 144.39, and 144.40. Also, the permit is subject to minor modifications for cause as specified in 40 C.F.R. §144.41. The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the permittee does not stay the applicability or enforceability of any permit condition.

2. Transfer of Permits - This permit is not transferable to any person except in accordance with 40 C.F.R. §144.38.

C. 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 such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. CONFIDENTIALITY

In accordance with 40 C.F.R. Part 2 and 40 C.F.R. §144.5, any information submitted to EPA pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission by stamping the words "confidential business information" on each page containing such information. If no claim is made at the time of submission, EPA may make the information available to the public without further notice. If a claim is asserted, the validity of the claim will be assessed in accordance with the procedures in 40 CFR Part 2 (Public Information). Claims of confidentiality for the following information will be denied:

1. The name and address of the permittee; and

2. Information which deals with the existence, absence or level of contaminants in drinking water.

E. DUTIES AND REQUIREMENTS

1. Duty to Comply - The permittee shall comply with all applicable Underground Injection Control (UIC) Program regulations and conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit issued in accordance with 40 C.F.R. §144.34. Any permit noncompliance constitutes a violation of the SDWA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or for denial of a permit renewal application. Such noncompliance may also be grounds for enforcement action under RCRA.

2. Penalties for Violations of Permit Conditions - Any person who violates a permit requirement is subject to civil penalties and other enforcement action under the SDWA and may be subject to such actions pursuant to the RCRA. Any person who willfully violates permit conditions may be subject to criminal prosecution.

3. Continuation of Expiring Permits

   (a) Duty to Reapply - To continue an activity regulated by this permit after the expiration date of this permit, the permittee must submit a complete application for a new permit at least 180 calendar days before this permit expires.

(b) Permit Extensions - The conditions of an expired permit may continue in force in accordance with 5 U.S.C. §558(c) and 40 C.F.R. §144.37.

(c) Effect - Permits continued under 5 U.S.C. §558(c) and 40 C.F.R. §144.37 remain fully effective and enforceable.

(d) Enforcement - When the permittee is not in compliance with the conditions of the expiring or expired permit, the Director may choose to do any or all of the following:

(1) Initiate enforcement action based upon the permit which has been continued;

(2) Issue a notice of intent to deny the new permit. If the permit application is denied, the owner or operator would then be required to cease the activities authorized by the continued permit or be subject to enforcement action for operation without a permit;

(3) Issue a new permit under 40 C.F.R. Part 124 with appropriate conditions; or

(4) Take other actions authorized by the UIC regulations.

(e) State Continuation - An EPA-issued permit does not continue in force beyond its expiration date under Federal law if at that time a State has primary enforcement responsibility under the SDWA. A State authorized to administer the UIC program may continue either EPA- or State-issued permits until the effective date of the new permits, if State law allows. Otherwise, the facility or activity is operating without a permit from the time of expiration of the old permit to the effective date of the State-issued new permit. Furthermore, if the State does not continue the expired EPA permit upon obtaining primary enforcement responsibility, the permittee must obtain a new State permit or be authorized to inject by State rule and failure to do so will result in unauthorized injection.

4. Need to Halt or Reduce Activity Not a Defense - It shall not be a defense for the permittee in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate - The permittee shall take all timely and reasonable steps necessary to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance - The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of this permit.

7. Duty to Provide Information – The permittee shall furnish to the Director, within a time specified, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request within a time specified, copies of records required to be kept by this permit.

8. Inspection and Entry - The permittee shall allow the Director or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   (a) Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this permit;

   (b) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

   (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   (d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any facilities, equipment or operations regulated or required under this permit.

9. Records

   (a) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit for a period of at least five years from the date of the sample, measurement or report.

(b) The permittee shall maintain records of all data required to complete the permit application form for this permit and any supplemental information submitted under 40 C.F.R. §§144.27, 144.28, and 144.31 for a period of at least five (5) years from the date the permit application was signed.

(c) The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of plugging and abandonment of this injection well.

(d) The retention period specified in Part I(E)(9)(a) through (c) of this permit may be extended by request of the Director at any time. The permittee shall continue to retain records after the retention period specified in Part I(E)(9)(a) through (c) of this permit or any requested extension thereof expires unless the permittee delivers the records to the Director or obtains written approval from the Director to discard the records.

(e) Records of monitoring information shall include:

(1) The date, exact place, and time of sampling or measurements;

(2) The name(s) of the individual(s) who performed the sampling or measurements;

(3) A precise description of both sampling methodology and the handling of samples;

(4) The date(s) analyses were performed;

(5) The name(s) of the individual(s) who performed the analyses;

(6) The analytical techniques or methods used; and

(7) The results of such analyses.

10. Monitoring - Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The permittee shall use the methods described in Appendix I of 40 C.F.R. Part 261, or an equivalent method approved by the Director, to take representative samples. Monitoring results shall be reported at the intervals contained in Part II(D) and Part III(A) of this permit.

(a) Monitoring of the nature of injected fluids shall comply with applicable analytical methods cited and described in Tables IA, IB, and IC of 40 C.F.R. §136.3 or in Appendix III of 40 C.F.R. Part 261 or in certain circumstances by other methods that have been approved by the Director.

(b) Sampling and analysis shall comply with the specifications of the Waste Analysis Plan required in Part II(C)(3) of this permit.

11. Signatory Requirements - All reports or other information required to be submitted by this permit or requested by the Director shall be signed and certified in accordance with 40 C.F.R. §144.32.

12. Reporting Requirements

(a) Planned Changes - The permittee shall give written notice to the Director, as soon as possible, of any planned physical alterations or additions to the permitted facility.

(b) Anticipated Noncompliance - The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(c) Compliance Schedules - The permittee shall submit reports of compliance or noncompliance with, or any progress reports on, interim and final requirements in any compliance schedule of this permit no later than 30 calendar days following each schedule date.

(d) Twenty-four Hour Reporting

(1) The permittee shall report to the Director any permit noncompliance which may endanger human health or the environment. See, e.g., Part I(H)(5) of this permit. Any information shall be provided orally within twenty-four (24) hours from the time the permittee becomes aware of the circumstances. Such reports shall include, but not be limited to, the following information:

(i) Any monitoring or other information which indicates that any contaminant may cause an endangerment to a USDW; and

(ii) Any noncompliance with a permit condition, or malfunction of the injection system, which may cause fluid migration into or between USDWs; and

(iii) Any failure to maintain mechanical integrity.

(2) The permittee shall report to the Director any event which triggers an alarm or shutdown device required in Part II(B)(4) of this permit. Any information shall be provided orally within twenty-

four (24) hours from the time the permittee becomes aware of the circumstances.

(3) A written report shall also be submitted to EPA within five (5) working days of the time the permittee becomes aware of the circumstances described in either Part I(E)(12)(d)(1) or (2) of this permit. The report shall contain, at minimum, a description of the event that caused the alarm to go off and, to the best of the permittee's current knowledge, the cause(s) and potential environmental impact(s) of the event. If the event caused noncompliance with any of the terms of this permit, it shall also include:

(i) A description of the noncompliance and its cause;

(ii) The period of noncompliance, including exact dates and times;

(iii) If the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(iv) Steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance.

(e) Other Noncompliance - The permittee shall report all other instances of noncompliance not otherwise reported at the time monitoring reports are submitted. The reports shall contain the information listed in Part I(E)(12)(d)(3) of this permit.

(f) Other Information - When the permittee becomes aware of its failure to submit any relevant facts in the permit application or that incorrect information was submitted in a permit application or in any report to the Director, the permittee shall submit such facts or corrected information within ten (10) calendar days, unless a longer time period is approved by the Director.

(g) Report on Permit Review - Within thirty (30) calendar days of receipt of this permit, the permittee shall certify to the Director that one of its officers has read and is personally familiar with all terms and conditions of this permit.

13. Hazardous Waste Treatment, Storage, and Disposal Facility Requirements – The permittee shall comply with the requirements for wells injecting hazardous waste listed at 40 C.F.R. §144.14.

F. CLOSURE

1. Closure Plan - A plan for closure of the well that includes assurance of financial responsibility as required in 40 C.F.R. §144.52(a)(7) and includes the information, relating to plugging and abandonment required under 40 C.F.R. §146.71(a)(4), is at Part III(B) of this permit. The implementation of the Closure Plan is a condition of this permit; however, the permittee must receive the approval of the Director to proceed before implementing this plan. The obligation to implement the Closure Plan survives the termination of this permit or the cessation of injection activities.

2. Plugging and Abandonment - The permittee must receive the approval of the Director before plugging the well and shall plug and abandon the well consistent with 40 C.F.R. §146.71, as provided in the Closure Plan at Part III(B) of this permit. Within 60 calendar days after plugging the well, the permittee shall submit a Closure Report to the Director. The report shall be certified as accurate by the permittee and by the person who performed the plugging operation (if other than the permittee), and shall consist of either:

   (a) A statement that the well was plugged in accordance with the Closure Plan previously approved by the Director; or

   (b) If the actual closure differed from the approved plan, a statement defining the actual closure and explaining why the Director should approve such deviation. If the Director determines that a deviation from a previously approved plan may endanger USDWs, the permittee shall replug the well as required by the Director.

3. Revision of Closure Plan - If the permittee finds it necessary to change the Closure Plan, it shall submit a revised plan to the Director for approval with the next monthly report.

4. Notice of Intent to Close - The permittee shall notify the Director at least 60 calendar days before closure of the well, unless a shorter notice period is approved by the Director. The permittee shall submit any proposed significant revision to the method of closure reflected in the Closure Plan for approval by the Director at least 60 calendar days before closure, unless a shorter period of time is approved by the Director.

5. Temporary Disuse - If the permittee wishes to cease injection for longer than 24 months, it may keep the well open only if it:

   (a) Has received authorization from the Director; and

(b) Has described actions or procedures, satisfactory to the Director, that it will take to ensure that the well will not endanger USDWs during this period. These actions or procedures shall include compliance with the technical requirements applicable to active injection wells unless waived by the Director.

6. Standards for Well Closure - Prior to closing the well, the permittee shall:

(a) Observe and record the pressure decay for a time specified by the Director and report this information to the Director;

(b) Conduct mechanical integrity tests as requested by the Director to ensure integrity of casing and cement left in the ground after closure. Required testing methods may include any or all of those listed in 40 C.F.R. §146.71(d)(2); and

(c) Flush the well with a buffer fluid.

G. POST-CLOSURE CARE

The permittee shall comply with the requirements for post-closure care and financial responsibility for post-closure care at 40 C.F.R. §§ 146.72 and 146.73.

1. Post-Closure Plan - The permittee shall comply with the approved plan for post-closure maintenance and monitoring. This plan includes the information required by 40 C.F.R. §146.72(a) and demonstrates how each of the applicable requirements of 40 C.F.R. §146.72(b) will be met. The approved post-closure plan is part of the permit file for this permit and the permittee shall maintain and comply with this plan as if it were fully set forth in the permit. The obligation to implement the post-closure plan survives the termination of this permit or the cessation of injection activities.

2. Duration of Post-Closure Period - The post-closure care period shall continue at least until all of the requirements of the approved post-closure plan and of 40 C.F.R. §146.72 have been met. Prior to the time that the post-closure care period is due to expire, the Director may extend the post-closure care period if he or she finds that the extended period is necessary to protect the health of persons or to protect a USDW.

3. Post-Closure Corrective Action - The permittee shall continue and complete any corrective action required under 40 C.F.R. §146.64.

4. Post-Closure Groundwater Monitoring - The permittee shall continue to conduct any groundwater monitoring required under this permit until pressure in the injection zone decays to the point that the well's cone of influence no longer intersects the base of the lowermost USDW as identified in the permit file for this

permit, or as defined by the Director. The permittee shall estimate the time for pressure in the injection zone to decay to this point and shall include this estimate in the Post-Closure Plan. The Director may extend the period of post-closure monitoring if he or she determines that it is necessary to protect the health of persons or to protect a USDW.

5. Survey Plat - The permittee shall submit a survey plat to the local zoning authority designated by the Director as required by 40 C.F.R. §146.72(b)(3) and submit a copy to the Director.

6. Notification to State and Local Authority - The permittee shall provide notification and information to State and local authorities as required by 40 C.F.R. §146.72(b)(4).

7. Retention of Records - The permittee shall retain, for a period of three years following well closure, the records specified by 40 C.F.R. §146.72(b)(5), and shall deliver those records to the Director at the end of the retention period.

8. Notice in Deed to Property – The permittee must record, in accordance with State law, a notation on the deed to the facility property, or on some other instrument which is normally examined during title search, that will in perpetuity provide any potential purchaser of the property with the information listed in 40 C.F.R. §146.72(c).

9. Financial Responsibility for Post-Closure Care - The permittee shall submit an approved demonstration of financial responsibility for post-closure care, as required in 40 C.F.R. §146.73, to the Director prior to the commencement of injection. The obligation to maintain financial responsibility for post-closure care survives the termination of this permit or the cessation of injection.

H. MECHANICAL INTEGRITY

1. Standards - The injection well must have and maintain mechanical integrity consistent with 40 C.F.R. §146.8(a)(1) and (2). Mechanical integrity demonstrations must be witnessed by an authorized representative of the Director to satisfy the requirements of 40 C.F.R. §146.8.

2. Periodic Mechanical Integrity Testing [§146.8] - The permittee shall conduct the mechanical integrity testing as follows:

   (a) Long string casing, injection tubing and annular seal shall be tested by means of an approved pressure test in accordance with 40 C.F.R. §146.8(a)(1) at least once every twelfth month beginning with the date of the last approved demonstration and in the following circumstances: 1) whenever there has been a well workover in which tubing is removed

from the well; 2) the packer is reset; or 3) when loss of mechanical integrity becomes suspected during operation. The pressure test shall be performed at 100 psig over the maximum injection pressure set in Part III(A) or 500 psig, whichever is greater;

(b) The bottom-hole cement shall be tested by means of an approved radioactive tracer survey at least once every twelfth month beginning with the date of the last approved demonstration;

(c) An approved temperature, noise, oxygen activation, or other approved log shall be run prior to the commencement of injection, and thereafter at least once every 24 months, beginning with the date of the last approved demonstration to determine the absence of upward fluid migration. If after three such demonstrations no upward fluid migration has been detected, the permittee may request that the frequency be reduced to at least once every five years. The Director may require such tests whenever the well is worked over. The permittee must submit logging procedures to the Director for approval before running logs for the purpose of meeting this requirement;

(d) An approved casing inspection log shall be run before injection commences and whenever the permittee conducts a workover in which the injection tubing is pulled. The permittee may request the Director to waive this requirement if a satisfactory casing inspection log has been run within the previous year; and

(e) The permittee may use any other test approved by the Director in accordance with the procedures in 40 C.F.R. §146.8(d).

3. Prior Notice and Reporting - The permittee shall notify the Director in writing of his or her intent to demonstrate mechanical integrity at least 30 calendar days prior to such demonstration. At the discretion of the Director a shorter time period may be allowed. Failure to provide this prior notice will invalidate any successful mechanical integrity demonstration unless the shorter notice time was approved by the Director. Reports of mechanical integrity demonstrations which include logs must include an interpretation of the results by a knowledgeable log analyst. The permittee shall report the results of a mechanical integrity demonstration within 30 calendar days after completion thereof.

4. Gauges - The permittee shall calibrate all gauges used in mechanical integrity demonstrations to an accuracy of not less than one-half (0.5) percent of full scale, prior to each required test of mechanical integrity. A copy of the calibration certificate shall be submitted to the Director or his or her representative at the time of demonstration and every time the gauge is calibrated. The gauge shall be

marked in no greater than 5 psi increments. Failure to calibrate the gauges will invalidate any successful mechanical integrity demonstration.

5. Loss of Mechanical Integrity - If the permittee or the Director finds that the well fails to demonstrate mechanical integrity during a test, or fails to maintain mechanical integrity during operation, or that a loss of mechanical integrity as defined by 40 C.F.R. §146.8(a)(1) and (2) is suspected during operation, the permittee shall halt the operation immediately and follow the reporting requirements as directed in Part I(E)(12) of this permit. The permittee shall not resume operation until mechanical integrity is demonstrated and the Director gives written approval to recommence injection.

6. Mechanical Integrity Testing on Request From Director - The permittee shall demonstrate mechanical integrity at any time upon written notice from the Director.

I. FINANCIAL RESPONSIBILITY

1. Financial Responsibility - The permittee shall maintain financial responsibility and resources to comply with closure and post-closure requirements of this permit, in a manner consistent with 40 C.F.R. §§ 144.52 (a)(7), 144.60 through 144.70, and 146.73. A copy of the approved financial assurance mechanism for closure costs is in Part III(B) of this permit. The permittee shall update this mechanism to include post-closure costs before injection commences.

   (a) Pursuant to 40 C.F.R. §§ 144.62(a), 146.71, and 146.73, the permittee must maintain a written cost estimate in current dollars for the Closure Plan and Post-Closure Plan as specified in 40 C.F.R. §§ 146.10, 146.72, and 146.73. The closure and post-closure cost estimate at any point in the life of the facility operation must equal the maximum cost of closure and post-closure at that time.

   (b) Pursuant to 40 C.F.R. §§ 144.62(b) and 146.73, the permittee must adjust the cost estimate of closure and post-closure for inflation within 30 calendar days after each anniversary of the first estimate. The permittee shall follow the method described in 40 C.F.R. §144.62(b) or other method approved by the Director.

   (c) The permittee must revise the closure and post-closure cost estimate whenever a change in the Closure Plan or Post-Closure Plan increases the cost of closure.

   (d) If the revised closure and post-closure cost estimate exceeds the current amount of the financial assurance mechanism, the permittee shall submit a

revised mechanism to cover the increased cost within 90 calendar days after the revision specified in Part I(I)(1)(b) and (c) of this permit.

(e) The permittee must keep on file at the facility a copy of the latest closure and post-closure cost estimate prepared in accordance with 40 C.F.R. §§ 144.62, 146.72, and 146.73, during the operating life of the facility.

2. Insolvency - The permittee must notify the Director within ten business days of any of the following events:

(a) The bankruptcy of the trustee or issuing institution of the financial mechanism; or

(b) Suspension or revocation of the authority of the trustee institution to act as trustee; or

(c) Loss by the institution issuing the financial mechanism of its authority to issue such an instrument.

3. Notification - The permittee must notify the Director by certified mail of the commencement of voluntary or involuntary proceedings under Title 11 (Bankruptcy), U.S. Code naming the permittee as debtor, within ten business days after the commencement of the proceeding. A guarantor of a corporate guarantee must make such a notification if he or she is named as debtor, as required under the terms of the guarantee.

4. Establishing Other Coverage - The permittee must establish other financial assurance or liability coverage acceptable to the Director, within 60 calendar days of the occurrence of the events identified in Part I(I)(2) or (3) of this permit.

J. CORRECTIVE ACTION

1. Compliance - The permittee shall comply with 40 C.F.R. §146.64.

2. Corrective Action - A plan for corrective action under 40 C.F.R. §146.64 is not necessary at this time because no improperly plugged, completed, or abandoned wells which penetrate the confining zone for this well are known to be present in the Area of Review (AOR). Within 30 days of written notification from the Director that there are wells in the AOR which penetrate the confining zone and either are improperly plugged, completed, or abandoned, or for which adequate plugging or completion information is unavailable, the permittee shall submit a Corrective Action Plan with a schedule for its implementation for approval by the Director. The AOR is specified in the administrative record for this permit.

3. Prohibition of Movement of Fluids into USDWs - Should upward migration of fluids through the confining zone of this permitted well be discovered within the AOR for this well, the permittee shall immediately cease injection into this well until the situation has been corrected and reauthorization has been given by the Director. The permittee shall immediately notify EPA and the Michigan Department of Environmental Quality (MDEQ) within 24 hours of the discovery of the problem and submit written confirmation transmitted by letter within five days. This includes but is not limited to fluid migration through any previously unknown, improperly plugged or unplugged well due to the injection of permitted fluids, or due to problems with the casing of this well due to the injection of permitted fluids.

4. Corrective Action under Section 3004(u) of RCRA - The permittee shall comply with corrective action requirements for all solid waste management units at this facility, as required by any RCRA permit issued to this facility.

K. INJECTION OF RESTRICTED HAZARDOUS WASTES

1. Further Requirements - The permittee shall comply with all regulations set forth under 40 C.F.R. Part 148. The permittee may continue to inject the restricted hazardous wastes specified in Part III(E) of this permit as long as it meets all other requirements of this permit and applicable regulations and at least one of the following remains in effect:

   (a) an extension of the effective date of a prohibition has been granted pursuant to 40 C.F.R. §148.4 with respect to such waste;

   (b) the exemption granted in response to a petition filed under 40 C.F.R. §148.20 to allow injection of restricted wastes, with respect to those wastes and wells covered by the exemption, remains in effect, and all conditions of the exemption are met;

   (c) land disposal ban dates have not been promulgated for the hazardous constituents of the wastestream; or

   (d) the concentration of hazardous constituents in each RCRA hazardous waste are below the treatment standards for each specific RCRA waste code found at 40 C.F.R. §268.40, Table entitled “Treatment Standards for Hazardous Waste.”

2. Injection Limitations - Characteristics and concentrations of hazardous constituents of injected waste shall not exceed any limits listed in Part III(D) of this permit. The monthly average injection rate for the permitted well shall not exceed the limitation listed in Part III(A) of this permit.

3. Exemption/Permit Modifications - This permit may be modified to permit injection of wastes other than those listed in Part III(D) of this permit or wastes in concentrations in excess of those listed in Part III(D) of this permit provided an exemption to statutory restrictions has been obtained pursuant to the provisions of 40 C.F.R. Part 148.

4. False Information - The permittee must notify the Director within 48 hours after obtaining knowledge that information submitted in support of a request for exemption under 40 C.F.R. Part 148 is false, inaccurate, or incomplete.

5. Petition Termination - Upon written notification from the Director that an exemption granted under 40 C.F.R. §148.20 has been terminated, the permittee shall immediately cease injection of all prohibited hazardous wastes.

6. Petition Renewal - The Director may require a new or updated 40 C.F.R. Part 148 demonstration prior to renewing this permit if the Director has determined that the basis for granting the exemption to the statutory restriction is affected by new information.

L. COMMENCEMENT OF INJECTION

Injection into the well is prohibited until the permittee obtains written approval from the Director. Approval will not be granted until the following conditions are met:

1. Information to be Submitted: The operator has submitted and obtained the Director's written approval of a personnel training and staffing plan demonstrating that all operators who will be on site during the operation of the injection well have adequate training, including training on deep well operations, and providing for continuing education for all operators on at least an annual basis.

2. Director Inspection - All well monitoring equipment is operational and has been inspected by EPA or its representative in accordance with 40 C.F.R. §144.51(m)

3. Mechanical Integrity Demonstration - Mechanical integrity of the well has been demonstrated in accordance with 40 C.F.R. §146.8(a)(1) and (2) and with Part I(H)(1) and (2) of this permit.

4. Warning and Shut-off Systems - The automatic warning and shut-off system required in Part II(B)(4) of this permit must pass a test witnessed by an authorized representative of the Director subjecting it to simulated failure conditions. The permittee must certify that a trained operator will be on site at all times when the well is operating to implement the system.

5. Notice to Inject - The permittee is prohibited from commencing injection until it receives written notice from the Director that the well has been constructed in

compliance with this permit and that Part III(E) has been modified to add any approved sources.

M. PERMIT REOPENER

This permit may be reopened after an exemption to the restricted hazardous waste land disposal prohibition has been issued or modified under 40 C.F.R. Part 148 to incorporate any conditions which may have been attached to such exemption.

PART II
WELL SPECIFIC CONDITIONS FOR UIC PERMITS

A. CONSTRUCTION

1. Siting - The injection well shall inject only into the formation(s) at the depths listed on the cover page of this permit. At no time shall injection occur into a formation which is above the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water.

2. Casing and Cementing - Notwithstanding any other provisions of this permit, the permittee shall case and cement the well to prevent the movement of fluids into or between USDWs for the expected life of the well. The casing and cement used in the construction of this well are shown in Part III(C) of this permit.

3. Tubing and Packer Specifications - The permittee shall inject only through tubing with a packer set within the long string casing within 100 feet above the top of the injection zone. The tubing and packer used in the well are represented in engineering drawings contained in Part III(C) of this permit.

4. Wellhead Specification - The permittee shall maintain a female coupling and valve on the wellhead, to be used for independent injection pressure readings.

5. Site Security – In order to help prevent any improper use and to help protect the integrity of the injection well, the operator must construct and maintain a fence around the facility and provide 24 hour guard service to preclude access by unauthorized personnel.

B. OPERATIONS

1. Injection Pressure Limitation - Except during stimulation, the permittee shall not cause or permit the injection pressure at the wellhead to exceed the maximum limitation which is specified in Part III(A) of this permit or initiate fractures or propagate existing fractures in the injection zone. In no case shall injection pressure initiate fractures or propagate existing fractures in the confining zone or cause the movement of injection or formation fluids into a USDW.

2. Additional Injection Limitation - No substances other than those identified in Part III(E) of this permit shall be injected. The permittee shall submit a certified statement attesting to compliance with this requirement at the time of the annual report.

3. Annulus Fluid and Pressure - The permittee shall fill the annulus between the tubing and the long string casing with a fluid approved by the Director and identified in the administrative record of this permit. The permittee shall submit any proposed change in the annulus fluid for the approval of the Director before

implementation. The permittee shall maintain a positive pressure on the annulus over the entire length of the tubing as specified in Part III(A) of this permit, except during workovers or times of annulus maintenance.

4. Warning and Shut-off System - The permittee shall install an automatic warning and automatic shut-off system prior to the commencement of injection. The permittee shall continuously operate and maintain the system after the commencement of injection to stop injection within 30 minutes of any of the following situations:

   (a) Pressure changes in the annulus or annulus/tubing differential signifying or identifying possible deficiencies in mechanical integrity; or

   (b) Injection pressure, annulus pressure, or annulus/tubing differential pressure reaches the pressure limits as specified in Part III(A) of this permit.

   The permittee must test the warning system and shut-off system prior to receiving authorization to inject, and at least once every twelfth month after the last approved demonstration. These tests must involve subjecting the system to simulated failure conditions and must be witnessed by the Director or his or her representative.

5. Trained Operator - A trained operator must be on site at all times during operation of the well. Prior to receiving authorization to inject the permittee must submit to EPA a personnel training and staffing plan that shows adequate training for all operators on site during the operation of the injection well. Each operator is required to undergo at least 24 hours of deep well operations refresher training during each calendar year.

6. Precautions to Prevent Well Blowouts

   (a) The permittee shall maintain on the well at all times a pressure that will prevent the return of the injection fluid to the surface. If there is gas formation in the injection zone near the well bore, such gas shall be prevented from entering the casing or tubing. The well bore shall be filled with a high specific gravity fluid during workovers to maintain a positive (downward) gradient and/or a plug shall be installed that can resist the pressure differential. A blowout preventer shall be kept in proper operational status during workovers which involve tubing or packer removal.

   (b) Where the injected wastes have the potential to react with the injection formation to generate gases, the permittee shall follow the procedures below to assure that a backflow or blowout does not occur:

(1) Limit the temperature, pH or acidity of the injected waste; and

(2) Develop procedures necessary to assure that pressure imbalances do not occur.

(c) If a blowout occurs, the permittee shall not resume operation until the Director gives written approval to recommence injection.

C. MONITORING

1. Sampling Point - The injection fluid samples shall be taken at the sampling locations specified in the approved Waste Analysis Plan for this permit.

2. Continuous Monitoring Devices - The permittee shall install continuous monitoring devices and use them to monitor injection pressure, injection volume, sight glass level, pH, flow rate and the pressure on the annulus between the tubing and the long string of casing. The monitoring results shall be submitted to the Director as specified in Part II(D) and Part III(A) of this permit and maintained for EPA's inspection at the facility.

3. Waste Analysis Plan - The permittee shall comply with the approved Waste Analysis Plan which describes the procedures used to monitor the nature of injected fluids and the procedures which will be carried out to comply with Part I(E)(10) of this permit. The Waste Analysis Plan is a part of the permit file and compliance with this plan is a condition of the permit. A copy of the approved Waste Analysis Plan shall be kept at the facility. The permittee shall assure that the Waste Analysis Plan remains accurate and the analyses remain representative and shall so certify at the time of the annual report. As provided in the Waste Analysis Plan, the permittee shall sample and analyze for the appropriate parameters every waste load that comes into the facility for injection to ensure that the injected waste composition corresponds to the previously approved waste type.

4. Ambient Monitoring - At least every twelfth month, the permittee shall, pursuant to 40 C.F.R. §146.68(e), monitor the pressure buildup in the injection interval, including, at a minimum, a shut down of the well for a time sufficient to conduct a valid observation of the pressure fall-off curve. The permittee shall submit plans for this testing at least 30 days before the testing is planned, and is prohibited from performing the testing unless the Director has given written approval.

5. Compatibility of Well Material - The permittee shall continuously monitor corrosion of the construction material(s) by a method approved by the Director. Authorization to inject shall not be given until the corrosion monitoring plan has been approved by the Director. The approved corrosion monitoring plan shall be part of the permit file for this permit and the permittee shall maintain and comply

with the plan as if it were fully set forth in the permit. Continuous corrosion monitoring shall be operational at the time of the commencement of injection. The permittee shall report loss of mass, thickness, cracking, pitting and other signs of corrosion at least monthly.

6. Temperature Monitoring – The permittee shall monitor injectate temperature at least once daily on each day during which injection occurs. If injection occurs during more than one eight-hour period in a day, temperature must be recorded at least once every six hours. The monitoring results shall be submitted to the Director as specified in Part II(D)(1) of this permit.

7. Calibration of Equipment – The permitteee shall perform calibration of measuring devices, including but not limited to flow meters, injection and annulus pressure recorders, pH meters, at least annually and during any maintenance performed on these devices.

8. Compliance Audit – Within twelve months after commencing injection, and at least every twenty four months thereafter, the permittee shall obtain a compliance audit, including an on-site review, from an independent third party. In the twenty-four month period between independent third party audits, the permittee shall also conduct an internal compliance audit. The auditor's reports shall evaluate the permittee's compliance with all provisions of the permit and shall be submitted to the permittee and to the Director within two months of the audit. If the audit report identifies deficiencies, the permittee shall expeditiously address those deficiencies. Obtaining the compliance audit or acting on its recommendations shall not excuse the permittee from liability for any penalties or sanctions for violation of this permit.

D. REPORTING REQUIREMENTS

The permittee shall submit all required reports to the Director at the following address no later than the end of the month following the reporting period. Monitoring reports under Part II(D)(1), (2), and (3) are not required until the initial authorization to inject has been granted or otherwise required by the Director:

United States Environmental Protection Agency
Region 5, WU-16J
77 West Jackson Blvd.
Chicago, Illinois 60604-3590
ATTN: UIC Branch, DI Section

Unless business confidentiality is claimed under Part I(D) of this permit, the permittee shall also make copies of all required reports publicly available in a document repository maintained by the permittee and located either in the vicinity of the facility or on a website. The permittee must submit and obtain the Director's written approval of a plan for establishing and operating the document repository.

1. Monthly Reports. The permittee shall submit monthly reports of the following information:

   (a) Results of the injection fluid analyses specified in Part III(A) and (E) of this permit and the approved Waste Analysis Plan as recorded in the permit file for this permit. In reporting fluid analyses, the permittee shall identify the waste components of the waste stream by their common name, chemical name, structure and concentration, or as approved by the Director.

   (b) A tabulation of maximum injection pressure, maximum and minimum sight glass levels, maximum and minimum annulus pressure, injectate pH, flow rate, and minimum differential between simultaneous measurements of injection pressure and annulus pressure for each day of the month;

   (c) Appropriately scaled graphs representing the continuous monitoring as required in Part II(C)(2) of this permit showing injection pressure, annulus pressure, flow rate, pH, injection volume, and sight glass levels. One graph must include, at a minimum, daily maximum injection pressure and daily average flow rate on a single monthly chart. A second graph must display the daily maximum and minimum sight glass levels;

   (d) A statement of the total volumes of fluid injected to date, in the current calendar year and in the current calendar month. If non-waste-water (for instance, a continuous flush of water for dilution) is injected, the total, annual, and monthly injected volumes for wastewater only, as well as total injected volume must be reported;

   (e) A tabulation of the dates, amounts and types of liquid added to or removed from the annulus system during the month, and the cumulative additions and the cumulative subtractions for the current month and each of the past 12 months;

   (f) Any noncompliance with conditions of this permit, including but not limited to:

      (1) Any event that exceeds operating parameters for annulus pressure or injection pressure or annulus/tubing differential as specified in the permit; or

      (2) Any event which triggers an alarm or shutdown device required in Part II(B)(4) of this permit;

   (g) The results of the continuous corrosion monitoring required in Part II(C)(5) of this permit;

(h) A description of the repair and maintenance, routine or otherwise, performed on any component of the injection or annulus system during the previous month. The description shall include the reasons for performing the repair or maintenance, and, if a component failed or had the potential to fail, the outcome of the repair or maintenance activity and the life expectancy of the new or repaired components;

(i) Any other monitoring required on a monthly basis.

2. Annual Reports - The permittee shall report the following at least every twelfth month from the effective date of this permit:

(a) Results of the injection fluid analyses specified in Part III(A) and (E) of this permit, and the approved Waste Analysis Plan as recorded in the permit file for this permit. In reporting fluid analyses, the permittee shall identify the waste components of the waste stream by their common name, chemical name, structure and concentration, or as approved by the Director. This report must include statements showing that the permittee has met the requirements of Part I(E)(10), Part II(B)(2), and Part II(C)(3) of this permit.

(b) Results of pressure fall-off testing required by 40 C.F.R. §146.68(e) and results of all approved temperature, noise, oxygen activation, or other logs required by Part I (H)(2)(c) of this permit.

(c) Results of any calibration of measuring equipment as required in Part II (C)(7) of this permit.

(d) Documentation demonstrating the continuing operator training required in Part II (B)(5) of this permit.

(e) Compliance audit report as required in Part II(C)(8) of this permit.

3. Reports on Well Tests and Workovers - Within 30 calendar days after the activity, the permittee shall report to the Director the results of demonstrations of mechanical integrity, any well workover, or results of other tests required by this permit. If the permittee does not make these reports within the required time, the Director may consider the tests to have been failed.

PART III
ATTACHMENTS

These attachments include, but are not limited to, permit conditions and plans concerning operating procedures, monitoring and reporting, as required by 40 C.F.R. Parts 144, 146 and 148. The permittee shall comply with these conditions and adhere to these plans as approved by the Director, as follows:

A. SUMMARY OF OPERATING, MONITORING AND REPORTING REQUIREMENTS

B. CLOSURE PLAN

C. CONSTRUCTION DETAILS

D. GENERAL WASTE CHARACTERISTICS

E. LIST OF APPROVED SOURCES

ATTACHMENT A
SUMMARY OF OPERATING, MONITORING AND REPORTING REQUIREMENTS

CHARACTERISTIC	LIMITATION	MINIMUM MONITORING FREQUENCY	MINIMUM REPORTING FREQUENCY
Injection Pressure[1]	765 psig maximum[1]	continuous	monthly
Annulus Pressure	100 psig minimum	continuous	monthly
Annulus/Tubing Differential	100 psig minimum above operating injection pressure	continuous	monthly
Injection Rate[2] (Average for both wells #1-12 and #2-12)	166 gpm	continuous	monthly
Injection Rate (Maximum instantaneous)	270 gpm	continuous	monthly
Sight Glass Level		continuous	monthly
Annulus Fluid Loss		monthly	monthly
Cumulative Volume		daily	monthly
Temperature[3]		6-hour intervals	monthly
Corrosion Monitoring		monthly	monthly
Repair and Maintenance		NA	monthly
Toxicity Characteristic List		annually	annually
Fingerprint Analysis		per load	monthly
Chemical Composition and Physical Characteristics of Injected Oilfield Brine[4]		annually	annually
pH of Injected Fluids		continuous	monthly

[1] The maximum injection pressure was determined by site specific testing of the injection zone. The limitation on injection pressure will serve to prevent injection-formation fracturing.
[2] Average injection rate shall be reported using the calculation formulas and form on page A-2 of this permit.
[3] Frequency of temperature measurements will be in accordance with Part II(C)(6) of this permit. Reporting of injectate temperature will be in accordance with Part II(D)(1) of this permit.
[4] As specified in Part III(E) of this permit.

Calculation of Average Injection Rate

CURRENT REPORTING YEAR _____

CURRENT REPORTING MONTH _____

Date (month, year) of the first injection into either well at the Citrin Road Facility

_____

CURRENT MONTH (all volumes in gallons)

	Injected Waste	**Injected Non-Waste**	**Total injected**
MI-163-1W-C010 , Well #1-12			
Current Month			
Since facility first injected			
MI-163-1W-C011, Well #2-12			
Current Month			
Since facility first injected			
		Lifetime Combined	

Conversion factors
365.25 days per year ÷ 12 months per year = 30.4375 days per month
30.4375 days per month × 1440 minutes per day = 43,830 minutes per month

Calculations
Whole number of months of injection _____

_____ lifetime number of months of injection × 43,830 minutes/month

= _____ minutes of injection

Lifetime combined injected volume _____ × _____ minutes of injection

= _____ gpm average injection rate

Hazardous Substances Limitations and Reporting

RCRA CODE(S)	NAME	LIMIT (mg/ml)	MINIMUM[5] MONITORING FREQUENCY	MINIMUM REPORTING FREQUENCY
F039, P004	Aldrin	200	monthly/per load	monthly
U021	Benzidine	200	monthly/per load	monthly
P016,K017	sym-Dichloromethyl ether	160	monthly/per load	monthly
F020,F021, F022,F026, F027,F028, F032,F039, F032,K043, K099	Hexachlorodibenzo-p-dioxins	6	monthly/per load	monthly
K174,K178	Hexachlorodibenzo-p-dioxins, all	6	monthly/per load	monthly
F039,P082	Nitrosodimethylamine	200	monthly/per load	monthly
F039,K174, K178	1,2,3,4,6,7,8,9- Octachloro-dibenzofuran	6	monthly/per load	monthly
F039,K174, K178	1,2,3,4,6,7,8,9- Octachloro-dibenzo-p-dioxin	6	monthly/per load	monthly
F020,F021, F022,F026, F027,F028, F032,F039, F032,K043	Tetrachlorodibenzo-p-dioxins (TCDD)	30	monthly/per load	monthly
K174,K178	Tetrachlorodibenzo-p-dioxins (TCDD)	30	monthly/per load	monthly
P110	Tetraethyl lead	100	monthly/per load	monthly

[5]The monthly chemical analyses for the specific chemicals and waste codes required by this table apply to post-treatment "source" material for injection. A "per load" fingerprint analysis is required for each incoming waste shipment received and for each batch of post-treatment source material as specified in Part III(E) to confirm the general characteristics of the materials. The fingerprint analysis of the general characteristics of the source is not specific to these individual waste codes.

OMB No. 2040-0042 Approval Expires 4/30/07

EPA

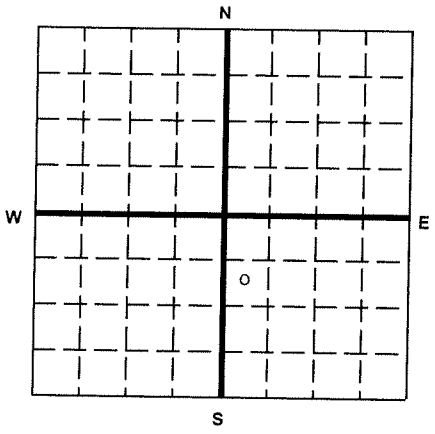
United States Environmental Protection Agency
Washington, DC 20460

PLUGGING AND ABANDONMENT PLAN

Name and Address of Facility
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Name and Address of Owner/Operator
Environmental Geo-Technologies, LLC
28470 Citrin Drive
Romulus, MI 48174

Locate Well and Outline Unit on Section Plat - 640 Acres



State	County	Permit Number
MI	Wayne	MI-163-1W-C011

Surface Location Description

SW 1/4 of NW 1/4 of SE 1/4 of Section 12 Township 3S Range 9E

Locate well in two directions from nearest lines of quarter section and drilling unit

Surface Location 1000 ft. frm (N/S) N Line of quarter section
and 280 ft. from (E/W) W Line of quarter section.

TYPE OF AUTHORIZATION
- [X] Individual Permit
- [ ] Area Permit
- [ ] Rule

Number of Wells 1

WELL ACTIVITY
- [X] CLASS I
- [ ] CLASS II
  - [ ] Brine Disposal
  - [ ] Enhanced Recovery
  - [ ] Hydrocarbon Storage
- [ ] CLASS III

Lease Name Disposal (MI, M-453) Well Number EDS 2-12

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
16"	60	177'	177'	20"
13 3/8"	48	598'	598'	17.5"
9 5/8"	36	1444'	1444'	12 1/4"
7"	26	3983'	3983'	8 3/4"

METHOD OF EMPLACEMENT OF CEMENT PLUGS
- [X] The Balance Method
- [ ] The Dump Bailer Method
- [ ] The Two-Plug Method
- [ ] Other

CEMENTING TO PLUG AND ABANDON DATA:	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	8 3/4"	6.276"					
Depth to Bottom of Tubing or Drill Pipe (ft.)	4550'	3950'					
Sacks of Cement To Be Used (each plug)	215	720					
Slurry Volume To Be Pumped (cu. ft.)	254	850					
Calculated Top of Plug (ft.)	3950'	3'					
Measured Top of Plug (if tagged ft.)	TBD	TBD					
Slurry Wt. (Lb./Gal.)	15.6	15.6					
Type Cement or Other Material (Class III)	Class A	Class A					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (if any)

From	To	From	To
None			

Estimated Cost to Plug Wells

$49,800.00 per approved procedure (attached).
See Attachment Q-4 from well permit.

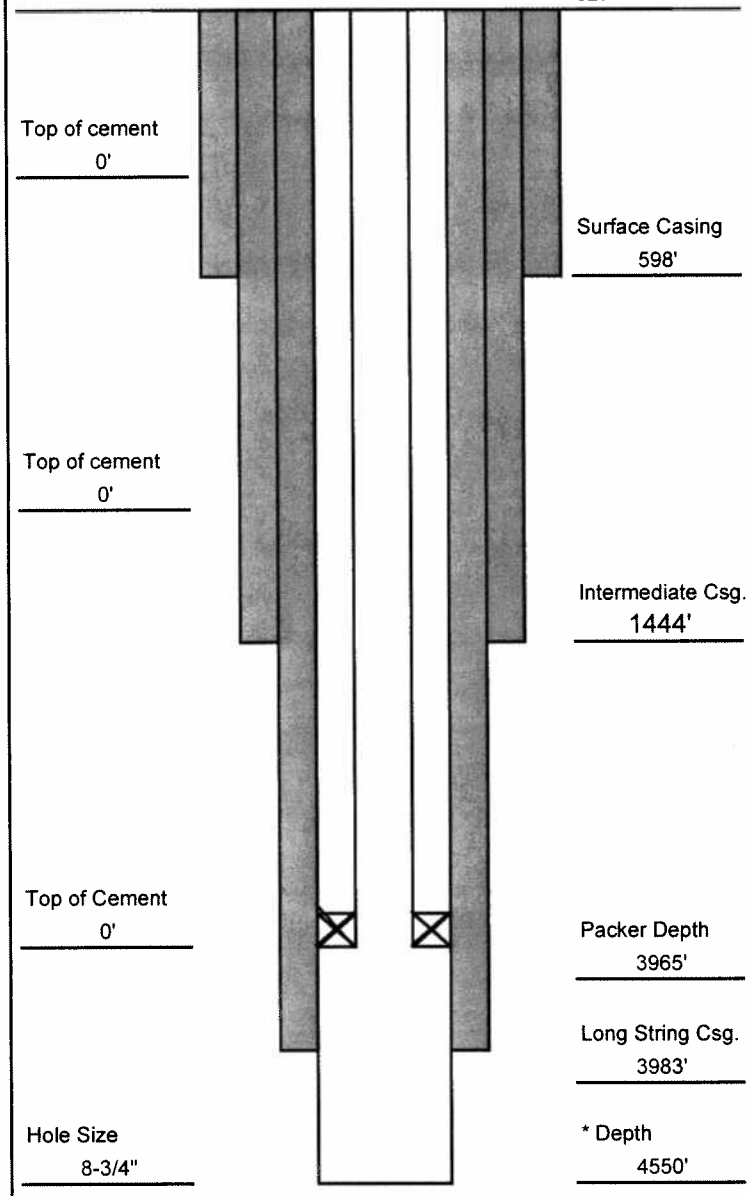
Certification

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

Name and Official Title *(Please type or print)*	Signature	Date Signed
Dimitrios Papas, CEO		2-07-2007

EPA Form 7520-14 (Rev. 8-01)

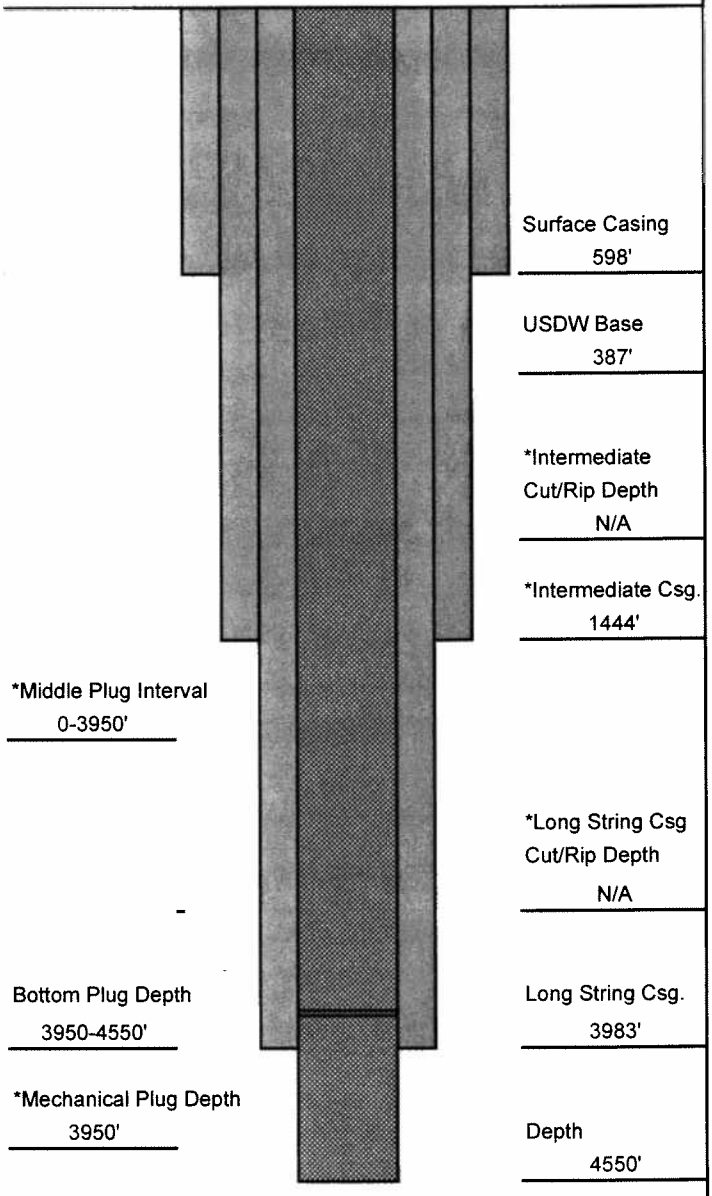
ORIGINAL WELL CONSTRUCTION DURING OPERATION



** Add Any Additional Information

* May not Apply

PLUGGING AND ABANDONMENT CONSTRUCTION



** Add Any Additional Information

* May not Apply

LIST OF ALL OPEN AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED

Specify Open Hole/ Perforations/ Varied Casing	From	To	Formation Name
Open hole	3983'	4550'	Franconia-Dresbach, Eau Claire, and Mt. Simon

Petrotek Engineering Corporation 10288 West Chatfield Avenue, Suite 200 Littleton, Colorado 80127 USA (303) 290-9414 FAX (303) 290-9580

January 20, 2011

Mr. Yaser Mahmoud
Environmental Geo Technologies
28470 Citrin Drive
Romulus, MI 48170

RE: Environmental Geo-Technologies
2011 Plugging and Abandonment Cost Update
UIC Permit Numbers: MI-163-1W-0007, MI-163-1W-0008

Dear Mr. Mahmoud:

As requested, Petrotek has completed an update of the plugging and abandonment procedures and associated costs for the closure of Environmental Geo-Technologies injection Wells No. 1-12 and 2-12. Previously approved field plugging procedures remain consistent with applicable regulations and have been amended to include final ambient reservoir monitoring and a comparison of values to determine if the injection activity has conformed with predicted values [146.71 (d) (1)] along with final mechanical integrity testing as specified in [146.71 (d) (2)]. The plugging costs have been adjusted to reflect current rates applicable in the Midwest for oilfield services including workover rigs, oilfield supplies and cementing equipment. A summary of the major cost elements (January 2011) is presented below.

Fall-off Test (24-hr) with BHP Gauge and Analysis	9,000
Reservoir Analysis/Pressure Comparison to Petition	1,500
Static Temperature Log	9,500
Workover Rig Mobilization - 1 day	2,500
Workover Rig Operations - 3 days	9,000
Workover Rig Demobilization - 1 day	2,500
Location Work/Welding	1,000
Blowout Preventer Rental and Drayage	2,500
Workstring Rental and Drayage	2,500
Squeeze Retainer	7,500
Miscellaneous Handling (forklift, etc.)	1,500
Brine and Hauling	2,000
Cementing	21,000
Disposal of Tubing, Packer and Wellhead	3,000
Field Supervision	5,000
Plugging Report Preparation	2,200
Total	**$82,200**

EGT Romulus, MI Well Plugging Cost Estimate
January 20, 2011

Based on requirements for the abandonment of hazardous wells, the total plugging and closure cost estimate for each well is approximately $82,200.00. The total cost for plugging both existing wells is estimated as $164,400.00.

The procedure to be used is consistent with Form 7520-14 forms as previously submitted and is summarized as follows:

1. Use site equipment to inject fresh water for a minimum of 24 hours. Rig-up logging contractor and pressure control equipment to RIH to the end of the tail pipe with a digital memory bottom-hole pressure gauge. Collect a minimum of 1 hour of injection data before shut-in. Collect pressure falloff data at a minimum of 10 second interval for 24 hours. Conduct gradient survey at 1,000 foot intervals as the memory tool is removed from the well. Prepare industry standard falloff analysis and compare measured and projected pressures to petition model projections.

2. Conduct one-hour static annulus pressure test on 7” casing x tubing annulus.

3. After well has been shut-in for a minimum of 36 hours, rig-up logging contractor and conduct temperature log according to Region 5 guidance.

4. Rig-up workover rig and equipment. Fill mud tank with 10 lb/gal brine. Tie in rig pump to wellhead and displace tubing with fresh water. Pump approximately 1000 gallons, 10 lb/gal brine, or brine necessary to kill wellhead pressure if positive pressure exists.

5. ND wellhead and install blow out preventer or rotating head and engage tubing. Work to release tubing from packer. Circulate annulus with 10 lb/gal brine as necessary until well is dead.

6. Remove injection tubing from well. Run in hole with work string tubing and packer retrieving tool. Latch packer and pull out of hole. Prepare to make up squeeze cement retainer.

7. Run in hole with squeeze retainer or packer on workstring to approximately 4000'. Attempt to pump 150% of calculated cased hole cement volume below retainer or packer into open hole and stop pumping at first attaining a squeeze pressure of 1100 psi or 150% of hole volume. Unsting from tool and clear tubing. Pull workstring out of hole.

8. Wait on cement. Close in BOP and pressure test casing/cement plug to 1000 psi.

9. Run in hole with open ended workstring to top of cement on retainer. Tag cement and pull uphole 1 joint. Pump Class "A" Michigan equivalent neat slurry in 100 sack increments while pulling approximately 18 joints of tubing after each increment. Use stage and balance method of emplacing plug.

10. Pull uphole to approximately 700' with workstring. Flush tubing with fresh water and assure circulation is achieved. Close in BOP and pressure up on top of plug with approximately 1000 psi.

11. Run in hole and tag up with top of plug. (Should be encountered at approximately 1000'). Pump remaining sacks of Class "A" neat Michigan equivalent cement slurry to bring cement to 3 feet below surface. Use any additional cement as required to assure that cement is circulated to surface.

12. Nipple down blow out preventers. Cut off casing heads and evaluate condition for salvage value. Cut off all casing strings 4' below ground level and weld 1/2" steel plate over the strings. Weld on appropriate abandonment markings on steel plate.

13. Rig down and move out pulling unit. Release support equipment.

Please feel free to call us with any questions or if additional clarification is required.

Sincerely,

Via E-mail

Petrotek Engineering Corporation
Ken Cooper

EGT
Environmental GEO Technologies

March 25, 2011

Via Federal Express

Susan Hedman
Regional Administrator
Region 5
United States Environmental Protection Agency
Mail Code R-19J
77 West Jackson Boulevard
Chicago, IL 60604-3507

RECEIVED
MAR 28 2011
UIC BRANCH
EPA, REGION 5

Re: Environmental Geo-Technologies, LLC
Letter of Credit No. 626857-04
UIC Permit Nos. MI-163-1W-C010 and MI-163-1W-C011

Dear Ms. Hedman:

Pursuant to 40 C.F.R. § 144.63(d)(4), enclosed please find two amendments to Letter of Credit No. 626857-04 issued by Comerica Bank ("Comerica") on February 10 & 18, 2011 in the amount of $164,400 as financial assurance for plugging and abandonment of the existing Underground Injection Control ("UIC") wells (UIC Permit Nos. MI-163-1W-C010 and MI-163-1W-C011) (the "Wells") at the former Environmental Disposal Systems, Inc. facility located at 28470 Citrin Drive, Romulus, MI 48174, Site ID No. MIR 000 016 055.

Also enclosed is a Standby Trust Agreement, dated March 25, 2011 bearing original signatures of Environmental Geo-Technologies, LLC ("EGT") and Comerica. This Standby Trust Agreement replaces the standby trust agreement bearing the original signatures of EGT and Comerica, dated March 22, 2007, which has apparently been lost, as indicated in Rebecca Harvey's January 10, 2011 letter to EGT.

Environmental Geo-Technologies, LLC submits the Letter of Credit and Standby Trust Agreement for purposes of its pending application for UIC permits to operate the Wells. Please call me with any questions regarding this submittal.

Very truly yours,
Environmental Geo-Technologies, LLC

By: Thomas Athans

Enclosures

cc: Rebecca L. Harvey, Chief UIC Branch
Thomas Kruger, Esq. (EPA)
Joseph M. Polito, Esq. ((Honigman Miller Schwartz and Cohn LLP)

Comerica Bank

MJM

COMERICA BANK
411 WEST LAFAYETTE (MC 3341)
DETROIT, MI 48226

FAX NO: (313) 222-9324
SWIFT: MNBDUS33

AMENDMENT TO LETTER OF CREDIT

FEBRUARY 10, 2011

CREDIT NUMBER OF
ISSUING BANK: 626857 -04

APPLICANT:

ENVIRONMENTAL GEO-TECHNOLOGIES, INC
1216 BEAUBIEN
DETROIT, MI 48226

BENEFICIARY:
REGIONAL ADMINISTRATOR, REGION 5
ENVIRONMENTAL PROTECTION AGENCY
77 WEST JACKSON BLVD
CHICAGO, IL 60604

AMENDMENT NUMBER: 03

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE CREDIT AND MUST BE ATTACHED THERETO.

GENTLEMEN:

IN ACCORDANCE WITH INSTRUCTIONS RECEIVED FROM OUR PRINCIPALS, THE ABOVE CAPTIONED CREDIT HAS BEEN AMENDED AS FOLLOWS:

THE AMOUNT OF THIS CREDIT HAS INCREASED BY 44,400.00 USD.

THE AMOUNT OF THIS CREDIT ISSUED NOW TOTALS USD 164,400.00

ALL OTHER TERMS AND CONDITIONS REMAIN UNCHANGED.

VERY TRULY YOURS,

AUTHORIZED SIGNATURE

Comerica Bank

TELEX NO: 3772134
FAX NO: 313 222 9115
SWIFT: MNBDUS33

COMERICA BANK
411 WEST LAFAYETTE (MC 3341)
DETROIT, MI 48226

AMENDMENT TO LETTER OF CREDIT

FEBRUARY 18, 2011

CREDIT NUMBER OF
ISSUING BANK: 626857 -04

APPLICANT:
ENVIRONMENTAL GEO-TECHNOLOGIES, LLC
1001 WOODWARD AVENUE, SUITE 400
DETROIT, MI 48226

BENEFICIARY:
REGIONAL ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 5
77 WEST JACKSON BLVD
CHICAGO, IL 60604

AMENDMENT NUMBER: 04

THIS AMENDMENT IS TO BE CONSIDERED AS PART OF THE ABOVE CREDIT AND MUST BE ATTACHED THERETO.

GENTLEMEN:

IN ACCORDANCE WITH INSTRUCTIONS RECEIVED FROM OUR PRINCIPALS, THE ABOVE CAPTIONED CREDIT HAS BEEN AMENDED AS FOLLOWS:

THIS LETTER OF CREDIT IS AMENDED IN ITS ENTIRETY TO NOW READ AS FOLLOWS:

QUOTE

TELEX NO: 3772134 MNB INTL DET
FAX NO: 313 222 9115
SWIFT: MNBDUS33

COMERICA BANK
411 W. LAFAYETTE, MC3341
DETROIT, MI 48226

IRREVOCABLE STANDBY LETTER OF CREDIT

REGIONAL ADMINISTRATOR
REGION(S) 5
U.S. ENVIRONMENTAL PROTECTION AGENCY
77 WEST JACKSON BLVD.
CHICAGO, IL 60604

DEAR SIR OR MADAM:

WE HEREBY ESTABLISH OUR IRREVOCABLE STANDBY LETTER OF CREDIT NO. 626857-04 IN YOUR FAVOR, AT THE REQUEST AND FOR THE ACCOUNT OF ENVIRONMENTAL GEO-TECHNOLOGIES, LLC, 1001 WOODWARD AVENUE, SUITE 400, DETROIT, MI 48226, UP TO THE AGGREGATE AMOUNT OF USD164,400.00 (ONE HUNDRED SIXTY-FOUR THOUSAND FOUR HUNDRED AND 00/100 U.S. DOLLARS) AVAILABLE UPON PRESENTATION OF:

(CONTINUED ON PAGE 2)

Comerica Bank

TELEX NO: 3772134 MNB INTL DET
FAX NO: 313 222 9115
SWIFT: MNBDUS33

COMERICA BANK
411 W. LAFAYETTE, MC3341
DETROIT, MI 48226

STANDBY LETTER OF CREDIT NO. 626857-04
PAGE 2

1. YOUR SIGHT DRAFT, BEARING REFERENCE TO THIS LETTER OF CREDIT NUMBER 626857-04, AND

2. YOUR SIGNED STATEMENT READING AS FOLLOWS: "I CERTIFY THAT THE AMOUNT OF THE DRAFT IS PAYABLE PURSUANT TO REGULATIONS ISSUED UNDER AUTHORITY OF THE SAFE DRINKING WATER ACT."

THIS LETTER OF CREDIT IS EFFECTIVE AS OF MARCH 22, 2007 AND SHALL EXPIRE ON MARCH 22, 2008 BUT SUCH EXPIRATION DATE SHALL BE AUTOMATICALLY EXTENDED FOR A PERIOD OF ONE YEAR ON MARCH 22, 2008 AND ON EACH SUCCESSIVE EXPIRATION DATE, UNLESS, AT LEAST 120 DAYS BEFORE THE CURRENT EXPIRATION DATE, WE NOTIFY BOTH YOU AND ENVIRONMENTAL GEO-TECHNOLOGIES, LLC BY CERTIFIED MAIL THAT WE HAVE DECIDED NOT TO EXTEND THIS LETTER OF CREDIT BEYOND THE CURRENT EXPIRATION DATE. IN THE EVENT YOU ARE SO NOTIFIED, ANY UNUSED PORTION OF THE CREDIT SHALL BE AVAILABLE UPON PRESENTATION OF YOUR SIGHT DRAFT FOR 120 DAYS AFTER THE DATE OF RECEIPT BY BOTH YOU AND ENVIRONMENTAL GEO-TECNOLOGIES, LLC, AS SHOWN ON THE SIGNED RETURN RECEIPTS.

WHENEVER THIS LETTER OF CREDIT IS DRAWN ON UNDER AND IN COMPLIANCE WITH THE TERMS OF THIS CREDIT, WE SHALL DULY HONOR SUCH DRAFT UPON PRESENTATION TO US, AND WE SHALL DEPOSIT THE AMOUNT OF THE DRAFT DIRECTLY INTO THE STANDBY TRUST FUND OF ENVIRONMENTAL GEO-TECHNOLOGIES, LLC, IN ACCORDANCE WITH YOUR INSTRUCTIONS.

WE CERTIFY THAT THE WORDING OF THIS LETTER OF CREDIT IS IDENTICAL TO THE WORDING SPECIFIED IN 40 CFR 144.70(D) AS SUCH REGULATIONS WERE CONSTITUTED ON THE DATE SHOWN IMMEDIATELY BELOW.

Gail Matheson
AUTHORIZED SIGNATURE

DATE: 2-21-11

NAME: Gail Matheson

TITLE: Assistant Vice President

THIS LETTER OF CREDIT IS SUBJECT TO AND GOVERNED BY THE 2007 REVISION OF THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS OF THE INTERNATIONAL CHAMBER OF COMMERCE (PUBLICATION NO. 600).

UNQUOTE.

Gail Matheson
AUTHORIZED SIGNATURE

DATE: 2-21-11

NAME: Gail Matheson

TITLE: Assistant Vice President

STANDBY TRUST AGREEMENT

U.S. Environmental Protection Agency
Underground Injection Control
Financial Responsibility Requirement

TRUST AGREEMENT, the "Agreement," entered into as of March 25, 2011, by and between Environmental Geo-Technologies, LLC, a Michigan limited liability company, the "Grantor," and Comerica Bank, a Texas banking association, the "Trustee." This Agreement supersedes the Standby Trust Agreement between the parties dated March 27, 2007.

WHEREAS, the United States Environmental Protection Agency, (EPA), an agency of the United States Government, has established certain regulations applicable to the Grantor, requiring that an owner or operator of an injection well shall provide assurance that funds will be available when needed for plugging and abandonment of the injection well,

WHEREAS, the Grantor has elected to establish a trust to provide all or part of such financial assurance for the facility(ies) identified herein,

WHEREAS, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this Agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, the Grantor and the Trustee agree as follows:

Section 1. *Definitions.* As used in this Agreement:

(a) The term "Grantor" means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.

(b) The term "Trustee" means the Trustee who enters into this Agreement and any successor Trustee.

(c) Facility or activity means any "underground injection well" or any other facility or activity that is subject to regulation under the Underground Injection Control Program.

Section 2. *Identification of Facilities and Cost Estimates.* This Agreement pertains to the facilities and cost estimates identified on attached Schedule A.

Section 3. *Establishment of Fund.* The Grantor and the Trustee hereby establish a trust fund, the "Fund," for the benefit of EPA. The Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as consisting of the property, which is acceptable to the Trustee, described in Schedule B attached hereto. Such property and any other property subsequently transferred to the Trustee is referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor established by EPA.

Section 4. *Payment for Plugging and Abandonment.* The Trustee shall make payments from the Fund as the EPA Regional Administrator shall direct, in writing, to provide for the payment of the costs of

plugging and abandonment of the injection wells covered by this Agreement. The Trustee shall reimburse the Grantor or other persons as specified by the EPA Regional Administrator from the Fund for plugging and abandonment expenditures in such amounts as the EPA Regional Administrator shall direct in writing. In addition, the Trustee shall refund to the Grantor such amounts as the EPA Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. *Payments Comprising the Fund.* Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee.

Section 6. *Trustee Management.* The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, subject, however, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing, which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims, *except that*:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;

(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and

(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. *Commingling and Investment.* The Trustee is expressly authorized in its discretion:

(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and

(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. *Express Powers of Trustee.* Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

(a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;

(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers

herein granted;

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depositary with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and

(e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 9. *Taxes and Expenses.* All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. *Annual Valuation.* The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to the Grantor and to the appropriate EPA Regional Administrator a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the Grantor and the EPA Regional Administrator shall constitute a conclusively binding assent by the Grantor, barring the Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement. In accordance with 40 CFR § 144.63(d)(3)(ii)(C), unless the standby trust fund is funded pursuant to the requirements of 40 CFR § 144.63, notices of nonpayment are not required.

Section 11. *Advice of Counsel.* The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 12. *Trustee Compensation.* The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 13. *Successor Trustee.* The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on

which it assumes administration of the trust in a writing sent to the Grantor, the EPA Regional Administrator, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 9.

Section 14. *Instructions to the Trustee.* All orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Exhibit A, or such other designees as the Grantor may designate by amendment to Exhibit A. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and instructions. All orders, requests, and instructions by the EPA Regional Administrator to the Trustee shall be in writing, signed by the EPA Regional Administrators of the Regions in which the facilities are located, or their designees, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or EPA hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or EPA, except as provided for herein.

Section 15. *Notice of Nonpayment.* The Trustee shall notify the Grantor and the appropriate EPA Regional Administrator, by certified mail within 10 days following the expiration of the 30-day period after the anniversary of the establishment of the Trust, if no payment is received from the Grantor during that period. After the pay-in period is completed, the Trustee shall not be required to send a notice of nonpayment. In accordance with 40 CFR § 144.63(d)(3)(ii)(D), unless the standby trust fund is funded pursuant to the requirements of 40 CFR § 144.63, notices of nonpayment are not required.

Section 16. *Amendment of Agreement.* This Agreement may be amended by an instrument in writing executed by the Grantor, the Trustee, and the appropriate EPA Regional Administrator, or by the Trustee and the appropriate EPA Regional Administrator if the Grantor ceases to exist.

Section 17. *Irrevocability and Termination.* Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of the Grantor, the Trustee, and the EPA Regional Administrator, or by the Trustee and the EPA Regional Administrator if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 18. *Immunity and Indemnification.* The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the EPA Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 19. *Choice of Law.* This Agreement shall be administered, construed, and enforced according to the laws of the State of Michigan.

Section 20. *Interpretation.* As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF, the parties below have caused this Agreement to be executed by their respective officers duly authorized and witnessed as of the date first above written. The parties below

certify that the wording of this Agreement is identical to the wording specified in 40 CFR § 144.70(a)(1) and 40 CFR § 144.63 as such regulations were constituted on the date first above written.

ENVIRONMENTAL GEO-TECHNOLOGIES, LLC

By: Dimitrios Papas
Its: Manager

Witness:

Name: THOMAS ATHANS
Title: VP

COMERICA BANK

By: Randy Browning
Its: Vice President

Witness:

Name: Pam Hamilton
Title: Sr. Trust Analyst

(X) This bank/institution has the authority to act as a trustee and its trust activities are examined and regulated by a State or Federal agency.

CERTIFICATE OF ACKNOWLEDGMENT
FOR
TRUST FUND AGREEMENT

STATE OF MICHIGAN)

) ss.

COUNTY OF WAYNE)

On this 25TH day of March, 2011, before me personally came Dimitrios Papas to me known, who, being by me duly sworn, did depose and say that he resides at 585 Lake Shore Drive, Grosse Pointe Shores, Michigan, that he is Manager of Environmental Geo-Technologies, LLC, the Michigan limited liability company described in and which executed the above instrument; that he knows the seal of said limited liability company; that the seal affixed to such instrument is such seal; that it was so affixed by order of the Managers of said limited liability company, and that he signed his name thereto by like order.

Sign Name: Karen R. Nitta

Print Name: KAREN R. NITTA

Notary Public, State of Michigan

County of WAYNE

My Commission Expires: 6/25/11

Acting in the County of WAYNE

Karen R. Nitta
Notary Public, State of Michigan, County of Wayne
My Commission Expires 6/25/2011
Acting in the County of Wayne

SCHEDULE A

Identification of Facilities and Cost Estimates

Schedule A is referenced in Section 2 of this Trust Agreement by and between Environmental Geo-Technologies, LLC, a Michigan limited liability company, the "Grantor," and Comerica Bank, a Texas banking association, the "Trustee."

EPA Identification Number:	MIR 000 016 055
Facility Name:	Environmental Geo-Technologies, LLC
Facility Address:	28470 Citrin Drive Romulus, Michigan 48174
Current Plugging and Abandonment Cost Estimate:	Well 1-12 - $82,200 Well 2-12 - $82,200
Date of Estimate:	January 20, 2011

SCHEDULE B

Pursuant to 40 C.F.R. § 144.63(d)(3)(ii)(A), payments into the trust fund as specified in 40 C.F.R. § 144.63(a) are not required unless the standby trust fund is funded pursuant to the requirements of 40 C.F.R. § 144.63(d).

EXHIBIT A

As referenced in Section 14 of this Trust Agreement, all orders, requests, and instructions by the Grantor to the Trustee shall be in writing, signed by such persons as are designated in this Exhibit A, or such other designees as the Grantor may designate by amendment to Exhibit A.

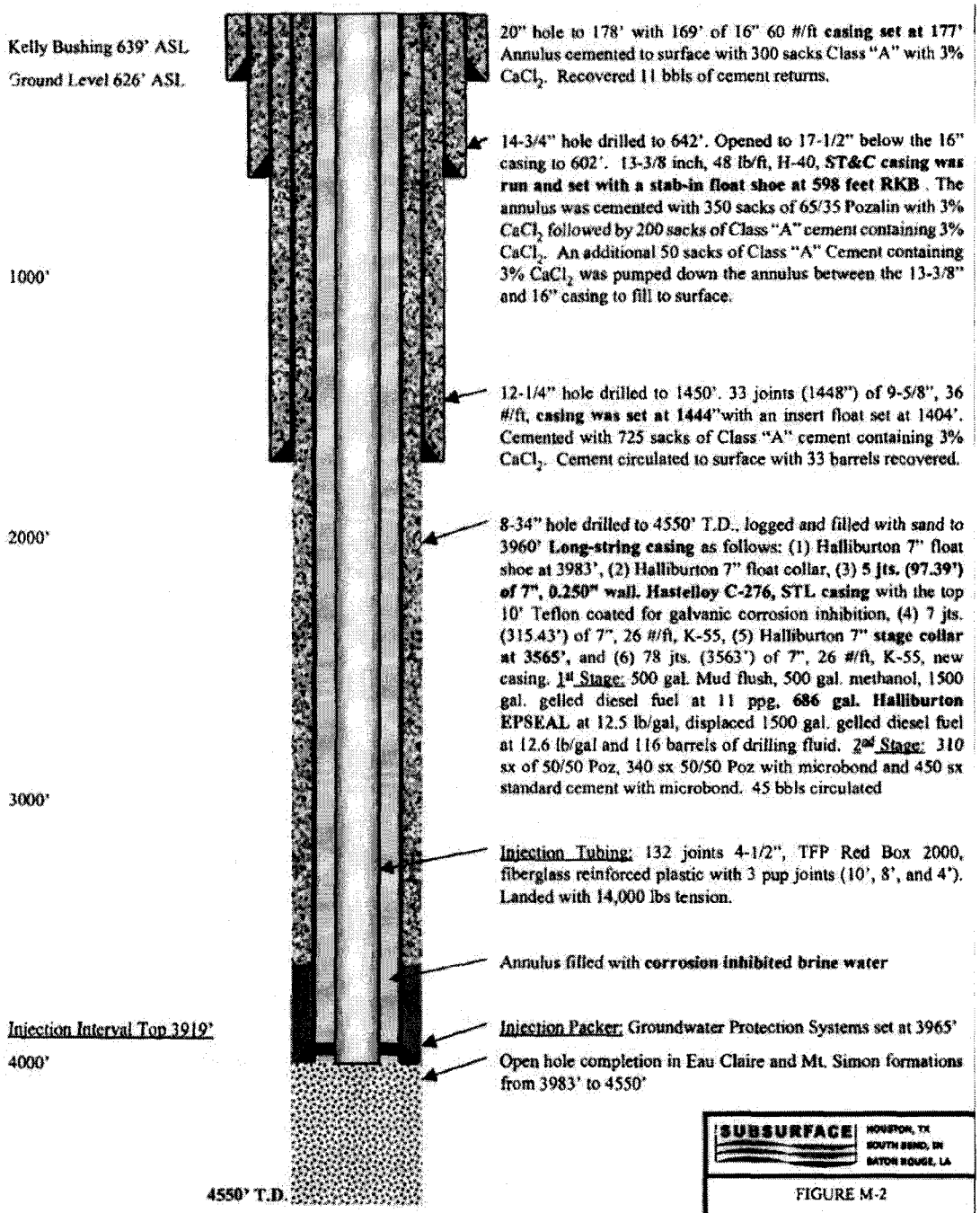
Dimitrios Papas

Thomas Athans

Any Officer, Director or Manager of Grantor

8878095.2

ATTACHMENT C
CONSTRUCTION DETAILS



SUBSURFACE — HOUSTON, TX; SOUTH BEND, IN; BATON ROUGE, LA

FIGURE M-2

Environmental Disposal Systems

Well No. 2-12

DATED: 10/22/02	APPROVED BY: JB	JOB NO. 6406295
DRAWN BY: JB	CHECKED BY: RN	SCALE: N/A

FIGURE M–3

Wellhead

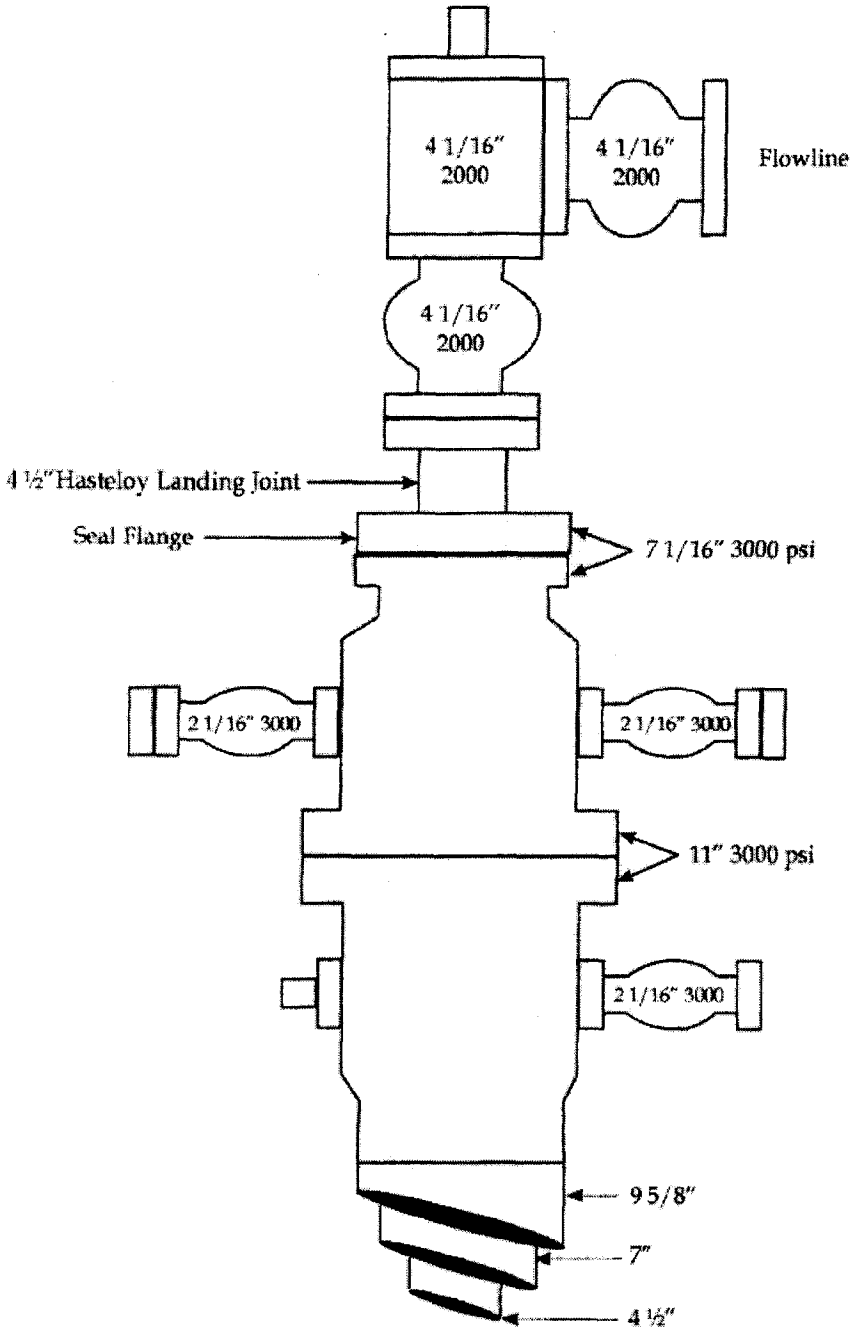
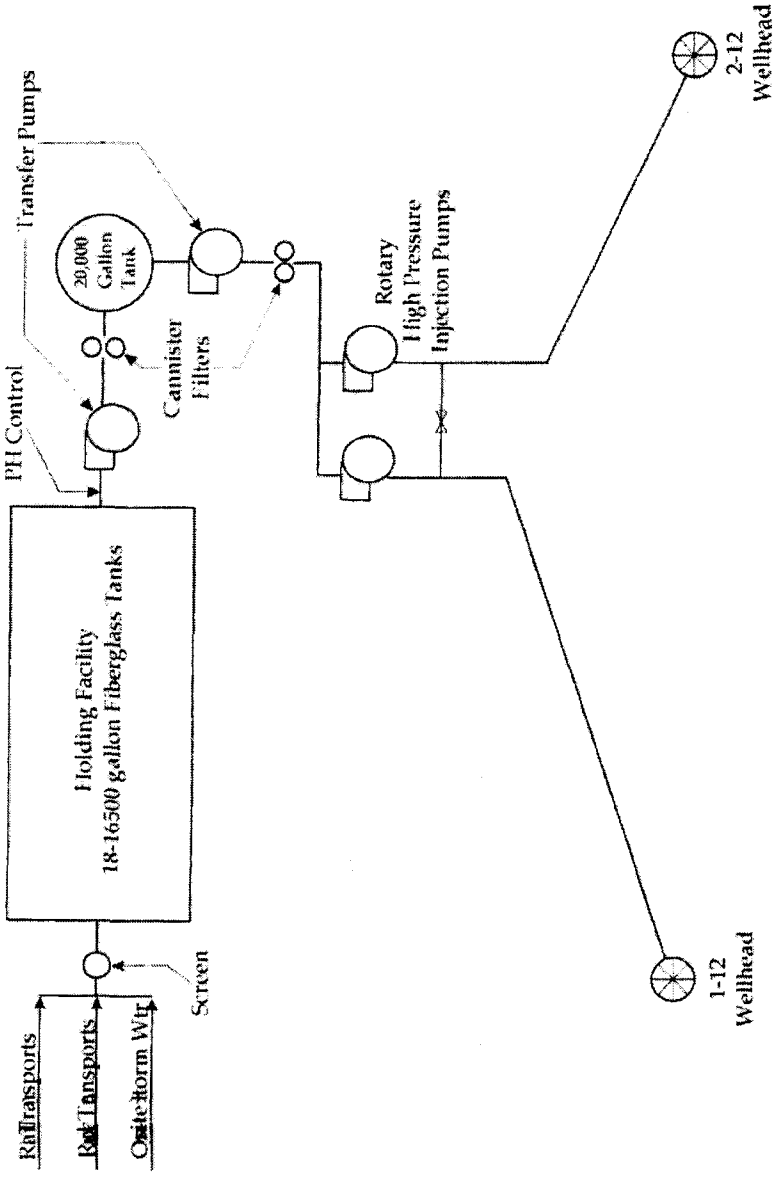


Figure K-1
1-12 & 2-12
Injection System



ATTACHMENT D
GENERAL WASTE CHARACTERISTICS

Source of Waste – Environmental Geo-Technologies, LLC (EGT) of Detroit, Michigan, will operate the proposed Class I facility in Romulus, Michigan. EGT plans to use this facility to dispose of hazardous and non-hazardous wastes as defined under RCRA, as specified at the 40 CFR 261.4.

Limitation – Only approved wastes, as specified in Attachment E of this permit, generated by clients of EGT may be injected into the well #2-12. All the other fluids entering this borehole must be approved by the Director for purposes of well testing, stimulation, workovers, or as buffer fluids.

Prohibitions – The permittee is prohibited from injecting wastes with either D001 (ignitable) or D003 (reactive) waste codes. In addition, no injectate containing PCBs at a concentration greater than or equal to 50 ppm shall be injected.

Waste Analysis Plan – This plan will be entered into this record and thus become an integral part of the permit.

Potential Waste Streams – At this time, no waste streams have been approved for disposal in the #2-12 well. Because this is a commercial well, it is not possible to list all potential waste streams that could be disposed of in the well. The likely hazardous waste streams will include:

- Diluted acid waste waters, such as used in metal cleaning and steel pickling operations, which would have a low pH and possibly an elevated level of heavy metals, such as chromium, cadmium, lead;

- Landfill leachates. Leachate may be from municipal and/or hazardous waste landfills; and

- Solvent-water mixtures containing less than 10% solvents. These solvents would include, but not be limited to: tetrachloroethylene, trichloroethylene, methylene chloride, xylene, acetone, methanol, and carbon tetrachloride.

Non-hazardous waste streams would likely include similar waste streams as above except at non-hazardous levels, as well as various rinsates, waste waters from manufacturing processes, landfill leachates from municipal landfills, and brine from oil and gas operations (Class II wells fluids).

List of Allowed RCRA Waste Codes

D Codes		F Codes	K Codes				P Codes			
D002	D039	F001	K001	K038	K102	K157	P001	P041	P084	P185
D004	D040	F002	K002	K039	K103	K158	P002	P042	P085	P188
D005	D041	F003	K003	K040	K104	K159	P003	P043	P087	P189
D006	D042	F004	K004	K041	K105	K160	P004	P044	P088	P190
D007	D043	F005	K005	K042	K106	K161	P005	P045	P089	P191
D008		F006	K006	K043	K107	K169	P006	P046	P092	P192
D009		F007	K007	K044	K108	K170	P007	P047	P093	P194
D010		F008	K008	K045	K109	K171	P008	P048	P094	P196
D011		F009	K009	K046	K110	K172	P009	P049	P095	P197
D012		F010	K010	K047	K111	K173	P010	P050	P096	P198
D013		F011	K011	K048	K112	K174	P011	P051	P097	P199
D014		F012	K013	K049	K113	K175	P012	P054	P098	P201
D015		F019	K014	K050	K114	K176	P013	P056	P099	P202
D016		F020	K015	K051	K115	K177	P014	P057	P101	P203
D017		F021	K016	K052	K116	K178	P015	P058	P102	P204
D018		F022	K017	K060	K117		P016	P059	P103	P205
D019		F023	K018	K061	K118		P017	P060	P104	
D020		F024	K019	K062	K123		P018	P062	P105	
D021		F025	K020	K069	K124		P020	P063	P106	
D022		F026	K021	K071	K125		P021	P064	P108	
D023		F027	K022	K073	K126		P022	P065	P109	
D024		F028	K023	K083	K131		P023	P066	P110	
D025		F032	K024	K084	K132		P024	P067	P111	
D026		F034	K025	K085	K136		P026	P068	P112	
D027		F035	K026	K086	K140		P027	P069	P113	
D028		F037	K027	K087	K141		P028	P070	P114	
D029		F038	K028	K088	K142		P029	P071	P115	
D030		F039	K029	K093	K143		P030	P072	P116	
D031			K030	K094	K144		P031	P073	P118	
D032			K031	K095	K145		P033	P074	P119	
D033			K032	K096	K147		P034	P075	P120	
D034			K033	K097	K148		P036	P076	P121	
D035			K034	K098	K149		P037	P077	P122	
D036			K035	K099	K150		P038	P078	P123	
D037			K036	K100	K151		P039	P081	P127	
D038			K037	K101	K156		P040	P082	P128	

U Codes							
U001	U039	U079	U118	U155	U193	U240	U393
U002	U041	U080	U119	U156	U194	U243	U394
U003	U042	U081	U120	U157	U196	U244	U395
U004	U043	U082	U121	U158	U197	U246	U396
U005	U044	U083	U122	U159	U200	U247	U400
U006	U045	U084	U123	U160	U201	U248	U401
U007	U046	U085	U124	U161	U202	U249	U402
U008	U047	U086	U125	U162	U203	U271	U403
U009	U048	U087	U126	U163	U204	U277	U404
U010	U049	U088	U127	U164	U205	U278	U407
U011	U050	U089	U128	U165	U206	U279	U408
U012	U051	U090	U129	U166	U207	U280	U409
U014	U052	U091	U130	U167	U208	U328	U410
U015	U053	U092	U131	U168	U209	U353	U411
U016	U055	U093	U132	U169	U210	U359	
U017	U056	U094	U133	U170	U211	U364	
U018	U057	U095	U134	U171	U213	U365	
U019	U058	U096	U135	U172	U214	U366	
U020	U059	U097	U136	U173	U215	U367	
U021	U060	U098	U137	U174	U216	U372	
U022	U061	U099	U138	U176	U217	U373	
U023	U062	U101	U139	U177	U218	U375	
U024	U063	U102	U140	U178	U219	U376	
U025	U064	U103	U141	U179	U220	U377	
U026	U066	U105	U142	U180	U221	U378	
U027	U067	U106	U143	U181	U222	U379	
U028	U068	U107	U144	U182	U223	U381	
U029	U069	U108	U145	U183	U225	U382	
U030	U070	U109	U146	U184	U226	U383	
U031	U071	U110	U147	U185	U227	U384	
U032	U072	U111	U148	U186	U228	U385	
U033	U073	U112	U149	U187	U234	U386	
U034	U074	U113	U150	U188	U235	U387	
U035	U075	U114	U151	U189	U236	U389	
U036	U076	U115	U152	U190	U237	U390	
U037	U077	U116	U153	U191	U238	U391	
U038	U078	U117	U154	U192	U239	U392	

ATTACHMENT E
LIST OF APPROVED SOURCES

Proposed Waste "Source" Information

The information shown in Subparts A through F of this Attachment must be submitted by the permittee initially for each proposed waste "source", pursuant to Part II(B)(2) of this permit. Initially each "source" is expected to be generated by the facility's on-site treatment process. It is noted that because the nature of the wastes receiving treatment may vary, characteristics of such a "source" may also vary. The permittee may incorporate the information into a form of its own, provided that all information is included, and that the same form is used for all proposed "sources". The permittee, by submitting appropriate knowledge of waste, shall specify that the waste from each "source" is either hazardous or non-hazardous wastes as defined at 40 CFR §§ 261.30-33. Appropriate knowledge of waste may consist of any or all of the following three categories: (1) knowledge of the waste generation process, (2) detailed record-keeping, or (3) waste analysis data.

The permittee must receive written authorization from EPA prior to injecting waste from this "source". Authorization shall consist of a final minor-modified permit, which shall list this "source" as an approved "source" in Part III (E) of this permit. Upon receiving the minor-modified permit, the permittee shall be authorized to inject this waste, subject to the conditions of this permit and the permittee's approved waste analysis plan. EPA will make every reasonable effort to expedite the administrative processing of minor permit modifications.

A. Permittee Information (required of all requested "sources")

1) Owner/Operator Name
2) Owner/Operator Address (Street, City, State, Zip Code)
3) Facility contact name and telephone number
4) Well Location (Township, Range, Section, Quarter Section, footage NSL, EWL)
5) EPA UIC Permit Number
6) State Permit Number (if applicable)
7) Well Name

B. Proposed Waste Generator ("Source") Information

1) Information required of all requested "sources":
   a) "Source" Identification number (a unique number assigned to the waste generator at the location specified)
   b) Generator Name
   c) Generator Address (Street, City, State, Zip Code)
   d) Generator Contact Name and telephone number
   e) EPA Identification numbers (if applicable)

2) Oilfield waste "sources" must also include:
   a) MDEQ (or equivalent) Oilfield Name

b) Location (Township, Range, and Section)
c) Geologic Formation

C. Waste Transporter Information (if applicable)

1) Transporter name
2) Transporter Address (Street, City, State, Zip Code)
3) Transporter Contact Name
4) Transporter Contact phone number
5) EPA Identification numbers (if applicable)

D. Waste "Source" Characterization of Hazardous and non-Hazardous Industrial Wastes

1) Sample analysis results, which include:
   a) Corrosivity
   b) Reactivity (as applicable to sample matrix)
   c) Ignitability
   d) Toxicity
   e) Specific Conductance
   f) Specific Gravity
   g) Temperature
   h) All other constituents which are indicated by the generator as likely to constitute a major portion of the waste stream (i.e., greater than 0.01 percent by mass).

   The test for toxicity shall follow the Toxicity Characteristic Leaching Procedure and should include all appropriate constituents which are listed at 40 CFR §261.24. The permittee may rely on the generator's knowledge of waste consistent with 40 CFR §262.11 and all appropriate knowledge of waste to reduce the number of constituents tested.

2) Sampling and Analysis Description

   a) The following information must be specified for each sampling event:
      (i) Sample collector's name, title, and employer
      (ii) Sample Collection method and preservation technique
      (iii) Sample Collection point

   b) The following information must be specified for each parameter:
      (i) Analytical method for parameter detection/quantification
      (ii) Analytical method accuracy
      (iii) Upper and lower analytical method quantification limits

E. Quality Assurance and Quality Control (QA/QC). A description of the following QA/QC Protocol followed, including, at minimum:

1) Equipment cleaning blanks
2) Trip blanks
3) Sample duplicates
4) Chain of custody
5) Equipment calibration
6) Data reduction and validation

These requirements are specified in the QA/QC portion of the permittee's waste analysis plan.

F. Historical and operational background of facility

1) A description of the historical and operational background of the facility, including, at minimum, the following elements:
   a) a detailed description of the process involved in generating, collecting, and storing the waste; and
   b) an identification of any changes in facility operations, periodic or otherwise, which may alter the composition of the waste stream.

2) The fingerprint monitoring frequency applied to each "source" shall be per load.

G. Periodic Monitoring of Approved "Sources"

1) **Periodic Analysis**. All waste sources will be analyzed as specified in Part III(E)(H) of this permit. An analysis of the constituents listed on Page A-3 will be conducted monthly for sources that may contain the identified waste codes.

2) **Fingerprint Analysis**. Prior to injection, all waste batches from a completed treatment process require fingerprint analysis as specified in Part III(E)(H) of this permit and shall, at a minimum, be subject to tests for the following:

   Specific Gravity, Total Suspended Solids, pH, Temperature, Total Dissolved Solids, Visual Solids Content, Flashpoint, Conductivity, and any other analyses deemed appropriate for characterizing the injected waste.

H. List of Presently Approved Sources

There are no approved waste sources at this time. Future approved "sources" of waste for disposal into the Well #2-12 injection well will be identified below by identification number, name, location, and sampling frequency and analytical parameters. Future sources, as approved by the Director, will be added to these tables.

1) **Hazardous Waste Fluids**

Source ID Number	**Source Name**	**Location (Address)**	**Waste Analysis Parameters[6]**	**Waste Sampling Frequency[7]**
	No sources approved		Toxicity Characteristic List Fingerprint	Annual Per load

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6 Hazardous waste fluid sampling parameters shall be determined on a case-specific basis. In requesting approval for a new source, the permittee may propose to test for a subset of the Toxicity Characteristic List (40 CFR § 261.24), which will be subject to EPA approval.

7 All hazardous waste fluids shall be sampled (fingerprinted) on a per-load basis.

2) **Non-hazardous Waste Fluids**

Source ID Number	Source Name	Location (Address)	Waste Analysis Parameters[8]	Waste Sampling Frequency[9]
	No sources approved		Toxicity Characteristic List Fingerprint	Annual Per load

3) **Oilfield Brines**

Source ID Number	Oilfield Name	Location (T-R-S)	Geologic Formation	Waste Sampling Frequency
	No sources approved			Annual

The permittee will update the Waste Source Characterization information, including detailed sample analysis results, annually and shall submit that information to EPA.

If the permittee seeks approval to inject a waste "source" directly into the well without treatment, its submission for approval of that "source" shall also include any appropriate analytical results necessary to identify waste constituents which may indicate a listed hazardous waste as defined at 40 CFR §§ 261.31, 261.32, 261.33, or 261.30 and if appropriate, a letter describing how the waste was determined to be non-hazardous.

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8 Non-hazardous waste fluid sampling parameters shall be determined on a case-specific basis. In requesting approval for a new source, the permittee may propose to test for a subset of the Toxicity Characteristic List (40 CFR § 261.24), which will be subject to EPA approval.

9 All non-hazardous waste fluids shall be sampled (fingerprinted) on a per-load basis.

I. Waste Stream Characterization

The information shown in Subparts A through F of this Attachment must also be submitted by the permittee initially for each proposed waste stream type to be received for treatment, although approval of the waste stream types is not required. The permittee may incorporate the information into a form of its own, provided that all information is included, and that the same form is used for all proposed waste streams. The permittee, by submitting appropriate knowledge of waste, shall specify that the waste in each waste stream is either hazardous or non-hazardous wastes as defined at 40 CFR §§ 261.30-33. Appropriate knowledge of waste may consist of any or all of the following three categories: (1) knowledge of the waste generation process, (2) detailed record-keeping, or (3) waste analysis data.

Each waste shipment must receive a fingerprint analysis for Specific Gravity, Total Suspended Solids, pH, Temperature, Flashpoint, Conductivity, Color, and any other analyses deemed appropriate for characterizing the waste. Shipments of oilfield brine waste must receive a fingerprint analysis for Barium, Calcium, Total Iron, Magnesium, Sodium Chloride, Bicarbonate, Carbonate, Sulfate, Sulfide Specific Gravity, Total Dissolved Solids, pH, and Resistivity (ohm-meters @ 75°F).