



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

May 29, 2008

REPLY TO THE ATTENTION OF:  
WU-16J

**CERTIFIED MAIL 7001 0320 0005 8933 7282**  
**RETURN RECEIPT REQUESTED**

Mr. Dimitrios Papas, CEO  
Environmental Geo-Technologies, LLC  
1216 Beaubien Street  
Detroit, Michigan 48226

**Re: Additional Information Request for Environmental Geo-Technologies, LLC (EGT) Wells 1-12 and 2-12, United States Environmental Protection Agency Underground Injection Control (UIC) Permit Applications #MI-163-1W-C010 and -C011**

Dear Mr. Papas:

Members of the UIC Branch technical staff have completed initial review of the UIC permit applications listed above. The applications document most of the information we need but there are some items that need additional clarification, which are listed below.

- 1) Attachment B:
  - Please provide a list of all wells in the 6.11 mile area of review (excluding water wells which have been provided). This list should not be limited to the wells penetrating the confining zone.
  - Provide a map showing locations of all of these wells as well as completion reports for all of the wells.
  - For the wells that penetrate the top of the confining zone, provide the following information: well construction, date of construction and total depth, well operator/owner, cement records, plugging records, distance from EGT wells 1-12 and 2-12.
  - Provide a list of names and addresses of all owners of record of land within a quarter mile of the facility boundary.
- 2) Attachment C:
  - Table C-1 – Please resubmit this table showing column headings. It is unclear if this table contains all wells in the area of review (including those that possibly do not penetrate the confining zone). Please clarify the content of Table C-1.
- 3) Attachment F:
  - Provide geologic description of confining zone (including lateral extent, lithology, thickness, permeability, porosity, extent of natural/induced fractures, etc.)
  - Provide geologic description of injection zone (including lateral extent, lithology, thickness, permeability, porosity, extent of natural/induced fractures, etc.)

- Provide page sized (8 1/2" x 11") diagrams showing construction of each EGT well and corresponding site stratigraphy.
- 4) Attachment H:
- Provide plans for corrosion monitoring.
- 5) Attachment J:
- If the permittee anticipates the need for fracture stimulation in the future, please provide a discussion about proposed procedures, showing how the operator proposes to confine fractures to the injection formation. If acid or other type of stimulation is proposed, procedures should also be included in this section. If the need for fracture stimulation is not anticipated, please explain why.
- 6) Attachment K:
- Figure K-1 does not seem to adequately describe the injection procedures. Site visits and previous documents submitted for this site indicated that the pretreatment process is much more complex than Figure K-1 shows. Please provide a detailed description of filters, storage tanks, pretreatment processes and facilities.
  - Provide a description and location of injection pumps (including rate capacity).
  - Provide a description of annulus pressure maintenance system.
  - Provide a description of alarm and shut-off system.
- 7) Attachment P:
- Please describe sight glass level monitoring and recording.
- 8) Attachment Q:
- Please describe plans to acquire a representative fluid sample from the first aquifer overlying the injection zone during well plugging procedures.
  - Please provide a post-closure plan, which covers the requirements of 40 CFR 146.72. This plan should include a detailed estimate of post-closure costs.
- 9) Attachment T:
- Please describe activities at the facility that will require the applicant to obtain permits under other statutes (from EPA or Michigan Department of Environmental Quality).
- 10) Attachment U:
- Please provide relevant SIC codes for this facility.
  - Attachment U refers to Letters of Credit in excess of \$800,000 provided by EGT. EPA has received a Letter of Credit in the amount of \$99,600 which covers the cost of plugging and abandoning the wells. Please explain and/or correct this discrepancy.
- 11) Attachment W: Waste Analysis Plan
- All proposed waste streams must be approved by the EPA – please include this step in the flowchart in Figure 2.30-6.
  - Hazardous Waste analysis – please include an explanation of testing for toxicity (40 CFR 261.24) or inclusion of an explanatory statement (40 CFR 144.32).
  - Non-Hazardous Waste – please include an explanation of how the absence of hazardous waste will be demonstrated.
  - Non-Hazardous Waste - please include an explanation of testing for toxicity (40 CFR

261.24) or inclusion of an explanatory statement (40 CFR 144.32).

- Please indicate that EGT (or a contract laboratory) will analyze for all parameters of the waste stream which constitute more than 0.01% by mass.
- Please expand the section discussing Quality Assurance/Quality Control to include the description of sampling and analytical methods with the following details: sample collector's name and title, sampling company name, sample collection method, sample collection point, sample preservation technique, sampling frequency, analytical method for parameter detection, anticipated analytical method accuracy, anticipated upper and lower analytical method quantification limits, and field documentation of sampling.
- Please expand the section discussing Quality Assurance/Quality Control to include the following elements: equipment cleaning blanks, trip blanks, sample duplicates, sample chain-of-custody protocol, equipment calibration, data validation, internal quality control, laboratory audits, corrective actions, and reports to the EPA.

Please respond to these issues at your earliest convenience so that we may continue processing your permit applications. If you have any questions about these issues, please contact Dana Rzeznik at (312) 886-6492 or [rzeznik.dana@epa.gov](mailto:rzeznik.dana@epa.gov).

Sincerely,

*Original signed by Rebecca Harvey*

Rebecca L. Harvey, Chief  
Underground Injection Control Branch