

**Q. PLUGGING AND ABANDONMENT PLAN**

Attachment Q-1 is the plugging and abandonment procedure for EGT's Well #1-12.

Attachment Q-2 is the plugging and abandonment procedure for EGT's Well #2-12.

Attachment Q-3 is a bid to implement the plans.

Attachment Q-4 is the plugging and abandonment form for EGT's Well #1-12.

Attachment Q-5 is the plugging and abandonment form for EGT's Well #2-12.

## **ATTACHMENT Q-1**

**ENVIRONMENTAL GEO-TECHNOLOGIES, LLC  
PLUGGING AND ABANDONMENT PROCEDURES  
CLASS I WELL #1-12  
(Form 7520-14 Attachment)**

1. Conduct one-hour static annulus pressure test on 7" casing x tubing annulus.
2. 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 100 gallons, 10 lb/gal brine, or brine necessary to kill wellhead pressure if positive pressure exists.
3. 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.
4. 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.
5. 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.
6. Wait on cement. Close in BOP and pressure test casing/cement plug to 1000 psi.
7. Run in hole with open ended workstring to top of cement on retainer. Tag cement and pull uphole 1 joint. Pump Class "A" neat slurry in 100 sack increments while pulling approximately 18 joints of tubing after each increment. Use stage and balance method of emplacing plug.
8. Pull uphole to 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.
9. Run in hole and tag up with top of plug. (Should be encountered at approximately 1000'). Pump remaining sacks of Class "A" neat slurry to bring cement to 3 feet below surface. Use any additional cement as required to assure that cement is circulated to surface.
10. 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.
11. Rig down and move out pulling unit. Release support equipment.

## **ATTACHMENT Q-2**

**ENVIRONMENTAL GEO-TECHNOLOGIES, LLC  
PLUGGING AND ABANDONMENT PROCEDURES  
CLASS I WELL #2-12  
(Form 7520-14 Attachment)**

1. Conduct one-hour static annulus pressure test on 7" casing x tubing annulus.
2. 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 100 gallons, 10 lb/gal brine, or brine necessary to kill wellhead pressure if positive pressure exists.
3. 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.
4. 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.
5. Run in hole with squeeze retainer or packer on workstring to approximately 3900'. 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.
6. Wait on cement. Close in BOP and pressure test casing/cement plug to 1000 psi.
7. Run in hole with open ended workstring to top of cement on retainer. Tag cement and pull uphole 1 joint. Pump Class "A" neat slurry in 100 sack increments while pulling approximately 18 joints of tubing after each increment. Use stage and balance method of emplacing plug.
8. Pull uphole to 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.
9. Run in hole and tag up with top of plug. (Should be encountered at approximately 1000'). Pump remaining sacks of Class "A" neat slurry to bring cement to 3 feet below surface. Use any additional cement as required to assure that cement is circulated to surface.
10. 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.
11. Rig down and move out pulling unit. Release support equipment.

## **Attachment Q-3**



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

February 8, 2007

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

**RE: Environmental Geo-Technologies  
2007 Plugging and Abandonment Cost Update  
UIC Permit Numbers: MI-163-1W-0007, MI-163-1W-0008**

Dear Mr. Yaser:

As requested, Petrotek has completed an annual review of the plugging and abandonment procedures and associated costs for the closure of Environmental Geo-Technologies injection Wells No. 1-12 and 2-12. Approved procedures in the applicable permits remain consistent with applicable regulations. The plugging costs have been adjusted since the previous cost estimate due to higher rates applicable in the Midwest for workover rigs, oilfield supplies and cementing equipment. The costs are based on the most recently available data from the Producer Price Index for Oil and Gas Extraction and oilfield service costs recently provided to Petrotek.

The total plugging cost estimate for Well No. 1-12 is \$49,800.00. The total plugging cost estimate for Well No. 2-12 is \$49,800.00. The total cost for plugging both existing wells is estimated as \$99,600.00.

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

Sincerely,

Via E-mail

Petrotek Engineering Corporation  
Richard Lyle

cc: Ken Cooper - Petrotek

**ENVIRONMENTAL GEO-TECHNOLOGIES**  
**DISPOSAL WELL PLUGGING COST ESTIMATE**

A cost of closure for the general plugging and abandonment plan described below is \$49,800 for each wells, 1-12 and 2-12. A summary of the major cost elements (February 2007) is presented below.

Workover Rig Mobilization - 1 day	\$2,000
Workover Rig Operations - 3 days	8,000
Workover Rig Demobilization - 1 day	2,000
Location Work/Welding	1,500
Blowout Preventer Rental and Drayage	2,000
2 7/8" Workstring Rental and Drayage	2,000
7" Squeeze Retainer	7,500
Cementing	19,000
Field Supervision	4,000
Engineering Report Preparation	1,800
<b>Total</b>	<b>\$49,800</b>

***Petrotek***

**Attachment Q-4**



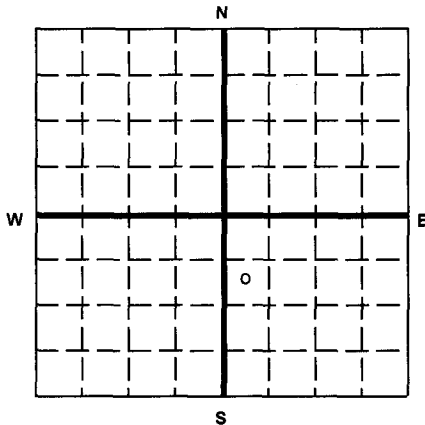
United States Environmental Protection Agency  
Washington, DC 20460

**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 MI	County Wayne	Permit Number MI-163-1W-C007
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 1066 ft. frm (N/S) <u>N</u> Line of quarter section and 303 ft. from (E/W) <u>W</u> Line of quarter section.		
TYPE OF AUTHORIZATION <input checked="" type="checkbox"/> Individual Permit <input type="checkbox"/> Area Permit <input type="checkbox"/> Rule Number of Wells <u>1</u>		WELL ACTIVITY <input checked="" type="checkbox"/> CLASS I <input type="checkbox"/> CLASS II <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> CLASS III
Lease Name	Disposal (MI, M-452)	Well Number EDS 1-12

**CASING AND TUBING RECORD AFTER PLUGGING**

SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
20"	94	119'	119'	24"
13 3/8"	48	396'	396'	17.5"
9 5/8"	36	824'	824'	12 1/4"
7"	26	4080'	4080'	8 3/4"

**METHOD OF EMPLACEMENT OF CEMENT PLUGS**

- The Balance Method
- The Dump Baller 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.)	4645'	4000'					
Sacks of Cement To Be Used (each plug)	215	720					
Slurry Volume To Be Pumped (cu. ft.)	254	850					
Calculated Top of Plug (ft.)	4000'	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)  
Dimitrios Papas, CEO

Signature

Date Signed  
12-07-2007

**Attachment Q-5**



United States Environmental Protection Agency  
Washington, DC 20460

**PLUGGING AND ABANDONMENT PLAN**

<b>Name and Address of Facility</b> Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174	<b>Name and Address of Owner/Operator</b> Environmental Geo-Technologies, LLC 28470 Citrin Drive Romulus, MI 48174
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Locate Well and Outline Unit on Section Plat - 640 Acres  	State MI	County Wayne	Permit Number MI-163-1W-C008
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) <u>N</u> Line of quarter section and <u>280</u> ft. from (E/W) <u>W</u> Line of quarter section.			
TYPE OF AUTHORIZATION <input checked="" type="checkbox"/> Individual Permit <input type="checkbox"/> Area Permit <input type="checkbox"/> Rule Number of Wells <u>1</u>		WELL ACTIVITY <input checked="" type="checkbox"/> CLASS I <input type="checkbox"/> CLASS II <input type="checkbox"/> Brine Disposal <input type="checkbox"/> Enhanced Recovery <input type="checkbox"/> Hydrocarbon Storage <input type="checkbox"/> CLASS III	
Lease Name		Disposal (MI, M-453)	Well Number EDS 2-12

CASING AND TUBING RECORD AFTER PLUGGING					METHOD OF EMPLACEMENT OF CEMENT PLUGS
SIZE	WT (LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE	
16"	60	177'	177'	20"	<input checked="" type="checkbox"/> The Balance Method <input type="checkbox"/> The Dump Baller Method <input type="checkbox"/> The Two-Plug Method <input type="checkbox"/> Other
13 3/8"	48	598'	598'	17.5"	
9 5/8"	36	1444'	1444'	12 1/4"	
7"	26	3983'	3983'	8 3/4"	

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) Dimitrios Papas, CEO	Signature 	Date Signed 2-07-2007
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