

**Appendix A
TCEQ Authorization Letter**

July 20, 2006 Transmittal

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 20, 2006

Mr. Jason Shirley
Installation Manager
U.S. Army, Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Re: Authorization and Registration of Class V Aquifer Remediation Injection Wells
TCEQ Authorization No. 5X2600431; WWC 12002216; CN602728206/RN104431655
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Dear Mr. Shirley:

The Underground Injection Control (UIC) staff has completed review of the inventory/authorization form dated May 30, 2006 from Parsons requesting approval for the injection of groundwater into five infiltration galleries filled with gravel, wood chips and vegetable oil as part of the remediation process at the above site. Our consideration for this proposed project for injection has included coordination with the commission's Remediation Division. Based on our review, approval is hereby given for construction and operation of the injection wells according to the submitted plans and specifications.

In order to maintain authorization by rule for the injection operations, the project must meet all requirements set by the Remediation Division and the UIC rules provided by 30 TAC Chapter 331. Requirements for the injection include:


1. All injection wells are to be constructed to meet the standards provided in 30 TAC §331.132 and completed well logs or construction diagrams submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 upon completion;
2. Operational and status changes shall be reported to and approved by the UIC Permits Team;
3. Closure (plugging) of injection wells, points and/or trenches shall comply with standards provided in 30 TAC §331.133. Closure reports including plugging reports and injection well monitoring data (injection volumes, pressures, and results) shall be submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 within 60 days of completion of injection or plugging activities; and

Mr. Jason Shirley
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July 20, 2006

4. Injection volumes, pressures, and concentrations of contaminants (including pH and total dissolved solids) in the injected groundwater shall be sampled bimonthly at the point of reinjection (prior to fluids being released into the trenches) and submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 on a monthly basis. The concentration of contaminants in the trench bioreactor monitoring sumps and the surrounding monitoring wells shall be sampled monthly and submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 on a quarterly basis. The concentrations of the contaminants shall not exceed those limits listed in 40 CFR §261.24 Toxicity characteristic table 1 that would deem them hazardous by concentration.

If you have any questions regarding this matter, please contact me at (512) 239-6075. If you will be corresponding by mail, please use mail code MC-130.

Sincerely,



Bryan Smith, P.G., Engineering Specialist
Industrial and Hazardous Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

BSS/ff

cc: ✓ Mr. Brian Vanderglas, Parsons, Austin

June 25, 2007 Transmittal

Kathleen Hartnett White, *Chairman*
Larry R. Soward, *Commissioner*
H. S. Buddy Garcia, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 25, 2007

Mr. Jason Shirley
Installation Manager
U.S. Army, Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Re: Amendment to Authorization of Class V Aquifer Remediation Injection Wells
TCEQ Authorization No. 5X2600431; WWC12033366; CN602728206/RN104431655
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Dear Mr. Shirley:

The Underground Injection Control (UIC) staff has completed review of the modification request dated November 29, 2006 requesting approval for the addition of one infiltration galleries filled with gravel, wood chips and vegetable oil as part of the remediation process at the above site. Our consideration for this proposed project for injection has included coordination with the commission's Remediation Division. Based on our review, approval is hereby given for construction and operation of the injection wells according to the submitted plans and specifications.

In order to maintain authorization by rule for the injection operations, the project must meet all requirements set by the Remediation Division and the UIC rules provided by 30 Texas Administrative Code (TAC) Chapter 331. Requirements for the injection include:

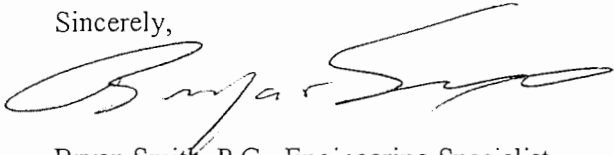
1. All injection wells are to be constructed to meet the standards provided in 30 TAC Section (§)331.132 and completed well logs or construction diagrams submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 upon completion;
2. Operational and status changes shall be reported to and approved by the UIC Permits Team;
3. Closure (plugging) of injection wells, points and/or trenches shall comply with standards provided in 30 TAC §331.133. Closure reports including plugging reports and injection well monitoring data (injection volumes, pressures, and results) shall be submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 within 60 days of completion of injection or plugging activities; and

Mr. Jason Shirley
Page 2
June 25, 2007

4. Injection volumes, pressures, and concentrations of contaminants (including pH and total dissolved solids) in the injected groundwater shall be sampled bimonthly at the point of reinjection (prior to fluids being released into the trenches) and submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 on a monthly basis. The concentration of contaminants in the trench bioreactor monitoring sumps and the surrounding monitoring wells shall be sampled monthly and submitted to the UIC Permits Team, Industrial and Hazardous Waste Permits Section, at mail code MC-130 on a quarterly basis. The concentrations of the contaminants shall not exceed those limits listed in 40 CFR §261.24 Toxicity characteristic table 1 that would deem them hazardous by concentration.

If you have any questions regarding this matter, please contact me at (512) 239-6075. If you will be corresponding by mail, please use mail code MC-130.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Smith", written in a cursive style.

Bryan Smith, P.G., Engineering Specialist
Industrial and Hazardous Waste Permits Section
Waste Permits Division
Texas Commission on Environmental Quality

BSS/ff

cc: Mr. Brian Vanderglas, Parsons, Austin

April 24, 2008 Transmittal



DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, MCAPP
25800 RALPH FAIR ROAD, BOERNE, TX 78015-4800

April 24, 2008

U-117-08

Mr. Bryan Smith
Texas Commission on Environmental Quality
Industrial and Hazardous Waste Permits Section
P.O. Box 13087 (MC-130)
Austin, TX 78711-3087

Subject: Request for Reduction of Data Collection and Reporting
Requirements for the Pilot Study Class V Aquifer Remediation
Injection Wells at Camp Stanley Storage Activity, Boerne,
Texas, TCEQ Authorization No. 5X2600431; WWC12002216;
CN602728206/RN104431655

Dear Mr. Smith:

The Camp Stanley Storage Activity (CSSA), McAlester Army Ammunition Plant, Joint Munitions Command, Army Materiel Command, U.S. Army, is submitting this request to seek authorization to reduce the data collection requirements for the subject Class V Aquifer Remediation Injection Wells as discussed during your recent visit in December 2007. The injection activities are performed at the on-post Solid Waste Management Unit (SWMU) B-3 site as pilot study activities which include the injection of recovered groundwater into mulch/gravel-filled bioreactor trenches.

CSSA's current data collection and reporting requirements as specified by the subject Texas Commission on Environmental Quality (TCEQ) Underground Injection Control (UIC) permit for the SWMU B-3 Bioreactor Pilot Study includes:

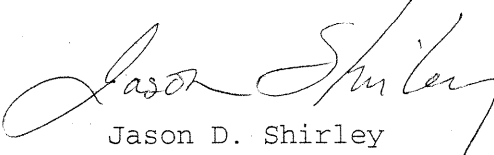
- **Bimonthly** - Injection volumes, pressures, and concentrations of contaminants (including pH and total dissolved solids) in the injected groundwater sampled bimonthly at the point of re-injection (prior to fluids being released into the trenches) and submitted to the TCEQ on a monthly basis.
- **Monthly** - The concentrations of contaminants in the trench bioreactor monitoring sumps and the surrounding monitoring wells sampled monthly and submitted to the TCEQ on a quarterly basis.

CSSA is requesting authorization for the reduction of data collection and reporting for the subject UIC permit based on the results of the data collected through ten months of operations at SWMU B-3 bioreactor pilot study. These data indicate that concentrations of contaminants in the injected groundwater continue to be well below the limits specified in 40 CFR §261.24 Toxicity Characteristics Table 1. In addition, this UIC well is near the middle of the 4,000-acre installation, approximately a mile from the nearest off-post boundaries. Therefore, CSSA proposes that bimonthly sampling requirements move to monthly sampling and the monthly sampling requirements move to

quarterly. Additionally, CSSA requests all monthly and quarterly collected data be reported semi-annually to the TCEQ (see attached table 1 for a summary of current and proposed monitoring and reporting schedule).

If you have any questions regarding the information contained in this letter, please feel free to contact Glare Sanchez, CSSA Environmental Program Manager, at (210) 698-5208 or Ken Rice, Parsons, at (512) 719-6050.

Sincerely,



Jason D. Shirley
Installation Manager

Attachments

cc: Glare Sanchez, CSSA Environmental Program Manager
Greg Lyssy, USEPA Region 6
Robert Bowersock, USACE
Julie Burdey, Parsons
Ken Rice, Parsons
Brian Vanderglas, Parsons
File: 745493.03000

Table 1

**Class V Aquifer Remediation Injection Well Permit #5X2600431
Sampling and Monitoring Schedule for the B3 Bioreactor Pilot Study
CSSA - Boerne, Texas**

Table 1
Class V Aquifer Remediation Injection Well Permit #5X2600431
Sampling and Monitoring Schedule for the B3 Bioreactor Pilot Study
CSSA - Boerne, Texas

	Sampling or Monitoring Location	Parameter(s)	Sampling Frequency	Reporting Frequency
Current Regulatory Req.	Flow meters (6) for each trench on downstream side of the header and one flow meter on the upstream side of the header	Injection volume	Twice per month (record)	Monthly
	Pressure gages (4) on both sides of the transfer pump, at the bag filter and on the header	Pressure on the transfer pump	Twice per month (record)	Monthly
	Sampling port (1) on the upstream side of the distribution header	- pH (field) and TDS (lab) - VOCs (b)	Twice per month	Monthly
	Trench sumps (5) (b)	- pH (field) and TDS (lab) - VOCs (b)	Monthly	Quarterly
	MPMWs (4) (c)	- pH (field) and TDS (lab) - VOCs (b)	Quarterly	Quarterly
Proposed Regulatory Req.	Flow meters (6) for each trench on downstream side of the header and one flow meter on the upstream side of the header	Injection volume	Monthly (record)	Semi-Annual
	Pressure gages (4) on both sides of the transfer pump, at the bag filter and on the header	Pressure on the transfer pump	Monthly (record)	Semi-Annual
	Sampling port (1) on the upstream side of the distribution header	- pH (field) and TDS (lab) - VOCs (a)	Monthly	Semi-Annual
	Trench sumps (5) (b)	- pH (field) and TDS (lab) - VOCs (a)	Quarterly	Semi-Annual
	MPMWs (4) (c)	- pH (field) and TDS (lab) - VOCs (a)	Quarterly	Semi-Annual

Notes:

- (a) Standard list of VOCs tested at CSSA
- (b) Bioreactor trench sumps (BTS) include: Trench 1 - 1-1, 1-2 and 1-3; Trench 2 - 2-1 and 2-2; Trench 3 - 3-1 and 3-2; Trench 4 - 4-1; Trench 5 - 5-1 and 5-2; Trench 6 - 6-1 and 6-2. Samples are collected from all trench sumps which includes the injection of CS-MW16 groundwater.
- (c) Multi-port monitoring wells (MPMW) include: CS-WB05 (9 sampling ports), CS-WB06 (6 sampling ports), CS-WB07 (6 sampling ports) and CS-WB08 (6 sampling ports). MPMW will be sampled quarterly and include only Zone LGR-03B for each MPMW. Surrounding monitor wells includes: CS-MW1-LGR, CS-B3-MW01-LGR, CS-D-LGR, CS-MW16-LGR and CS-MW16-CC.

July 31, 2008 Transmittal

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 31, 2008

Mr. Jason Shirley
Installation Manager
U.S. Army, Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Re: Amendment to Authorization of Class V Aquifer Remediation Injection Wells
TCEQ Authorization No. 5X2600431; Tracking No. 12331253-1
CN602728206/RN104431655
Camp Stanley Storage Activity
25800 Ralph Fair Road
Boerne, TX 78015

Dear Mr. Shirley:

The Underground Injection Control (UIC) staff has completed review of the modification request dated April 24, 2008 requesting approval to change the data collection and reporting requirements for the above authorization. The following change has been made to the above Class V authorization.

Injection volumes, pressures, and concentrations of contaminants (including pH and total dissolved solids) in the injected groundwater shall be sampled monthly at the point of reinjection (prior to fluids being released into the trenches) and submitted to the UIC Permits Team, Industrial & Hazardous Waste Permits Section, at mail code MC-130 on a biannual basis. The concentration of contaminants in the trench bioreactor monitoring sumps and the surrounding monitoring wells shall be sampled quarterly and submitted to the UIC Permits Team, Industrial & Hazardous Waste Permits Section, at mail code MC-130 on a biannual basis. The concentrations of the contaminants shall not exceed those limits listed in 40 CFR §261.24 Toxicity characteristic table 1 that would deem them hazardous by concentration.

If you have any questions regarding this matter, please contact me at (512) 239-6075. If you will be corresponding by mail, please use mail code MC-130.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryan Smith".

Bryan Smith, P.G., Engineering Specialist
Industrial & Hazardous Waste Permits Section
Waste Permits Division

BSS/fp

cc: Mr. Brian Vanderglas, Parsons, Austin