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Margaret Hoffman, *Executive Director*



## TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

*Protecting Texas by Reducing and Preventing Pollution*

March 9, 2004

Mr. Jason Shirley  
Post Commander  
U.S. Department of the Army  
25800 Ralph Fair Road  
Boerne, Texas 78015

Re: Permits by Rule Registration Number: 71208  
SWMU B-3 Soil Vapor Extraction Unit  
Boerne, Bexar County  
Regulated Entity Number: RN100662840  
Customer Reference Number: CN600126262

Dear Mr. Shirley:

This is in response to your Form PI-7, entitled "Registration for Permits by Rule," concerning the installation of a soil vapor extraction (SVE) system at Camp Stanley located at 25800 Ralph Fair Road in Boerne, Bexar County. We understand that you plan to install a SVE system consisting of at least two vapor extraction wells and a regenerative blower system to test contaminated soil and groundwater. The blower operates at a flow rate of approximately 200 standard cubic feet per minute. The company represents that there will be no emissions for benzene and petroleum hydrocarbons at this site. All other chemical emissions other than those from petroleum hydrocarbons meet the requirements of Permit by Rule Number 106.262. The total estimated volatile organic compounds emissions at this site are 0.7 pound per hour and 3.2 tons per year.

After evaluation of the information which you have furnished, we have determined that your installation is authorized under Title 30 Texas Administrative Code § 106.533 (30 TAC § 106.533) if constructed and operated as described in your registration request. This permit by rule was authorized by the Texas Commission on Environmental Quality (TCEQ) pursuant to 30 TAC Chapter 106.

A copy of the permit by rule in effect at the time of this registration is enclosed. You must install facilities in accordance with the version of the permit by rule in effect when installation actually begins [see 30 TAC § 106.4(a)(5)]. After completion of the installation, the facility shall be operated in compliance with all the applicable conditions of the claimed permit by rule and 30 TAC § 106.4.

Mr. Jason Shirley  
Page 2  
March 9, 2004

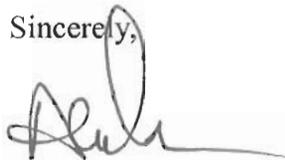
Re: Permits by Rule Registration Number: 71208

You are reminded that regardless of whether a permit is required, these facilities must be in compliance with all rules and regulations of the TCEQ and the U.S. Environmental Protection Agency at all times.

Please reference the regulated entity number (RN), customer reference number (CN), and permit number noted in this document in all your future correspondence for the referenced facility or site. The RN replaces the former TCEQ account number for the facility (if portable) or site (if permanent). The CN is a unique number assigned to the company or corporation and applies to all facilities and sites owned or operated by this company or corporation.

Your cooperation in this matter is appreciated. If you have any questions concerning this permit by rule, please contact Ms. Dana Johnson at (512) 239-2022 or write to the Texas Commission on Environmental Quality, Office of Permitting, Remediation, and Registration, Air Permits Division (MC-163), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,



Anne M. Inman, Manager  
General/Standard/Rule (GSR) Permit Section  
Air Permits Division  
Texas Commission on Environmental Quality

AMI/DSJ/kjp

Enclosure

cc: Mr. Rick Hite, Air Section Manager, Region 13 - San Antonio

Project Number: 104215

**TITLE 30** ENVIRONMENTAL QUALITY  
**PART 1** TEXAS COMMISSION ON ENVIRONMENTAL  
QUALITY  
**CHAPTER 106** PERMITS BY RULE  
**SUBCHAPTER X** WASTE PROCESSES AND REMEDIATION  
**RULE §§106.533** **Water and Soil Remediation**

Equipment used to reclaim or destroy chemicals removed from contaminated ground water, contaminated water condensate in tank and pipeline systems, or contaminated soil for the purpose of remedial action is permitted by rule, provided all the following conditions of this section are satisfied.

- (1) Applicability shall pertain to soil and water remediation at the property where the original contamination of the ground water or soil occurred or at a nearby property secondarily affected by the contamination, but not to any soil or water treatment facility where soils or water are brought in from another property. Such facilities are subject to §§116.110 of this title (relating to Applicability).
- (2) For treating groundwater or soil contaminated with petroleum compounds, the total emissions of petroleum hydrocarbons shall not exceed 1.0 pound per hour (lb/hr), except that benzene emissions also must meet the conditions of §§106.262(3) and (4) of this title (relating to Facilities (Emission and Distance Limitations)). For purposes of this section, petroleum is considered to include:
  - (A) liquids or gases produced from natural formations of crude oil, tar sands, shale, coal and natural gas; or
  - (B) refinery fuel products to include fuel additives.
- (3) For treating groundwater or soil contaminated with chemicals other than petroleum, emissions must meet the requirements of §§106.262(2), (3), and (4) of this title. If the groundwater or soil is contaminated with both petroleum and other chemicals, the petroleum compound emissions must meet paragraph (2) of this section and the other chemical emissions must meet the requirements of §§106.262(2), (3), and (4) of this title. The emission of any chemical not having a Limit (L) Value in Table 262 of §§106.262 of this title is limited to 1.0 lb/hr.
- (4) The handling and processing (screening, crushing, etc.) of contaminated soil and the handling and conditioning (adding moisture) of remediated soil shall be controlled such that there are no visible emissions with the exception of moisture.
- (5) If abatement equipment is used to meet paragraphs (2) and (3) of this section, the equipment must satisfy one of the following conditions.
  - (A) The vapors shall be burned in a direct-flame combustion device (incinerator, furnace, boiler, heater, or other enclosed direct-flame device) operated in compliance with §§106.493(2) and (3) of this title (relating to Direct Flame Incinerators (Previously SE 88)).
  - (B) The vapors shall be burned in a flare which meets the requirements of §§106.492 of this title (relating to Flares (Previously SE 80)) and the requirements of 40 Code of Federal Regulations 60.18, which shall take precedence over §§106.492 of this title in any conflicting requirements whether or not New Source Performance Standards apply to the flare.
  - (C) The vapors shall be burned in a catalytic oxidizer which destroys at least 90% of the vapors. An evaluation of oxidizer effectiveness shall be made at least weekly, using a portable flame or photoionization detector or equivalent instrument to determine the quantity of carbon compounds in the inlet and outlet of the catalytic oxidizer. Records of oxidizer performance shall be maintained in accordance with paragraph (7) of this section.
  - (D) The vapors shall be routed through a carbon adsorption system (CAS) consisting of at least two activated carbon canisters that are connected in series. The system shall meet the following additional requirements.

- (i) The CAS shall be sampled and recorded weekly to determine breakthrough of volatile organic compounds (VOC). Breakthrough is defined as a measured VOC concentration of 50 parts per million by volume (ppmv) in the outlet of the initial canister. The sampling point shall be at the outlet of the initial canister, but before the inlet to the second or final polishing canister. Sampling shall be performed while venting maximum emissions to the CAS (example: during loading of tank trucks, during tank filling, during process venting).
  - (ii) A flame ionization detector (FID) shall be used for VOC sampling. The FID shall be calibrated prior to sampling with certified gas mixtures (propane in air) of 10 ppmv  $\pm$  2.0% and of 100 ppmv  $\pm$  2.0%.
  - (iii) When the VOC breakthrough is measured, the waste gas flow shall be switched to the second canister immediately. Within four hours of detection of breakthrough, a fresh canister shall be placed as the new final polishing canister. Sufficient fresh activated carbon canisters shall be maintained at the site to ensure fresh polishing canisters are installed within four hours of detection of breakthrough.
  - (iv) Records of the CAS monitoring maintained at the plant site shall include, but are not limited to, the following:
    - (I) sample time and date;
    - (II) monitoring results (ppmv);
    - (III) corrective action taken, including the time and date of the action; and
    - (IV) process operations occurring at the time of sampling.
  - (v) The registration shall include a demonstration that activated carbon is an appropriate choice for control of the organic compounds to be stripped.
- (6) Before construction of the facility begins, the facility shall be registered with the commission's Office of Permitting, Remediation, and Registration in Austin using Form PI-7. The registration shall contain specific information concerning the basis (measured or calculated) for the expected emissions from the facility. The registration shall also explain details as to why the emission control system can be expected to perform as represented.
- (7) Records required by applicable paragraphs of this section shall be maintained at the site and made available to personnel from the commission or any local agency having jurisdiction. These records shall be made available to representatives of the commission and local programs upon request and shall be retained for at least two years following the date that the data is obtained.

**Source Note:** The provisions of this §§106.533 adopted to be effective March 14, 1997, 22 TexReg 2439; amended to be effective September 4, 2000, 25 TexReg 8653