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### TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

*Protecting Texas by Reducing and Preventing Pollution*

June 28, 1996

Lieutenant Colonel Dean C. Schmelling  
Post Commander  
DEPARTMENT OF THE ARMY, CAMP STANLEY  
25800 Ralph Fair Road  
Boerne, Texas 78006

Re: Standard Exemption  
Registration No. 32405  
Soil Vapor Extraction System  
Boerne, Bexar County  
Account ID No. BG-0841-S

Post-It <sup>®</sup> Fax Note	7671	Date	8 July 96	# of pages	10
To	KEN RICE	From	BRION MURPHY		
Co./Dept.	PARSONS	Co.	CAMP STANLEY		
Phone #	(512) 719-6050	Phone #	(210) 221-7453		
Fax #	(512) 719-6299	Fax #	(210) 221-7386		

Dear Lieutenant Colonel Schmelling:

This is in response to your request to register the operation of a soil vapor extraction system under Standard Exemption at your facility in Bexar County. We understand that the system will operate at a maximum flow rate of 80 standard cubic feet per minute and with no air abatement equipment. You have estimated that emissions of the contaminant of greatest concern at the site, vinyl chloride, will not exceed 0.25 pounds per hour. You have also documented the placement of the emissions point at least 3,000 feet away from the nearest off-site receptor.

Accordingly, and after evaluating the entirety of your submittal, we have determined that your operation conforms to the criteria of Standard Exemptions 68 and 118, if constructed and operated as described in your application. We remind you that regardless of whether a permit is required, you must maintain these facilities in compliance with all air quality rules and regulations of the TNRCC and of the U.S. Environmental Protection Agency at all times.

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We appreciate your cooperation in this matter. If you have any questions concerning this exemption, please contact Mr. Terry Murphy of our New Source Review Division at (512) 239-1587.

Sincerely,



*for*  
Tammy Villarreal  
Manager, Chemical Section  
New Source Review Division  
Texas Natural Resource Conservation Commission

TV/TM/rl

Enclosures

cc: Mr. James Menke, Air Program Manager, San Antonio

Record No. 43850

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

STANDARD EXEMPTION LIST

30 TAC §116.211  
Control of Air Pollution By Permits For  
New Construction or Modification

ADOPTED MAY 15, 1996  
EFFECTIVE JUNE 7, 1996

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68. 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, provided all the following conditions are satisfied:

(a) 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 §116.1, relating to Permit Requirements.

(b) 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 Standard Exemption 118(c) and (d). For purposes of this exemption, petroleum is considered to include: (1) liquids or gases produced from natural formations of crude oil, tar sands, shale, coal and natural gas, or (2) refinery fuel products to include fuel additives.

(c) For treating groundwater or soil contaminated with chemicals other than petroleum, emissions must meet the requirements of Standard Exemption 118(b), (c), and (d). If the groundwater or soil is contaminated with both petroleum and other chemicals, the petroleum compound emissions must meet condition (b) of this exemption and the other chemical emissions must meet the requirements of Standard Exemption 118(b), (c), and (d). The emission of any chemical not having a Limit (L) Value in Table 118A of Standard Exemption 118 is limited to 1.0 lb/hr.

(d) 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.

(e) If abatement equipment is used to meet conditions (b) and (c), the equipment must satisfy one of the following conditions:

(1) 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 Standard Exemption 88(b) and (c).

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(2) The vapors shall be burned in a flare which meets the requirements of Standard Exemption 80 and the requirements of 40 Code of Federal Regulations 60.18 which shall take precedence over Standard Exemption 80 in any conflicting requirements whether or not New Source Performance Standards apply to the flare.

(3) 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 condition (g).

(4) 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:

(A) 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.)

(B) 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 ± 2.0% and of 100 ppmv ± 2.0%.

(C) 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.

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(D) Records of the CAS monitoring maintained at the plant site shall include, but are not limited to, the following:

1. sample time and date,
2. monitoring results (ppmv),
3. corrective action taken, including the time and date of the action, and
4. process operations occurring at the time of sampling.

(E) The registration shall include a demonstration that activated carbon is an appropriate choice for control of the organic compounds to be stripped.

(f) Before construction of the facility begins, the facility shall be registered with the Texas Natural Resource Conservation Commission (TNRCC) Office of Air Quality 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.

(g) Records required by applicable paragraphs of this exemption shall be maintained at the site and made available to personnel from the TNRCC or any local agency having jurisdiction. These records shall be made available to representatives of the TNRCC and local programs upon request and shall be retained for at least two years following the date that the data is obtained.

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118. Facilities, or physical or operational changes to a facility, provided that all of the following conditions are satisfied:

(a) This exemption shall not be used to authorize construction or any change to a facility specifically authorized in another standard exemption, but not meeting the requirements of that exemption. However, once the requirements of a specific exemption are met, Exemption 118(c) and (d) may be used to qualify the use of other chemicals at the facility.

(b) Emission points associated with the facilities or changes shall be located at least 100 feet from any off-plant receptor\*.

(c) New or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than E as determined using the equation E = L/K and the following table.

<u>D</u> Feet	K	
100	326	E = maximum allowable hourly emission, and never to exceed 6 pounds per hour.
200	200	
300	139	
400	104	L = value as listed or referenced in Table 118A.
500	81	
600	65	
700	54	K = value from the table on this page. (interpolate intermediate values)
800	46	
900	39	
1,000	34	D = distance to the nearest off-plant receptor.
2,000	14	
3,000 or more	8	

(d) Notification must be provided using Form PI-7 within 10 days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, D values, and a description of pollution control equipment, if any.

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TABLE 118A  
 LIMIT VALUES (L) FOR USE WITH STANDARD EXEMPTION 118

Values included in this table represent screening levels for determining the applicability of Standard Exemption 118 and other standard exemptions using the Exemption 118 equation. The values are not to be interpreted as acceptable health effects values relative to the issuance of construction permits, special permits, or operating permits under 30 TAC Chapter 116.

Compound	Limit (L) Milligrams Per Cubic Meter
Acetone	590
Acetaldehyde	9
Acetone Cyanohydrin	4
Acetonitrile	34
Acetylene	2662
Adiponitrile	18
Aldrin	0.15
Sec-Amyl Acetate	1.1
Arsenic	0.01
Benzene	3
Beryllium and Compounds	0.0005
Butyl Acrylate	19
Butyl Glycidyl Ether	30
Butyl Mercaptan	0.3
Butyraldehyde	1.4
Butyric Acid	7.3
Butyronitrile	22
Carbon Tetrachloride	12
Chloroform	10
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.05
Chromium and Compounds	0.025
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.12
Cumene	43
o-Dichlorobenzene	180
p-Dichlorobenzene	108
1,2-dichloroethylene	79

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TABLE 118A Cont'd.

<u>Compound</u>	<u>Limit (L)</u> <u>Milligrams Per Cubic Meter</u>
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5
Diisobutyl Ketone	140
Dimethyl Aniline	6.4
Dimethylhydrazine	0.15
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	1
Ethylene Glycol Dinitrate	0.1
Ethylene Oxide	0.18
Ethyl Mercaptan	0.15
Ethyl Sulfide	1.6
Fibrous Glass Dust	5
Glycolonitrile	5
Heptane	350
Hydrazine	0.04
Hydrogen Chloride	1
Hydrogen Sulfide	1.1
Isoamyl Acetate	13
Isoamyl Alcohol	15
Isobutyronitrile	22
Isophorone Diisocyanate	0.045
Kepone	0.001
Kerosene	100
Malononitrile	8
Mercury, Inorganic	0.05
Mesityl Oxide	40
Methyl Acrylate	1.7
Methyl Amyl Ketone	5.8
Methyl Butyl Ketone	4
Methyl Disulfide	2.2
Methylenebis (Chloroaniline) MOCA	0.003
Methylenebis (Phenyl isocyanate)	0.05
Methylene Chloride	26

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TABLE 118A Cont'd.

<u>Compound</u>	<u>Limit (L)</u> <u>Milligrams Per Cubic Meter</u>
Methylhydrazine	0.08
Methyl Isoamyl Ketone	5.8
Methyl Mercaptan	0.3
Methyl Methacrylate	34
Methyl Propyl Ketone	530
Methyl Sulfide	0.5
Mineral Spirits	350
Naphtha	350
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	36
Octane	350
Parathion	0.05
Pentane	350
Perchloroethylene	33.5
Petroleum Ether	350
Phenyl Glycidyl Ether	5
Phenylhydrazine	0.6
Phenyl Mercaptan	0.4
Propionitrile	14
Propyl Acetate	281
Propylene Oxide	5
Propyl Mercaptan	0.08
Stoddard Solvent	350
Styrene	21
Succinonitrile	20
Tolidine	0.02
Trichloroethylene	135
Trimethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15
Vinyl Chloride	2

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The time weighted average Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), (1985-1986 Edition) shall be used for compounds not included in the table. Standard Exemption 118 cannot be used if the compound is not listed in the table or does not have a published TLV in the ACGIH.

(e) The facilities in which the following chemicals will be handled shall be located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor and the cumulative amount of any of the following chemicals resulting from one or more authorizations under this exemption (but not including permit authorizations) shall not exceed 500 pounds on the plant property and all listed chemicals shall be handled only in unheated containers operated in compliance with the United States Department of Transportation regulations (49 Code of Federal Regulations Parts 171 through 178): acrolein, ammonia, arsine, boron trifluoride, bromine, carbon disulfide, chlorine, chlorine dioxide, chlorine trifluoride, chloroacetaldehyde, chloropicrin, chloroprene, diazomethane, diborane, dimethylhydrazine, ethyl mercaptan, fluorine, formaldehyde, hydrogen bromide, hydrogen chloride, hydrogen cyanide, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, ketene, methylamine, methyl bromide, methylhydrazine, methyl isocyanate, methyl mercaptan, nickel carbonyl, nitric oxide, nitrogen dioxide, oxygen difluoride, ozone, pentaborane, perchloromethyl mercaptan, perchloryl fluoride, phosgene, phosphine, phosphorus trichloride, selenium hexafluoride, stibine, liquified sulfur dioxide, sulfur pentafluoride, and tellurium hexafluoride. Containers of these chemicals may not be vented or opened directly to the atmosphere at any time.

(f) For physical changes or modifications to existing facilities, there shall be no changes or additions of air pollution abatement equipment.

(g) Visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any five-minute period.

• Off-plant receptor means any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.