

Standard Exemption No. 32405
Modified B-3 SVE
(includes 12 wells)
February 1999

Exemption # 32405

Project#: 63949 PrePerm: / / Group: CHEM Permit #: 32405
Received: 01/22/1999 Reg6NOV: / / TechEngr: ~~PSD~~ JM/ ProjType: XRVW
Date: / / Date BO: / / (Duncan Stewart) STDX1: 533
Fee Amt.: \$0 Bd-Ord#: - - NewJobs: 0 182(f): NO

Issued To: Camp Stanley Storage Activity Dept. of The Army, PSD-TX #: <NONE>
ProjLink: <NONE>

<Primary Contact Information>
Email:
Name: Mr. LTC Ernest N. Roberson, Jr. Title: Post Commander
Building: Ralph Phone: () -
Street: 25800 Ralph Fair Rd. Fax: () -
City, State, Zip: Boerne, Tx., 78015-4800

<Project Information>
Unit: Soil Vapor Extraction System SIC: _____ Region: 13
Account: BG-0841-S Capacity: _____ SCC: _____ County: BEXAR
UnitType: ISSRME CapUnits: _____ Lat: _____ City: Boerne
Location: _____ Long: _____ CtyCo: BEXAR
Detail: _____

CORE Recd: 01/22/1999 ESOC: / / Deficient: / / RFC-SR: / /
CORE Engr: / / ASOC: / / Tech.Comp: / / RFC-DSC: / /
AdminComp: / / ESOC: / / Comp.Ltr.: / / Renewal: NO FIND
TransEngr: / / ASOC: / /

<Public Meeting - Hearing>
PN Required: ???
Date PN: / /
Date Pub: / /
PN/Sign/Cert: / /
Requested: / / / /
Disposed: / / / /
Disp Code: _____

<TONs/Yr Reduction>
NOX: _____ 0.0
CO: _____ 0.0
VOC: _____ 0.0
PM: _____ 0.0
SO2: _____ 0.0

Status:

<Project Activity History>
Table with columns: No, Date, Code, Date, Code, TelCons, Mis Date, Mis Code. Rows 1-10.

<Codes: E=Engineer, C=Company, O=Other, ?=Partial, *=Complete>

NSPS Code: _____ N.A. County: NO Non-PSD-Major: ??? <Local Programs>
NESHAP Code: _____ N.A.Net.Req: ??? PSD Net. Req: ??? County: NO
MACT Code: ??? N.A.Rev.Req: ??? PSD Rev. Req: ??? City: ???

Project Disposal
Chief Sign: [Signature] 2/18/99
Date Issued: / / Code: X

Processing Days as of 01/28/1999
Eng: 6 Comp: 0 Other: 0



FILE/TJ

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

February 22, 1999

Lieutenant Colonel Ernest N. Roberson, Jr.
Post Commander
Department of The Army, Camp Stanley
25800 Ralph Fair Road
Boerne, Texas 78015-4800

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

Dear Lieutenant Colonel Roberson:

This is in response to your request to register the change in operation of a soil vapor extraction system at your facility in Bexar County. We understand that the system will now operate at a maximum flow rate of 110 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 this project conforms to the criteria of 30 Texas Administrative Code (TAC) Sections 106.533 and 106.262, if constructed and operated as described in your application. The Texas Natural Resource Conservation Commission (TNRCC) Executive Director authorized these exemptions pursuant to 30 TAC Chapter 106. We have included copies of the exemptions in effect at the time of this registration. You must operate in accordance with all of their requirements.

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.

Lieutenant Colonel Ernest N. Roberson, Jr.

Page 2

February 22, 1999

Re: Exemption Registration No. 32405

We appreciate your cooperation in this matter. If you have any questions concerning these exemptions, please call Mr. Terry Murphy of our New Source Review Permits Division at (512) 239-1587 or write him at Texas Natural Resource Conservation Commission, Office of Air Quality, New Source Review Permits Division (MC-162), P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,



Tammy Villarreal

Manager, Chemical Section

New Source Review Permits Division

TV/TM/gg

Enclosures

cc: Mr. Leo Butler, Air Program Manager, San Antonio

Record No. 63949

CHEMICAL DIVISION
EXEMPTION REGISTRATION REVIEW

Company: Department of the Army, Camp Stanley

Record Number: 63949

Registration Number: 32405

Contact Name: Brian Vanderglas, Parsons Engineering Science, Inc.

Phone: (512) 719-6000

Fax: 6099

Description of Overall Unit: Soil remediation

Description of Facilities/Processes Claimed in this Registration and Exemptions Claimed: See prior Review. The registrant 533.

Sources, Emissions and Control Summary: See prior Review. The registrant has increased the number of recovery wells to 18. This allows for a maximum flow rate of 110 scfm. This represents less than a 1/3 increase over the prior level. Since the registrant estimated worst case emissions in the prior submittal at 52% of the allowable, the new configuration should not cause emissions to exceed the limits. Vinyl chloride is the contaminant of greatest concern at this site, and will most likely continue to remain below the 0.25 lb/hr. limit.

Emissions Reductions Due to NSRP: None

Requires PSD or Nonattainment Netting? No

Meets All General and Specific Conditions.

Reviewed By: Terry Murphy *TM* Team Leader: Duncan Stewart *DS*
Date: February 17, 1999 Date: 2/19/99



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

REGISTRATION FORM FOR EXEMPTIONS
FORM PI-7

Please mail to: TNRCC, Office of Air Quality, New Source Review Permits Division (MC-162),
PO Box 13087, Austin, TX 78711-3087

I. Company Name Department of the Army, Camp Stanley Storage Activity
(Corporation, Company, Government Agency, Firm, etc.)
 Mailing Address 25800 Ralph Fair Road, Boerne, TX 78015-4800
 Individual Authorized to Act for Registrant: Name LTC Ernest N. Roberson, Jr. Title Post Commander
 Address 25800 Ralph Fair Road, Boerne, TX 78015-4800 Telephone (210)221-7461 Fax ()

II. PHYSICAL LOCATION OF EXEMPT FACILITY (Latitude and Longitude must be to the nearest second):
 Name of Plant or Site Department of the Army, Camp Stanley Storage Activity
 Street Address 25800 Ralph Fair Road, Boerne, TX 78015-4800
 Nearest City Boerne Zip Code 78015 County Bexar Latitude 29°42'34" Longitude 98°36'51"
 SITE REQUIREMENTS: A. Submit a plot plan to scale of the property showing the location of plant boundaries, plant equipment, and surrounding area
 B. Furnish an area map with a scale showing the facility location relative to highways and towns.
 C. A physical address or accurate driving directions must be provided on all registrations.

III. TYPE OF FACILITY:
 A. Applicable Exemption Number(s) from TNRCC List 106.262; 106.533
 B. Name of Facility and Company's Facility Number Soil Vapor Extraction System
 C. TNRCC Account Identification Number BG-0841-5
 D. Previous Special Exemption or Permit Number 32405
 E. Operating Schedule: Hours/day 24 Days/week 7 Weeks/year 52
 F. Proposed Start of Construction (Date) Operation (Date)
 G. Permanent Portable
 H. Length of time at this site, if portable _____

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IV. PROCESS INFORMATION
 Description of Process: Prepare and attach a written description of the exempt process and applicable checklists (when available). The description must be in sufficient detail to indicate that the facility will conform to the specified exemption.

V. EMISSIONS DATA Furnish a description of the basis for emission rates including fugitives. (Calculations, emission factors, measurement, NSPS, etc.)

| Emission Point Number | Name of Source | Name of Air Contaminant | Emission Rate of Each Air Contaminant | | | |
|-----------------------|----------------|-------------------------|---------------------------------------|-------------|---------|-------------|
| | | | lb/hr | | tons/yr | |
| | | | Gaseous | Particulate | Gaseous | Particulate |
| | B-3 SVE System | TCE | 1.10 | | 4.8 | |
| | | DCE | 0.42 | | 1.8 | |
| | | Vinyl chloride | 0.017 | | 0.075 | |
| | | | | | | |
| | | | | | | |

VI. The required copy of the registration request has been sent to the Regional Office of the TNRCC: Yes No
 The required copy of the registration request has been sent to the Local Programs (if applicable): NA Yes No

VII. I, LTC Ernest N. Roberson, Jr. Post Commander
(Name) (Title)
 state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption. The facility will operate in compliance with all Regulations of the Texas Natural Resource Conservation Commission and with Federal Environmental Protection Agency Regulations governing air pollution.
 DATE 22 Jan 1999 SIGNATURE [Signature]

January 20, 1998

Via Certified Mail

Tammy Villarreal
Manager, Chemical Section, MC-162
TNRCC, New Source Review Division
PO Box 13087
Austin, TX 78711-3087

RECEIVED
JAN 27 1999

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True receive date
JAN 27 1999
PERMITS PROGRAM

Re: Notice of Modification to Standard Exemption Registration No. 32405 for
Soil vapor Extraction System at Camp Stanley Storage Activity
Boerne, Bexar County, Texas
TNRCC Account ID No. BG-0841-S

Dear Ms. Villarreal:

The subject soil vapor extraction (SVE) system at Camp Stanley Storage Activity (CSSA) is currently authorized under Standard Exemption Registration No. 32405. As referenced in my letter to you of December 20, 1996, we have made modifications to the layout of the SVE system and wish to incorporate those changes into the exemption registration representations at this time. There are now eighteen wells in the SVE system, which may be evacuated at a maximum blower rate of 110 SCFM. Exhaust concentrations from the SVE system are unchanged from previous representations since the original six wells are located in the areas of highest contaminant concentration.

This standard exemption registration is intended to replace the previous representations in their entirety. Information required for your review of the exemption application under 30 TAC §106.4, §106.262, and §106.533 is included. If you require any additional information or have questions/comments you may contact me directly, or Mr. Brian Murphy of CSSA at 210/698-5208.

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JAN 27 1999

PERMITS PROGRAM

Sincerely,

Brian Vanderglas
Parsons Engineering Science, Inc.
Brian Vanderglas
Task Manager

xc: Air Program Manager, TNRCC Region 13, San Antonio
JoJean Mullen - AFCEE
Mr. Brian Murphy, CSSA

Texas Natural Resource Conservation Commission
Standard Exemption Registrations, Revision 2
SWMU B-3 SVE Site

January 1999

Prepared for



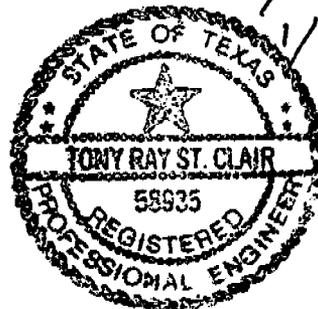
Department of the Army
Camp Stanley Storage Activity
Boerne, Texas

Prepared by

PARSONS ENGINEERING SCIENCE
8000 Centre Park Drive, Suite 200
Austin, Texas 78754

Project Number 728487.05010

Tony St. Clair
1/13/99



Printed on Recycled Paper

did not copy report

Associate w/ file

PARSONS ENGINEERING SCIENCE, INC.

A UNIT OF PARSONS INFRASTRUCTURE & TECHNOLOGY GROUP INC

8000 Centre Park Drive, Suite 200 • Austin, Texas 78754-5140 • (512) 719-6000 • Fax: (512) 719-6099

December 20, 1996

Via certified mail

Tammy Villarreal
Manager, Chemical Section
TNRCC, New Source Review Division
PO Box 13087
Austin, Texas 78711-3087

Re: Notice of Alteration to
Standard Exemption Registration No. 32405 for
Soil Vapor Extraction System at
Camp Stanley Storage Activity
Boerne, Bexar County, Texas
TNRCC Account ID No. BG-0841-S

Dear Ms. Villarreal:

We appreciate your previous approval of our standard exemption registration for a soil vapor extraction (SVE) system at Camp Stanley Storage Activity (CSSA) located in Boerne, Texas. On behalf of our client, CSSA, Parsons Engineering Science is notifying your office of intent to alter the physical layout of the existing SVE system. Within the next month, we intend to drill twelve additional wells, bringing the total number of wells up to eighteen. Between February 3 and June 13, 1997, we will perform a series of tests on different extraction configurations, but will not extract from more than six wells at any one time. This alternate representation of our system will not increase any emissions, as the extraction equipment will just be connected to six wells at a time.

Estimated emissions represented on the existing PI-7 registration are still valid, and no new pollutants are expected. At the conclusion of the tests, we will prepare recommendations for full-scale operation of the system and will prepare a formal modification to the existing exemption registration, should the test results indicate the necessity of such.

If you require any additional information or have questions/comments you may contact me directly, or Mr. Brian Murphy of CSSA at 210-698-5208.

Sincerely,

Brian Vanderglas

Parsons Engineering Science, Inc.
Brian Vanderglas
Task Manager

xc: Mr. James Menke, Air Program Manager, TNRCC Region 13 San Antonio
Lt. Col. Dean C. Schmelling, Post Commander, CSSA
Mr. Brian Murphy, CSSA

*GENERAL PERMIT INFORMATION

PERMIT: 02405 ENGR: MURPHY, TERRANCE / GROUP: CHEM ID:960841
ISSUED TO: DEPT OF THE ARMY, CAMP STANLEY STORA
UNIT NAME: SVE
OPERATING SCHEDULE: 24.0 HRS/DAY 7 DAYS/WK 52 WKS/YR
LAT: 29-42-34 LONG: 098-36-51 REGION: 13 COUNTY: BEXAR
NEAR CITY: BOERNE LOC: 25300 RALPH FAIR ROAD

***PERMIT/SITE CONTACT INFORMATION:

PERSON: LT. DEAN C. SCHMELLING ADDR1: 25300 RALPH FAIR ROAD
TITLE: POST COMMANDER ADDR2: BOERNE
CITY: BOERNE STATE: TX ZIP: 78005 PHONE: (210)221-7461

** CONSTRUCTION **

TYPE APPL(C,S,X): (X)
APPL RECD : 06-03-96
DEFIC LTR SNT :
SUPP INFO REQ :
SUPP INFO RECD :
APPL CMPLT :
COMP LTR SNT :
PUB NTC SNT :
PUB NTC PUB :
PUB HEAR (R,H) : ()
CNST TYPE(C,X,S): (X)
DISP (I) : 07-01-96
CNST START DATE :

** OPERATING **

OPERATION START :
OPER APPL RECD :
OPER APPL CMPLT :
DISP(I,D): ()
OPR TYPE(R,S) : ()

* I= ISSUED D=DENIED *
* E=EXPIRED *
* C=CNST S=SPECIAL *
* X=EXEMPT R=OPER *

** CONTINUANCE **

NOTICE MAILED :
APPL RECD :
DEFIC LTR SNT :
SUPP INFO REQ :
SUPP INFO RECD :
APPL CMPLT :
COMP LTR SNT :
PUB NTC SNT :
PUB NTC PUB :
PUB HEAR(R,H) : ()
DISP(I,D,E):() :

MISSIONS CHANGED :

***REMARKS:

***OTHER PERMIT DATES:

APP/PERMIT VOIDED:
APP ON HOLD UNTIL:
CONST STOPPED UNTIL:

REASON:
REASON:

VOID/HOLD CODES:

CR-COMPANY REQUEST
DD-DATA DELAY
RE-REISSUED

PD-PLT DISMANTLED

TI-TIME EXPIRED
TD-TECH DIFFICULTY
NR-NO RESPONSE

***PERMIT TYPES/STANDARDS:

NEW MAJ SOURCE:> 100 TPY:
MAJOR MODIFICATION:
NON-ATTAIN REVIEW:
INSIGNIFICANT EMISSIONS:
FUEL CONVERSION:

SIC: 9999
PORTABLE:
NSPS:
NESHAP:
TOXIC MATERIALS:

RELATED PERMITS: SUFFIX REASON
TAC@: CHG LOC:
PSD-TX: CHG OWN:
STD EX NO.: 068

***AIR CONTAMINANT INFORMATION:

NAME CODE MAX ALLOWABLE RATE ACTUAL
LBS/HR TONS/YR TONS/YR

***ASATEMENT EQUIPMENT:

file

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



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

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.

Lieutenant Colonel Dean C. Schmelling
Page 2
June 28, 1996

Re: Standard Exemption
Registration No. 32405

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

CHEMICAL DIVISION
STANDARD EXEMPTION REGISTRATION REVIEW

Company: Dept. of the Army, Camp Stanley

Registration Number: 32405

Record Number: 42868

Contact Name: LTC Dean Schmelling

Phone: (210) 221-7461

Description of Overall Unit: Soil remediation

Description of Facilities/Processes Claimed in this Registration and Exemptions Claimed: This is a SVE system that draws vapors from multiple wells and vents directly to the atmosphere. The applicant claims STDX 68.

Sources, Emissions and Control Summary: The soil at this site is contaminated with chlorinated compounds (DCE, TCE, and VC). The applicant has now submitted a map documenting the EPs' distance to off-site receptors (4,750 feet). He also confirms that a pilot study was performed w/o benefit of registration, and he has now stated that he understands the registration requirement and will comply in all future submittals. The applicant has now provided data on historical soil sampling, soil gas analyses, and pilot test results. Vinyl chloride is the contaminant of greatest concern at this site, both in terms of its levels and its L value. There is a discrepancy in the pilot test results for vinyl chloride, and one of the soil gas analyses for VC shows one area potentially high enough, if drawn upon alone, to cause a 118(c) VC exceedance. Nevertheless, the applicant has given enough data elaboration to ensure that VC emissions will most likely remain below the 0.25 lb/hr. limitation. The pilot test data, for example, shows - at worst - a 170 ppmv level for VC. At 80 scfm, the resultant emissions would be .13 lbs/hr., or 52% of the allowable.

Requires PSD or Nonattainment Netting? No

Meets All General and Specific Conditions.

Reviewed By:

Terry Murphy

Team Leader:

Stewart

Date: 7/1/96

Date:

7/1/96





DEPARTMENT OF THE ARMY
CAMP STANLEY STORAGE ACTIVITY, RRAD
25900 RALPH FAIR ROAD, BOERNE, TX 78015-4800

May 31, 1996

Office of the Commander

SUBJECT: Standard Exemption Registration No. 32405
Soil Vapor Extraction System
Account ID No. BG-0841-S
Response to Insufficiencies, Camp Stanley Storage
Activity, Boerne, Bexar Co., Texas

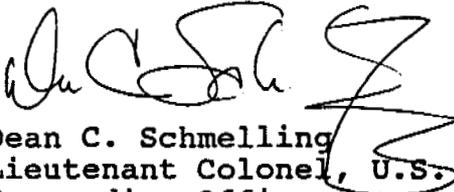
Ms. Tammy Villarreal
Manager, Chemical Section
TNRCC, New Source Review Division
PO Box 13087
Austin, Texas 78711-3087

Dear Ms. Villarreal:

In response to your evaluation of our Standard Exemption Registration for a Soil Vapor Extraction (SVE) system at Camp Stanley Storage Activity (CSSA) located in Boerne, Texas, we have revised the Standard Exemption request for the SVE system, incorporating information required in your letter dated May 10, 1996. In order to expedite your review, a written response to all insufficiencies noted by the TNRCC is also enclosed.

If you have additional questions or any other comments, you may contact Mr. Brian Murphy at (210) 698-5208.

Sincerely,


Dean C. Schmelling
Lieutenant Colonel, U.S. Army
Commanding Officer

Enclosures

Copy Furnished:

Mr. James Menke, Air Program Manager,
TNRCC Region 13, San Antonio, Texas

RECEIVED
JUN 03 1996

PERMITS PROGRAM



**Standard Exemption Registration of SVE system
at Camp Stanley Storage Activity
Response to Insufficiencies from TNRCC New Source Review Division**

Insufficiency 1: Provide a to-scale map that shows the emission point and the distance to the nearest off-site receptor.

Response: A to-scale map locating the SVE system (EPN 8) and the nearest off-site receptor is included in the standard exemption registration revision 1 for the SVE system. A copy of this map was included in the original submittal which also included Building 200 and Building 27 Paint Booth exemption registrations.

Insufficiency 2: Please furnish the date of operation of the system. We note that the pilot test was conducted without prior registration. For future reference, we consider any emissions into the atmosphere from remediation projects, even pilot tests, as subject to provision (f) of Standard Exemption 68. Also for future reference, please note that, in no case, may emissions of trichlorethylene and dichloroethylene exceed six pounds per hour.

Response: The SVE system began pilot operation on March 6, 1996. CSSA provided the TNRCC with a work plan for the SVE pilot test system, February 9, 1996 to Richard Clarke of the Corrective Action Section, which included an estimation of air emissions and the applicability of Standard Exemption 68. In the future, any new activities which may emit pollutants in the atmosphere will be properly registered with the TNRCC. CSSA understands that maximum emission rates of trichlorethylene and dichloroethylene are limited to six pounds per hour, of which the emissions from the current SVE system are 0.79 lb/hr and 0.31 lb/hr, respectively.

Insufficiency 3: If you have any soil analyses, please discuss these as they may relate to the pilot test results.

Response: Soil analyses as well as soil gas analyses were conducted during the SVE construction and pilot testing. We feel that a better representation of actual emissions from the SVE system is through utilization of soil gas analyses. Soil analyses are used to quantify the contamination within SWMU B-3. A discussion of the soil analyses relating to the SVE system has been included in the process description of standard exemption registration revision 1 for the SVE system.



tile

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Dan Pearson, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

May 10, 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

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 have evaluated the information you have submitted in support of your request, and we find that a number of insufficiencies prevent us from determining whether you have met all the requirements of the standard exemption claimed in your registration request and/or of 30 TAC §116.211 (Regulation VI). Therefore, we cannot confirm your claim of this exemption at this time.

Insufficiencies are summarized below:

Please provide a to-scale site map that shows the emissions points and the distance to the nearest off-site receptor.

Please furnish the date of operation of the system. We note that the pilot test was conducted without prior registration. For future reference, we consider any emissions into the atmosphere from remediation projects, even pilot tests, as subject to provision (f) of Standard Exemption 68. Also for future reference, please note that, in no case, may emissions of trichloroethene and dichloroethene exceed six pounds per hour.

If you have any soil analyses, please discuss these as they may relate to the pilot test results.

Lieutenant Colonel Dean C. Schmelling
Page 2
May 10, 1996

Re: Standard Exemption
Registration No. 32405

Please submit any new information or modification proposals as a new standard exemption registration request. To expedite the process at that time, please include a copy of this letter. We remind you that Sections 382.0518(a) and 382.057 of the Texas Clean Air Act, Texas Health and Safety Code, Chapter 382, provide that you must obtain a construction permit or fully comply with a standard exemption before you begin work on the construction of a new facility or modify an existing facility that may emit air contaminants.

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

Sincerely,



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

TV/TM/al

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

Record No. 42868

CHEMICAL DIVISION
STANDARD EXEMPTION REGISTRATION REVIEW

Company: Dept. of the Army, Camp Stanley

Registration Number: 32405

Record Number: 42868

Contact Name: LTC Dean Schmelling

Phone: (210) 221-7461

Description of Overall Unit: Soil remediation

Description of Facilities/Processes Claimed in this Registration and Exemptions Claimed: This is a SVE system that draws vapors from multiple wells and vents directly to the atmosphere. The applicant claims STDX 68.

Sources, Emissions and Control Summary: The soil at this site is contaminated with chlorinated compounds (DCE, TCE, and VC). The applicant has not submitted a map documenting the EPs' distance to off-site receptors. He also indicates a pilot study was performed w/o benefit of registration, and he has not stated when this system has, or will, go into normal operation. He has used the pilot test results to predict emissions. We will ask for the results of any soil testing so that we can more accurately analyze the pilot test's findings relative to emissions predictions.

Requires PSD or Nonattainment Netting? No

Does Not Meet All General and Specific Conditions.

Reviewed By:

Team Leader:

H. Stewart

Date:

Date:

5/9/96

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

REGISTRATION FORM FOR STANDARD EXEMPTIONS

FORM PI-7

Please mail to: TNRCC, Office of Air Quality, New Source Review Division (MC-162), PO Box 13087, Austin, TX 78711-3087

| I. Company Name <u>Department of the Army, Camp Stanley</u> (Corporation, Company, Government Agency, Firm, etc.) Mailing Address <u>25800 Ralph Fair Road, Boerne, TX 78006</u> Individual Authorized to Act for Applicant: Name <u>LTC Dean C. Schmelling</u> Title <u>Post Commander</u> Address <u>25800 Ralph Fair Road, Boerne, TX 78006</u> Telephone <u>(210) 221-7461</u> Fax <u>()</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-------------------------|---------------------------------------|-------------|---------|-------------|----|---|-----|----|--|--|----|--|--|----|---|--|----|---|--|----|--|--|----|---|--|----|--|--|
| II. LOCATION OF EXEMPT FACILITY (Latitude and Longitude must be to the nearest second): Name of Plant or Site <u>Department of the Army, Camp Stanley</u> Street Address <u>25800 Ralph Fair Road, Boerne, TX 78006</u> Nearest City <u>Boerne</u> County <u>Bexar</u> Latitude <u>29° 42' 34"</u> Longitude <u>98° 36' 51"</u> SITE REQUIREMENTS: A. Submit a plot plan to scale of the property showing the location of plant boundaries, plant equipment, and surrounding area. B. Furnish an area map with a scale showing the facility location relative to highways and towns. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| III. TYPE OF FACILITY: <table style="width: 100%; border: none;"> <tr> <td style="width: 5%;">A.</td> <td style="width: 75%;">Applicable Standard Exemption Number(s) from TNRCC List <u>Exemption Number 68, 118</u></td> <td style="width: 20%; text-align: right;">:05</td> </tr> <tr> <td>B.</td> <td>Name of Facility and Company's Facility Number _____</td> <td></td> </tr> <tr> <td>C.</td> <td>TNRCC Account Identification Number <u>156 03415</u></td> <td></td> </tr> <tr> <td>D.</td> <td>Previous Special Exemption or Permit Number _____</td> <td></td> </tr> <tr> <td>E.</td> <td>Operating Schedule: Hours/day <u>24</u> Days/week <u>7</u> Weeks/year <u>52</u></td> <td></td> </tr> <tr> <td>F.</td> <td>Proposed Start of Construction _____ (Date) Operation _____ (Date)</td> <td></td> </tr> <tr> <td>G.</td> <td>Permanent <input checked="" type="checkbox"/> Portable <input type="checkbox"/></td> <td></td> </tr> <tr> <td>H.</td> <td>Length of time at this site, if portable _____</td> <td></td> </tr> </table> | | | | | | | A. | Applicable Standard Exemption Number(s) from TNRCC List <u>Exemption Number 68, 118</u> | :05 | B. | Name of Facility and Company's Facility Number _____ | | C. | TNRCC Account Identification Number <u>156 03415</u> | | D. | Previous Special Exemption or Permit Number _____ | | E. | Operating Schedule: Hours/day <u>24</u> Days/week <u>7</u> Weeks/year <u>52</u> | | F. | Proposed Start of Construction _____ (Date) Operation _____ (Date) | | G. | Permanent <input checked="" type="checkbox"/> Portable <input type="checkbox"/> | | H. | Length of time at this site, if portable _____ | |
| A. | Applicable Standard Exemption Number(s) from TNRCC List <u>Exemption Number 68, 118</u> | :05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B. | Name of Facility and Company's Facility Number _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C. | TNRCC Account Identification Number <u>156 03415</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| D. | Previous Special Exemption or Permit Number _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| E. | Operating Schedule: Hours/day <u>24</u> Days/week <u>7</u> Weeks/year <u>52</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| F. | Proposed Start of Construction _____ (Date) Operation _____ (Date) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| G. | Permanent <input checked="" type="checkbox"/> Portable <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| H. | Length of time at this site, if portable _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IV. PROCESS INFORMATION Description of Process: <i>Prepare and attach a written description of the exempt process and applicable checklists (when available). The description must be in sufficient detail to indicate that the facility will conform to the specified exemption.</i> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| V. EMISSIONS DATA Furnish a description of the basis for emission rates including fugitives. (Calculations, emission factors, measurement, NSPS, etc.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Emission Point Number | Name of Source | Name of Air Contaminant | Emission Rate of Each Air Contaminant | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | lb/hr | | tons/yr | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | Gaseous | Particulate | Gaseous | Particulate | | | | | | | | | | | | | | | | | | | | | | | | |
| EPN 8. | B-3 SVE System | TCE | 0.79 | | 3.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | DCE | 0.31 | | 1.34 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Vinyl Chloride | 0.13 | | 0.59 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VI. The required copy of the application has been sent to the Regional Office of the TNRCC: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No The required copy of the application has been sent to the Local Programs (if applicable): <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VII. I, <u>LTC Dean C. Schmelling</u> <u>Post Commander</u> (Name) (Title) state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I further state that to the best of my knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption. The facility will operate in compliance with all Regulations of the Texas Natural Resource Conservation Commission and with Federal Environmental Protection Agency Regulations governing air pollution. DATE <u>4/11/96</u> SIGNATURE <u>[Signature]</u> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

178 1 111
[Handwritten signature]



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

April 16, 1996

Office of the Commander

Ms. Karen M. Bullard
TNRCC Office of Air Quality
NSR Division/Coatings Section
P.O. Box 13087
Austin, TX 78711-3087

8 105

Dear Ms. Bullard,

Enclosed is the Standard Exemption Registration for our Air Permit.

A handwritten signature in black ink, appearing to read "Dean C. Schmelling".

Dean C. Schmelling
Lieutenant Colonel, U.S. Army
Commanding Officer

Enclosure

Copy furnished:

TNRCC San Antonio Regional Office

**SWMU B-3 SOIL VAPOR EXTRACTION (SVE) SYSTEM
EXEMPTION REGISTRATION**

99405

**Section 3
Table of Contents**

PI-7 Form
Process Description
Process Flow Diagrams
Applicable Checklists
Emissions Data

SWMU B-3 SVE

FORM PI-7

SWMU B-3 SVE

PROCESS DESCRIPTION

Soil Vapor Extraction (SVE) System

CSSA has conducted a SVE pilot test on soils located in Solid Waste Management Unit (SWMU) B-3. The purpose of the pilot test is to determine if SVE is a viable alternative for soils remediation at SWMU B-3 and to collect sufficient data to design a full-scale SVE system to be used for soil remediation. The basic theory of soil vapor extraction is to apply a negative pressure, or vacuum, to the subsurface to create a pressure gradient. This gradient produces advective air flow which will remove vapor-phase compounds and also promote continued volatilization of organic compounds adsorbed in site soils. The vacuum is created by using blowers or vacuum pumps, and is applied to the subsurface soils through extraction wells. Specific objectives of the SVE pilot test are to estimate the following variables:

- Soil permeability to vapor flow;
- Radius of influence of the extraction well;
- Vacuum variability with depth;
- Vapor concentration before, during, and after the test.

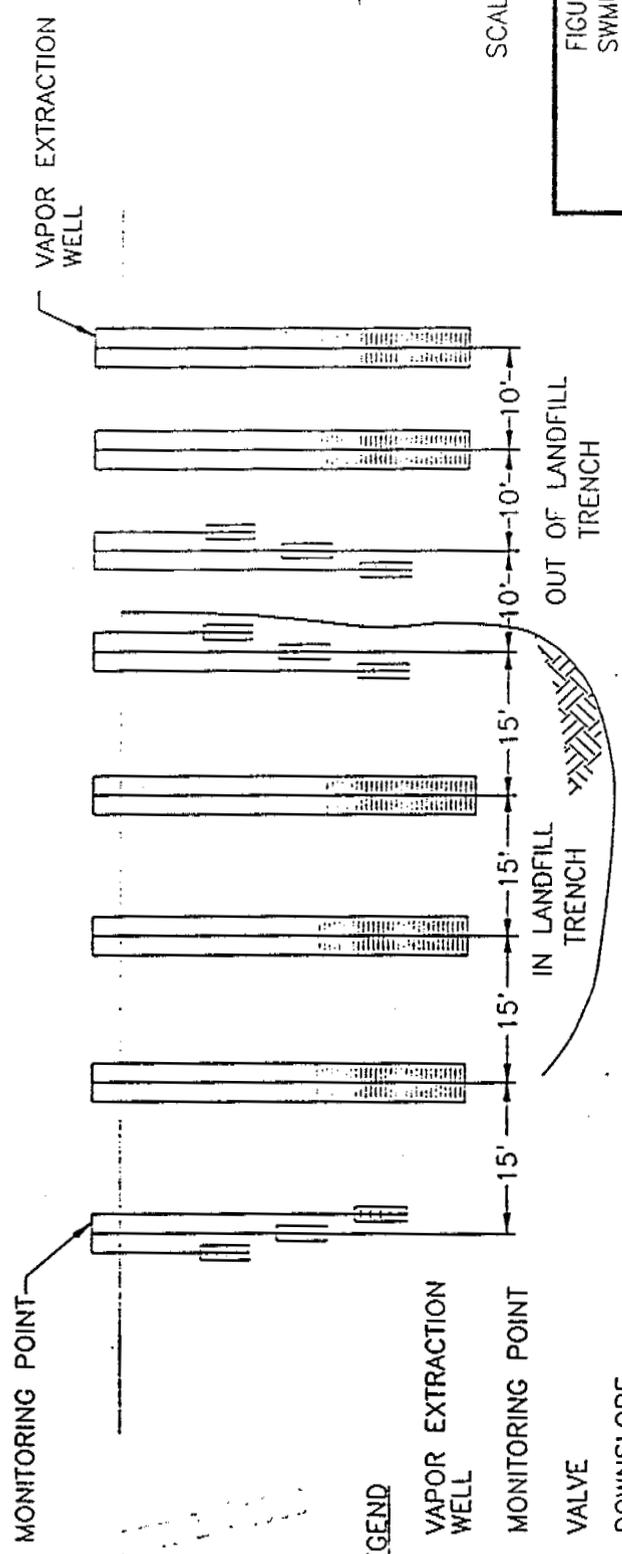
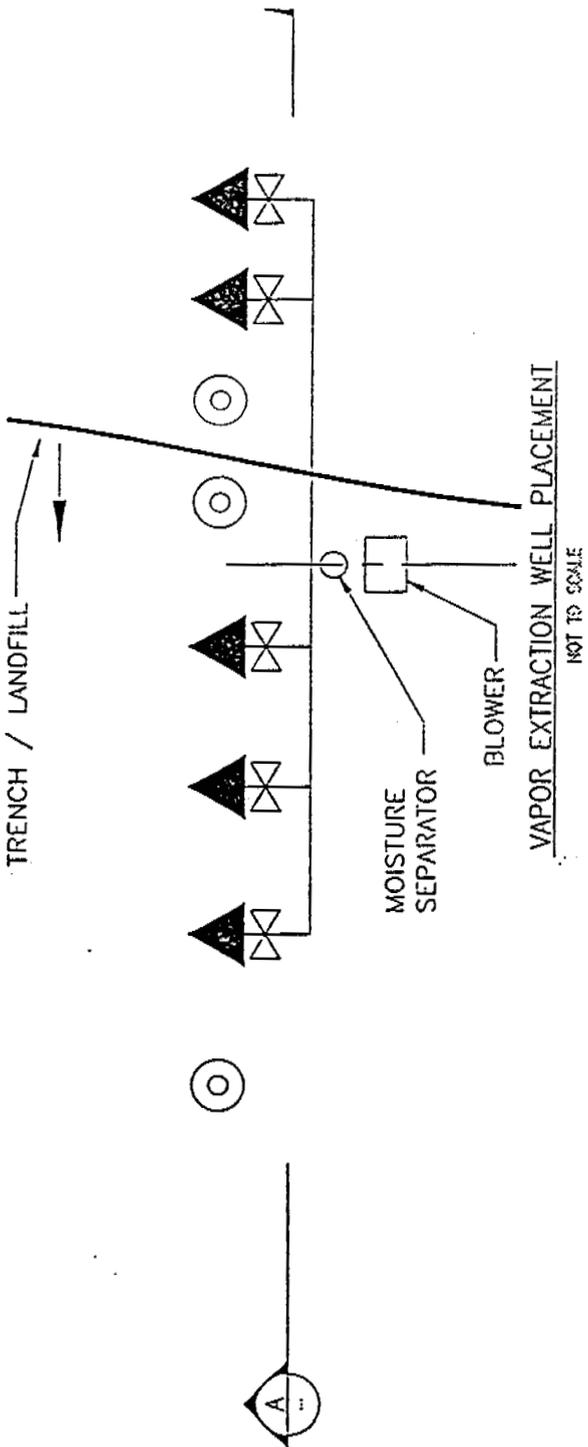
The SVE pilot test system extracted primarily, trichloroethylene (TCE), and *cis*-1,2, dichloroethylene (DCE), from surrounding soils. Soil gas samples taken from SWMU B-3 revealed the presence of chlorinated hydrocarbons at the following maximum soil gas concentrations:

| Chemical Compound | Soil gas concentration (ppmv) |
|-------------------|-------------------------------|
| TCE | 480 |
| DCE | 250 |
| Vinyl Chloride | 170 |

SWMU B-3 SVE SYSTEM

PROCESS FLOW DIAGRAMS

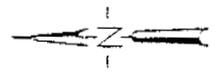
TRENCH / LANDFILL



LEGEND

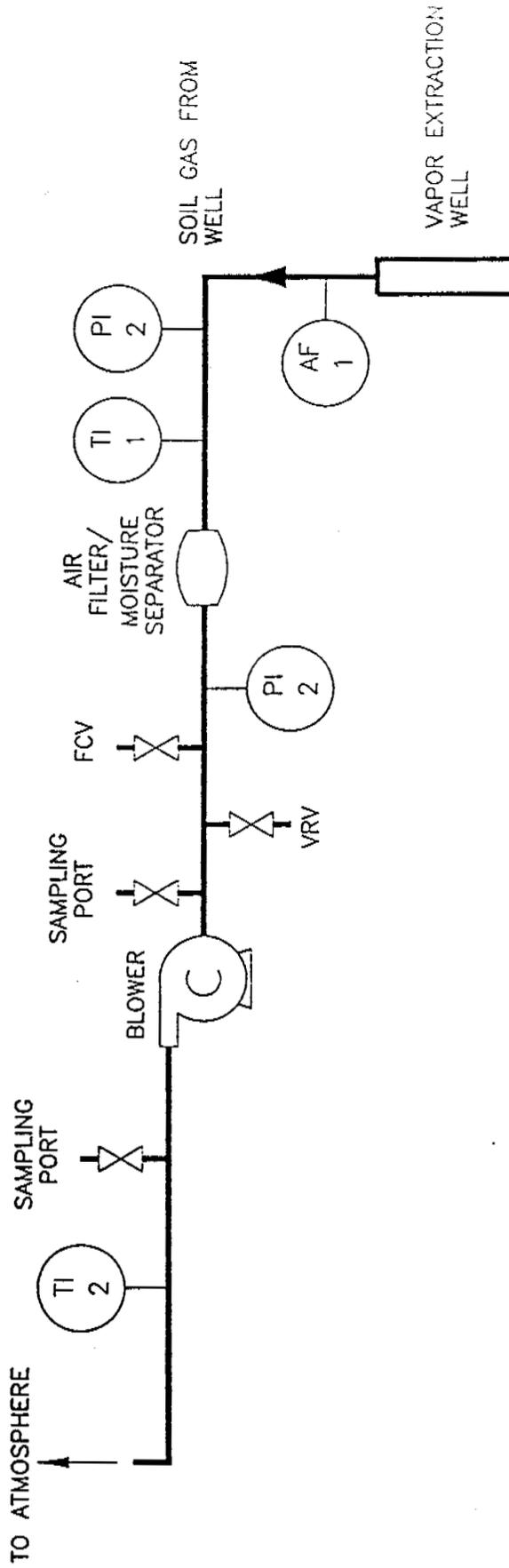
- VAPOR EXTRACTION WELL
- MONITORING POINT
- VALVE
- DOWNSLOPE

SECTION A-A
NOT TO SCALE



SCALE: NTS

FIGURE 3.1
SWMU B-3
CONCEPTUAL DESIGN OF VAPOR EXTRACTION WELL PLACEMENT



LEGEND

-  AIR FLOW INDICATOR
-  PRESSURE INDICATOR
-  TEMPERATURE INDICATOR
- FCV FLOW CONTROL VALVE
- VRV VACUUM RELIEF VALVE

FIGURE 3.4
 PROPOSED BLOWER SYSTEM
 INSTRUMENTATION DIAGRAM

CSSA GW EVALUATION

**SWMU B-3 SVE
EMISSION DATA**

Soil Vapor Extraction (SVE) System

Standard Exemption 118 (c) Emission Calculations

The speciated chlorinated hydrocarbon emission rates and calculated emission limits derived from Standard Exemption No. 118(c) are presented in the table below. Also shown is the equation for calculating the emission rate.

In order to compare the worst case scenario with the emission limits established in the applicable Standard Exemption, the maximum soil gas concentrations will be used in the calculations. During an SVE operation, the soil gas concentrations typically start at a maximum concentration and decrease asymptotically to steady state conditions. Therefore, the soil gas concentrations presented in the emission calculations are the maximum concentrations of chemical compounds in the initial soil gas 30 minutes after the pilot system was turned on. In addition, emission rates were calculated using the maximum flow rate of 80 standard cubic feet per minute (SCFM).

Chemical constituent emission limits (E) for Standard Exemption 118(c) are calculated by using the equation $E = L/K$, where L is the value as listed in table 118A and K is the value from standard exemption list 118(c).

Calculated VS. Exempted Emission Rates

| Chemical Compound | Soil gas conc. (ppmv) | Air Displacement (SCFM) | Molecular Weight (lb/lb-mole) | Calculated emission rate (lb/hr) | (tons/yr) | L (mg/M ³) | E - Exempted emission rate (lb/hr) |
|-------------------|-----------------------|-------------------------|-------------------------------|----------------------------------|-----------|------------------------|------------------------------------|
| TCE | 480 | 80 | 131.4 | 0.79 | 3.5 | 135 | 16.875 ⁶ |
| DCE | 250 | 80 | 97.0 | 0.31 | 1.34 | 79 | 9.8750 ⁶ |
| Vinyl Chloride | 170 | 80 | 62.5 | 0.13 ✓ | 0.59 | 2 | 0.25 |

.25 = $\frac{2}{8}$

K = 135
D = 7.875

Emission Rate Equation

Chlorinated hydrocarbon emission rate (lb/hr) = (contaminant concentration) x (contaminants molecular weight in lb/lb-mole) x (air pump rate in cubic feet per minute) x $(1.581 \times 10^{-7} \text{ lb-mole-min./ft}^3\text{-ppmv-hr})$. For calculation of yearly emission rates, it was assumed that the SVE system will operate 24 hours a day, 7 days a week, 52 weeks per year at the 30 minute soil gas concentrations.

Conclusion

The calculated emission rates are compared with E, the emission limit rate expressed in Standard Exemption 118. As seen in the table above, the soil vapor extraction test system satisfies the requirements of Standard Exemption No. 118(c).

STANDARD EXEMPTION 68

APPLICABLE CHECKLISTS

Standard Exemption 68
Checklist

Contaminated Water and Soil Remediation Equipment

REGISTRATION IS REQUIRED BEFORE CONSTRUCTION OF FACILITIES COVERED BY THIS STANDARD
EXEMPTION MAY BEGIN

The following checklist is designed to help you confirm that you meet Standard Exemption 68 (STDX 68) requirements. Any "no" answers indicate that the claim of exemption may not meet all requirements for the use of Standard Exemption 68. If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met or obtain a construction permit.

| <u>YES</u> | <u>NO</u> | <u>NA</u> | <u>DESCRIPTION</u> |
|------------|-----------|-----------|--|
| <u>x</u> | — | — | Have you included a description of how this exemption claim meets the general rule for the use of standard exemptions (§116.211 checklist is available)? |
| <u>x</u> | — | — | Will the remediation be at the property where the contamination originally occurred or at a nearby property secondarily affected by the contamination? |
| — | — | <u>x</u> | Is the total emissions rate of petroleum hydrocarbons (except benzene) less than or equal to one (1) pound per hour? Attach calculations and supporting data such as soil/water contaminant concentrations. |
| — | — | <u>x</u> | Do benzene emissions meet the emissions limits of STDX 118(c)? Attach calculations, contaminant concentrations, and a scaled map showing the emission(s) point(s) and nearby off-property receptors. |
| <u>x</u> | — | — | Do chemical emissions other than those from petroleum hydrocarbons meet the requirements of STDX 118(b) and (c)? Attach calculations, contaminant concentrations, and a scaled map showing the emission(s) point(s). |
| <u>x</u> | — | — | Will the handling, processing, and conditioning of contaminated and remediated soil be free of visible emissions (except for moisture)? |
| — | — | <u>x</u> | If you use abatement equipment to meet the exemption's emissions limits, does it <u>completely</u> satisfy one of the conditions stated in STDX 68(e)(1)-(4)? Which one? <u> </u> _ Describe the abatement process in an attachment. |

**Standard Exemption 118
Checklist
Facilities and Modifications**

**A PI-7 WITH REQUIRED ATTACHMENTS MUST BE SUBMITTED WITHIN TEN DAYS OF INSTALLATION
OR MODIFICATION OF FACILITIES UNDER THIS EXEMPTION**

The following checklist has been designed to help you confirm that you meet Standard Exemption 118 (STDX 118) requirements. Any "no" answers indicate that the claim of exemption may not meet all the requirements for the use of Standard Exemption 118. If you do not meet all the requirements, you may alter the project design/operation in such a way that all requirements of the exemption are met or obtain a construction permit.

| <u>YES</u> | <u>NO</u> | <u>NA</u> | <u>DESCRIPTION</u> |
|------------|-----------|-----------|--|
| <u>X</u> | — | — | Have you included a description of how this exemption claim meets the general rule for the use of standard exemptions (§116.211 checklist is available)? |
| <u>X</u> | — | — | Have you reviewed all other exemptions to determine that none authorize the proposed construction or change had all requirements been met? |
| — | — | <u>X</u> | If this claim is to qualify the use of other chemicals at a facility authorized by another exemption, are all the requirements of that specific exemption met? Have you included a description of how that exemption's requirements are met? |
| <u>X</u> | — | — | Is each emission source located at least 100 feet from any recreational area, 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? Attach a scaled map. |
| <u>X</u> | — | — | Do all the chemicals that will be part of new or changed emissions at the facility appear in Table 118A or in the 1985-86 version of the list of Threshold Limit Values (TLV) published by the American Conference of Governmental Industrial Hygienists? List the compounds and their L value from Table 118A or their TLV. |
| <u>X</u> | — | — | Are the calculated new or increased emissions, including fugitives, for each chemical less than or equal to 5 tons per year? Attach calculations. |
| <u>X</u> | — | — | Are the calculated new or increased emissions, including fugitives, for each chemical less than or equal to "E" pounds per hour as determined using the formula in STDX 118(c) or 6 pounds per hour, whichever is lower? Attach both the "E" and emissions calculations for each compound. |
| <u>X</u> | — | — | Have you attached to the PI-7 a complete description of the project? |
| <u>X</u> | — | — | Are all the facilities, in which the compounds listed in STDX 118(e) are handled, located at least 300 feet from the nearest property line and 600 feet from the nearest |

Standard Exemption 118 Checklist
Page 2

off-property receptor? Your attached scaled map should show the effected facilities, the nearest fence lines, and receptors.

- Are the total on-property quantities of each compound listed in STDX 118(e) always less than or equal to 500 pounds? This requirement does not apply to permit authorizations.
- Are all compounds listed in STDX 118(e) handled only in unheated containers operated in compliance with U.S. Department of Transportation Regulations (49 CFR 171 through 178)?
- Are procedures and equipment in place to ensure that containers containing chemicals listed in STDX 118(e) never vent to, or are never opened directly to, the atmosphere? Attach descriptions as necessary.
- For physical changes or modifications to existing facilities, does all air pollution abatement equipment remain unchanged (i.e. no change or addition is allowed)? (This requirement does not mean that new facilities may not have control equipment.)
- Will all visible emissions, except uncombined water, have opacity less than or equal to 5 percent in any five-minute period?

**Texas Natural Resource Conservation Commission
Standard Exemption Registrations, Revision 1:
SWMU B-3 SVE Site**



**Department of the Army
Camp Stanley Storage Activity
Boerne, Texas**

June 1996

*did not
copy report*