



RECEIVED

1:54 pm, Mar 10, 2008

Alameda County
Environmental Health

March 7, 2008

Trinity Project: 103.001.001

Permitting Staff

Bay Area Air Quality Management District

939 Ellis Street

San Francisco, California 94109

*Re: Application for Authority to Construct
Active Sub-Slab Depressurization System
Searway Property
649 Pacific Ave.
Alameda, California*

Dear Permitting Staff:

This letter, prepared by Trinity Source Group, Inc. (Trinity) on behalf of Timber Del Properties, L.L.C., transmits an application package, requesting an Authority to Construct from the Bay Area Air Quality Management District (BAAQMD). The Timber Del Properties L.L.C. proposes to construct an active sub-slab depressurization system in the existing commercial building located at the above-referenced address (Figure 1). The building was formerly used for a dry cleaning operation from the 1940's until at least 1979. The purpose of the active sub slab depressurization system is to mitigate the volatile organic compounds (VOCs) vapor intrusion concerns for the site structure.

Trinity understands that as an active system, the sub-slab depressurization system will require a BAAQMD Permit to Operate, and also will require a BAAQMD Authority to Construct. Therefore, this application package requests the Authority to Construct from BAAQMD.

The subject building is a two-story commercial building at the intersection of Pacific Avenue and Webster Street in Alameda, California. The project site building is currently used as a Kelley-Moore Paints store. The tenants of adjacent portions of the building include the East Ocean Seafood Restaurant at 1713 Webster Street, a martial arts school, and a tailoring/cleaners shop. The general land use in the site vicinity is commercial and residential.

The active sub-slab depressurization system will consist of two extraction wells located near DPT-1 and DPT-2 (Figure 2). Extraction well pipe runs will be trenched to nearby walls. The pipe runs will continue up to the first floor ceiling, where they will be manifolded together and connected to a suction fan located in the roof attic. The exhaust air will be piped to the southwest corner of the roof and discharges through a three foot tall stack. This corner of the property is adjacent to a parking lot and street with open access to available wind, and therefore the low VOC mass discharged should not pose a risk of accumulating or concentrating. The electric fan blower will be equipped with a pressure indicator and flow meter to monitor performance.

This permit application package includes the following drawings and forms:

- Figure 1, showing the site location,
- Sheet 1: location map and drawing index,
- Sheet 2: system layout,
- Sheet 3: Section A-A',
- Sheet 4: extraction well detail,
- Sheet 5: miscellaneous details
- Form P-101B,
- Form G to describe the source, and
- Form P for the emission point.

Purpose of the Mitigation

Due to past releases of dry cleaning solvents at the subject property, the Alameda County Environmental Health services (ACEHS) has requested that a sub-slab depressurization system be installed to mitigate for the potential of indoor air vapor intrusion to the subject property. The sub-slab air to be captured and mitigated contains low concentrations of VOCs, primarily dry cleaning products, Stoddard solvent, perchloroethylene (PCE) and its degradation product trichloroethylene (TCE), and chloroform and carbon tetrachloride (CT).

Trinity has performed extensive testing of the air flow patterns beneath the floor slabs and determined the engineering design criteria to mitigate potential environmental exposure risk. A description of the source of these compounds and testing performed is provided in Trinity's *Sub-Slab Vapor Mitigation Report*, dated December 7, 2007, a copy of the report is included for your review. ACEHS approved the findings of the *Sub-Slab*

Vapor Mitigation Report and in a letter dated December 28, 2007 requested that an appropriate sub-slab depressurization system be installed.

Description of the proposed remedial measures

The proposed remedial measures consist of installing two sub-slab vapor extraction wells and connecting the wells via conveyance piping to an industrial grade suction fan equipped with filters. The specifications of the suction fan, a GCX VOC Series unit manufactured by IQAir, are provided in Attachment A.

The fundamental principle of the system design is to create a low negative pressure (vacuum) beneath the existing concrete floor slab. Previous work performed by Trinity, was to seal penetrations in the floor slab to prevent potential leaks from the interior of the building into the sub-slab. This work was deemed successful due the positive results obtained in the vapor mitigation testing.

Hence, upon creating a negative pressure at the extraction well points, air flow beneath the floor slab will be directed into the extraction wells. Two extraction wells will be installed at the locations shown in Sheet 2. The construction details for each extraction well are provided in Sheet 4. Note, the replacement floor will be protected with a 60-mil HDPE vapor barrier, and joints between existing and new floor sealed with a concrete epoxy. The new floor will be finished to match existing grade to prevent any trip hazard.

The captured air will be drawn along the conveyance piping by the suction provided by an air cleaning unit that creates the negative pressure beneath the floor slab, and has the added feature of VOC filters to further mitigate air discharge. Sheet 3 provides a cross-sectional view of the system from extraction point DPT-1, a similar piping run will be constructed from extraction point DPT-2.

The air will pass through the GCX VOC unit and be discharged to the exterior of the building along the wall of the attic. The discharge stack will be located along the exterior of the attic wall (as requested by the City of Alameda Planning and Building Department to preserve the aesthetic of the subject property).

Estimate of daily and maximum daily flow rate.

Estimates of the daily mass removal are based on results obtained during the performance of the sub-slab vapor mitigation diagnostic testing presented in Table 6 of the *Sub-Slab Vapor Mitigation Report*: a copy of Table 6 is presented as Attachment B. Note the mass removal rates are based on the highest concentrations of VOCs removed during the diagnostic testing, and as such, the mass estimates are considered conservative with respect to potential VOC emissions. It is anticipated that VOC concentrations will decrease with time as mass is removed from the subsurface.

Table 6 presents three sets of mass removal estimates based on:

- 1) the maximum air flow rating of the extraction fan (a Shop-Vac suction fan) used in the diagnostic testing at 180 cubic feet per minute (cfm).
- 2) the maximum allowable flow rate at 72 cfm based on the maximum concentrations of the contaminants of concern compared against BAAQMD Trigger Levels as presented in Table 2-5-1 of BAAQMD Regulation 2 Rule 5, and
- 3) the maximum actual flow rate of 24 cfm measured during the diagnostic testing and the maximum concentrations of the contaminants of concern.

Note for case 2, the trigger level limit was set by the BAAQMD Chronic Trigger Level for carbon tetrachloride of 4.3 pounds-mass per year (lbm/yr). No other contaminant of concern exceeded its Chronic Trigger Level yearly mass removal limit.

On a daily basis, under all scenarios the total mass of VOCs removed was determined to be significantly less than the 1-lbm/day. Trinity notes that an exemption to the BAAQMD rules may apply for this project under Rule 8-47-402, provided that a health risk screening analysis for benzene, vinyl chloride, perchloroethylene, methylene chloride and trichloroethylene is approved by the APCO. Trinity requests BAAQMD's assistance in this determination, and if applicable seeks such an exemption.

As provided in the specifications for GCX VOC Series unit; the unit has selectable fan speeds, of:

- 1 - 40 cfm
- 2 - 60 cfm
- 3 - 90 cfm
- 4 - 140 cfm
- 5 - 270 cfm

At the rated fan speeds the unit can be operated at fan speeds 1 and 2 and comply with the above stated discharge limits. Although friction losses within the extraction wells and conveyance piping would likely allow for higher operating fan speeds (similar to what was observed in the diagnostic testing).

Further the GCX VOC Series unit is equipped with 25 lbm of VOC absorbing carbon filters which will act to reduced VOC emissions to the atmosphere. At the 72 cfm extraction rate, it is estimated that 13.6 lbm of total VOCs would be extracted (Table 6) in one year; assuming a 90% of influent VOC concentration reduction and a 50% absorption efficiency rate, the carbon filters would be spend in about one-year of operation.

Sampling and Analysis Plan for Vapor Effluent prior to Discharge to Atmosphere

Trinity will implement the following sampling and analysis plan (SAP) to characterize and monitor air/vapor quality prior to any discharge to the atmosphere. Trinity anticipates that the initial sub-slab vapor extracted from the site will be of the highest concentrations, and as such, initial system shakedown testing of extracted and treated vapor will be on a daily frequency, with sample analyses performed on a rushed (12-hr) turn-around basis by a State of California certified laboratory.

The extensive sub-slab baseline sampling demonstrated that sub-slab air is impacted by four chlorinated VOCs, specifically PCE, TCE, Chloroform and CT. EPA method TO-15 tests for the four VOCs of concerned and as such, EPA method TO-15 analysis will be performed on samples collected on the sub-slab air process stream.

Trinity proposes sampling waste (effluent) discharge according to the schedule listed below:

Sample time following treatment start-up	Pretreatment Influent	Post Treatment Effluent
0-hrs (shake down testing)	TO-15	
24-hrs (shake down testing)	TO-15	TO-15
48-hrs (shake down testing)	TO-15	TO-15
72-hrs (shake down testing)	TO-15	TO-15
1-week (shake down testing)	TO-15	TO-15
2-weeks	TO-15	TO-15
4-weeks	TO-15	TO-15
6-weeks	TO-15	TO-15
8-weeks	TO-15	TO-15
12-weeks	TO-15	TO-15
16-weeks	TO-15	TO-15
At 3-month (quarterly) interval until system shut-down	TO-15	TO-15

Spent carbon will be changed out when VOC breakthrough is achieved, and limit possible emissions to less than 1-pound per day of total VOCs.

Application for Authority to Construct
BAAQMD
649 Pacific Ave.
Alameda, California
March 7, 2008

Other information deemed necessary by the executive Officer.

No sensitive receptors, such as schools or hospitals are located within 1,000 feet of the subject property, and as such, Trinity requests that the public notification requirements be exempt from this application. The nearest school to the site is the College of Alameda located approximately 1,200 feet northeast of the Site on the east side of Atlantic Avenue.

Further, as presented in Table 6, the anticipated discharge will be well below the 1-pound per day abatement limit, and as such, the estimated emissions for the sub-slab depressurization/mitigation system may qualify for an exemption under Rule 8-47-402. Trinity would appreciate the BAAQMD assistance in a determination if such an exemption can be applied to the propose project.

This application is being submitted for your review and approval. Trinity has not included any permit fees at this time, as a representative from your office has informed Trinity that construction and permit to operate fees are set on a case-by-case basis depending on the nature of the discharged effluent. Trinity will forward appropriate fees upon request from the BAAQMD.

If you have any questions regarding this document, please call Trinity at (831) 685-1217.

Sincerely,

TRINITY SOURCE GROUP, INC.



David A. Reinsma, PG
President and Principal Geologist



Eric J. Choi
Staff Scientist

Attachments

Attachment A: GCX VOC unit specifications,

Figure 1: site location,

Sheet 1: location map and drawing index,

Sheet 2: system layout,

Sheet 3: section A-A'

Sheet 4: extraction well detail

Sheet 5: miscellaneous details

Attachment B: *Sub – Slab Vapor Mitigation Report*- table 6,

Attachment C: BAAQMD forms,

Form: P-101B,

Application for Authority to Construct
BAAQMD
649 Pacific Ave.
Alameda, California
March 7, 2008

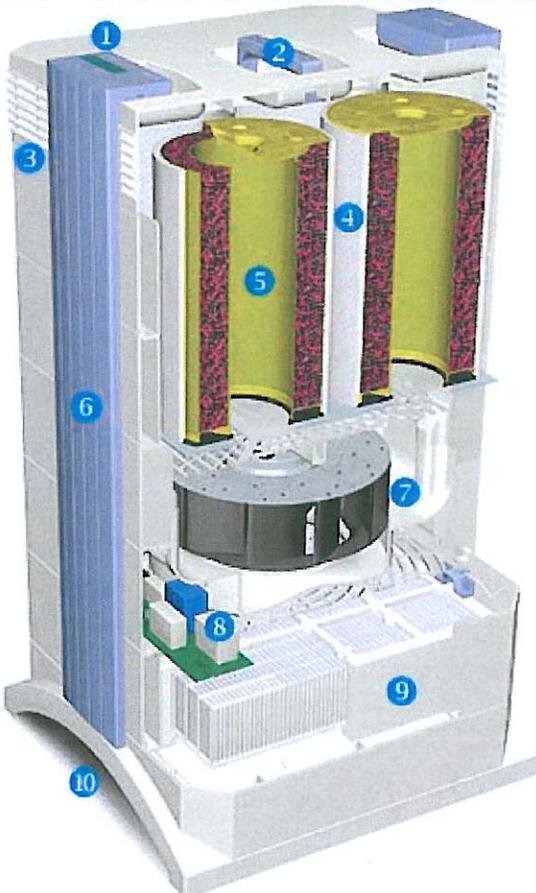
Form: G to describe the source, and

Form: P for the emission point.

ATTACHMENT A

GCX VOC Unit Specifications

GCX VOC specifications.

Specifications	Other Information
	<p>Customized Gas and Odor Control The GCX Series is IQAir's highest capacity air cleaner range with customized filters for specific gaseous contaminants and odors. Just like a professional gas mask, IQAir maximizes filter efficiency for different gases and odors by offering the right filter cartridge. And while gas and odor control are a particular strength of these systems, the GCX Series also offers excellent filtration efficiency for particles.</p> <p>The main difference between the GCX and its smaller sibling the GC is, that the GCX contains 25 lbs. of gas phase media while the GC Series contains 12 lbs. In addition the GCX Series features larger pre- and post-particle filters. As a result the maximum air delivery of the GCX is about 20% higher than that of the GC.</p>
<ol style="list-style-type: none">1. User Control Panel2. Carrying Handle3. No-Draft Diffuser4. Particle Post-Filter Sleeves5. Gas and Odor Filter Cartridges6. Snap-Open Locking Arms7. High-Performance Centrifugal Fan8. Advanced Fan Control9. Pre-Max Pre-Filter (Class H11L)10. Dual Floor Air Intake	<p>Gas Cartridge Technology Each IQAir® GCX model contains four reusable filter cartridges with up to 25 lbs. of gas phase media. A wide range of differently formulated cartridges are available to maximize the filtration efficiency for different types of gaseous contaminants. Since IQAir® gas filter cartridges are reusable, replacing them is not only economical, but also environmentally friendly.</p>

General

Number of Selectable Fan Speeds	5
Air Delivery (with new filters installed) per Speed	1 - 40 cfm 2 - 60 cfm 3 - 90 cfm 4 - 140 cfm 5 - 270 cfm
Maximum Coverage Area	1200 sq ft (based on maximum fan speed and an 8.5 ft ceiling)
System Efficiency for Particles	99% or more at 0.3 microns 95 for smaller particles
Power Requirements	115 VAC 50-60 Hz The entire electrical system is UL certified.
Energy Consumption (Max)	195 W
Standby Energy Consumption	2.5 W
Power Cable	Grounded Detachable 6 foot
Dimensions	H 40" W 15" D 16"
Net Weight (including filters)	80 lbs
Warranty Period	1 yr on unit including fan motor, excluding filters
Casters	Optional casters (Mobility 56) sold separately.

Filters

Number of Filter Stages	3 (particle pre-filtration, gas absorption and particle post-filtration)
Total Number of Replacement Filters	9 (1 HEPA-type pre-filter, 4 gas cartridges and 4 post-filter sleeves)
Particulate Pre-Filter	Mini-pleat HEPA filter with efficiency of 98% at .3 microns

High-Efficiency Particulate Filtration

The particulate filtration GCX units complements the gaseous filtration process by removing over 97% of particles before they can reach the gas phase media. This increases the efficiency and life of the media by preventing its pores from clogging. The GXC units' overall filtration efficiency for particles is 97% at .3 microns. The post filter is electrostatically charged to trap particulate pollutants and microorganisms (bacteria and viruses)

For more critical filtration of microbiological contaminants, bacteria, and viruses see our [Cleanroom Series](#) or [Dental Series](#) models.

Amount of Gas Phase Filter Media	Between 18 and 25 lbs. depending on media
Cartridge Design	Galvanized, reusable metal cylinders
Particulate Post-Filter	Four electrostatically charged fiber media sleeves
Filter Life	Pre-Filter 6-18 months Sleeves 2-3 years Cartridges up to 3 years (filter life is dependant on the operating environment)

Housing

Number of Housing Modules	10
Housing Material	PS-ABS and ABS(UV-stabilized)
Color of Main Housing/Arms	Light Gray/Blue
Air Intake	Two side openings at base of unit
Air Outlet	Via diffuser with horizontal 320 degree opening on top of unit

Fan

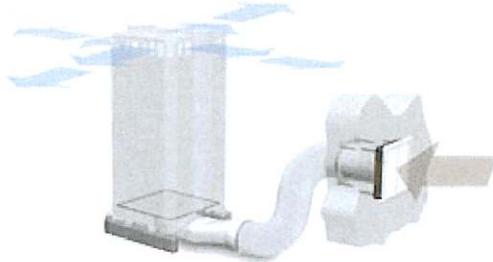
Fan Type	Centrifugal fan, backward curved, single inlet
Bearings	Maintenance-free steal ball bearings
Speed Regulation	Voltage reductions via capacitor switching

Electronic Control Panel

Control Panel Finish	Polyester overlay panel
Main Display	Liquid crystal display, 16 character x 2 line
Status and Indicator LEDs	Timer Status LED, Filter Life Status LEDs, Fan Speed Indicator LEDs
Display Languages	English, French, German, Italian, Spanish

InFlow W125

Product Summary



The InFlow W125 ducting kit enables any IQAir filtration system to draw air through a wall or window vent into an indoor environment. Use of the InFlow W125 is advisable when the main pollution source is located in adjacent indoor environments or outdoors.

Enjoy controlled clean air ventilation

An IQAir filter system combined with an InFlow W125 can be installed to draw outdoor air into an indoor environment. In this setup, an IQAir serves as a ventilation system, bringing in oxygen-rich outdoor air and a filtration system, which removes undesirable outdoor pollutants such as pollen, mold spores, dust and exhaust soot. As a result, fresh and filtered outside air comes into the room.

Create clean positive pressure areas

An IQAir filter system combined with an InFlow W125, which draws air into a room will in most cases allow the creation of a positive pressure. This positive pressure helps to clean the air in a room by constantly flushing out air pollutants and by preventing outside pollutants from entering the room.

Application Examples

- Protection of allergy sufferers from pollen exposure in their home
- Protection of patients from microbiological exposure (e.g. aspergillus) in a hospital
- Creation of clean research or manufacturing areas (controlled environments)
- Protection of plant control rooms from corrosive contaminants
- Creation of a clean zone within a home or office which helps to prevent outdoor pollution from nature, factories, traffic, agriculture to enter

Using an InFlow W125 with an IQAir system can improve indoor air quality by:

- diluting polluted air with clean air
- flushing out air pollutants
- reducing influx of new outside pollutants due to a build-up of positive pressure
- by increasing oxygen content in indoor air (when outdoor air is being drawn in)
- Installation



The InFlow W125 kit can be easily added to any IQAir filtration unit in a matter of minutes. As regards the building,

the only modification required is a 5" hole in a window, wall or door which allows you to connect the InFlow W125 aluminum duct.

The duct may be freely flexed to allow control over the desired vent location. It is expandable in length, from 10" in its original compressed state, to 39" when fully extended.

IQAir Compatibility

Compatible with all IQAir filtration devices. Not compatible with the accessories PF40, VMF, VM FlexVac, VM InFlow and FlexVac.

OutFlow W125

Product Summary



The OutFlow W125 kit allows filtered air from any IQAir® filtration device to be directed through a wall or window vent. The OutFlow W125 kit can be used to:

- create clean areas
- deliver filtered air into cleanrooms or to the outside
- create negative pressure areas
- create positive pressure areas

Clean Area and Cleanroom Use

The supply of filtered air into an environment helps reduce air pollution in that environment by dilution and the creation of positive pressure, which reduces the infiltration of polluted air from outside the environment. With the OutFlow W125 kit, the filtration device is positioned outside the clean area or cleanroom, saving valuable space and reducing noise exposure. It also eliminates the danger of housing leakage, making it suitable even for certified cleanrooms.

Create clean positive pressure areas

An IQAir filter system combined with an InFlow W125, which draws air into a room will in most cases allow the creation of a positive pressure. This positive pressure helps to clean the air in a room by constantly flushing out air pollutants and by preventing outside pollutants from entering the room.

Emission Control

Legislation limits the emission of polluted air to the outdoors. The OutFlow W125 filters air before it is exhausted outdoors to help meet environmental emission standards.

Isolation Areas

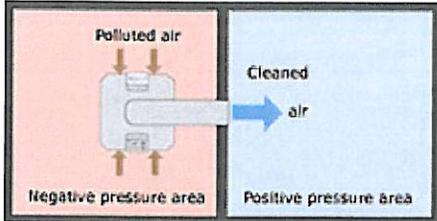
Infection control (e.g. tuberculosis) in hospitals and similar facilities demands the creation of negative pressure environments to reduce the spread of airborne microorganisms. The OutFlow W125 permits operation of the filter unit from within the isolation area, eliminating the danger of housing leakage into the surrounding area.

The OutFlow W125 kit easily modifies any IQAir filtration unit. Simply replace the top module of any standard IQAir filtration unit with the TopFlow adapter. All that is needed to install the ducting, wall tube and vent is a 5.2" opening in a wall or window. The OutFlow W125 kit also includes a damper and a protective mesh grille which prevents backdrafts and entry of coarse particles when the system is not in use. The large 5" diameter of the ducting ensures

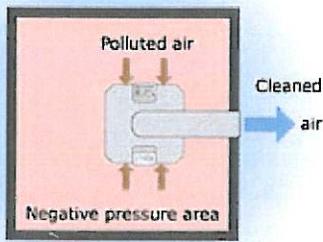
low air resistance.

The aluminum duct may be freely flexed to allow control over the desired vent location. It is expandable in length from 10" in its original compressed state to 39" when fully extended.

Creation of Pressure Differentials



The OutFlow W125 lets you create pressure differentials between different indoor areas. Negative pressure serves to contain pollutants in an isolation area. Positive pressure protects a clean environment from uncontrolled infiltration of airborne contaminants from polluted areas.

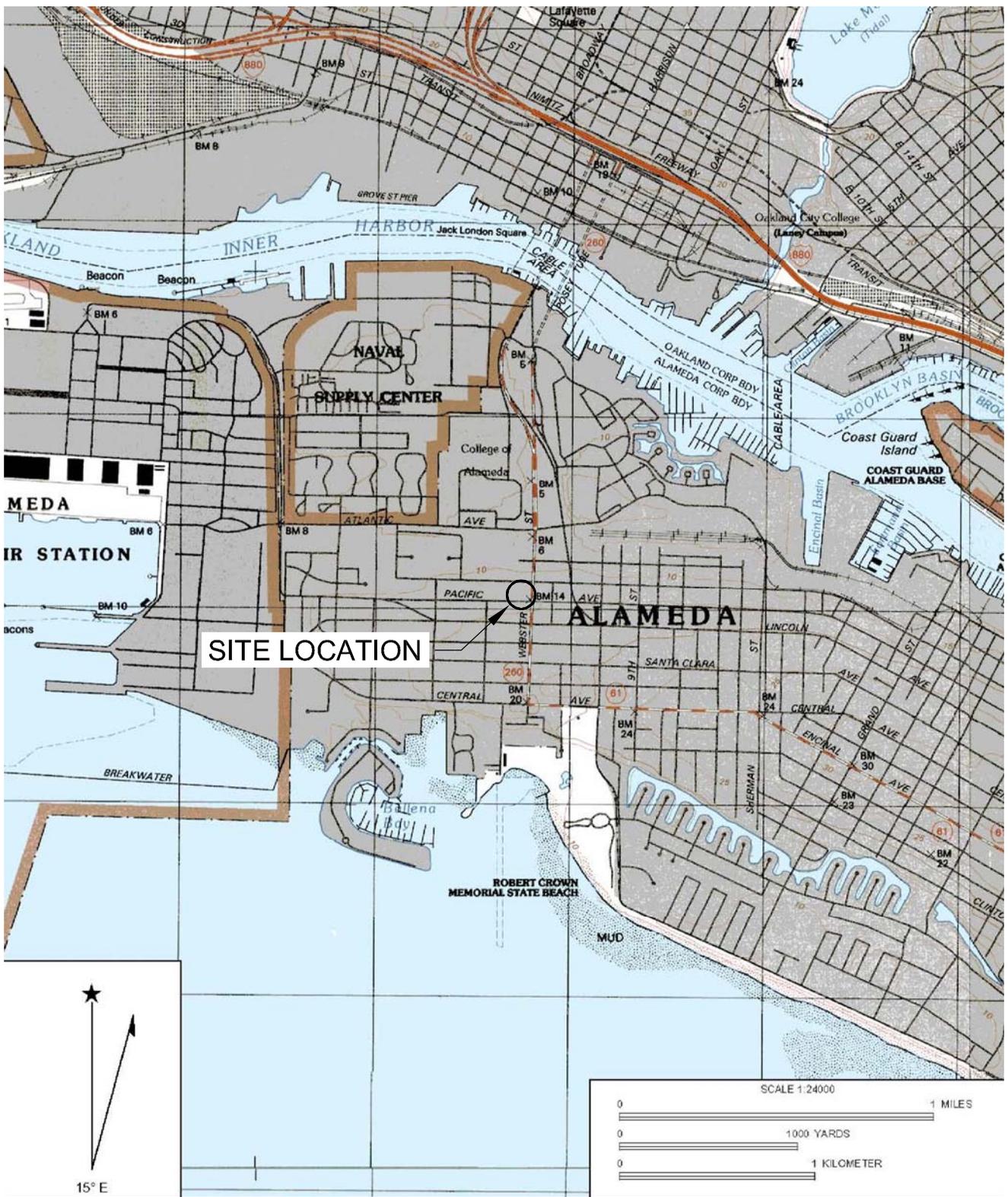


Emission Control

With the OutFlow W125 your IQAir filtration device can be used for emission control. Air is filtered and expelled outdoors via a flexible ducting system. The negative pressure area that is created prevents unfiltered indoor air from leaking outdoors.

IQAir Compatibility

Compatible with all IQAir filtration devices and accessories.



Name: OAKLAND WEST
Date: 5/4/2006

Location: 037° 46' 34.86" N 122° 16' 37.65" W NAD 27
Caption: San Francisco Bay, Oakland West Quadrangle - 1:24,000

REF. 103_002\SLM.DWG
BASEMAP FROM MAPTECH, INC.

PREPARED BY



500 Chestnut Street, Suite 225
Santa Cruz, CA. 95060

Tel: (831) 426-6600 Fax: (831) 426-6602

SITE LOCATION MAP

Searway Property
649 Pacific Avenue
Alameda, California

PROJECT:
103.005.005

FIGURE:

1

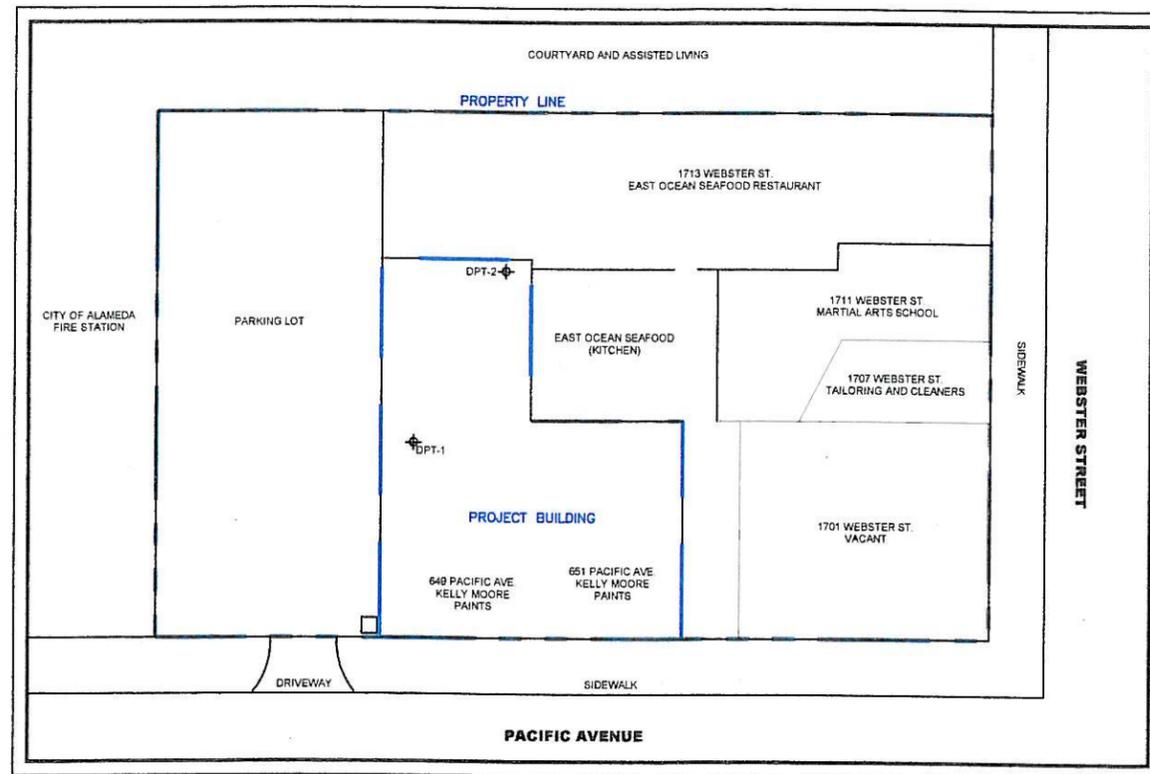
SUB-SLAB VAPOR MITIGATION SYSTEM INSTALLATION PLANS

SEARWAY PROPERTY

649 PACIFIC AVENUE

ALAMEDA, CALIFORNIA

PREPARED BY: TRINITY SOURCE GROUP, INC.



SITE LOCATION MAP
(NOT TO SCALE)

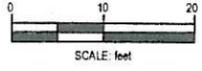
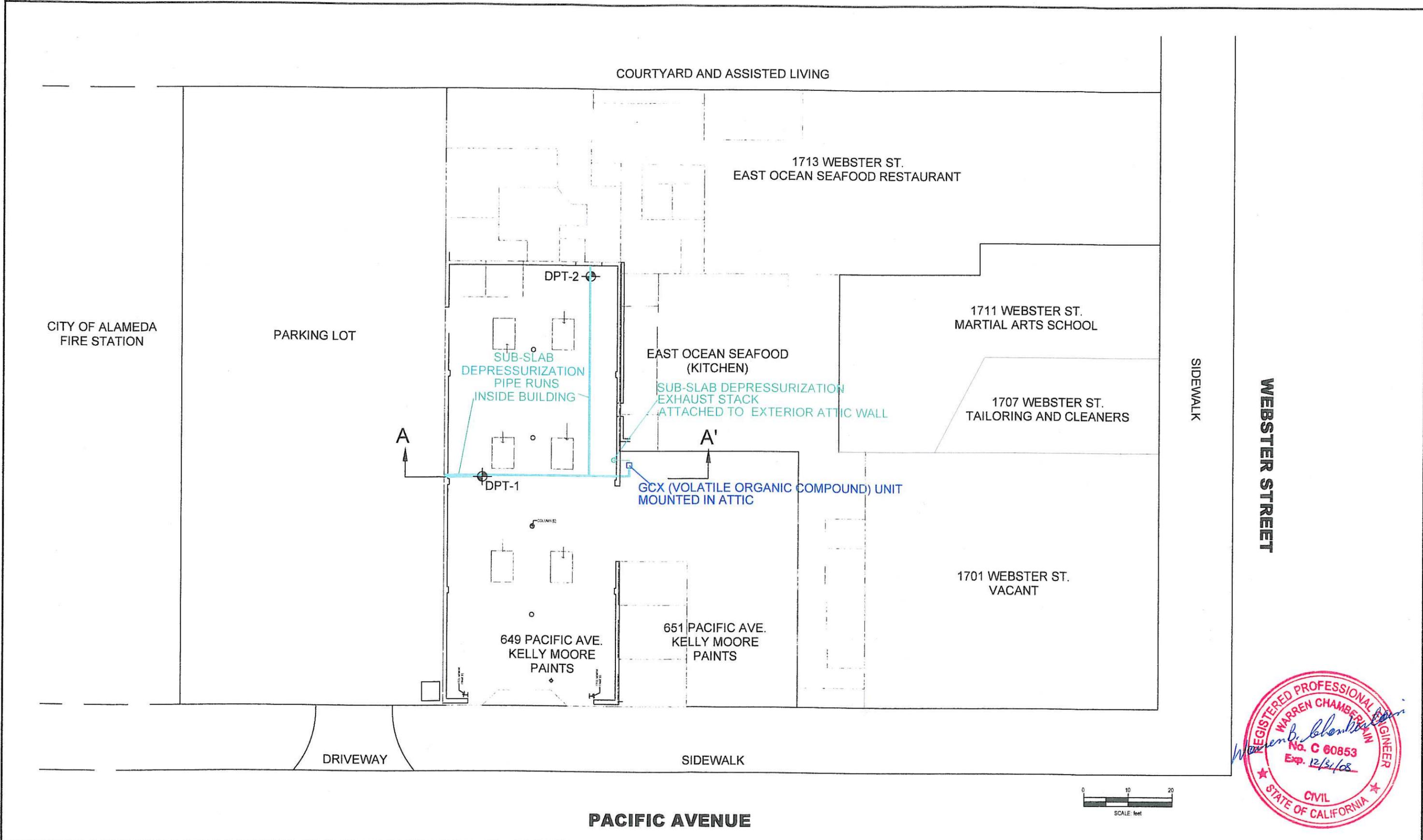
DRAWING INDEX

SHEET NO.	DRAWING TITLE
1	TITLE SHEET, LOCATION MAP AND DRAWING INDEX
2	SYSTEM LAYOUT
3	SECTION A-A'
4	EXTRACTION WELL DETAIL
5	MISCELANEOUS DETAILS



REV.	DATE	DESCRIPTION	BY	CRD.	APP.	DESIGNED BY	TRINITY	SEARWAY PROPERTY	SUB-SLAB DEPRESSURIZATION SYSTEM	SCALE
						W.B. CHAMBERLAIN	500 Chestnut Street, Suite 225	649 PACIFIC AVENUE	TITLE SHEET,	NOT APPLICABLE
						W.B. CHAMBERLAIN	Santa Cruz, California 95060	ALAMEDA, CALIFORNIA	LOCATION MAP, AND	PROJECT NO.
						CHECKED BY	(831) 426-5600 Fax: (831) 426-5602		DRAWING INDEX	103.001.001
						D. REINSMAN				SHEET NO.
						APPROVED BY				OF
						D. REINSMAN				1
						DATE				5
						3-5-08				

Sheet_1_This.dwg



REV.	DATE	DESCRIPTION	BY	CHKD.	APP.

DESIGNED BY W.B. CHAMBERLAIN
 DRAWN BY W.B. CHAMBERLAIN
 CHECKED BY D. REINSMA
 APPROVED BY D. REINSMA
 DATE 3-5-08

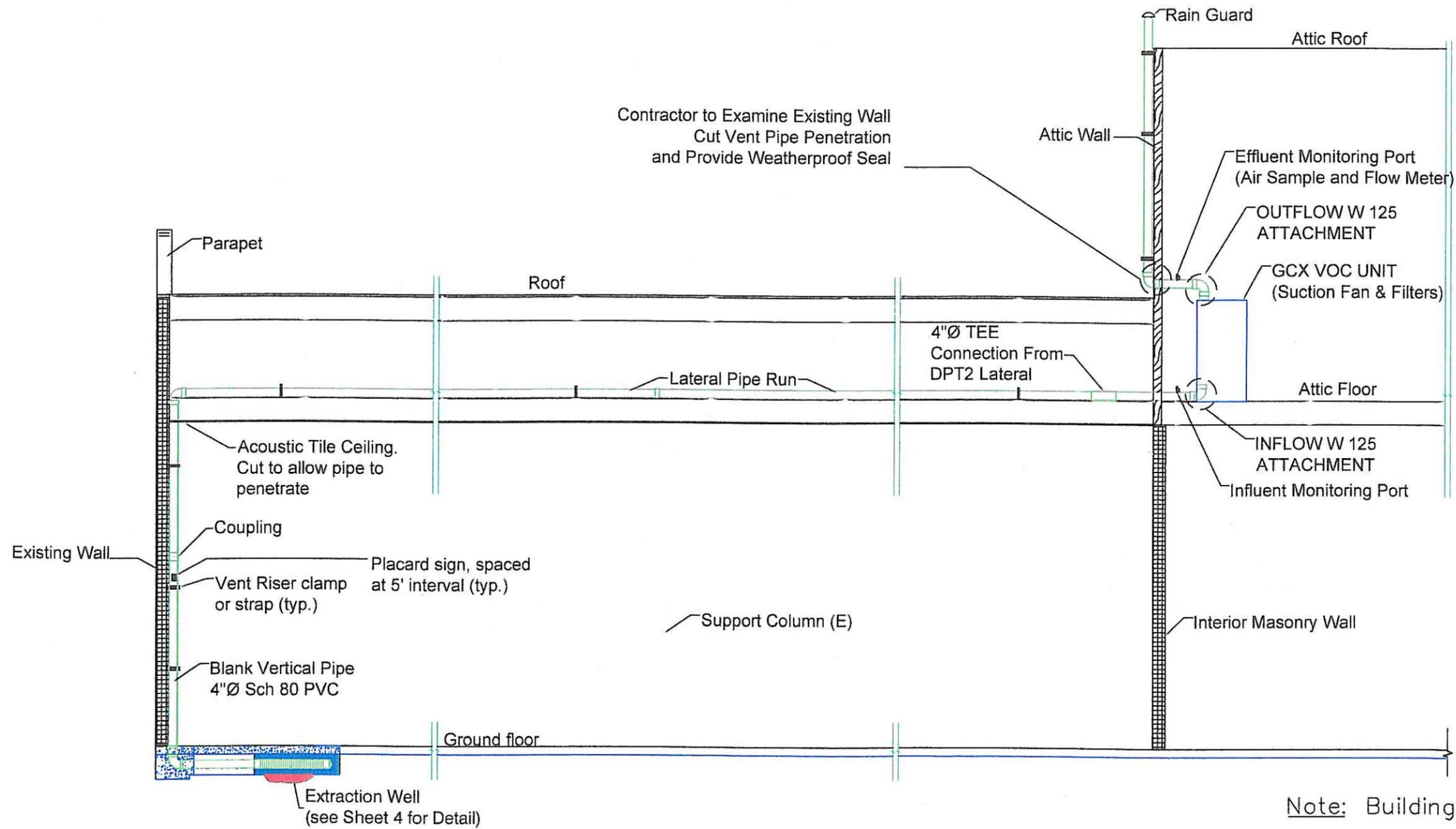
TRINITY
 500 Chestnut Street, Suite 225
 Santa Cruz, California 95060
 (831) 426-5600 Fax: (831) 426-5602

SEARWAY PROPERTY
 649 PACIFIC AVENUE
 ALAMEDA, CALIFORNIA

SUB-SLAB DEPRESSURIZATION SYSTEM
 SYSTEM LAYOUT

SCALE	1' = 20"
PROJECT NO.	103.001.001
SHEET NO.	2 OF 5

Sheet_2_layout.dwg



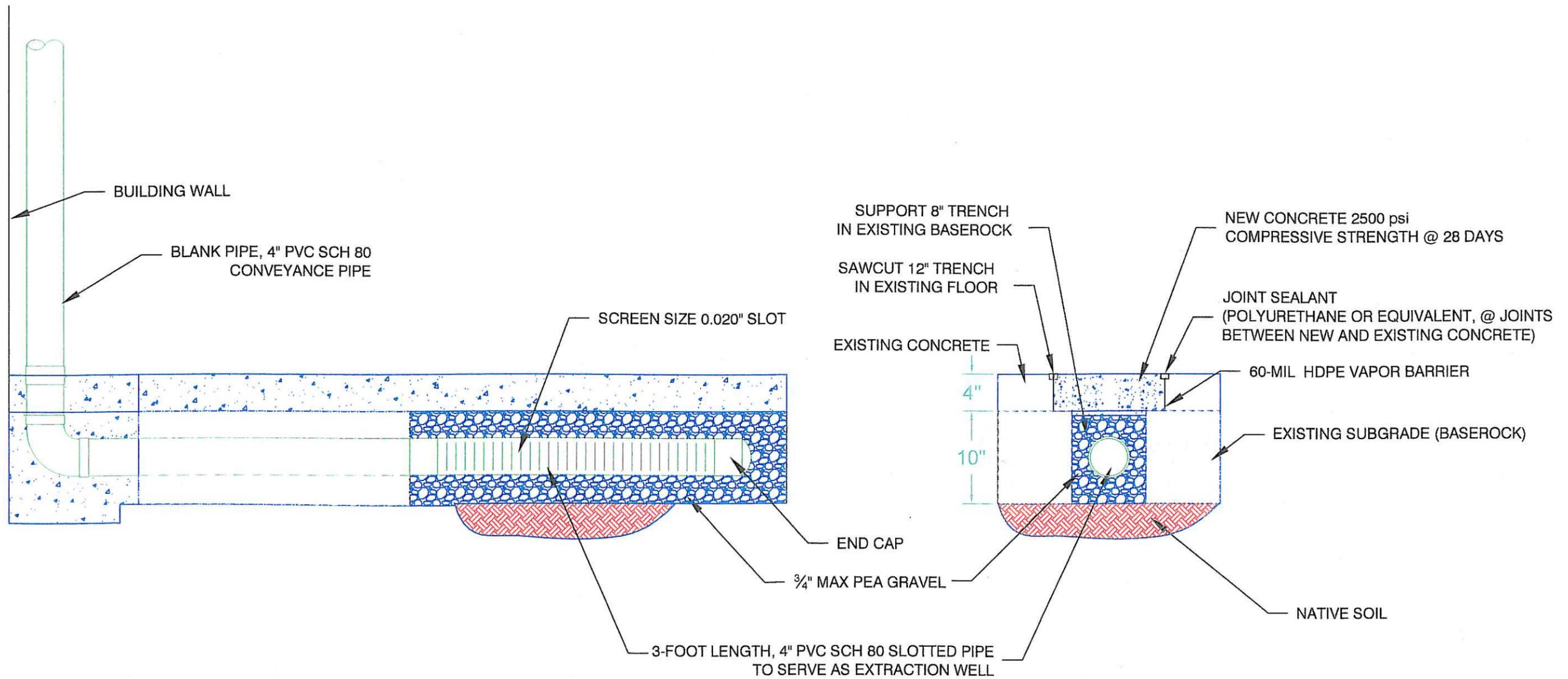
**CONVEYANCE PIPING - VENT RISER DETAIL (SECTION A-A)
VAPOR ABATEMENT SYSTEM DETAIL**

Note: Building Details for illustration purposes only and based on architectural drawings. Installation of vapor abatement piping runs will not modify structural integrity of walls, ceiling or roof.



REV.	DATE	DESCRIPTION	BY	CHK.	APP.	DESIGNED BY	TRINITY	SEARWAY PROPERTY	SUB-SLAB DEPRESSURIZATION SYSTEM	SCALE
						W.B. CHAMBERLAIN	500 Chestnut Street, Suite 225	649 PACIFIC AVENUE	SECTION A-A'	1" = 5'
						W.B. CHAMBERLAIN	Santa Cruz, California 95060	ALAMEDA, CALIFORNIA	WALL, CEILING AND ROOF PIPING RUNS	PROJECT NO.
						D. REINSMA	(831) 426-5600 Fax: (831) 426-5602			103.001.001
						D. REINSMA				SHEET NO.
						DATE				3
						3-5-08				OF
										5

Sheet 3 - Section A-A.dwg



PIPE - WELL LATERAL DETAIL (TYPICAL)

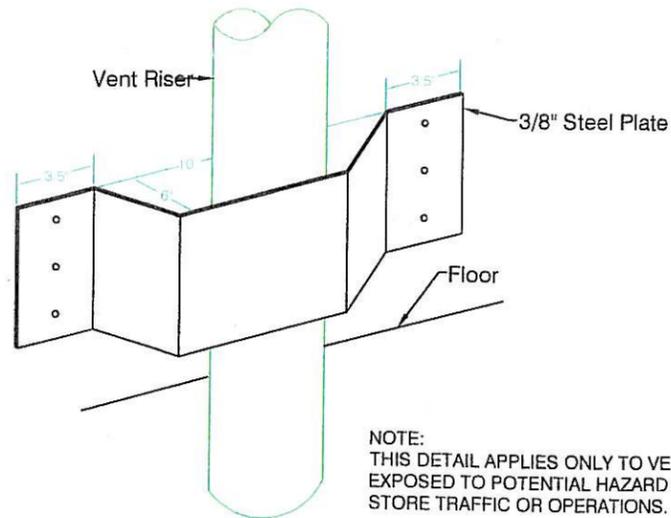
TRENCH DETAIL (TYPICAL)

TYPICAL EXTRACTION WELL DETAIL
BELOW GROUND COMPLETION



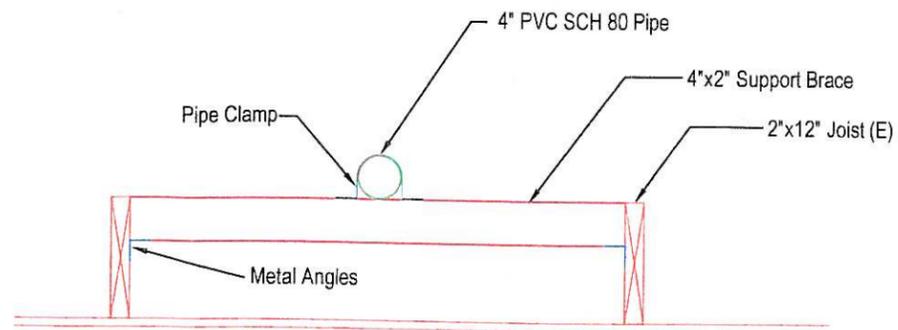
REV.	DATE	DESCRIPTION	BY	CHKD.	APP.	DESIGNED BY	TRINITY	SEARWAY PROPERTY	SUB-SLAB DEPRESSURIZATION SYSTEM	SCALE
						W.B. CHAMBERLAIN	500 Chestnut Street, Suite 225	649 PACIFIC AVENUE	EXTRACTION WELL DETAIL	1"=2'
						W.B. CHAMBERLAIN	Santa Cruz, California 95060	ALAMEDA, CALIFORNIA		PROJECT NO. 103.001.001
						CHECKED BY D. REINSMA	(831) 426-5600 Fax: (831) 426-5602			SHEET NO. 4 OF 5
						APPROVED BY D. REINSMA				
						DATE 3-5-08				

Sheet_4_LTR.dwg



NOTE:
THIS DETAIL APPLIES ONLY TO VENT RISERS
EXPOSED TO POTENTIAL HAZARD FROM
STORE TRAFFIC OR OPERATIONS.

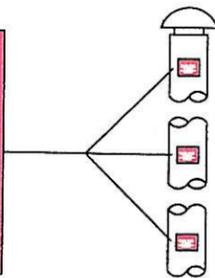
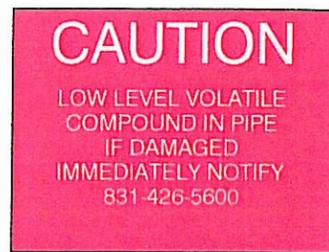
VENT RISER GUARD (Optional)



CONVEYANCE PIPE SUPPORT ALONG CEILING

(Spaced every 10 feet along ceiling)

NOTE:
THIS DETAIL APPLIES ONLY TO SECTION A-A' PIPE RUN.
PIPE RUNS FROM DPT2 CLAMP TO EXISTING JOISTS.



3" x 4" WIDE, ALL SIGNS PLASTIC
WITH ADHESIVE BACKING,
LARGE LETTERS MIN. 1/2" HIGH
WHITE LETTERS ON RED BACKGROUND.

THIS SIGN SHALL BE POSTED ON
EACH VENT RISER AT FIVE FOOT
(5) INTERVALS ALONG PIPE.

TYPICAL SIGN ON VENT RISER



REV.	DATE	DESCRIPTION	BY	CHKD.	APP.

DESIGNED BY W.B. CHAMBERLAIN
DRAWN BY W.B. CHAMBERLAIN
CHECKED BY D. REINSMA
APPROVED BY D. REINSMA
DATE 3-5-08

TRINITY

500 Chestnut Street, Suite 225
Santa Cruz, California 95060
(831) 426-5600 Fax: (831) 426-5602

SEARWAY PROPERTY
649 PACIFIC AVENUE
ALAMEDA, CALIFORNIA

SUB-SLAB DEPRESSURIZATION SYSTEM

MISCELLANEOUS DETAILS

SCALE NA	
PROJECT NO. 103.001.001	
SHEET NO. 5	OF 5

ATTACHMENT B

Sub-Slab Vapor Mitigation Report

TABLE 6

Table 6
Sub-Slab Depressurization Test - Mass Removal Estimate

Searway Property
649 Pacific Avenue
Alameda, California

Compound	Flow Rate (cfm)	Extracted Air Volume (m ³ /hr)	Influent Total VOCs µg/m ³	Pounds of VOCs Extracted (lbm/hour)	BAAQMD (1-hr max) Acute Trigger Level (lbm/hour)	Operation Hour (hr)	Pounds of VOCs Extracted (lbm/day)	Total Pounds of VOCs Extracted (lbm/yr)	BAAQMD Chronic Trigger Level (lbm/yr)
At maximum rated volumetric flow rate for Shop-Vac air-flow									
Stoddard	180	306	3,000	2.02E-03	--	24.0	4.86E-02	17.73	--
CT	180	306	1,800	1.21E-03	4.20E+00	24.0	2.91E-02	10.64	4.3
Chloroform	180	306	300	2.02E-04	3.30E-01	24.0	4.86E-03	1.77	34.0
TCE	180	306	0	6.61E-08	--	24.0	1.59E-06	0.00	91.0
PCE	180	306	650	4.38E-04	4.40E+01	24.0	1.05E-02	3.84	30.0
Total Mass				3.88E-03			0.093	33.98	
At maximum allowable volumetric flow rate per BAAQMD Trigger Levels									
Stoddard	72	122	3,000	8.10E-04	--	24.0	1.94E-02	7.09	--
CT	72	122	1,800	4.86E-04	4.20E+00	24.0	1.17E-02	4.25	4.3
Chloroform	72	122	300	8.10E-05	3.30E-01	24.0	1.94E-03	0.71	34.0
TCE	72	122	0	2.64E-08	--	24.0	6.35E-07	0.00	91.0
PCE	72	122	650	1.75E-04	4.40E+01	24.0	4.21E-03	1.54	30.0
Total Mass				1.55E-03			0.037	13.59	
At maximum observed diagnostic test volumetric flow rate									
Stoddard	24	41	3,000	2.70E-04	--	24.0	6.48E-03	2.36	--
CT	24	41	1,800	1.62E-04	4.20E+00	24.0	3.89E-03	1.42	4.3
Chloroform	24	41	300	2.70E-05	3.30E-01	24.0	6.48E-04	0.24	34.0
TCE	24	41	0	8.81E-09	--	24.0	2.12E-07	0.00	91.0
PCE	24	41	650	5.85E-05	4.40E+01	24.0	1.40E-03	0.51	30.0
Total Mass				5.17E-04			0.012	4.53	

Notes:

CT = Carbon Tetrachloride
PCE = Tetrachloroethane
TCE = Trichloroethene
vocs = volatile organic compounds
cfm = cubic feet per minute
lbm/day = pound mass per day
lbm/yr = pound mass per year
lbm/hour = pound mass per hour
hr = hour

-- = BAAQMD Trigger Level Not Established (per table 2-5-1)
BAAQMD = Bay Area Air Quality Management District

Conversion factors

1 ft³ = 0.02832 m³
1 cfm = 1.699 (1.700) m³/hr
1 pound (lbm) = 453.6 grams

ATTACHMENT C
BAAQMD FORMS



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
 939 Ellis Street, San Francisco, CA 94109
 Engineering Division (415) 749-4990
 www.baaqmd.gov fax (415) 749-5030

Form P-101B
 Authority to Construct/
 Permit to Operate

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1. Application Information

BAAQMD Plant No. _____ Company Name Searway Property
 Equipment/Project Description Active Sub-Slab Depressurization System

2. Plant Information *If you have not previously been assigned a Plant Number by the District or if you want to update any plant data that you have previously supplied to the District, please complete this section.*

Equipment Location 649 Pacific Ave.
 City Alameda Zip Code 94501
 Mail Address 2424 Central Ave.
 City Alameda State CA Zip Code 94501
 Plant Contact Don Lindsey Title Timber Del Properties, L.L.C.
 Telephone (510) 520-3453 Fax (510) 523-1570 Email donlindsey@jps.net

NAICS (North American Industry Classification System) see www.census.gov/epcd/naics02/naico602.htm

3. Proximity to a School (K-12)

The sources in this permit application (check one) Are Are not within 1,000 ft of the outer boundary of the nearest school.

4. Application Contact Information *All correspondence from the District regarding this application will be sent to the plant contact unless you wish to designate a different contact for this application.*

Application Contact David Reinsma, Trinity Source Group, Inc. Title President & Principal Geologist
 Mail Address 500 Chestnut Street, Suite 225
 City Santa Cruz State CA Zip Code 95060
 Telephone (831) 426-5600 Fax (831) 426-5602 Email dar@tsgcorp.net

5. Additional Information *The following additional information is required for all permit applications and should be included with your submittal. Failure to provide this information may delay the review of your application. Please indicate that each item has been addressed by checking the box. Contact the Engineering Division if you need assistance.*

- If a new Plant, a local street map showing the location of your business
- A facility map, drawn roughly to scale, that locates the equipment and its emission points
- Completed data form(s) and a pollutant flow diagram for each piece of equipment. (See www.baaqmd.gov/pmt/forms/)
- Project/equipment description, manufacturer's data
- Discussion and/or calculations of the emissions of air pollutants from the equipment

6. Trade Secrets *Under the California Public Records Act, all information in your permit application will be considered a matter of public record and may be disclosed to a third party. If you wish to keep certain items separate as specified in Regulation 2, Rule 1, Section 202.7, please complete the following steps.*

- Each page containing trade secret information must be labeled "trade secret" with the trade secret information clearly marked.
- A second copy, with trade secret information blanked out, marked "public copy" must be provided.
- For each item asserted to be trade secret, you must provide a statement which provides the basis for your claim.

7. Small Business Certification You are entitled to a reduced permit fee if you qualify as a small business as defined in Regulation 3. In order to qualify, you must certify that your business meets all of the following criteria:

- The business does not employ more than 10 persons and its gross annual income does not exceed \$600,000.
- And the business is not an affiliate of a non-small business. (Note: a non-small business employs more than 10 persons and/or its gross income exceeds \$600,000.)

8. Accelerated Permitting The Accelerated Permitting Program entitles you to install and operate qualifying sources of air pollution and abatement equipment **without waiting for the District to issue a Permit to Operate**. To participate in this program you must certify that your project will meet all of the following criteria. Please acknowledge each item by checking each box.

- Uncontrolled emissions of any single pollutant are each less than 10 lb/highest day, or the equipment has been precertified by the BAAQMD.
- Emissions of toxic compounds do not exceed the trigger levels identified in Table 2-5-1 (see Regulation 2, Rule 5).
- The project is not subject to public notice requirements (the source is either more than 1000 ft. from the nearest school, or the source does not emit any toxic compound in Table 2-5-1).
- For replacement of abatement equipment, the new equipment must have an equal or greater overall abatement efficiency for all pollutants than the equipment being replaced.
- For alterations of existing sources, for all pollutants the alteration does not result in an increase in emissions.
- Payment of applicable fees (the minimum permit fee to install and operate each source). See Regulation 3 or contact the Engineering Division for help in determining your fees.

9. CEQA Please answer the following questions pertaining to CEQA (California Environmental Quality Act).

- A. Has another public agency prepared, required preparation of, or issued a notice regarding preparation of a California Environmental Quality Act (CEQA) document (initial study, negative declaration, environmental impact report, or other CEQA document) that analyzes impacts of this project or another project of which it is a part or to which it is related? YES NO If no, go to section 9B.

Describe the document or notice, preparer, and date of document or expected date of completion:

- B. List and describe any other permits or agency approvals required for this project by city, regional, state or federal agencies:

Alameda County Health Care Services Agency
City of Alameda, Planning and building department

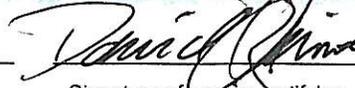
- C. List and describe all other prior or current projects for which either of the following statements is true: (1) the project that is the subject of this application could not be undertaken without the project listed below, (2) the project listed below could not be undertaken without the project that is the subject of this application:

Building Permit for Active Sub-Slab Depressurization System

10. Certification I hereby certify that all information contained herein is true and correct. (Please sign and date this form)

David Reinsma

Senior Geologist



2/22/2008

Name of person certifying (print)

Title of person certifying

Signature of person certifying

Date

Send all application materials to the BAAQMD Engineering Division, 939 Ellis Street, San Francisco, CA 94109.



BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 Ellis Street . . . San Francisco, CA 94109. . . (415) 749-4990 FAX (415 749-5030

Form G is for general air pollution sources. Use specific forms when applicable. If this source burns fuel, then also complete Form C.

- 1. Business Name: Searway Property Plant No:
2. SIC No.: Date of Initial Operation
3. Name or Description: Active Sub Slab Depressurization System Source No.: S-1,2
4. Make, Model, and Rated Capacity of Equipment: IQAir, GCX VOC,270 cfm max
5. Process Code1 G-8 Material Code2 8999 Usage Unit2 Pounds
6. Total throughput, last 12 mos. 0 usage units2 Maximum operating rate:72 cfm
7. Typical % of total throughput: Dec-Feb25 % Mar-May25 % Jun-Aug25 % Sep-Nov25 %
8. Typical operating times: 24 hrs/day 7 days/week 52 weeks/year
9. For batch or cyclic processes: minutes/cycle minutes between cycles
10. Exhaust gases from source: Wet gas flowrate 24 cfm at 65 F
Approximate water vapor content 0.05 volume%

EMISSION FACTORS (at maximum operating rate)

If this form is being submitted as part of an application for an authority to construct, completion of the following table is mandatory. If not, and the Source is already in operation, completion of the table is requested but not required.

If this source also burns fuel, do not include those combustion products in the emission factors below; they are accounted for on Form C. If source test or other data are available for composite emissions only, estimate from those data the emissions attributable to just the general process and show below.

Check box if factors apply to emissions after Abatement Device(s).

Table with 2 columns: Emission Factors lb/Usage Unit 2 and Basis Code 3. Rows include Particulate, Organics, Nitrogen Oxides, Sulfur Dioxide, Carbon Monoxide, and Other.

18. With regard to air pollutant flow from this source, what sources(s), abatement device(s) and/or emission point(s) are immediately downstream?

S- S- S- A A- A-
P- 1 P- P- P- P-

1See Tables G-1 through G-7 for code
3See Basis Code Table below

2See Table G5 or the Material Codes Table (available upon request)

Person completing this form: David Reinsma Date: 2/22/2008

Basis Code	
Codes	Method
0	Not applicable for this pollutant
1	Source Testing or other measurement <i>by plant</i>
2	Source Testing or other measurement <i>by BAAQMD</i>
3	Specification from vendor
4	Material balance <i>by plant</i> using engineering expertise and knowledge of process
5	Material balances <i>by BAAQMD</i> using engineering expertise and knowledge of process
6	Taken from AP-42 ("Compilation of Air Pollutant Emission Factors," E.P.A.)
7	Taken from literature, other than AP-42
8	Guess

Process Code Tables for General Air Pollution Sources (Data Form G)	
Table	Process
G-1	Food & Agricultural
G-3	Metallurgical (Secondary Metals)
G-4	Mineral
G-5	Petroleum Refining
G-7	Chemical/Other
G-8	Miscellaneous
G-9	Fugitive Emissions

TABLE G-1
FOOD AND AGRICULTURAL PROCESSES

<u>CODE</u>	<u>PROCESS</u>
1028	Aging
1001	Brewing
1022	Cleaning
1021	Conveying/transferring
1003	Cooking
1020	Cooling/stoning
1004	Cotton ginning - cleaner
1005	Cotton ginning - stick/burr machine
1006	Cotton ginning - unloading fan
1026	Dehydration
1007	Direct fired kiln
1008	Direct fired roaster
1016	Dryer - rotary
1019	Dryer - spray
1023	Dryer - other
1009	Drying tower
1030	Extraction - mechanical
1029	Extraction - solvent
1027	Fermentation
1014	Grinding
1010	Indirect fired kiln
1011	Indirect fired roaster
1007	Kiln - direct fired
1010	Kiln - indirect fired
1012	Liquor aging
1013	Meat smoker
1024	Milling
1025	Oven baking
1035	Packaging
1030	Pressing - extraction
1031	Pressing - other
1015	Prilling
1008	Roaster - direct fired
1011	Roaster - indirect fired
1016	Rotary dryer
1017	Screening
1018	Shipping & receiving
1019	Spray dryer
1032	Sterilization - food/pharmaceutical products
1020	Stoning/cooling
1034	Storage
1033	Sulfuring - fruit/food stuff
1021	Transferring/conveying
1999	Other/not specified

TABLE G-3

METALLURGICAL (SECONDARY METALS)

DRYING (Kilns/Dryers/Ovens)

3002 Calcining kiln
 3003 Concentrate dryer
 3004 Oxide kiln
 3005 Other/not specified

FURNACES

3030 Bake furnace
 3007 Blast furnace
 3008 Casting furnace
 3009 Crucible furnace
 3010 Cupola
 3011 Cupola furnace
 3012 Electric arc furnace
 3013 Flux furnace
 3014 Heat treating furnace
 3015 Horizontal muffle furnace
 3016 Induction furnace
 3017 Open hearth furnace
 3018 Open hearth furnace w/ oxygen lance
 3019 Pot furnace
 3020 Retort furnace
 3059 Reverberatory - rotary
 3022 Reverberatory - sweat
 3021 Reverberatory - other
 3023 Rotary furnace - non-reverberatory
 3024 Smelt-crucible furnace
 3025 Smelt-reverberatory furnace
 3026 Sweating furnace
 3027 Other/not specified

MATERIAL HANDLING/MISCELLANEOUS

3062 Abrasives blasting
 3029 Annealing
 3065 Annealing - continuous
 3063 Anodizing
 3069 Buffing/polishing
 3031 Can making operations
 3046 Casting - miscellaneous
 3033 Chlorination station
 3062 Cleaning - abrasives blasting
 3034 Cleaning - chemical
 3076 Conveying
 3068 Crushing/shredding
 3035 Drawing
 3036 Drilling
 3070 Electroplating - decorative chrome
 3071 Electroplating - hard chrome

3037 Extruding
 3047 Fabricating - miscellaneous
 3039 Finishing - soak pit
 3038 Finishing - other/not specified
 3040 Foil converting
 3041 Foil rolling
 3042 Galvanizing
 3043 Grinding
 3044 Honing
 3045 Lead oxide manufacturing
 3067 Machine shop operations
 3061 Milling/turning
 3046 Miscellaneous casting
 3047 Miscellaneous fabricating
 3048 Mixing
 3064 Non-destructive coating
 3049 Paste mixer (lead batteries)
 3072 Pickling
 3050 Pitch treating (furnace electrode mfg)
 3051 Plating (not chrome)
 3052 Reaming
 3073 Refining
 3053 Rolling
 3054 Sand handling
 3055 Sanding
 3056 Sawing
 3077 Screening
 3060 Sintering
 3075 Soldering
 3057 Storage
 3074 Ventilation
 3066 Welding
 3999 Other/not specified

TABLE G-4

MINERAL PROCESSES

DRYING (Kilns/Dryers/Ovens)

4002 Calcimatic kiln
 4003 Coke dryer
 4004 Curing oven
 4005 Fluidized bed kiln
 4006 Rotary dryer
 4070 Rotary kiln
 4007 Vertical kiln
 4008 Other/not specified

FURNACES

4010 Cupola
 4012 Electric furnace
 4011 Electric induction furnace
 4013 Reverberatory furnace - other
 4014 Reverberatory furnace - recupex
 4015 Reverberatory furnace - regenex
 4071 Rotary - non-reverberatory
 4016 Soda lime genl furnace (glass manufacturing)
 4072 Vertical furnace - other
 4017 Other/not specified

MATERIAL HANDLING/MISCELLANEOUS

4073 Abrasives blasting
 4019 Asphalt blowing
 4020 Asphalt dipping
 4077 Asphalt mixing - batch/continuous
 4078 Asphalt mixing - rotary drum
 4021 Asphalt spraying
 4022 Bagging
 4073 Blasting - abrasives cleaning
 4023 Blasting - quarry
 4024 Blow chamber
 4075 Calcining
 4025 Coal cleaning - therm/flash
 4026 Coal cleaning - therm/fluid bed
 4027 Coal cleaning - therm/multi low pd
 4028 Concrete batching - asbestos/cement products
 4029 Concrete batching - other
 4030 Conveying
 4031 Cooling
 4032 Crushing
 4033 Drying (open air)
 4034 Electric arc melting
 4035 Fiberizing

4036 Forming line (fiberglass manufacturing)
 4037 Furnace room venting
 4074 Glass enamel spraying
 4038 Glass manufacturing - batching
 4039 Glass manufacturing - material receiving
 4040 Glass manufacturing - material storage
 4041 Glass manufacturing - mixing
 4042 Glass manufacturing - molten holding tanks
 4043 Glass manufacturing - other/not specified
 4044 Grinding
 4045 Hold/shakeout
 4046 Hydrator
 4079 Loading - feed/surge/weigh bins
 4080 Loading/unloading (non-mining/quarry)
 4047 Milling
 4048 Mining/quarry - cobbing
 4053 Mining/quarry - crushing (primary)
 4054 Mining/quarry - crushing (secondary)
 4069 Mining/quarry - crushing (tertiary)
 4061 Mining/quarry - loading/unloading
 4049 Mining/quarry - open pit blasting
 4050 Mining/quarry - open pit cobbing
 4051 Mining/quarry - open pit drilling
 4052 Mining/quarry - ore concentrating
 4055 Mining/quarry - stockpiling
 4056 Mining/quarry - stripping
 4057 Mining/quarry - surface blasting
 4058 Mining/quarry - surface drilling
 4059 Mining/quarry - tailing piles
 4060 Mining/quarry - tailings
 4062 Mining/quarry - ventilating
 4068 Mining/quarry - other
 4081 Mixing operations
 4063 Road surfacing
 4073 Sand blasting
 4064 Screening
 4065 Sintering
 4066 Stone cutting
 4067 Storage - contained
 4076 Storage - open
 4037 Venting - furnace room
 4099 Other/not specified

TABLE G-5
PETROLEUM REFINING PROCESSES

<u>CODE</u>	<u>PROCESS</u>	<u>CODE</u>	<u>MATERIAL</u>	<u>USAGE UNITS</u>
5030	Alkylation	195	Hydrocarbons - olefinic	1000 barrels feed
5001	Asphalt oxidizer	30	Asphalt	tons processed
5002	Blow-down system - w/ controls	340	Crude oil *	1000 bbl/day ref cap
5003	Blow-down system - w/o controls	340	Crude oil *	1000 bbl/day ref cap
5004	Catalytic reforming	342	Cat reformer fresh feed	1000 barrels fresh feed
5023	Chemical treating - other	239	Feedstock	1000 barrels
5025	Converting - other/not specified	239	Feedstock	1000 barrels
5005	Cooling tower	428	Water - brackish/sea	1000 gallons
5005	Cooling tower	415	Water - fresh	1000 gallons
5005	Cooling tower	300	Waste Water	1000 gallons
5018	Delayed coking	343	Delayed coke product	tons produced
5027	Distillation - crude	89	Crude oil	1000 barrels
5032	Distillation - vacuum	339	Vacuum distillation feed	1000 barrels
5028	Distillation - other	239	Feedstock	1000 barrels
5034	Flexicoking	346	Coker fresh feed	1000 barrels fresh feed
5007	Fluid cat cracker	344	FCC fresh feed	1000 barrels fresh feed
5008	Fluid coking - cooling	345	Fluid coke product	tons produced
5009	Fluid coking - general	346	Coker fresh feed	1000 barrels fresh feed
5010	Fluid coking - storage	345	Fluid coke product	tons produced
5011	Fluid coking - transportation	345	Fluid coke product	tons produced
5021	Hydrocracking	239	Feedstock	1000 barrels
5026	Hydrogen manufacturing	50	C1-C2 paraffins	million cubic feet
5026	Hydrogen manufacturing	52	C3+ paraffins	1000 barrels feed
5026	Hydrogen manufacturing	188	Naphtha	1000 barrels feed
5022	Hydrotreating/hydrofining	239	Feedstock	1000 barrels
5031	Isomerization	52	C3+ paraffins	1000 barrels feed
5017	Oil-water separator	300	Waste water	1000 barrels
5017	Oil-water separator	427	Process water	1000 gallons
5024	Polymerization	195	Hydrocarbons - olefinic	1000 barrels feed
5012	Process drain - w/controls	442	Waste water - sour	1000 barrels
5012	Process drain - w/controls	300	Waste water	1000 barrels
5013	Process drain - w/o controls	442	Waste water - sour	1000 barrels
5013	Process drain - w/o controls	300	Waste water	1000 barrels
5017	Separator - oil/water	300	Waste water	1000 barrels
5017	Separator - oil/water	427	Process water	1000 gallons
5014	Sludge converter	347	Sludge	tons produced
5029	Solvent extraction	***	(use specific Materials Code)	
5037	Sour water stripping	442	Waste water - sour	1000 barrels
5035	Sulfur removal - other/caustic	238	Refinery fuel gas	million cubic feet
5019	Thermal cracking	446	Thermal cracker fresh feed	1000 barrels feed
5020	Thermal processing - other	446	Thermal cracker fresh feed	1000 barrels feed
5032	Vacuum distillation	339	Vacuum distillation feed	1000 barrels
5015	Vacuum jet - w/ controls	339	Vacuum distillation feed	1000 barrels
5016	Vacuum jet - w/o controls	339	Vacuum distillation feed	1000 barrels
5033	Wastewater storage - ponds	300	Waste water	1000 gallons
5036	Wastewater storage - tanks	300	Waste water	1000 gallons
5993	Other/not specified	80	Coke	tons
5994	Other/not specified	89	Crude oil	1000 barrels
5995	Other/not specified	239	Feedstock	1000 barrels feed
5997	Other/not specified	339	Vacuum distillation feed	1000 barrels
5998	Other/not specified	338	Waste gases	million cubic feet
5999	Other/not specified	321	Other petroleum products	1000 gallons

NOTE: Each process listed in this Table has a specific material associated with it. This combination should be used on the G-Form.

*Code 340 for crude oil for these processes must be used; emissions are dependent on total refinery capacity rather than on throughput. Use code 89 for crude oil in any other process.

TABLE G-7

CHEMICAL PROCESSES

7019	Air blow ml brine	7067	Pressure treating - other
7020	Ammoniating	7068	Prilling
7016	Ammonium sulfate mfg - NH ₃ /H ₂ SO ₄ proc	7153	Process tank
7018	Ammonium sulfate mfg - coke oven byprdcts	7071	Pulpboard manufacturing
7131	Biological oxidation	7072	Pyrolysis
7021	Bodying oil	7073	Reactor - other/not specified
7022	Boiling tub	7074	Regenerator
7023	Brine evaporation	7075	Rubberized fabric mfg - hot melt coating
7096	Calcining - rotary kiln	7076	Rubberized fabric mfg - impregnation
7024	Calcining - other	7077	Rubberized fabric mfg - wet coating
7030	Carbon black manufacturing - other process	7078	Rubberized fabric mfg - other/not spec
7132	Carbon dioxide liquifaction plant	7080	Scrubber
7031	Carpet operation	7081	Seelite exhaust
7032	Caulking	7103	Separating - oil/water
7998	Chemical reaction - other/not specified	7098	Separating - other
7073	Chemical reactor - other/not specified	7290	Sewage - Digesters
7055	Claus - modified 2 stage	7270	Sewage - Disinfection
7056	Claus - modified 3 stage	7230	Sewage - Flow equalization
7057	Claus - modified 4 stage	7210	Sewage - Preliminary treatment
7033	Condensing	7220	Sewage - Primary treatment
7155	Contaminated ground water stripping	7300	Sewage - Reclamation
7156	Contaminated soil remediation	7250	Sewage - Secondary clarifiers
7034	Cooking	7240	Sewage - Secondary treatment
7035	Creosote pressure treating	7280	Sewage - Sludge handling processes
7114	Crystallizing	7260	Sewage - Tertiary treatment
7036	Cyclohex - general	7200	Sewage - Wastewater treatment plant
7151	Dipping/cleaning tank	7058	Sodium carbonate Solvay - NH ₃ recovery
7037	Distillation	7059	Sodium carbonate Solvay - handling
7133	Etching	7060	Sodium carbonate Trona - calcining
7038	Ethylene dichloride mfg - direct chlorination	7061	Sodium carbonate Trona - dryer
7039	Ethylene dichloride mfg - oxychlorination	7146	Sterilization - medical equipment
7023	Evaporation - brine	7089	Sulfate pulping - other/not specified
7110	Evaporation - other	7082	Sulfate pulping - blow tank accumulator
7040	Fabrics manufacturing - bleaching	7083	Sulfate pulping - fluidbed calciner
7041	Fabrics manufacturing - yarn prep	7084	Sulfate pulping - liquor oxidation tower
7042	Fabrics manufacturing - other/not specified	7085	Sulfate pulping - mult-effect evaporation
7152	Feed/holding tank	7086	Sulfate pulping - smelt dissolv tank
7158	Gas collection system	7087	Sulfate pulping - turpentine condenser
7044	Gas purging	7088	Sulfate pulping - washer/screen
7046	Gypsum pond	7090	Sulfite pulping - digester
7130	Hydrochloric acid manufacturing	7091	Sulfite pulping - evaporator
7148	Hydrochloric acid regeneration	7092	Sulfite pulping - liquor recovery
7144	Laboratory	7093	Sulfite pulping - pulp digester
7145	Landfill with gas collection system	7094	Sulfite pulping - smelt tank
7159	Landfill without gas collection system	7095	Sulfite pulping - other/not specified
7132	Liquifaction - CO ₂ plant	7047	Sulfuric acid mfg - chamber process
7053	Liquifaction - diaphragm	7048	Sulfuric acid mfg - contact process
7054	Liquifaction - merc cell	7050	Sulfuric acid mfg - other/not specified
7055	Mod-Claus 2 stage	7049	Sulfuric acid regenerators
7056	Mod-Claus 3 stage	7157	Tank/drum/container cleaning
7057	Mod-Claus 4 stage	7073	Other chemical - reactor
7097	Neutralizing	7998	Other chemical reaction - other/not spec
7062	Nitration reactors	7999	Other process/not specified
7051	Nitric acid - paraxylen gen		
7052	Nitric acid concentrators		
7063	Nitric acid mfg - ammonia oxid new		
7064	Nitric acid mfg - ammonia oxid old		
7131	Oxidation, biological		
7065	Phosphoric acid manufacturing - thermal		
7066	Phosphoric acid manufacturing - wet process		
7147	Phosphoric acid manufacturing - other		
7154	Photographic equipment		

**TABLE G-8
MISCELLANEOUS PROCESSES**

DRYING (Kilns/Dryers/Ovens)

7002 Pigment drying
 7003 Spray drying
 7004 Veneer drying
 7005 Drying - other/not specified

MATERIAL HANDLING

7116 Bagging/packaging
 7007 Drying
 7045 Granulating
 7008 Grinding
 7009 Loading - storage tank
 7010 Loading - tank car
 7108 Milling
 7011 Mixing
 7115 Pelletizing
 7017 Pumping facility - organic liquids
 7012 Sanding
 7014 Storage
 7013 Material handling - other/not spec

MISCELLANEOUS

7109 Abrasives blasting
 7109 Cleaning - abrasives blasting
 8001 Coating operation - powder, other non-solvent
 7105 Cooling - pond
 7104 Cooling - tower
 7106 Cooling - other
 8003 Expanders - plastics, other
 8004 Extruders - plastics, other
 7045 Granulating
 7143 Insulation stripping - wire
 7143 Laser-stripping - wire insulation
 8005 Material working equipment - plastics, other
 7111 Molding/curing - plastics
 7112 Molding/curing - rubber
 7113 Molding/curing - other/not specified
 8002 Oven
 8006 Paper/paperboard handling equipment
 7109 Sand blasting
 7079 Sawmill operation
 7143 Wire insulation stripping - laser
 7107 Woodworking - other/not specified
 8999 Other process - not specified

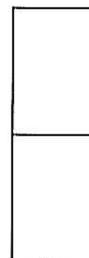
**TABLE G-9
FUGITIVE EMISSION SOURCES**

FUGITIVE EMISSIONS

9000 Combined fugitive emission sources
 9010 Refinery flaring/blowdown
 9070 Refinery pressure relief valves
 9080 Refinery process drains
 9040 Refinery process vessels
 9060 Refinery pumps/compressors
 9030 Refinery vacuum products
 9050 Refinery valves/flanges

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

939 Ellis Street . . . San Francisco, CA . . . 94109 . . . (415) 749-4990 . . . Fax (415) 749-5030



Form P is for well-defined emission points such as stacks or chimneys only; do not use for windows, room vents, etc.

Business Name: Searway Property Plant No: _____

Emission Point No: P-1

With regard to air pollutant flow into this emission point, what source(s) and/or abatement device(s) are **immediately** upstream?

S- 1 S- 2 S- _____ S- _____ S- _____
 S- _____ A- _____ A- _____ A- _____ A- _____ A- _____

Exit cross-section area: 0.087 sq. ft.

Height above grade: 29 ft.

Effluent Flow from Stack

	<i>Typical Operating Condition</i>	<i>Maximum Operating Condition</i>
<i>Actual Wet Gas Flowrate</i>	24 cfm	72 cfm
<i>Percent Water Vapor</i>	0.02 Vol %	0.05 Vol %
<i>Temperature</i>	60 °F	65 °F

If this stack is equipped to measure (monitor) the emission of any air pollutants,

Is monitoring continuous? yes no

What pollutants are monitored? VOCs & Stoddard Solvents

Person completing this form David Reinsma Date 2/22/2008