

## Wickham, Jerry, Env. Health

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**From:** Suzanne McClurkin-Nelson [SMcClurkin-Nelson@deltaenv.com]  
**Sent:** Monday, August 02, 2010 3:24 PM  
**To:** Wickham, Jerry, Env. Health  
**Cc:** denis.l.brown@shell.com; Suzanne McClurkin-Nelson; Regina Bussard; Matt Lambert; Oscar Valdez  
**Subject:** July 2010 Monthly Status Report (System Installation) - 4212 First, Pleasanton (Fuel Leak Case No. RO0000360)  
**Attachments:** 2010-06-29\_Approved ATC Permit.pdf; Installation schedule as of 080210.pdf  
**Importance:** High

Hello Jerry;

The planning permit application package was re-submitted to the City of Pleasanton Planning Division today. The Planning Division associate in charge of our permit request will be on vacation most of September, so we are hoping to get this wrapped up in August and submit a permit request to the Building Department immediately following receipt of the planning permit. Following receipt of the planning department permit, a preliminary determination will be made as to whether the Building Department application will need to go through legal review; if so, the turnaround is anticipated to be at a minimum 3-4 weeks for the Building Department permit. It is quite likely, however, that we will not be required to go through the legal review, in which case the permit could be issued within a week.

Re-submittal of the Planning Permit Application hinged on (1) receipt of our Authority to Construct (ATC), (2) completion of a noise survey to show compliance with the residential noise standard cited in Section 9.04.035 of the Pleasanton Municipal Code, and (3) specific plan revisions as noted in a letter dated June 29, 2010 from the City of Pleasanton Planning Division. The ATC was issued on June 29, 2010 by Bay Area Air Quality District (BAAQMD), but a hard copy was never received in the mail; a faxed version was sent to us on July 22nd following a query into the status of the permit (attached). Local ordinance limits noise levels near residential areas to 60 decibels (dB) from 10:00 pm to 6:00 am; the limit applies to total noise, including typical street traffic noise. Rather than conduct a noise survey at a 'similar' site, Delta and Shell have opted to modify the run time of the proposed system with a timer, which would shut the system down during hours subject to the noise ordinance restrictions (10:00 PM to 6:00 AM); this will allow us the run the system 16 hours every day with an 8-hour recharge period. Once the system is installed and operational, a noise survey at the site can be conducted if at some point it would be felt to optimize system efficiency.

Installation of the remaining remediation wells (nine air sparge wells and one additional SVE well) has been targeted for the 3Q10; system installation is currently targeted for early winter (Oct/Nov).

A monthly status report for August 2010 will be scheduled for submittal to you no later than August 31, 2010. I've attached an updated schedule; please let me know if you have any questions or comments. Thanks!

**Suzanne McClurkin-Nelson | Consultant | North American Operations**  
**Delta Consultants, an Oranjewoud N.V. Company**  
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**Proposed Schedule for SVE/AS System Installation and Startup**

Shell-Branded Service Station  
4226 First Street (aka 4212 First Street)  
Pleasanton, California

Task Description	2009		2010											
	November	December	January	February	March	April	May	June	July	August	September	October	November	December
Complete engineering drawings for SVE/AS system; submit for internal review, submit to sub-contractors for bid estimates	11/20/09													
First request to subcontractors for system installation bid	11/23/09													
General PG&E application submitted (power to site)		12/3/09												
Preliminary bids for system installation received from subcontractors		12/9/09												
Permit application for SVE/AS/Observation Well installations submitted		12/9/09												
Get revised drawings from Drafting		12/17/09												
Revised Bids requested from Subcontractors		12/17/09												
Preliminary award to subcontractor for system install		12/30/09												
SVE Well permit applications sent to Subcontractor for signatures		12/9/09												
SVE (and one AS) Well Permits granted/received		12/15/09												
Install four SVE wells (SVE-1 through SVE-4), observ. well (OBS-1) and a test air sparge well (SP-10)			1/12-14/10											
Complete air sparge pilot testing; analytical samples submitted (5-day TAT)			1/26/10											
Planning permit application submitted (with drawings and other required documents); 3-4 week review anticipated				2/9/10										
Receive response to Planning Dept. Permit (need additional info, site photos, additional design copies)					3/2/10									
BAAQMD application package for Authority to Construct submitted					3/10/10									
Submit additional fees to BAAQMD for ATC						4/23/10								
System design review/revisions based on planning department comments and air sparge result analysis						(in progress)	5/27/10							
Planning permit application re-submitted with revisions							5/28/10							
Submit air sparge pilot test report								6/7/10						
Request risk analysis from BAAQMD								6/22/10						
Complete system design drawing revisions								6/24/10						
PG&E work (prep electrical supply for site)									(postponed due to permitting delays)					
Conduct noise survey (per Planning Dept. request)										(cancelled)				
Receive ATC from BAAQMD										7/22/10 (issued 6/29/10)				
Re-submit Planning Permit Application										8/2/10				
Planning permit received										(mid August)				
Submit Building permit application; 10 days needed for review/issue										(late August)				
Building Dept. finishes application review and sends comments and changes											(early Sept)			
Building Dept. permit application re-submitted with revisions; 7 to 10 days needed for review/issue												(mid Sept)		
Building permit received												(late Sept)		
Install remaining remediation wells AS-1 to AS-9 & SVE-5														
Schedule system installation activities														
System installation (currently estimated at 4 weeks)														
Startup notification to BAAQMD (at least 3 days prior to startup)														
PG&E final power hookup														
System shakedown, inspection, trouble-shooting														
System startup and sampling														
Begin continuous operation (assuming all compliance parameters are met)														
Startup report to BAAQMD & ACEH (*or as required by the ATC)														

Please note the above calendar assumes a limited turnaround time for agency review of respective permits and applications, and will be updated as changes occur throughout the process.



BAY AREA  
AIR QUALITY  
MANAGEMENT  
DISTRICT  
SINCE 1955

June 29, 2010

Shell Oil Products US  
20945 So Wilmington Ave  
Carson, CA 90810

Attention: Shell/Denis Brown

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**Authority to Construct for Permit Application No. 21705, Plant No. 20140**

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**Required  
Action**

Your Authority to Construct is enclosed. This Authority to Construct is not a Permit to Operate. To receive your Permit to Operate you must:

1. Complete the Start-up Notification portion of the Authority to Construct.
2. Send the Start-up Notification to the assigned Permit Engineer via e-mail, fax or mail at least seven days prior to operating your equipment.

*Note: Operation of equipment without sending the Start-up Notification to the District may result in enforcement action.*

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**Authorization  
of Limited Use**

The Authority to Construct authorizes operation during the start-up period from the date of initial operation indicated in your Start-up Notification until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) included in this Authority to Construct will be in effect during the start-up period.

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**Contact  
Information**

If you have any questions, please contact your assigned Permit Engineer:

Flora W Chan, Air Quality Engineer I

Tel: (415) 749-4630 Fax: (415) 749-4949 Email: fchan@baaqmd.gov



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# BAY AREA AIR QUALITY MANAGEMENT DISTRICT

## Authority to Construct

(This is not a Permit to Operate)

Plant No. 20140  
Application No. 21705

### Shell Oil Products US

4212 1st Street, Pleasanton, CA 94566

is hereby granted an *Authority to Construct* for the following equipment:

S-1 Soil Vapor Extraction System, 150 scfm vacuum blower

abated by

A-1 SVE Abatement System

SVE Abatement System, Thermal/Catalytic Oxidizer/ 2 Carbon drums

Equipment above is subject to attached condition no. 24667.

Approved by

for

JACK P. BROADBENT  
EXECUTIVE OFFICER / APCO

Issue date: June 29, 2010

Expiration date: June 28, 2012

## Start-up Notification

**Instructions:** At least seven days before the scheduled initial operation contact your assigned Permit Engineer via email or complete and send this Start-up Notification to the District via fax or mail.

Engineer: Flora W Chan, Air Quality Engineer I

Tel: (415) 749-4630 Fax: (415) 749-4949

Email: fchan@baaqmd.gov

Plant No. 20140

Source No. S-1

Application No. 21705

The initial operation of this equipment is scheduled for \_\_\_\_\_ (month/day/year)

Print your first and last name \_\_\_\_\_

Telephone No. \_\_\_\_\_



Plant Name: Shell Oil Products US

S-1 Soil Vapor Extraction System, 150 scfm vacuum blower

Condition No. 24667

Plant No. 20140

Application No. 21705

1. Precursor Organic Compound (POC) emissions from Source S-1 shall be abated by Abatement device A-1 SVE Abatement System, consisting of either a Thermal Oxidizer, Catalytic Oxidizer, or at least two (200 lbs minimum capacity) Activated Carbon Vessels during all periods of operation. Start-up and subsequent operation of each abatement device shall take place only after written notification of same has been received by the District's Engineering Division. Influent vapor flow shall not exceed 150 scfm. [Basis. Reg 8-47-301,302].
2. The POC abatement efficiency of abatement device A-1 shall be maintained at a minimum of 98.5% by weight for inlet POC concentrations greater than or equal to 2000 ppmv (measured as hexane). For inlet concentrations below 2000 ppmv and greater than or equal to 200 ppmv, a. minimum abatement efficiency of 97% shall be maintained. For inlet concentrations below 200 ppmv, a minimum abatement efficiency of 90% shall be maintained. The minimum abatement efficiency shall be waived if outlet POC concentrations are shown to be less than 10 ppmv (measured as hexane). In no event shall Benzene emissions to the atmosphere exceed 0.05 pounds per day for sources S-1.
3. While operating as a Thermal Oxidizer, the minimum operating temperature of A-1 shall not be less than 1400 degrees Fahrenheit. While operating as a Catalytic Oxidizer, the minimum operating temperature of A-1 shall not be less than 600 degrees Fahrenheit.
4. To determine compliance with Condition Number 3, the Thermal/Catalytic Oxidizer shall be equipped with continuous measuring and temperature recording instrumentation. The temperature data collected from the temperature recorder shall be maintained in a file which shall be available for District inspection for a period of at least 2 years following the date on which such data are recorded.
5. To determine compliance with Condition 2, within ten days after start-up of the Thermal Oxidizer, and within ten days after start-up of the Catalytic Oxidizer, the operator of these sources shall:
  - a. Analyze inlet gas stream to determine the flow rate and concentration of POC present.
  - b. Analyze exhaust gas to determine the flow rate, and the concentration of Benzene and POC present.
  - c. Calculate the Benzene emission rate in pounds per day based on the exhaust gas analysis and the operating exhaust flow rate. The soil vapor flow rate shall be decreased, if necessary, to demonstrate compliance with Condition 2.



Plant Name: Shell Oil Products US

S-1 Soil Vapor Extraction System, 150 scfm vacuum blower

Condition No. 24667

Plant No. 20140

Application No. 21705

- d. Calculate the POC abatement efficiency based on the inlet and exhaust gas analysis. For the purpose of determining compliance with condition 2, the POC concentration shall be reported as hexane.
      - e. Submit to the District's Engineering Division the test results and emission calculations within one month from the testing date. Samples shall be analyzed according to modified EPA test methods 8015 and 8020 or their equivalent to determine the concentrations of POC and Benzene.
6. The operator of this source shall maintain the following records for each month of operation of the Thermal/Catalytic Oxidizer:
  - a. Days and hours of operation.
  - b. Each emission test, analysis or monitoring results logged-in for the day of operation they were taken.
  - c. Analysis results for any catalyst plugs removed from the bed to determine remaining life of the catalyst.

Such records shall be retained and made available for inspection by the District for two years following the date the data is recorded. [basis: Reg. 1-523]
7. During operation of the Activated Carbon Vessels, the operator of this source shall monitor with a photo-ionization detector (PID), flame-ionization detector (FID), or other method approved in writing by the District's Source Test Manager at the following locations:
  - a. At the inlet to the second to last Carbon vessel in series.
  - b. At the inlet to the last Carbon vessel in series.
  - c. At the outlet of the Carbon vessel that is last in series prior to venting to the atmosphere.

When using an FID to monitor breakthrough, readings may be taken with and without a Carbon filter tip fitted on the FID probe. Concentrations measured with the Carbon filter tip in place shall be considered methane for the purpose of these permit conditions.
8. These monitor readings shall be recorded in a monitoring log at the time they are taken. The monitoring results shall be used to estimate the frequency of Carbon change-out necessary to maintain compliance with conditions number 9 and 10, and shall be conducted on a daily basis. The operator of this source may propose for District review, based on actual measurements taken at the site during operation of the source, that the monitoring schedule be changed based on the decline in organic emissions and/or the



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S-1 Soil Vapor Extraction System, 150 scfm vacuum blower

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demonstrated breakthrough rates of the carbon vessels. Written approval by the District's Engineering Division must be received by the operator prior to a change to the monitoring schedule.

9. The second to last Carbon vessel shall be immediately changed out with unspent carbon upon breakthrough, defined as the detection at its outlet in excess of the higher of the following limits:
    - a. 10 % of the inlet stream concentration to the carbon bed.
    - b. 10 ppmv (measured as hexane).
  10. The last Carbon vessel shall be immediately changed out with unspent Carbon upon detection at its outlet of 10 ppmv or greater (measured as hexane).
  11. The operator of this source shall maintain the following information for each month of operation of the Activated Carbon Vessels:
    - a. Hours and time of operation.
    - b. Each emission test, analysis or monitoring results logged in for the day of operation they were taken.
    - c. The number of Carbon vessels removed from service.
- Such records shall be retained and made available for inspection by the District for two years following the date the data is recorded. [basis: Reg.523]
12. Any non-compliance with these conditions shall be reported to the Compliance and Enforcement Division at the time that it is first discovered. The submittal shall detail the corrective action taken and shall include the data showing the exceedance as well as the time of occurrence.
  13. The operator shall maintain a file containing all measurements, records and other data that are required to be collected pursuant to the various provisions of this conditional Authority to Construct/Permit to Operate. All measurements, records and data required to be maintained by the operator shall be retained for at least two years following the date the data is recorded [basis: Reg 1-523].
  14. Upon final completion of the remediation project, the operator of Source S-1 shall notify the Engineering Division within two weeks of decommissioning the operation.

*End of Conditions*