Chevron

Dave Feiglstok
Manager

Health, Environment & Safety
Chevron Products Company
P. O. Box 1272
Richmond, CA 94802-0272
Tel 510 242 1400
Fax 510 242 5353
dmfe@chevron.com

September 13, 2011

Mr. Greg Solomon
Senior Air Quality Engineer
Bay Area Air Quality Management District
939 Ellis Street
San Francisco, CA 94109

Chevron Energy & Hydrogen Renewal Project
Renewal of Authority to Construct – District Regulation 2-1-407
Application No. 12842, Plant 10

Dear Mr. Solomon:

Further to Chevron's August 17, 2011 meeting with you and other District staff concerning the request for renewal of the Authority to Construct (ATC) issued on September 19, 2008, the following additional information is being provided. This information provides additional documentation concerning "substantial use" for the Hydrogen Purity and Hydrogen Plant elements of Chevron's Hydrogen & Energy Renewal Project (Renewal Project).

- Liquid Oxygen Tanks: It was noted that these tanks were not on the previously submitted equipment list, but were observed to be present during your August 11, 2011 visit to the Refinery. These tanks were fabricated offsite by Air Products, delivered to the Refinery, and placed prior to the July 2009 shutdown of Renewal Project construction.

- Final Total Materials Cost for Each Project:
  - Hydrogen Plant: REDACTED – CONFIDENTIAL AND TRADE SECRET
  - Hydrogen Purity Improvements: REDACTED – CONFIDENTIAL AND TRADE SECRET

- Original ATC with Sources No Longer in the Project Identified: See the attached original ATC with the sources no longer in the project struck out.

- Wet ESP Purchase Date: Chevron has determined that May 14, 2007 was the date that prospective vendors were engaged to discuss Wet ESP options and performance capabilities since Chevron was anticipating the need to install this equipment to reduce particulate matter and sulfuric acid mist emissions to acceptable levels. The final purchase order was issued on July 31, 2008. Chevron cannot confirm an exact equipment delivery date. During the District's August 11, 2011 Refinery visit, you observed that the Wet ESPs are on site.

- Blanks in the Praxair Equipment List: The attached Praxair Equipment list has been updated to fill in the blanks (highlighted in yellow) that existed in Chevron's August 16, 2001 submittal to the District. While there are still a few blanks, the majority of the information is included. EQUIPMENT DESCRIPTIONS AND SHIPMENT DATES HAVE BEEN REDACTED – CONFIDENTIAL AND TRADE SECRET.

As set forth in District Regulation 2-1-407, pursuant to an environmental impact report that "explicitly covered a construction period longer than four years," the District issued the ATC on September 19, 2008. By letter dated September 15, 2010, Chevron requested that the ATC be renewed for an additional two year term. The District subsequently requested additional information by letter dated October 6, 2010. Chevron responded to that request by letter dated November 17, 2010. Chevron submitted additional information demonstrating "substantial use" on July 14 and August 16, 2011.

TRADE SECRET INFORMATION

Please note that much of the information included with this transmittal is confidential business information/trade secret. Chevron asserts that this information is trade secret pursuant to Section 6254.7 of the Government Code and District Rule 2-1-202.7 and is not public record as follows:

- The Praxair equipment costs, descriptions, and shipment dates contain engineering and design information of commercial value that could provide competitors with a business advantage.

- The Chevron cost information contains information of commercial value that could provide competitors with a business advantage.

The redacted, public version of the information is also being submitted to the District with this letter.

If you have any questions concerning the information provided in this submittal, please contact Bob Chamberlin at (510) 242-1466.

Sincerely,

Dave Feiglstok

Attachments

BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT
SINCE 1955

ALAMEDA COUNTY
Tom Bates
Scott Haggerty
Janet Lockhart
Nate Miley

CONTRA COSTA COUNTY
John Gioia
Mark Ross
Michael Shimansky
Gayle B. Uilkema

MARIN COUNTY
Harold C. Brown, Jr.

NAPA COUNTY
Brad Wagenknecht
(Secretary)

SAN FRANCISCO COUNTY
Chris Daly
Jake McGoldrick
Gavin Newsom

SAN MATEO COUNTY
Jerry Hill
(Chair)
Carol Klatt

SANTA CLARA COUNTY
Erin Garner
Yoriko Kishimoto
Liz Kniss
Patrick Kwok

SOLANO COUNTY
John F. Silva

SONOMA COUNTY
Tim Smith
Pamela Torliatt
(Vice-Chair)

Jack P. Broadbent
EXECUTIVE OFFICER/APCO

Submitted by Chevron on September 13, 2011 annotated to indicate sources no longer in the Revised Renewal Project.

September 19, 2008

Chevron Products Company
841 Chevron Way
Richmond, CA 94802

Attention: **Tery Lizarraga**

Application Number: 12842
Plant Number: 10
Equipment Location:
Same as above

Dear Applicant:

SUBJECT: AUTHORITY TO CONSTRUCT

This is your Authority to Construct the following:

S-4449 Hydrogen Plant Train #1, 140 MM SCFD Hydrogen Produced maximum capacity

S-4450 Hydrogen Plant Train #2, 140 MM SCFD Hydrogen Produced maximum capacity

S-4451 Hydrogen Recovery Unit, 50 MM SCFD Hydrogen Recovered maximum capacity

S-4471 Hydrogen Plant Train #1 Reformer Furnace, 950 MMBtu/hr maximum firing rate higher heating value (HHV), equipped with Low-NOx Burners abated by A-0302 Hydrogen Plant Train #1 Selective Catalytic Reduction (SCR) [Vented to P-0302 Hydrogen Plant Train #1 Furnace Exhaust]

S-4472 Hydrogen Plant Train #2 Reformer Furnace, 950 MMBtu/hr maximum firing rate HHV, equipped with Low-NOx Burners abated by A-0303 Hydrogen Plant Train #2 SCR [Vented to P-0303 Hydrogen Plant Train #2 Furnace Exhaust]

S-4465 Hydrogen Plant Cooling Tower, 36,000 gal/min maximum capacity

S-6021/A-6021 Hydrogen Plant Flare, 1.6 MMBtu/hr Pilot maximum capacity HHV, [Vented to P-0305 Hydrogen Plant Flare Exhaust]

~~**S-4452 Continuous Catalyst Regeneration Reformer, 71,300 BPD maximum capacity [Vented to P-0308 CCRR Regeneration Vent]**~~

~~**S-4477 Reformer Furnace #1, 201 MMBtu/hr maximum firing rate HHV, equipped with Low-NOx Burners abated by A-0309 SCR**~~

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~~S-4478 Reformer Furnace #2, 402 MMBtu/hr maximum firing rate HHV equipped with Low-NOx Burners abated by A-0309 SCR~~

~~S-4479 Reformer Furnace #3, 201 MMBtu/hr maximum firing rate HHV equipped with Low-NOx Burners abated by A-0309 SCR~~

~~S-4480 Reformer Furnace #4, 201 MMBtu/hr maximum firing rate HHV equipped with Low-NOx Burners abated by A-0309 SCR~~

~~A-0309 SCR for CCRR Furnaces #1 – #4 (S-4477, S-4478, S-4479, S-4480) [Vented to P-0309 Reformer Furnaces #1 – #4 (S-4477, S-4478, S-4479, S-4480)]~~

~~S-4473 3rd Cogeneration Gas Turbine, 550 MMBtu/hr maximum firing rate HHV, Combined Gas Turbine and HRSG equipped with Duct Burners 860 MMBtu/hr firing rate (calendar day), Combined Gas Turbine and HRSG equipped with Duct Burners 840 MMBtu/hr maximum firing rate (annual average)~~

~~S-4474 3rd Cogeneration Heat Recovery Steam Generator (HRSG) equipped with Duct Burners, equipped with Low-NOx Burners 350 MMBtu/hr Duct Burner maximum firing rate HHV, Combined Gas Turbine and HRSG equipped with Duct Burners 860 MMBtu/hr firing rate (calendar day), Combined Gas Turbine and HRSG with Duct Burners 840 MMBtu/hr maximum firing rate (annual average)~~

~~A-74 SCR abating both 3rd Cogeneration Gas Turbine and Heat Recovery Steam Generator~~

~~A-75 Oxidation Catalyst abating both 3rd Cogeneration Gas Turbine and Heat Recovery Steam Generator [Vented to P-0306 3rd Cogeneration Gas Turbine/Heat Recovery Steam Generator]~~

S-4454 #6 H2S Plant, Recycle Amine Regenerator, 11 MMSCFD maximum capacity

S-4490 Sulfur Loading Rack, 157 LT/hr maximum capacity abated by A-0310 Sulfur Loading Rack Caustic Scrubber [Vented to P-0310 Sulfur Loading Rack Caustic Scrubber Exhaust]

A-4450 Acid Gas Scrubber (C-2440), 11 MMSCFD Acid Gas for abatement of: #3 H2S Plant (S-4433), #4 H2S Plant (S-4434), #5 H2S Plant (S-4435), Recycle Amine Regenerator (S-4454), and the #8 NH3-H2S Plant (S-4429) and #18 NH3-H2S Plant (S-4345)

S-4456 Fresh Amine Storage Tank, 70,000 gal maximum capacity

S-3227 Lean Amine Storage Tank, 130,000 gallon maximum capacity

S-3228 Caustic Storage Tank, 200,000 gallon maximum capacity

S-3229 Spent Caustic Storage Tank, 400,000 gallon maximum capacity

S-4436 F-2170 Stack Gas Heater No. 1 SRU, 31.9 MMBtu/hr maximum firing rate HHV [vented to P-0151 SRU Train #1 Exhaust]

S-4437 F-2270 Stack Gas Heater No. 2 SRU, 31.9 MMBtu/hr maximum firing rate HHV [Vented to P-0152 SRU Train #2 Exhaust]

Implied Conditions
In the absence of specific permit conditions to the contrary, the throughputs, fuel and material consumption, capacities, and hours of operation described in your permit application will be considered maximum allowable limits. A new permit will be required before any increase in these parameters, or change in raw material handled, may be made.

Expiration
In accordance with Regulation 2-1-407, this Authority to Construct expires two years from the date of issuance unless the authority to construct has been renewed.

Trade Secret
Unless you have already designated specifically identified materials in your permit application as trade secret, under the California Public Records Act, all data in your permit application, the permit itself and all permit conditions will be considered a matter of public record and may be disclosed to a third party. Please contact your permit reviewer immediately if you wish to amend your permit application submittals or to designate certain permit conditions as trade secret. Unless we hear from you within ten (10) calendar days of this letter, except for materials which have been previously designated as trade secret, you shall be deemed to have waived any claim of confidentiality with respect to all materials in the District's files relating to this permit application.

Right of Entry
The Air Pollution Control Officer of the Bay Area Air Quality Management District, the Chairman of the California Air Resources Board, the Regional Administrator of the Environmental Protection Agency, and/or their designees, upon presentation of credentials, shall be granted the right of entry to any premises on which an air pollution source is located for the purposes of:

A. The inspection of the source
B. The sampling of materials used at the source
C. The conduct of an emissions source test
D. The inspection of any records required by District rule or permit condition.

Correspondence
Please include you application number with any correspondence with the District. The District's regulations may be viewed online at www.baaqmd.gov If you have any questions on this matter, please call **Gregory D Solomon, Senior Air Quality Engineer at (415) 749-4715.**

Very truly yours,

Jack P. Broadbent
Executive Officer/APCO

by
Engineering Division

BGY:GDS
Attachment: Condition no. 24136

Praxair Richmond H2 Plant - Praxair Supplied Equipment - 12/31/09						
Item #	Equipment Tag No.	Description	Purchase Status	Installation Status - % complete	Purchase Order #	Shipment Date
1	CP-3305	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207961OS	REDACTED - CONFIDENTIAL TRADE SECRET
2	CP-3315	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207961OS	REDACTED - CONFIDENTIAL TRADE SECRET
3	CP-3310	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207961OS	REDACTED - CONFIDENTIAL TRADE SECRET
4	CP-3905	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30212903OS	REDACTED - CONFIDENTIAL TRADE SECRET
5	ST-3640	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30209538OS	REDACTED - CONFIDENTIAL TRADE SECRET
6	SK-3645	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	DATA UNAVAILABLE	REDACTED - CONFIDENTIAL TRADE SECRET
7	G-3660	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30209538OS	REDACTED - CONFIDENTIAL TRADE SECRET
8	SK-3450	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30211817OS	REDACTED - CONFIDENTIAL TRADE SECRET
9	SK-3460	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30211817OS	REDACTED - CONFIDENTIAL TRADE SECRET
10	SK-3470	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30211817OS	REDACTED - CONFIDENTIAL TRADE SECRET
11	HX-3650	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30211085OS	REDACTED - CONFIDENTIAL TRADE SECRET
12	PU-1500	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30245293OS	REDACTED - CONFIDENTIAL TRADE SECRET
13	PU-2500	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30245293OS	REDACTED - CONFIDENTIAL TRADE SECRET
14	PU-3502	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30245293OS	REDACTED - CONFIDENTIAL TRADE SECRET
15	T-3921 & T-3922	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30237683UP	REDACTED - CONFIDENTIAL TRADE SECRET
16	SK-1000	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30240462OS	REDACTED - CONFIDENTIAL TRADE SECRET
17	SK-3490	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30307305	REDACTED - CONFIDENTIAL TRADE SECRET
18	D-3491	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30307305	REDACTED - CONFIDENTIAL TRADE SECRET
19	D-3486	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30305890	REDACTED - CONFIDENTIAL TRADE SECRET
20	D-3481	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30305891	REDACTED - CONFIDENTIAL TRADE SECRET
21	EB-8311, EB-8312, & EB-8313	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30247597OS	REDACTED - CONFIDENTIAL TRADE SECRET
22	EB-8314	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30247599OS	REDACTED - CONFIDENTIAL TRADE SECRET
23	ES-8311	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30213674OS	REDACTED - CONFIDENTIAL TRADE SECRET
24	ES-8312	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30213675OS	REDACTED - CONFIDENTIAL TRADE SECRET
25	ES-8313	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30217705OS	REDACTED - CONFIDENTIAL TRADE SECRET
26	ES-8307	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30219353OS	REDACTED - CONFIDENTIAL TRADE SECRET
27	ES-8317	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30219018OS	REDACTED - CONFIDENTIAL TRADE SECRET
28	ES-8327	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30219019OS	REDACTED - CONFIDENTIAL TRADE SECRET
29	ET-8325	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30193556OS	REDACTED - CONFIDENTIAL TRADE SECRET
30	ET-8328	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30193453OS	REDACTED - CONFIDENTIAL TRADE SECRET
31	EN-8304	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30268079OS	REDACTED - CONFIDENTIAL TRADE SECRET
32	EN-8304	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30268079OS	REDACTED - CONFIDENTIAL TRADE SECRET
33	EN-8304	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30268079OS	REDACTED - CONFIDENTIAL TRADE SECRET
34	EN-8304	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30268079OS	REDACTED - CONFIDENTIAL TRADE SECRET
35	ED-8305	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30277457OS	REDACTED - CONFIDENTIAL TRADE SECRET
36	ED-8305	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30277457OS	REDACTED - CONFIDENTIAL TRADE SECRET
37	ED-8305	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30277457OS	REDACTED - CONFIDENTIAL TRADE SECRET
38	ED-8308	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30272938OS	REDACTED - CONFIDENTIAL TRADE SECRET
39	ED-8308	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30272938OS	REDACTED - CONFIDENTIAL TRADE SECRET
40	ED-8308	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30272938OS	REDACTED - CONFIDENTIAL TRADE SECRET

41	EM8310	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30242974OS	REDACTED - CONFIDENTIAL TRADE SECRET
42	EM8311	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30242984OS	REDACTED - CONFIDENTIAL TRADE SECRET
43	EM8312	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30242985OS	REDACTED - CONFIDENTIAL TRADE SECRET
44	EL-8305	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30246331OS	REDACTED - CONFIDENTIAL TRADE SECRET
45	EL-8306	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30246332OS	REDACTED - CONFIDENTIAL TRADE SECRET
46	EL-8307	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30246333OS	REDACTED - CONFIDENTIAL TRADE SECRET
47	EL-8308	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30246334OS	REDACTED - CONFIDENTIAL TRADE SECRET
48	DATA UNAVAILABLE	REDACTED - CONFIDENTIAL TRADE SECRET	DATA UNAVAILABLE	DATA UNAVAILABLE	DATA UNAVAILABLE	REDACTED - CONFIDENTIAL TRADE SECRET
49	BG-8401-1	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30235468OS	REDACTED - CONFIDENTIAL TRADE SECRET
50	BG-8401-2	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30235468OS	REDACTED - CONFIDENTIAL TRADE SECRET
51	BG-8401-3	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30235434OS	REDACTED - CONFIDENTIAL TRADE SECRET
52	BG-8401-4	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30235435OS	REDACTED - CONFIDENTIAL TRADE SECRET
53	AE-17001, AE-37201A, AE-27001, AE-27001B, AE-12402, AE-12403	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30253203OS	REDACTED - CONFIDENTIAL TRADE SECRET
54	AE-37004, AE-17004, AE-27004	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30252661OS	REDACTED - CONFIDENTIAL TRADE SECRET
55	AE-12108, AE-22108	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30260061OS	REDACTED - CONFIDENTIAL TRADE SECRET
56	AE-39908	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30260061OS	REDACTED - CONFIDENTIAL TRADE SECRET
57	AE-37005, AE-17005, AE-27005	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30263739OS	REDACTED - CONFIDENTIAL TRADE SECRET
58	AE-37205	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30263739OS	REDACTED - CONFIDENTIAL TRADE SECRET
59	AE-12402, AE-12403	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30253203OS	REDACTED - CONFIDENTIAL TRADE SECRET
60	AE-39820, AE29810	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30264005OS	REDACTED - CONFIDENTIAL TRADE SECRET
61	AE39810	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30264005OS	REDACTED - CONFIDENTIAL TRADE SECRET
62	AE-11000, AE-21000	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30254264OS	REDACTED - CONFIDENTIAL TRADE SECRET
63	AE-11450, AE-21450	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30263994OS	REDACTED - CONFIDENTIAL TRADE SECRET
64	AEPUR1, AEPUR2	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30274257	REDACTED - CONFIDENTIAL TRADE SECRET
65	No equipment tag number	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30954274	REDACTED - CONFIDENTIAL TRADE SECRET
66	AE-39700	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30220838OS	REDACTED - CONFIDENTIAL TRADE SECRET
67	RM9201	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207851 OS	REDACTED - CONFIDENTIAL TRADE SECRET
68	RM9221	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207851 OS	REDACTED - CONFIDENTIAL TRADE SECRET
69	RM9211	REDACTED - CONFIDENTIAL TRADE SECRET	Received	Not Installed	30207851 OS	REDACTED - CONFIDENTIAL TRADE SECRET