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BAY AREA AIR QUALITY  
MANAGEMENT DISTRICT

J. W. Hartwig  
Manager

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

September 15, 2010

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

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

Dear Mr. Solomon:

Pursuant to District Regulation 2-1-407, Chevron hereby requests that the Authority to Construct (ATC) for the Chevron Energy & Hydrogen Renewal Project be renewed for an additional two years from the current expiration date of September 19, 2008, (See Attachment 1 - Chevron Energy & Hydrogen Renewal Project Authority to Construct).

The ATC was issued pursuant to an environmental impact report that explicitly covered an eight year construction period, (See Attachment 2 - Chevron Energy & Hydrogen Renewal Project Conditional Use Permit, Exhibit A, General Provision A8). As set forth in District Regulation 2-1-407.2, Chevron anticipates subsequent two year ATC renewal periods until completion of the construction period covered by the Conditional Use Permit.

The ATC renewal fee estimate is provided in Attachment 3. Chevron will submit a check for the fee upon District confirmation.

If you have any questions, please contact Bob Chamberlin (510) 242-1466.

Sincerely,

  
Jeff W. Hartwig

# **ATTACHMENT - 1**



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. Ulkema

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  
Yonko Kishimoto  
Liz Kniss  
Patrick Kwok

SOLANO COUNTY  
John F. Silva

SONOMA COUNTY  
Tim Smith  
Pamela Torliatt  
(Vice-Chair)

Jack P. Broadbent  
EXECUTIVE OFFICER/APCO

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]

S-4438 F-2370 Stack Gas Heater No. 3 SRU, 56.1 MMBtu/hr maximum firing rate HHV [Vented to P-0153 SRU Train #3 Exhaust]

This is your Authority to Construct for Modification of Existing Equipment:

S-4253 TKC/FCC Feed Hydrotreater, 96,000 BPD maximum capacity

S-4435 No. 5 H<sub>2</sub>S Plant, 9.6 MMSCFD maximum capacity

S-4227 Sulfur Recovery Unit Train #1, 345 LTD maximum capacity abated by both A-0020 SRU#1 Tail Gas Unit Thermal Oxidizer 30.8 MMBtu/hr HHV maximum firing rate and A-120 Wet Electrostatic Precipitator (ESP)

S-4228 Sulfur Recovery Unit Train #2, 345 LTD maximum capacity abated by A-0021 SRU#2 Tail Gas Unit Thermal Oxidizer 30.8 MMBtu/hr HHV maximum firing rate and A-121 Wet Electrostatic Precipitator (ESP)

S-4229 Sulfur Recovery Unit Train #3, 570 LTD maximum capacity abated by A-0022 SRU#3 Tail Gas Unit Thermal Oxidizer 45.0 MMBtu/hr HHV maximum firing rate and A-122 Wet Electrostatic Precipitator (ESP)

The equipment described above is subject to condition no. 24136.  
Existing equipment is also subject to any existing conditions.

#### Notification

Please contact your assigned Permit Engineer, listed in the correspondence section of this letter, in writing, (by letter, fax, or email) at least three days before the initial operation of the equipment so that we may observe the equipment in operation and verify conformance with the Authority to Construct. Operation includes any start-up of the source for testing or other purposes. Operation of equipment without notification to the District may result in enforcement action. Do not send start-up notifications to the Air Pollution Control Officer. Startup information may be faxed to the Engineering Division at (415) 749-5030.

#### Start-up Period

After receipt of the start-up letter required above, this Authority to Construct authorizes operation during the start-up period from the date of initial operation noted in your start-up letter until the Permit to Operate is issued, up to a maximum of 90 days. All conditions (specific or implied) of the Authority to Construct are in effect during the start-up period.

#### Fees

District Regulation 3 requires a fee for each new Permit to Operate. You will be invoiced upon receipt of your start-up letter. No permits will be issued until all outstanding fees are paid.

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:

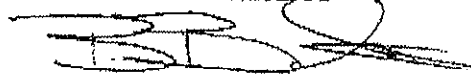
- A. The inspection of the source
- B. The sampling of materials used at the source
- C. The conduct of an emissions source test
- D. The inspection of any records required by District rule or permit condition.

Correspondence

Please include you application number with any correspondence with the District. The District's regulations may be viewed online at [www.baaqmd.gov](http://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

# **ATTACHMENT - 2**

## EXHIBIT A

### CONDITIONAL USE PERMIT NUMBER 1101974 and DESIGN REVIEW PERMIT NUMBER 1104423 CHEVRON ENERGY AND HYDROGEN RENEWAL PROJECT

On March 20, 2008, the City of Richmond ("City") Planning Commission approved Conditional Use Permit Number 1101974 and Design Review Permit Number 1104423 (together, "Conditional Use Permit") for the Chevron Energy and Hydrogen Renewal Project ("Renewal Project"), subject to the following conditions:

#### A. GENERAL PROVISIONS

**A1.** The Renewal Project at the Chevron Richmond Refinery ("Refinery") shall adhere to the City Charter, Municipal Code, all applicable ordinances, all permits and approvals, all plans and specifications, and all Conditions of Approval.

**A2.** All of the mitigation measures set forth in the certified Chevron Energy and Hydrogen Renewal Project Environmental Impact Report Final Environmental Impact Report (State Clearinghouse No. 2005072117) ("Renewal Project EIR") are hereby incorporated by reference and included as conditions of approval of this Conditional Use Permit. The adopted mitigation measures, shown in Attachment 1 hereto, are hereby incorporated and included as conditions of the Conditional Use Permit approval to ensure that the mitigation measures identified in the Renewal Project EIR are complied with during project implementation and operation.

**A3.** Any significant alteration of the approved plans shall be requested in writing and approved by the Planning and Building Services Department prior to changes being made in the field.

**A4.** The permittee, Chevron Products Company ("Chevron") shall apply for building and grading permits pursuant to Municipal Code Sections 12.44.030 and 6.02.150.

**A5.** Prior to the issuance of a building or grading permit for any portion of the Renewal Project, Chevron shall demonstrate to the Planning and Building Services Department that it has obtained necessary permits and approvals from reviewing agencies for such portion of the Renewal Project, including but not limited to Authority to Construct from the Bay Area Air Quality Management District ("BAAQMD"), NPDES permit/waste discharge requirements from the Regional Water Quality Control Board ("RWQCB"), California Energy Commission Certification or Small Power Plant Exemption, East Bay Municipal Utility District water supply assessment, and a Caltrans encroachment permit.



**A6.** The Planning Commission will hold hearings at a frequency of once each year during the term of this Conditional Use Permit to review Chevron's compliance with the conditions of approval of this Conditional Use Permit. At least two (2) months prior to the time that each hearing is to be held, Chevron shall submit both a compliance report and a fee to cover staff costs associated with the compliance review.

**A7.** Chevron shall record the conditions of approval of this Conditional Use Permit with the Contra Costa County Recorder in a form that is satisfactory to the City. An endorsed copy of the recorded Conditional Use Permit shall be filed with the Planning and Building Services Department within ten (10) days of the recordation. This Conditional Use Permit shall not take effect until it has been recorded and an endorsed copy filed with the Planning and Building Services Department. (See Municipal Code § 15.04.910.070(A).)

**A8.** This Conditional Use Permit shall be revocable eight (8) years from the date of approval unless Chevron has obtained building permits for all of the following Renewal Project components: (i) hydrogen plant replacement, (ii) power plant replacement, (iii) catalytic reformer replacement, (iv) hydrogen purity improvements, (v) replacement of one or more existing tanks, (vi) all new and replacement tanks, (vii) new maintenance facility, and (viii) new central control room, each as described in Chapter 3 (Project Description) of the Renewal Project Draft EIR, as amended by the Renewal Project Final EIR, except to the extent vested as provided herein. The use permit shall be vested with respect to each component when a building permit has been issued and construction of that component has been diligently pursued. The use permit shall expire upon the expiration of the building permit with respect to any of the components of the Renewal Project for which construction has not commenced. (See Municipal Code § 15.04.910.070(C).) Revocation of this Conditional Use Permit shall not relieve Chevron of the obligation to comply with the Conditions of Approval as they apply to any portion of the Renewal Project for which a building permit has been granted.

**A9.** To the fullest extent permitted by law, Chevron shall defend, indemnify, and hold harmless the City of Richmond, its council, boards, commissions, agents, officers, employees, consultants, successors and assigns from and against any and all claims, demands, obligations, proceedings, actions, causes of action, suits, losses, judgments, fines, penalties, damages, liabilities, costs and expenses (including without limitation attorney's fees, disbursements, and all other professional or expert fees and costs) to attack, set aside, void or annul any approval of the Planning Commission, City Council, Planning Director, or any other employee, department, committee, or agency of the City concerning the environmental review, use permit approval, other actions, permits or approval for the Renewal Project, including any Project condition imposed by the City or any of its agencies, departments, commissions, boards, agents, officers, employees, or council. This duty to indemnify includes any damages awarded against the City, if any, the cost of suit, attorney's fees, and other costs and expenses incurred in connection with such claim, action or proceeding and whether incurred by Chevron, the City and/or the parties initiating or bringing such claim, action or proceeding.

In the event Chevron is required to defend the City, the City shall retain the right to (a) approve the counsel to defend the City, (b) approve all significant decisions concerning the manner in which the defense is conducted, and (c) approve all settlements, which approval shall

# **ATTACHMENT - 3**

## Chevron Energy &amp; Hydrogen Renewal Project Authority to Construct Renewal Fee Estimate

Sept. 15, 2010

Source No.	Unit	ATC Status	Reg. 3 Schedule	Initial Fee	Reg. 3-330 ATC Renewal Fee
S-4449	H2 Plant #1	Substantial Use	G-1	\$ 2,120.00	N/A
S-4450	H2 Plant #2	Substantial Use	G-1	\$ 2,120.00	N/A
S-4451	H2 Recovery Unit	Substantial Use	G-1	\$ 2,120.00	N/A
S-4471	H2 Plt Reformer Furnace #1	Substantial Use	B	\$ 82,969.00	N/A
S-4472	H2 Plt Reformer Furnace #2	Substantial Use	B	\$ 82,969.00	N/A
S-4465	H2 Plt Cooling Tower	Substantial Use	?		N/A
S-4452	CCRR	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4477	Reformer Furnace #1	No	B	\$ 8,936.46	\$ 4,468.23
S-4478	Reformer Furnace #2	No	B	\$ 17,872.92	\$ 8,936.46
S-4479	Reformer Furnace #3	No	B	\$ 8,936.46	\$ 4,468.23
S-4480	Reformer Furnace #4	No	B	\$ 8,936.46	\$ 4,468.23
S-4473	3rd Cogen Gas Turbine	No	B	\$ 24,453.00	\$ 12,226.50
S-4474	3rd Cogen HRSG	No	B	\$ 15,561.00	\$ 7,780.50
S-4454	#6 H2S Plant Recycle Amine Generator	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4490	Sulfur Loading Rack	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4456	Fresh Amine Storage Tank	No	C	Exempt	N/A
S-3227	Lean Amine Storage Tank	No	C	Exempt	N/A
S-3328	Caustic Storage Tank	No	C	Exempt	N/A
S-3229	Spent Caustic Storage Tank	No	C	Exempt	N/A
S-4436	F-2170 Stack Gas Heater No. 1 SRU	No	B	\$ 1,418.27	\$ 709.14
S-4437	F-2270 Stack Gas Heater No. 2 SRU	No	B	\$ 1,418.27	\$ 709.14
S-4438	F-2370 Stack Gas Heater No. 3 SRU	No	B	\$ 2,494.21	\$ 1,247.10
S-4253	TKC/FCC Feed Hydrotreater	Substantial Use	G-1		N/A
S-4435	No. 5 H2S Plant	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4227	SRU #1 w/TGU A-0020	No	B	\$ 1,369.37	\$ 684.68
S-4228	SRU#2 w/TGU A-0021	No	B	\$ 1,369.37	\$ 684.68
S-4229	SRU #3 w/TGU A-0022	No	B	\$ 2,000.70	\$ 1,000.35
				<b>Total:</b>	<b>\$ 51,623.25</b>

Chevron Energy & Hydrogen Renewal Project Authority to Construct Renewal Fee Estimate

Sept. 15, 2010

Source No.	Unit	ATC Status	Reg. 3 Schedule	Initial Fee	Reg. 3-330 ATC Renewal Fee
S-4449	H2 Plant #1	Substantial Use	G-1	\$ 2,120.00	N/A 1060
S-4450	H2 Plant #2	Substantial Use	G-1	\$ 2,120.00	N/A 1060
S-4451	H2 Recovery Unit	Substantial Use	G-1	\$ 2,120.00	N/A 1060
S-4471	H2 Plt Reformer Furnace #1	42,237 Substantial Use	B	\$ 82,969.00	N/A 21,119
S-4472	H2 Plt Reformer Furnace #2	42,237 Substantial Use	B	\$ 82,969.00	N/A 21,119
S-4465	H2 Plt Cooling Tower	Substantial Use	? 344 2172		N/A 1060X-172
S-4452	CCRR	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4477	Reformer Furnace #1	No	B	\$ 8,936.46	\$ 4,468.23
S-4478	Reformer Furnace #2	No	B	\$ 17,872.92	\$ 8,936.46
S-4479	Reformer Furnace #3	No	B	\$ 8,936.46	\$ 4,468.23
S-4480	Reformer Furnace #4	No	B	\$ 8,936.46	\$ 4,468.23
S-4473	3rd Cogen Gas Turbine	No	B	\$ 24,453.00	\$ 12,227.50
S-4474	3rd Cogen HRSG	No	B	\$ 15,561.00	\$ 7,780.50
S-4454	#6 H2S Plant Recycle Amine Generator	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4490	Sulfur Loading Rack	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4456	Fresh Amine Storage Tank	No	C	Exempt 121	N/A 61
S-3227	Lean Amine Storage Tank	No	C	Exempt 225	N/A 113
S-3228	Caustic Storage Tank	No	C	Exempt 346	N/A 173
S-3229	Spent Caustic Storage Tank	No	C	Exempt 692	N/A 346
S-4436	F-2170 Stack Gas Heater No. 1 SRU	No	B	\$ 1,418.27	\$ 709.14
S-4437	F-2270 Stack Gas Heater No. 2 SRU	No	B	\$ 1,418.27	\$ 709.14
S-4438	F-2370 Stack Gas Heater No. 3 SRU	No	B	\$ 2,494.21	\$ 1,247.10
S-4253	TKC/FCC Feed Hydrotreater	Substantial Use	G-1	2120	N/A 1060
S-4435	No. 5 H2S Plant	No	G-1	\$ 2,120.00	\$ 1,060.00
S-4227	SRU #1 w/TGU A-0020	No	49,702 B	\$ 1,369.37	\$ 684.68 24,851
S-4228	SRU#2 w/TGU A-0021	No	49,702 B	\$ 1,369.37	\$ 684.68 24,851
S-4229	SRU #3 w/TGU A-0022	No	49,702 B	\$ 2,000.70	\$ 1,000.35 24,851
				Total:	\$ 51,623.25

27 sources  
 20 - new flare  
 28 total in AIC 6-5 \$39,136 \$19,568

\$122,378  
 \$161,038

- definition of Substantial use & proof

- fees

- BACT/offset review  
 1M10 issue

include  
 TAC or  
 not?

\$450,606  
 w. Flare