

Diseree Gomez

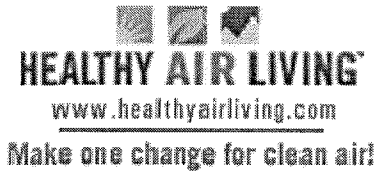
From: Diseree Gomez
Sent: Thursday, February 23, 2017 11:20 AM
To: David Torii
Cc: Misa Velasco
Subject: Project # S-1154368

Good Morning David,

This email serves as confirmation that the entitled notice has been received, processed, and completed on February 23, 2017. An electronic version is now available for viewing in PAS under System ID# C2804653.

Thank You,

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org



System ID C2804053

RECEIVED

FEB 22 2017

PUBLIC NOTICE CHECK LIST

PROJECT #: S-55 PROJECT #: S-1154368

SJVAPCD

REQST.	COMPL.
✓	✓
✓	<input type="checkbox"/>
✓	—

ERC PRELIMINARY PUBLIC NOTICE

Newspaper Notice Emailed to Clerical (Check box and tab to generate Notice)
 Send email to "OA-PublicNotices" containing the following:
 SUBJECT: facility name, facility id#, project #, type of notice (prelim/final)
 BODY: project description and why it is being noticed (Emission Reduction Credit Banking)

ENCLOSED DOCUMENTS REQUIRE:

- ✓ ✓ Enter Correct Date, Print All Documents from File and Obtain Director's Signature
- ✓ ✓ Determine date comment period will end, enter date on Newspaper Notice and Aviso en Español, and Email **PRELIMINARY** Newspaper Notice for Publication in Bakersfield Californian Pub Date: 2-28-17 Due Date: 3-30-17 3-30-17
- ✓ ✓ Mail/email **PRELIMINARY** Notice Letter to Applicant (email address: Lance.Ericksen@chevron.com) with the following attachments:
 - ✓ Application Evaluation
 - ✓ Newspaper Notice
- ✓ ✓ Email **PRELIMINARY** Public Notice package to EPA Gerardo
- ✓ ✓ Email **PRELIMINARY** Public Notice package to CARB Tung Le
- ✓ ✓ Email **PRELIMINARY** Newspaper Notice, Aviso en Español and Public Notice package to "webmaster" Webteam
- ✓ ✓ After posted on website, send email with weblink of Newspaper notice, Aviso en Español, and full public notice package to:
 - ✓ specific [C, S, or N] region **and** District wide permitting notification list-serves (both English and Spanish list serves)
 - ✓ facility specific distribution list, (AQE – enter email address from PAS facility details notifications tab, if none enter NONE below): none
- ✓ ✓ Mail the newspaper notice and aviso en español (NN/AE), or full public notice package (FNP) to the persons on facility specific distribution list, as follows (entered by AQE, if none, enter NONE below):
 - NN/AE or FNP Name/address: none
 - NN/AE or FNP Name/address: none
- ✓ ✓ Send **PRELIMINARY** Public Notice package to EDMS
- — Other Special Instructions (please specify): _____

Date Completed [DATE COMPLETED]/By David Torii

CALIFORNIA NEWSPAPER SERVICE BUREAU

DAILY JOURNAL CORPORATION

Mailing Address : 915 E FIRST ST, LOS ANGELES, CA 90012
Telephone (213) 229-5300 / Fax (213) 229-5481
Visit us @ WWW.LEGALADSTORE.COM

Diseree Gomez
SAN JOAQUIN VALLEY AIR POLL CONTROL DIST
1990 E. GETTYSBURG AVE.
FRESNO, CA 93726

CNS 2980627

COPY OF NOTICE

Notice Type: GPN GOVT PUBLIC NOTICE
Ad Description Preliminary Public Notice for Chevron USA, Inc., Project #
S-1154368, Bakersfield.

To the right is a copy of the notice you sent to us for publication in the THE
BAKERSFIELD CALIFORNIAN. Please read this notice carefully and call us
with any corrections. The Proof of Publication will be filed with the County
Clerk, if required, and mailed to you after the last date below. Publication
date(s) for this notice is (are):

02/28/2017

The charge(s) for this order is as follows. An invoice will be sent after the
last date of publication. If you prepaid this order in full, you will not receive
an invoice.

NOTICE OF
PRELIMINARY
DECISION FOR THE
PROPOSED ISSUANCE
OF EMISSION
REDUCTION CREDITS

NOTICE IS HEREBY
GIVEN that the San
Joaquin Valley Unified Air
Pollution Control District
solicits public comment on
the proposed issuance of
Emission Reduction
Credits to Chevron USA,
Inc. for the shutdown of
two IC engines, in Lost
Hills, CA. The quantity of
ERCS proposed for
banking is 284 lb-NOx/yr,
1,295 lb-PM10/yr and
3,744 lb-CO/yr.

The analysis of the
regulatory basis for this
proposed action, Project
#S-1154368, is available
for public inspection at
http://www.valleyair.org/no
tices/public_notices_idx.ht
m and at any District
office. For additional
information, please contact
the District at (661) 392-
5500. Written comments
on this project must be
submitted by March 30,
2017 to ARNAUD
MARJOLLET, DIRECTOR
OF PERMIT SERVICES,
SAN JOAQUIN VALLEY
UNIFIED AIR
POLLUTION CONTROL
DISTRICT, 34946
FLYOVER COURT,
BAKERSFIELD, CA
93308.
2/28/17
CNS-2980627#
THE BAKERSFIELD
CALIFORNIAN

Daily Journal Corporation

Serving your legal advertising needs throughout California. Call your local

- BUSINESS JOURNAL, RIVERSIDE (951) 784-0111
DAILY COMMERCE, LOS ANGELES (213) 229-5300
LOS ANGELES DAILY JOURNAL, LOS ANGELES (213) 229-5300
ORANGE COUNTY REPORTER, SANTA ANA (714) 543-2027
SAN FRANCISCO DAILY JOURNAL, SAN FRANCISCO (800) 640-4829
SAN JOSE POST-RECORD, SAN JOSE (408) 287-4866
THE DAILY RECORDER, SACRAMENTO (916) 444-2355
THE DAILY TRANSCRIPT, SAN DIEGO (619) 232-3486
THE INTER-CITY EXPRESS, OAKLAND (510) 272-4747



Diseree Gomez

From: Diseree Gomez
Sent: Thursday, February 23, 2017 10:35 AM
To: Gerardo C. Rios - EPA (SJV_T5_Permits@epamail.epa.gov); Tung Le (ttle@arb.ca.gov)
Cc: 'Lance.Ericksen@chevron.com'
Subject: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55, Project # S-1154368
Attachments: Prelim.S-1154368.pdf; Newspaper.S-1154368.pdf

Importance: High

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Chevron USA, Inc. for the shutdown of two IC engines, in Lost Hills, CA. The quantity of ERCs proposed for banking is 284 lb-NOx/yr, 1,295 lb-PM10/yr and 3,744 lb-CO/yr.

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org


HEALTHY AIR LIVING
www.healthyairliving.com
Make one change for clean air!

Diseree Gomez

From: Microsoft Outlook
To: Gerardo C. Rios - EPA (SJV_T5_Permits@epamail.epa.gov)
Sent: Thursday, February 23, 2017 10:35 AM
Subject: Relayed: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55,Project # S-1154368

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

*Gerardo C. Rios - EPA ([SJV T5 Permits@epamail.epa.gov](mailto:SJV_T5_Permits@epamail.epa.gov)) ([SJV T5 Permits@epamail.epa.gov](mailto:SJV_T5_Permits@epamail.epa.gov))
<[mailto:SJV T5 Permits@epamail.epa.gov](mailto:SJV_T5_Permits@epamail.epa.gov)>*

Subject: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55,Project # S-1154368

Diseree Gomez

From: Microsoft Outlook
To: 'Lance.Ericksen@chevron.com'
Sent: Thursday, February 23, 2017 10:35 AM
Subject: Relayed: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55,Project # S-1154368

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

'Lance.Ericksen@chevron.com' (Lance.Ericksen@chevron.com) <<mailto:Lance.Ericksen@chevron.com>>

Subject: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55,Project # S-1154368

Diseree Gomez

From: Diseree Gomez
Sent: Thursday, February 23, 2017 10:46 AM
To: WebTeam
Cc: Misa Velasco
Subject: valleyair.org update: Preliminary Public Notice for Chevron USA, Inc., Facility # S-55, Project # S-1154368
Attachments: Prelim.S-1154368.pdf; Newspaper.S-1154368.pdf; Aviso.S-1154368.pdf

February 23, 2017 (Facility S-55 Project S-1154368) NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Chevron USA, Inc. for the shutdown of two IC engines, in Lost Hills, CA. The quantity of ERCs proposed for banking is 284 lb-NOx/yr, 1,295 lb-PM10/yr and 3,744 lb-CO/yr. The comment period ends on March 30, 2017.

[Newspaper Notice](#)

[Aviso](#)

[Public Notice Package](#)

Diseree Gomez

Office Assistant II

San Joaquin Valley Air Pollution Control District

1990 E. Gettysburg Ave

Fresno, CA. 93726

559.230.6003

Diseree.Gomez@valleyair.org



HEALTHY AIR LIVING™

www.healthyairliving.com

Makes one change for clean air!

**AVISO DE DECISIÓN PRELIMINAR
PARA LA PROPUESTA OTORGACIÓN DE
CERTIFICADOS DE REDUCCIÓN DE EMISIONES**

POR EL PRESENTE SE NOTIFICA que el Distrito Unificado para el Control de la Contaminación del Aire del Valle de San Joaquín está solicitando comentarios del público para la propuesta emisión de Certificados de Reducción de Emisiones (ERC, por sus siglas en inglés) a Chevron USA, Inc. para el cierre de dos motores de combustión interna, en Lost Hills. La cantidad de ERCs propuestas para almacenar es 284 lb-NOx/año, 1,295 lb-PM10/año y 3,744 lb-CO/año.

El análisis de la base regulatoria para esta acción propuesta, Proyecto #S-1154368, está disponible para la inspección pública en http://www.valleyair.org/notices/public_notices_idx.htm y en cualquiera de las oficinas del Distrito. Para más información en Español, por favor comuníquese con el Distrito al (661) 392-5500. Comentarios por escrito acerca de este propuesto permiso inicial deben de ser sometidos antes del 30 de Marzo del 2017 a **ARNAUD MARJOLLET, DIRECTOR DEL DEPARTAMENTO DE PERMISOS, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**

**NOTICE OF PRELIMINARY DECISION
FOR THE PROPOSED ISSUANCE OF
EMISSION REDUCTION CREDITS**

NOTICE IS HEREBY GIVEN that the San Joaquin Valley Unified Air Pollution Control District solicits public comment on the proposed issuance of Emission Reduction Credits to Chevron USA, Inc. for the shutdown of two IC engines, in Lost Hills, CA. The quantity of ERCs proposed for banking is 284 lb-NOx/yr, 1,295 lb-PM10/yr and 3,744 lb-CO/yr.

The analysis of the regulatory basis for this proposed action, Project #S-1154368, is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm and at any District office. For additional information, please contact the District at (661) 392-5500. Written comments on this project must be submitted by March 30, 2017 to **ARNAUD MARJOLLET, DIRECTOR OF PERMIT SERVICES, SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308.**

Diseree Gomez

From: Diseree Gomez
Sent: Tuesday, February 28, 2017 12:03 PM
To: South (Notices_of_Permitting_Actions-Southern_Region@lists.valleyair.org); All Regions (Notices_of_Permitting_Actions-All_Regions@lists.valleyair.org)
Subject: Public Notice on Permitting Action S-1154368

The District has posted a new permitting public notice. The public notice can be viewed on our website at: [http://www.valleyair.org/notices/Docs/2017/02-23-17_\(S-1154368\)/Newspaper.pdf](http://www.valleyair.org/notices/Docs/2017/02-23-17_(S-1154368)/Newspaper.pdf)

For a list of public notices and public notice packages, please visit our website at: http://www.valleyair.org/notices/public_notices_idx.htm#PermittingandEmissionReductionCreditCertificateNotices

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org



HEALTHY AIR LIVING™

www.healthyliving.com

Make one change for clean air!

Diseree Gomez

From: Diseree Gomez
Sent: Tuesday, February 28, 2017 12:03 PM
To: All Spanish (Avisos_Sobre_Acciones_de_Permitos-Todos@lists02.valleyair.org)
Subject: Aviso Publico Sobre Acciones de Permitos S-1154368

El Distrito del Aire a publicado un nuevo aviso público de permiso. El aviso público se puede ver en nuestro sitio de web en: [http://www.valleyair.org/notices/Docs/2017/02-23-17_\(S-1154368\)/Aviso.pdf](http://www.valleyair.org/notices/Docs/2017/02-23-17_(S-1154368)/Aviso.pdf)

Para obtener una lista de avisos públicos y paquetes de avisos públicos, por favor visite nuestro sitio de web en: http://www.valleyair.org/notices/public_notices_idx.htm#PermittingandEmissionReductionCreditCertificateNotices

Gracias,

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!



FEB 22 2017

Gregory Pritchett
Chevron USA, Inc.
PO Box 1392
Bakersfield, CA 93302

Re: Notice of Preliminary Decision – Emission Reduction Credits
Facility Number: S-55
Project Number: S-1154368

Dear Mr. Pritchett:

Enclosed for your review and comment is the District's analysis of Chevron USA, Inc.'s application for Emission Reduction Credits (ERCs) resulting from the shutdown of two IC engines, near Lost Hills, CA. The quantity of ERCs proposed for banking is 284 lb-NOx/yr, 1,295 lb-PM10/yr and 3,744 lb-CO/yr.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice comment period, the District intends to issue the ERCs. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. David Torii of Permit Services at (661) 392-5620.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:dbt

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

San Joaquin Valley Air Pollution Control District ERC Banking Application Review

Facility Name: Chevron USA, Inc. Date: 1/17/17
Mailing Address: PO Box 1392 Engineer: David Torii
Bakersfield, CA 93302 Lead Engineer: Rich Karrs
Contact Person: Lance Ericksen
Telephone: (661) 654-7145
Project #: S-1154368
Received: 12/22/15
Deemed Complete: 1/20/16
ERC #s: S-4659-2, '3 and '4

I. Summary

Chevron USA, Inc. (CUSA) shutdown natural gas-fired internal combustion engines (S-55-13 and '14) in December 2015. Subsequently, the facility submitted this application to bank actual emission reductions (AER) resulting from shutdown of the engines. See the Permits to Operate (PTOs) in **Appendix B**.

The following emission reductions have been found to qualify for ERC banking:

	NO _x [lb/qtr.]	PM ₁₀ [lb/qtr.]	CO [lb/qtr.]
1st Quarter	72	328	949
2nd Quarter	68	306	885
3rd Quarter	74	337	975
4th Quarter	72	324	935
Total	286	1,295	3,744

II. Applicable Rules

Rule 2301 Emission Reduction Credit Banking (1/19/12)

III. Location of Reduction

The equipment was located at the Lost Hills Gas Processing facility in the Section 3, Township 27S, Range 21E in Kern County.

IV. Method of Generating Reductions

The emission reductions are generated by the permanent shutdown of two 1680 bhp Waukeshia model 7044GSI rich burn natural gas-fired IC engines S-55-13 and '14 powering gas compressors. The engines' workload has been taken over by the facility's electric compression operation (S-55-9).

Equipment Description

- S-55-13: GAS COMPRESSION OPERATION INCLUDING ONE 1680 HP WAUKESHA MODEL 7044GSI NATURAL GAS-FIRED IC ENGINE WITH DCL INDUSTRIES MODEL 2-DC76-14 3-WAY CATALYST, AND A AIR/FUEL RATIO CONTROLLER DRIVING A THREE-STAGE GAS COMPRESSOR
- S-55-14: GAS COMPRESSION OPERATION INCLUDING ONE 1680 HP WAUKESHA MODEL 7044GSI NATURAL GAS-FIRED IC ENGINE WITH DCL INDUSTRIES MODEL 2-DC76-14 3-WAY CATALYST, AND AN AIR/FUEL RATIO CONTROLLER DRIVING A THREE-STAGE GAS COMPRESSOR

V. Calculations

A. Assumptions and Emission Factors

Assumptions

- Two-year baseline period selected for calculation of AER is 12/1/2011 through 11/30/2013
- Annual emissions will be rounded to the nearest pound in accordance with District Policy APR-1105 (dated 7/16/1992).
- The engines were fired on public utility commission (PUC) quality natural gas per PTOs.
- Natural Gas Heating Value is 1,020 Btu/scf (typical for PUC gas)

Emission Factors (EF)

PM10 Emissions Factor

No PM10 source tests were performed for the engines; therefore, the PTO's PM10 emission limit/factor was used.

Emissions factors for NOx, and CO were calculated based of the engines' source test data summarized below (see Appendix D for source test data).

	Source Test Date	ppmv @15% O2	
		NOx	CO
S-55-13	12/15/10	0.16	6.0
S-55-13	10/11/13	-	6.0
S-55-13	12/31/14	2.0	44.0
S-55-14	12/15/10	0.01	11.1
S-55-14	1/10/13	0.22	1.3
S-55-14	1/11/13	-	8.0
	Total	2.39	76.4
	Ave	0.60	12.7
	lb/MMBtu	0.0022	0.0289

The emission factor derivation calculations are shown below:

NOx Emissions Factor

Equation:

$$\text{NOx (lb. /MMBtu)} = \text{ppm} \times 1/\text{molar volume} \times \text{MW} \times \text{Fd} \times 20.9 / (20.9 - \%O_2)$$

Where:

$$\text{ppm} = 0.60 \text{ ppm @ } 15\%O_2 \text{ engine source test average}$$

$$\text{molar volume} = 379.5 \text{ dscf/lbmol @ } 14.696 \text{ psia, } 70 \text{ deg. F}$$

$$\text{MW} = \text{molecular weight, lb. /lb-mol}$$

$$\text{Fd} = 8710 \text{ dscf/MMBtu for natural gas @ } 70 \text{ deg F}$$

Therefore:

$$\text{NOx (lb./MMBtu)} = 0.60 \text{ E-06 ft}^3 \times 1/379.5 \text{ dscf/lb-mol} \times 46 \text{ lb./lb-mol} \times 8710 \text{ dscf/MMBtu} \times 20.9/(20.9 - 15.0)$$

$$\text{NOx (lb. /MMBtu)} = 0.0022$$

CO Emissions Factor

Equation:

$$\text{CO (lb. /MMBtu)} = \text{ppm} \times 1/\text{molar volume} \times \text{MW} \times \text{Fd} \times 20.9 / (20.9 - \%O_2)$$

Where:

$$\text{ppm} = 12.7 \text{ ppm @ } 15\% O_2 \text{ engine source test average}$$

$$\text{molar volume} = 379.5 \text{ dscf/lb. mol @ } 14.7 \text{ psia, } 70 \text{ deg. F}$$

$$\text{MW} = \text{molecular weight, lb. /lb-mol}$$

$$\text{Fd} = 8710 \text{ dscf/MMBtu for } 1020 \text{ Btu/scf Natural Gas @ } 70 \text{ deg F}$$

Therefore,

$$\text{CO (lb. /MMBtu)} = 12.7 \text{ E-06} \times 1/379.5 \text{ dscf/lb-mol} \times 28 \text{ lb./lb-mol} \times 8710 \text{ dscf/MMBtu} \times 20.9/(20.9 - 15.0)$$

$$\text{CO (lb. /MMBtu)} = 0.0289$$

The emissions factors are summarized below:

Natural Gas Emission Factors		
Pollutant	Emissions Factors (lb/MMBtu)	Source
NOx	0.0022	Engine source tests
PM10	0.01	PTOs
CO	0.0289	Engine source tests

B. Baseline Period Determination

Pursuant to Rule 2301, Section 3.6, the Baseline Period is the same as defined in Rule 2201, which is:

The two consecutive years of operation immediately prior to the submission date of the complete application; or at least two consecutive years within the five years immediately prior to the submission date of the complete application if determined by the APCO as more representative of normal source operation.

The baseline period from 12/1/2011 to 11/30/2013 was determined to be more representative of normal source operation than the two years immediately prior to submission of the banking application. The baseline period was calculated by determining the normal source operation (NSO) average fuel use for the last nine years; comparing the fuel use for the last five years, and establishing the two year period within the last five years closest to the NSO nine year average as the baseline period. See fuel use and NSO data in Appendix C.

C. Baseline Data

The baseline natural gas-use is taken from the annual fuel-use records that have been supplied by the applicant, as posted in the following table.

Fuel Usage (MMBtu)							
Month/Year	Year					Total Quarterly Fuel Use	Average Fuel Used for 2012 and 2013
	Quarter	2011	2012	2013			
Jan	1 st		12,852	12,925		72,985	36,493
Feb	1 st		11,586	10,857			
Mar	1 st		11,003	13,762			
Apr	2 nd		9,568	12,291		68,056	34,028
May	2 nd		13,250	12,844			
Jun	2 nd		13,406	6,697			
Jul	3 rd		13,977	6,029		74,936	37,468
Aug	3 rd		14,010	12,457			
Sep	3 rd		14,745	13,718			
Oct	4 th		14,425	13,352		71,906	35,953
Nov	4 th		12,758	13,687			
Dec	4 th	10,512	7,172				

D. Historical Actual Emissions (HAE)

The HAE from the fuel use is determined by multiplying the average quarterly fuel-use by the emission factor presented above.

Criteria Emissions During Baseline Period (lb./qtr.) (HAE)			
	NO _x	PM10	CO
1st Quarter	80	365	1,055
2nd Quarter	75	340	983
3rd Quarter	82	375	1,083
4th Quarter	79	360	1,039

The Air Quality Improvement Deduction (AQID) is 10% of the AER per Rule 2201, Sections 3.6 and 4.12.1, and is summarized as follows:

Air Quality Improvement Deduction (AQID) lb./qtr. (AQID = AER x 10%)			
	NO _x	PM10	CO
1st Quarter	8	36	105
2nd Quarter	7	34	98
3rd Quarter	8	37	108
4th Quarter	8	36	104

E. Post Project Potential to Emit (PE2)

As discussed above, the subject equipment has been permanently shut down and its PTOs surrendered. Therefore the PE2s for NOx, PM10, and CO are zero.

F. Emission Reductions Eligible for Banking

The emission reductions eligible for banking are the difference between the historical actual emissions and the potential to emit after the project minus the air quality improvement deduction.

Criteria Emissions Eligible for Banking (lb. /qtr.)			
	NOx	PM10	CO
1st Quarter	72	328	949
2nd Quarter	68	306	885
3rd Quarter	74	337	975
4th Quarter	72	324	935

VI. Compliance

Rule 2301 – Emissions Reduction Credit Banking

To comply with the definition of Actual Emissions Reductions (Rule 2201, Section 3.2.1), the reductions must be real, enforceable, quantifiable, permanent, and surplus.

A. Real

The emission reductions were generated by the shutdown of two natural gas-fired internal combustion engines powering natural gas compressors. The engines' workload has been taken over by the facility's electric compression operation (S-55-9). Emission reductions have been calculated based on actual heat input to the engines and certified source test results and recognized emission factors for the baseline period. Therefore, the reductions are real.

B. Enforceable

The PTOs for the natural gas-fired internal combustion engines have been surrendered. Operation of the equipment without a valid permit would subject the Permittee to enforcement actions. Therefore, the reductions are enforceable.

C. Quantifiable

The reductions are quantifiable since they were calculated from historic fuel use data, source testing data, established and accepted emission factors, permitted limits, and methods according to District Rule 2201. Therefore, the reductions are quantifiable.

D. Permanent

The natural gas-fired internal combustion engines have been shut down and the PTOs surrendered. The gas formerly compressed by the IC engines is currently compressed by electric motor-powered compressors.

E. Surplus

To be considered surplus, Actual Emission Reductions shall be in excess, at the time the application for an Emission Reduction Credit or an Authority to Construct authorizing such reductions is deemed complete, of any emissions reduction which:

- *Is required or encumbered by any laws, rules, regulations, agreements, orders, or*
- *Is attributed to a control measure noticed for workshop, or proposed or contained in a State Implementation Plan, or*
- *Is proposed in the APCO's adopted air quality plan pursuant to the California Clean Air Act.*

At the time of the shutdown and subsequent permit surrender, the units involved were in compliance with current and any known future requirements of all applicable rules and regulations. Therefore, the reductions are surplus.

F. Not used for the Approval of an Authority to Construct or as Offsets

The emission reduction credits generated by the shutdown of natural gas-fired internal combustion engine will not be used for the approval of any Authority to Construct or used as mitigating offsets for approval of other equipment. See section VI.A, above.

G. Timely Submittal

Section 4.2.3 of Rule 2301 – Emissions Reduction Credit Banking (1/19/12) states that ERC certificate applications for reductions shall be submitted within 180 days after the emission reduction occurs. The ERC application was received on 12/22/15. The engines ceased operation in December of 2015. Therefore, the application was submitted in a timely fashion.

VII. Recommendation

Issue the ERC Certificates in the amount posted in the table below and on the Draft ERC Certificates in Appendix A.

Summary of ERC Amounts (lb)			
	NO_x	PM₁₀	CO
ERC Number	S-4659-2	S-4659-4	S-4659-3
1 st Quarter	72	328	949
2 nd Quarter	68	306	885
3 rd Quarter	74	337	975
4 th Quarter	72	324	935
Total Per Year	286	1,295	3,744

List of Appendixes

- A. Draft Emission Reduction Credit Certificates
- B. Surrendered PTO
- C. NSO and Historical Fuel Use Data
- D. Engine Source Test Results

Appendix A
Draft ERC Certificates

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
S-4659-2

ISSUED TO: CHEVRON USA INC LOST HILLS GP

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
72 lbs	68 lbs	74 lbs	72 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
S-4659-3

ISSUED TO: CHEVRON USA INC LOST HILLS GP

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For CO Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
949 lbs	885 lbs	975 lbs	935 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director /APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

San Joaquin Valley
Air Pollution Control District

Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate

DRAFT
S-4659-4

ISSUED TO: CHEVRON USA INC LOST HILLS GP

ISSUED DATE: <DRAFT>

LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
328 lbs	306 lbs	337 lbs	324 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
100.0%	100.0%	100.0%	100.0%
328 lbs	306 lbs	337 lbs	324 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

Appendix B
Surrendered PTOs

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-55-13-11

EXPIRATION DATE: 08/31/2016

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

GAS COMPRESSION OPERATION INCLUDING ONE 1680 HP WAUKESHA MODEL 7044GSI NATURAL GAS-FIRED IC ENGINE WITH DCL INDUSTRIES MODEL 2-DC76-14 3-WAY CATALYST, AND A AIR/FUEL RATIO CONTROLLER DRIVING A THREE-STAGE GAS COMPRESSOR:

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
2. The engine shall be equipped with a turbocharger and with an intercooler. [District Rule 2201]
3. This IC engine shall be fired on Public Utility Commission (PUC) quality natural gas with a sulfur content not exceeding 1.0 grains/100 scf. [District Rules 2201, 4801]
4. Compressor shall be reciprocating type only and shall be in wet gas service only. [District Rules 2201, 4001]
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
6. VOC emissions from fugitive components associated with this engine/compressor shall not exceed 2.0 lb VOC per day. [District Rule 2201]
7. VOC emission rate from all compression operations shall not exceed 0.66 lb/hr from fugitive sources. [District NSR Rule]
8. Emissions from the IC engine when operating under load shall not exceed any of the following limits: 11 ppmv-NOx @ 15% O2, 30 ppmv-VOC @ 15% O2, 270 ppmv-CO @ 15% O2, 0.00285 lb-SOx/MMBtu, or 10 lb-PM10/MMscf. [District Rules 2201, 4702]
9. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NOx. [District Rules 4702]
10. Compliance demonstration (source testing) shall be by District witnessed or authorized by District personnel. [District Rule 1081]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
13. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
16. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702]
19. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702]
20. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702]
21. The permittee shall maintain, and make available for District inspection, all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4702]
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081]
23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801]
24. Sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 1081]
25. Sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE
These terms and conditions are part of the Facility-wide Permit to Operate.

26. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rules 1070]
27. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702]

These terms and conditions are part of the Facility-wide Permit to Operate.

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: S-55-14-11

EXPIRATION DATE: 08/31/2016

SECTION: SW03 TOWNSHIP: 27S RANGE: 21E

EQUIPMENT DESCRIPTION:

GAS COMPRESSION OPERATION INCLUDING ONE 1680 HP WAUKESHA MODEL 7044GSI NATURAL GAS-FIRED IC ENGINE WITH DCL INDUSTRIES MODEL 2-DC76-14 3-WAY CATALYST, AND AN AIR/FUEL RATIO CONTROLLER DRIVING A THREE-STAGE GAS COMPRESSOR:

PERMIT UNIT REQUIREMENTS

1. This engine shall be equipped with either a positive crankcase ventilation (PCV) system that recirculates crankcase emissions into the air intake system for combustion, or a crankcase emissions control device of at least 90% control efficiency. [District Rule 2201]
2. The engine shall be equipped with a turbocharger and with an intercooler. [District Rule 2201]
3. This IC engine shall be fired on Public Utility Commission (PUC) quality natural gas with a sulfur content not exceeding 1.0 grains/100 scf. [District Rules 2201, 4801]
4. Compressor shall be reciprocating type only and shall be in wet gas service only. [District Rules 2201, 4001]
5. This engine shall be equipped with an operational nonresettable elapsed time meter or other APCO approved alternative. [District Rule 4702]
6. VOC emissions from fugitive components associated with this engine/compressor shall not exceed 2.0 lb VOC per day. [District Rule 2201]
7. VOC emission rate from all compression operations shall not exceed 0.66 lb/hr from fugitive sources. [District 2201 Rule]
8. Emissions from the IC engine when operating under load shall not exceed any of the following limits: 11 ppmv-NOx @ 15% O₂, 30 ppmv-VOC @ 15% O₂, 270 ppmv-CO @ 15% O₂, 0.00285 lb-SO_x/MMBtu, or 10 lb- PM10/MMscf. [District Rules 2201, 4702]
9. Emissions source testing shall be conducted with the engine operating either at conditions representative of normal operations or conditions specified in the Permit to Operate. Source testing emissions for this unit shall be calculated using the arithmetic mean, pursuant to District Rule 1081 (Amended December 16, 1993), of 3 thirty-minute test runs for NO_x. [District Rule 4702]
10. Compliance demonstration (source testing) shall be by District witnessed or authorized by District personnel. [District Rule 1081]
11. Source testing shall be conducted using the methods and procedures approved by the District. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. [District Rule 1081]
12. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081]
13. No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
14. Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

15. The permittee shall monitor and record the stack concentration of NO_x (as NO₂), CO, and O₂ at least once every calendar month (in which a source test is not performed) using a portable emission monitor that meets District specifications. Monitoring shall not be required if the engine is not in operation, i.e. the engine need not be started solely to perform monitoring. Monitoring shall be performed within 5 days of restarting the engine unless monitoring has been performed within the last month. Records must be maintained of the dates of non-operation to validate extended monitoring frequencies. [District Rule 4702]
16. If either the NO_x or CO concentrations corrected to 15% O₂, as measured by the portable analyzer, exceed the permitted emission concentration, the permittee shall return the emissions to within the acceptable range as soon as possible, but no longer than 8 hours after detection. If the portable analyzer readings continue to exceed the allowable emissions concentration after 8 hours, the permittee shall notify the District within the following 1-hour, and conduct a certified source test within 60 days of the first exceedance. In lieu of conducting a source test, the permittee may stipulate a violation has occurred, subject to enforcement action. The permittee must then correct the violation, show compliance has been re-established, and resume monitoring procedures. If the deviations are the result of a qualifying breakdown condition pursuant to Rule 1100, the permittee may fully comply with Rule 1100 in lieu of performing the notification and testing required by this condition. [District Rule 4702]
17. All alternate monitoring parameter emission readings shall be taken with the unit operating either at conditions representative of normal operations or conditions specified in the permit-to-operate. The analyzer shall be calibrated, maintained, and operated in accordance with the manufacturer's specifications and recommendations or a protocol approved by the APCO. Emission readings taken shall be averaged over a 15 consecutive-minute period by either taking a cumulative 15 consecutive-minute sample reading or by taking at least five (5) readings, evenly spaced out over the 15 consecutive-minute period. [District Rule 4702]
18. The permittee shall maintain records of: (1) the date and time of NO_x, CO, and O₂ measurements, (2) the O₂ concentration in percent and the measured NO_x and CO concentrations corrected to 15% O₂, (3) make and model of exhaust gas analyzer, (4) exhaust gas analyzer calibration records, and (5) a description of any corrective action taken to maintain the emissions within the acceptable range. [District Rule 4702]
19. This engine shall be operated and maintained in proper operating condition per the manufacturer's requirements as specified in the Inspection and Maintenance (I & M) plan submitted to the District. [District Rule 4702]
20. The permittee shall update the I & M plan for this engine prior to any planned change in operation. The permittee must notify the District no later than seven days after changing the I & M plan and must submit an updated I & M plan to the APCO no later than 14 days after the change for approval. The date and time of the change to the I & M plan shall be recorded in the engine's operating log. For modifications, the revised I & M plan shall be submitted to and approved by the APCO prior to issuance of the Permit to Operate. The permittee may request a change to the I & M plan at any time. [District Rule 4702]
21. The permittee shall maintain, and make available for District inspection, all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 4702]
22. The following test methods shall be used: NO_x (ppmv) - EPA Method 7E or ARB Method 100, CO (ppmv) - EPA Method 10 or ARB Method 100, stack gas oxygen - EPA Method 3 or 3A or ARB Method 100, and VOC (ppmv) - EPA Method 25 or EPA Method 18 referenced as methane, fuel gas sulfur content - ASTM D 3246 or double GC for total sulfur content, and EPA Method 21 for fugitive components. [District Rule 1081]
23. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [District Rule 4801]
24. Sulfur content of the natural gas being fired in the engine shall be determined using ASTM method D 1072, D 3031, D 4084, D 3246, or double GC for H₂S and mercaptans. [District Rule 1081]
25. Sulfur content of each fuel source shall be tested weekly except that if compliance with the fuel sulfur content limit has been demonstrated for 8 consecutive weeks for a fuel source, then the testing frequency shall be quarterly. If a test shows noncompliance with the sulfur content requirement, the source must return to weekly testing until eight consecutive weeks show compliance. [District Rule 2201]

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

26. Permittee shall maintain an engine operating log, on a monthly basis, which includes the following information; total hours of operation, type and quantity of fuel used, maintenance or modifications performed, monitoring data, compliance source test results, and any other information necessary to demonstrate compliance with Rule 4702. [District Rule 1070]
27. All records required by this permit shall be maintained for a period of five years and shall be made readily available for District inspection upon request. [District Rule 4702]

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix C

NSO and Historical Fuel Use Data

Normal Source Operation K5 and K6

Month			Total
	MSCF	Blu/scf	MMBlu
Dec-05		1,020	
Jan-06	11,745	1,020	11,980
Feb-06	11,101	1,020	11,323
Mar-06	11,988	1,020	12,228
Apr-06	11,125	1,020	11,348
May-06	12,052	1,020	12,293
Jun-06	11,015	1,020	11,235
Jul-06	8,665	1,020	8,838
Aug-06	12,746	1,020	13,001
Sep-06	12,559	1,020	12,810
Oct-06	12,594	1,020	12,846
Nov-06	13,391	1,020	13,659
Dec-06	10,509	1,020	10,719
Jan-07	11,658	1,020	11,891
Feb-07	11,745	1,020	11,980
Mar-07	12,173	1,020	12,416
Apr-07	10,055	1,020	10,256
May-07	7,761	1,020	7,916
Jun-07	10,279	1,020	10,485
Jul-07	12,445	1,020	12,694
Aug-07	13,108	1,020	13,370
Sep-07	12,203	1,020	12,447
Oct-07	11,332	1,020	11,559
Nov-07	12,558	1,020	12,809
Dec-07	11,785	1,020	12,021
Jan-08	12,687	1,020	12,941
Feb-08	12,754	1,020	13,009
Mar-08	10,642	1,020	10,855
Apr-08	11,434	1,020	11,663
May-08	11,045	1,020	11,266
Jun-08	11,071	1,020	11,292
Jul-08	11,777	1,020	12,013
Aug-08	11,012	1,020	11,232
Sep-08	9,917	1,020	10,115
Oct-08	11,245	1,020	11,470
Nov-08	11,119	1,020	11,341
Dec-08	11,683	1,020	11,917
Jan-09	15,049	1,020	15,350
Feb-09	11,246	1,020	11,471
Mar-09	15,125	1,020	15,428
Apr-09	13,874	1,020	14,151
May-09	15,220	1,020	15,524
Jun-09	10,234	1,020	10,439
Jul-09	14,069	1,020	14,350
Aug-09	14,505	1,020	14,795
Sep-09	14,413	1,020	14,701
Oct-09	13,963	1,020	14,242
Nov-09	13,584	1,020	13,856
Dec-09	9,899	1,020	10,097
Jan-10	12,506	1,020	12,756
Feb-10	11,893	1,020	12,131
Mar-10	13,100	1,020	13,362
Apr-10	12,705	1,020	12,969
May-10	13,453	1,020	13,722
Jun-10	12,646	1,020	12,899
Jul-10	12,647	1,020	12,900
Aug-10	12,864	1,020	13,121
Sep-10	12,980	1,020	13,240
Oct-10	12,737	1,020	12,992
Nov-10	12,448	1,020	12,697
Dec-10	13,208	1,020	13,472

Jan-11	13,515	1,020	13,785
Feb-11	12,264	1,020	12,509
Mar-11	13,177	1,020	13,441
Apr-11	12,707	1,020	12,961
May-11	12,951	1,020	13,210
Jun-11	13,042	1,020	13,303
Jul-11	12,888	1,020	13,146
Aug-11	10,732	1,020	10,947
Sep-11	11,013	1,020	11,233
Oct-11	11,017	1,020	11,237
Nov-11	7,372	1,020	7,519
Dec-11	10,306	1,020	10,512
Jan-12	12,600	1,020	12,852
Feb-12	11,359	1,020	11,586
Mar-12	10,787	1,020	11,003
Apr-12	9,380	1,020	9,568
May-12	12,990	1,020	13,250
Jun-12	13,143	1,020	13,406
Jul-12	13,703	1,020	13,977
Aug-12	13,735	1,020	14,010
Sep-12	14,456	1,020	14,745
Oct-12	14,142	1,020	14,425
Nov-12	12,508	1,020	12,758
Dec-12	7,031	1,020	7,172
Jan-13	12,672	1,020	12,925
Feb-13	10,644	1,020	10,857
Mar-13	13,492	1,020	13,762
Apr-13	12,050	1,020	12,291
May-13	12,592	1,020	12,844
Jun-13	6,566	1,020	6,697
Jul-13	5,911	1,020	6,029
Aug-13	12,213	1,020	12,457
Sep-13	13,449	1,020	13,718
Oct-13	13,099	1,020	13,352
Nov-13	13,418	1,020	13,687
Dec-13	13,534	1,020	13,805
Jan-14	14,060	1,020	14,341
Feb-14	12,737	1,020	12,991
Mar-14	13,736	1,020	14,011
Apr-14	13,256	1,020	13,521
May-14	4,516	1,020	4,606
Jun-14	7,179	1,020	7,322
Jul-14	11,343	1,020	11,570
Aug-14	13,345	1,020	13,612
Sep-14	12,074	1,020	13,233
Oct-14	13,907	1,020	14,185
Nov-14	12,651	1,020	12,904
Dec-14	11,456	1,020	11,685
Jan-15	7,509	1,020	7,659
Feb-15	0	1,020	0
Mar-15	0	1,020	0
Apr-15	12,539	1,020	12,790
May-15	15,162	1,020	15,465
Jun-15	13,236	1,020	13,501
Jul-15	11,301	1,020	11,527
Aug-15	10,666	1,020	10,879
Sep-15	12,611	1,020	12,863
Oct-15	11,565	1,020	11,796
Nov-15	10,506	1,020	10,717
Dec-15		1,020	

NSO Average

12,000

Historical Actual Emissions (HAE)

Month	Total			24 Month Block Differences vs NSO	36 Month Block Differences vs NSO	48 Month Block Differences vs NSO
	MSCF	Btu/scf	MMBtu			
Dec-10	13,208	1,020	13,472			
Jan-11	13,515	1,020	13,785			
Feb-11	12,284	1,020	12,509			
Mar-11	13,177	1,020	13,441			
Apr-11	12,707	1,020	12,981			
May-11	12,951	1,020	13,210			
Jun-11	13,042	1,020	13,303			
Jul-11	12,888	1,020	13,148			
Aug-11	10,732	1,020	10,947			
Sep-11	11,013	1,020	11,233			
Oct-11	11,017	1,020	11,237			
Nov-11	7,372	1,020	7,519			
Dec-11	10,306	1,020	10,512			
Jan-12	12,600	1,020	12,852			
Feb-12	11,359	1,020	11,586			
Mar-12	10,787	1,020	11,003			
Apr-12	9,380	1,020	9,588			
May-12	12,990	1,020	13,250			
Jun-12	13,143	1,020	13,406			
Jul-12	13,703	1,020	13,877			
Aug-12	13,735	1,020	14,010			
Sep-12	14,458	1,020	14,745			
Oct-12	14,142	1,020	14,425			
Nov-12	12,508	1,020	12,758	452		
Dec-12	7,031	1,020	7,172	190		
Jan-13	12,872	1,020	12,925	154		
Feb-13	10,844	1,020	10,867	85		
Mar-13	13,492	1,020	13,782	89		
Apr-13	12,050	1,020	12,281	71		
May-13	12,582	1,020	12,844	55		
Jun-13	6,588	1,020	6,897	210		
Jul-13	5,911	1,020	6,029	518		
Aug-13	12,213	1,020	12,467	454		
Sep-13	13,449	1,020	13,718	350		
Oct-13	13,090	1,020	13,362	262		
Nov-13	13,418	1,020	13,687	5	74	
Dec-13	13,634	1,020	13,805	132	88	
Jan-14	14,080	1,020	14,341	184	88	
Feb-14	12,737	1,020	12,981	263	112	
Mar-14	13,736	1,020	14,011	378	127	
Apr-14	13,258	1,020	13,521	543	143	
May-14	4,516	1,020	4,806	183	86	
Jun-14	7,179	1,020	7,322	71	282	
Jul-14	11,343	1,020	11,570	171	308	
Aug-14	13,345	1,020	13,612	189	232	
Sep-14	12,974	1,020	13,233	251	178	
Oct-14	13,907	1,020	14,185	261	94	
Nov-14	12,661	1,020	12,904	255	55	99
Dec-14	11,456	1,020	11,685	88	88	8
Jan-15	7,509	1,020	7,659	288	57	28
Feb-15	0	1,020	0	738	378	82
Mar-15	0	1,020	0	1,312	884	89
Apr-15	12,539	1,020	12,790	1,281	585	62
May-15	15,162	1,020	15,485	1,182	533	65
Jun-15	13,236	1,020	13,501	888	530	327
Jul-15	11,301	1,020	11,527	669	588	607
Aug-15	10,666	1,020	10,878	735	685	610
Sep-15	12,611	1,020	12,863	770	788	583
Oct-15	11,565	1,020	11,786	836	811	558
Nov-15	10,506	1,020	10,717	859	887	568

Appendix D

Engine Source Test Results

S-55-13

12/15/10

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 13	Mod#: 5
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
---------------	---------------------	------------------------	----------------------------

Representative Test

Unit Identification:	Description:	<input type="button" value="Add New Unit"/>	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>
CAHN GP K-5				
1 Unit Total				

Test Results For: CAHN GP K-5

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	70.0	6.0	<input type="checkbox"/>	15	3	
Fuel S	lbs/MMBtu SO2	0.00285	0.0002	<input type="checkbox"/>		3	
NOx	ppm	25.0	0.16	<input type="checkbox"/>	15	3	
VOC	ppm	30.0	0.0	<input type="checkbox"/>	15	3	

10/11/13

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 13	Mod#: 6
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
---------------	---------------------	------------------------	----------------------------

Representative Test

Unit Identification:	Description:	<input type="button" value="Add New Unit"/>	<input type="button" value="Save"/>	<input type="button" value="Cancel"/>
K-5, SUB ZZZZ				
1 Unit Total				

Test Results For: K-5, SUB ZZZZ

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	270.0	6.0	<input type="checkbox"/>	15	3	

S-55-13

12/31/14

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 13	Mod#: 8
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
---------------	---------------------	------------------------	----------------------------

Representative Test

Unit Identification:	Description:			
CAHN GP K-5		Add New Unit	Save	Cancel
1 Unit Total				

Test Results For: CAHN GP K-5

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	70.0	44.0	<input type="checkbox"/>	15	3	
Fuel S	gr/100scf	1.0	0.06	<input type="checkbox"/>		3	
NOx	ppm	11.0	2.0	<input type="checkbox"/>	15	3	
SO2	lb/MMBtu	0.00285	0.0002	<input type="checkbox"/>		3	
VOC	ppm	30.0	0.0	<input type="checkbox"/>	15	3	

S-55-14

12/15/10

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 14	Mod#: 5
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
---------------	---------------------	------------------------	----------------------------

Representative Test

Unit Identification:	Description:		
K-6 1 Unit Total		Add New Unit	Save Cancel

Test Results For: CAHN GP K-6

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	70.0	11.1	<input type="checkbox"/>	15	3	
Fuel S	lbs/MMBtu SO2	0.00285	0.0002	<input type="checkbox"/>		3	
NOx	ppm	25.0	0.01	<input type="checkbox"/>	15	3	
VOC	ppm	30.0	0.0	<input type="checkbox"/>	15	3	

1/10/13

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 14	Mod#: 6
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details
---------------	---------------------	------------------------	----------------------------

Representative Test

Unit Identification:	Description:		
CAHN GP K-6 1 Unit Total		Add New Unit	Save Cancel

Test Results For: CAHN GP K-6

Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description
CO	ppm	70.0	1.3	<input type="checkbox"/>	15	3	
Fuel S	gr/100scf	1.0	0.06	<input type="checkbox"/>		3	
NOx	ppm	25.0	0.22	<input type="checkbox"/>	15	3	
VOC	ppm	30.0	0.1	<input type="checkbox"/>	15	3	

S-55-14

1/11/13

Facility: S 55 CHEVRON USA INC LOST HILLS GP	Permit ID: 14	Mod#: 6
--	---------------	---------

Test Tracking	Periodic Test Setup	Test Equipment Details	Test Result Details																
<p>Representative Test</p> <p>Unit Identification: <input type="text" value="K-6, SUB ZZZZ"/> Description: <input type="text"/></p> <p>1 Unit Total</p> <p><input type="button" value="Add New Unit"/> <input type="button" value="Save"/> <input type="button" value="Cancel"/></p>																			
<p>Test Results For: K-6, SUB ZZZZ</p> <table border="1"> <thead> <tr> <th>Pollutant</th> <th>Units</th> <th>Limit</th> <th>Result</th> <th>Failed</th> <th>O2 Correction (%)</th> <th># Runs</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>CO</td> <td>ppm</td> <td>270.0</td> <td>8.0</td> <td><input type="checkbox"/></td> <td>15</td> <td>3</td> <td></td> </tr> </tbody> </table>				Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description	CO	ppm	270.0	8.0	<input type="checkbox"/>	15	3	
Pollutant	Units	Limit	Result	Failed	O2 Correction (%)	# Runs	Description												
CO	ppm	270.0	8.0	<input type="checkbox"/>	15	3													

PROJECT ROUTING FORM

FACILITY NAME: Chevron USA Inc Lost Hills Gp

FACILITY ID: S-55 PROJECT NUMBER: S-1154368

PERMIT #'s: _____

DATE RECEIVED: December 22, 2015

PRELIMINARY REVIEW	ENGR	DATE	SUPR	DATE
A. Application Deemed Incomplete				
Second Information Letter				
B. Application Deemed Complete	<i>ABT</i>	<i>11/19/16</i>	<i>cg</i>	<i>1/20/16</i>
C. Application Pending Denial				
D. Application Denied				

ENGINEERING EVALUATION	INITIAL	DATE
E. Engineering Evaluation Complete • Project triggering Federal Major Modification: <input type="checkbox"/> Yes AND Information entered into database (AirNet) <input checked="" type="checkbox"/> No (not Fed MMod) • District is Lead Agency for CEQA purposes AND the project GHG emissions increase exceeds 230 metric tons/year: <input checked="" type="checkbox"/> Yes AND Information Entered in database (AirNet) <input type="checkbox"/> Not Required	<i>ABT</i>	<i>10/31/16</i> <i>2/24/15</i>
F. Supervising Engineer Approval Direct Convert <input type="checkbox"/> Yes <input type="checkbox"/> No	<i>RWIC</i>	<i>11/4/16</i>
G. Compliance Division Approval <input checked="" type="checkbox"/> Not Required		
H. Applicant's Review of Draft Authority to Construct Completed <i>N/A</i> <input type="checkbox"/> 3-day Review <input type="checkbox"/> 10-day Review <input checked="" type="checkbox"/> No Review Requested		
I. Permit Services Regional Manager Approval	<i>cg</i>	<i>11/8/16</i>

DIRECTOR REVIEW <input type="checkbox"/> Not Required	INITIAL	DATE
J. Preliminary Approval to Director		
K. Final Approval to Director		

David Torii

From: David Torii
Sent: Monday, April 3, 2017 6:37 AM
To: OA-PublicNotices
Subject: ERC Banking Project 1154368, S-55
Attachments: Torii 1154368final-public_notice_erc_no_comments_(OC_8-4-14).doc

OA Group,

Attached are documents requiring Director signature. Please let me know if you have questions.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!

David Torii

From: David Torii
Sent: Thursday, December 15, 2016 6:53 AM
To: Misa Velasco
Subject: RE: ERC Banking Project 1154368, S-55

Hi Misa,

I just wanted to touch bases with you regarding what became of this public notice.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING™

www.healthyairliving.com

Make one change for clean air!

From: Misa Velasco
Sent: Tuesday, November 15, 2016 2:56 PM
To: David Torii; OA-PublicNotices
Subject: RE: ERC Banking Project 1154368, S-55

Hi David,

Your request has been received and will be processed.

Thank you!!

Artemiza Velasco
Senior Office Assistant
San Joaquin Valley Air Pollution Control District
559-230-6009



HEALTHY AIR LIVING™

www.healthyairliving.com

Make one change for clean air!

Service Teamwork Attitude Respect

From: David Torii
Sent: Tuesday, November 15, 2016 1:39 PM
To: OA-PublicNotices
Subject: ERC Banking Project 1154368, S-55

OA Group,

Attached are documents requiring Director signature. Please let me know if you have questions.

Thanks

David Torii, P.E.
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING™

www.healthyairliving.com

Make one change for clean air!

David Torii

From: David Torii
Sent: Thursday, October 27, 2016 12:32 PM
To: 'LanceEricksen '
Subject: 1154368, S-4659 ERC Banking Amounts

Lance,

As requested during our phone conversation this AM, below are the bankable emissions for the above project.

Please let me know if you have questions.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!

Criteria Emissions Eligible for Banking (lb. /qtr.)			
	NOx	PM10	CO
1st Quarter	72	328	949
2nd Quarter	67	306	885
3rd Quarter	74	337	975
4th Quarter	71	324	935

David Torii

From: Beck, Daniel L. <beckdl@chevron.com>
Sent: Wednesday, August 10, 2016 9:08 AM
To: David Torii
Cc: Ericksen, Lance; Ockert, Todd J
Subject: ERC Banking Project S-1154368

David – I received word from the Lost Hills field that the two engines will not be re-started and will be removed. A permit cancellation letter should be sent to the APCD in the next couple of weeks.

I know the last communication between you and Lance was to put the project on hold until the issue of permanent cancellation could be resolved. Please deem it resolved and the project can be processed. Also, please let me know if you need anything from me.

Thanks

Daniel L. Beck, P.E.
HES Advisor – Air Permitting
Health, Environment and Safety
San Joaquin Valley Business Unit

Chevron North America Exploration and Production
9525 Camino Media, C1047
Bakersfield, CA 93311
Office: 661 654 7141
Cell: 661 282 6157
e-mail: beckdl@chevron.com

David Torii

From: Ericksen, Lance <Lance.Ericksen@chevron.com>
Sent: Thursday, March 31, 2016 11:24 AM
To: David Torii
Subject: Banking Project for Lost Hills Engines K-5 and K-6 - Project S-1154368

These engines have been shutdown since the first of the year. Chevron is currently evaluating future need for IC engines at the compression station. This evaluation may take several more months. Please put the banking project for these engines on hold until we have completed our review.

Thank you for your assistance.

Lance Ericksen
Health, Environment, and Safety Specialist/Engineer

Chevron North America Exploration and Production Company
San Joaquin Valley Business Unit (SJVBU)
9525 Camino Media (C-1035)
Bakersfield, CA 93311
Office: (661) 654-7145
Fax: (661) 654-7606
Lance.Ericksen@chevron.com

CONFIDENTIALITY NOTICE: This message may contain confidential information that is legally privileged and is intended only for the use of the parties to whom it is addressed. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of any information in this message is strictly prohibited. If you have received this message in error, please notify me at (661) 654-7145 or reply by e-mail. Thank you.

TELEPHONE/MEETING CONVERSATION

Date: 3/7/16

Time:

With: Lance Ericksen

Title: Applicant

Telephone Number: 661-654-7145

Company: CUSA

Facility ID: S-55

Project No.: 1154368

APCD Representative: David Torii

Title: AQE

Subject:

SUMMARY OF CONVERSATION:

DT: Can you explain what changes at/to the gas plant have occurred that make it possible to shut down the two IC engine-powered compressors?

LE: The facility's electric-powered compressors will take over the workload of the IC engine-powered compressors. No increase in the flare's usage is expected.

We may replace engines S-55-13 and '14 in the future since it is cheaper for us to operate natural gas-fired IC engines than electric motors.

We will surrender the S-55-13 and '14 PTOs before issuance of the ERCs but prefer to keep them in the event it is decided to replace the engines with replacement IC engines that may be able to enjoy some NSR benefits.

David Torii

From: David Torii
Sent: Monday, March 7, 2016 12:56 PM
To: Leonard Scandura
Subject: Translation Request 1154368, S-55
Attachments: 1154368prelim-public_notice_erc_(OC_9-10-14).doc

Leonard,

Attached is a public notice requiring translation into Spanish.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!

David Torii

From: David Torii
Sent: Monday, February 29, 2016 1:15 PM
To: 'Ericksen, Lance'
Subject: RE: ERC Banking Project 1154368, S-55

Lance,

Also, can you explain what changes at/to the gas plant have occurred that make it possible to shut down the two IC engine-powered compressors.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!

From: Ericksen, Lance [<mailto:Lance.Ericksen@chevron.com>]
Sent: Wednesday, February 10, 2016 7:29 AM
To: David Torii
Subject: RE: ERC Banking Project 1154368, S-55

I haven't had time to go over this in detail hopefully I can look at it Friday.

Thanks for your patience.

From: David Torii [<mailto:David.Torii@valleyair.org>]
Sent: Tuesday, February 09, 2016 9:22 AM
To: Ericksen, Lance
Subject: [****EXTERNAL****] RE: ERC Banking Project 1154368, S-55

Lance,

Have you made a decision regarding the below email?

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!

From: David Torii
Sent: Thursday, January 28, 2016 7:55 AM
To: LanceEricksen
Subject: ERC Banking Project 1154368, S-55

Lance,

Attached is the NOx and CO source test data I used to calculate the AER for the ERC banking application for the shutdown of two S-55 engines. Please let me know if you have objections.

Thanks

David Torii
Permit Services Division
San Joaquin Valley Air Pollution Control District
34946 Flyover Court
Bakersfield, CA 93308-9725
661-392-5620
Fax 661-392-5585



HEALTHY AIR LIVING

www.healthyairliving.com

Make one change for clean air!



JAN 20 2016

Gregory Pritchett
Chevron USA Inc Lost Hills Gp
PO Box 1392
Bakersfield, CA 93302

Re: Notice of Receipt of Complete Application - Emission Reduction Credits Banking
Facility Number: S-55
Project Number: S-1154368

Dear Mr. Pritchett:

The District has completed a preliminary review of your application for Emission Reduction Credits (ERCs) Banking resulting from the shutdown of two IC engine/compressors at the Lost Hills Gas Plant, Lost Hills.

Based on this preliminary review, the application appears to be complete. However, during processing of your application, the District may request additional information to clarify, correct, or otherwise supplement, the information on file.

Pursuant to District Rule 3060, your application may be subject to an hourly Engineering Evaluation Fee. If the applicable fees exceed the submitted application filing fee, the District will notify you at the conclusion of our review.

Thank you for your cooperation. Should you have any questions, please contact Mr. David Torii at (661) 392-5620.

Sincerely,

Arnaud Marjollet
Director of Permit Services



Leonard Scandura, P.E.
Permit Services Manager

AM: dbt

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585



RECEIVED
DEC 22 2015
SJVAPCD
Southern Region

San Joaquin Valley SBU
Chevron North America
Exploration and Production
P.O. Box 1392
Bakersfield, CA 93302
Tel 661 654 7038
Fax 661 654 7133
mbje@chevron.com

December 22, 2015

Mr. Leonard Scandura
Permit Services Manager
San Joaquin Valley APCD
34946 Flyover Court
Bakersfield, CA 93308

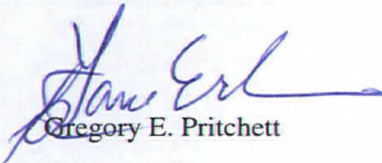
**RE: Emission Reduction Credit Banking Application
Shutdown of Lost Hills Engines K5 and K6**

Dear Mr. Scandura:

Chevron U.S.A. Inc. (CUSA) has shutdown Lost Hills Engines K5 and K6 (S-55-13 and '14). CUSA is therefore requesting to bank the emission reductions. Additional details are included with the attached proposal, which is available in electronic format upon request. Enclosed please find the necessary application form and a \$832.00 check for application filing fee.

If you have any questions or require additional information please contact Mr. Lance Ericksen of my staff, at either (661) 654-7145.

Sincerely,


Gregory E. Pritchett

Attachments


San Joaquin Valley Air Pollution Control District

Application for

RECEIVED
DEC 22 2015
SJVAPCD
Southern Region

EMISSION REDUCTION CREDIT (ERC)

CONSOLIDATION OF ERC CERTIFICATES

1. ERC TO BE ISSUED TO: Chevron U.S.A. Inc.	Facility ID: S-55 (if known)																																			
2. MAILING ADDRESS: Street/P.O. Box: P.O. Box 1392 City: Bakersfield State: CA Zip Code: 93302																																				
3. LOCATION OF REDUCTION: Street: Lost Hills Oilfield City: Lost Hills Gas Production Facility SECTION 3 TOWNSHIP 27S RANGE 21E	4. DATE OF REDUCTION: December 2015																																			
5. PERMIT NO(S): C-2885-57	EXISTING ERC NO(S):																																			
6. METHOD RESULTING IN EMISSION REDUCTION: <input checked="" type="checkbox"/> SHUTDOWN <input type="checkbox"/> RETROFIT <input type="checkbox"/> PROCESS CHANGE <input type="checkbox"/> OTHER DESCRIPTION: Shutdown of A Fee and C Fee Gas Turbines <small>(Use additional sheets if necessary)</small>																																				
7. REQUESTED ERCs: (In pounds per calendar quarter except CO ₂ e)																																				
<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>VOC</th> <th>NO_x</th> <th>CO</th> <th>PM₁₀</th> <th>SO_x</th> <th>Other</th> </tr> </thead> <tbody> <tr> <td>1st Qtr</td> <td></td> <td>172</td> <td>1971</td> <td>1151</td> <td></td> <td></td> </tr> <tr> <td>2nd Qtr</td> <td></td> <td>190</td> <td>1838</td> <td>1270</td> <td></td> <td></td> </tr> <tr> <td>3rd Qtr</td> <td></td> <td>174</td> <td>2023</td> <td>1163</td> <td></td> <td></td> </tr> <tr> <td>4th Qtr</td> <td></td> <td>208</td> <td>1941</td> <td>1389</td> <td></td> <td></td> </tr> </tbody> </table>			VOC	NO _x	CO	PM ₁₀	SO _x	Other	1 st Qtr		172	1971	1151			2 nd Qtr		190	1838	1270			3 rd Qtr		174	2023	1163			4 th Qtr		208	1941	1389		
	VOC	NO _x	CO	PM ₁₀	SO _x	Other																														
1 st Qtr		172	1971	1151																																
2 nd Qtr		190	1838	1270																																
3 rd Qtr		174	2023	1163																																
4 th Qtr		208	1941	1389																																
CO ₂ e metric ton/yr																																				
8. SIGNATURE OF APPLICANT: 	TYPE OR PRINT TITLE OF APPLICANT: Manager Health Environment, and Safety																																			
9. TYPE OR PRINT NAME OF APPLICANT: Gregory E. Pritchett	DATE: _____ TELEPHONE NO: _____																																			

FOR APCD USE ONLY:

CHEVRON NA EXPLORATION PROD CO.

DATE STAMP	FILING FEE RECEIVED: \$ <u>832⁻</u> CK # <u>24311898</u> DATE PAID: <u>12/22</u> PROJECT NO.: <u>S-1154368</u> FACILITY ID.: <u>S-55</u>
------------	---

**ERC APPLICATION
EVALUATION**

Project #:

Engineer:

Date:

Facility Name: Chevron USA, Inc.
Mailing Address: P.O. Box 1392
Bakersfield, CA 93302

Contact Person: Lance Ericksen
Telephone: (661) 654-7145
Date Application Received:
Date Deemed Complete:

I. Summary:

Chevron USA, Inc. (CUSA) proposes to bank emission reduction credits from the shutdown of Lost Hills Engines K5 and K6 permitted as S-55-13 and S-5-14.

CUSA requests emission reduction credit (ERC) certificates for the following emissions:

lb/qr	NOx	CO	PM10
Bankable Q1	172	1971	1151
Bankable Q2	190	1838	1270
Bankable Q3	174	2023	1163
Bankable Q4	208	1941	1389

II. Applicable Rules:

Rule 2201 New and Modified Source Review
Rule 2301 Emission Reduction Credit Banking

III. Location of Reduction:

The engine location is:

Sec 3 T27S R21E Lost Hills Gas Processing Facility

IV. Method of Generating Reduction:

The natural gas fueled engines were removed from service in December 2015 and are scheduled for removal.

V. ERC Calculations:

A. Assumptions and Emission Factors

Emission reductions were calculated using measured and recorded heat input values and actual source test results for the engines. Recorded fuel use (MCF or thousand cubic foot) and calculated heat input (MMBtu or million British thermal unit), are tabulated and presented in Appendix A.

Emission factors for NOx and CO are based on source tests for the engines. Source test summary pages from certified source tests performed for the engine, within the 5 year-baseline period, are included in Appendix B. The engines were equipped with non-selective catalytic reduction and were in compliance with Table 2 Section 1.d. of Rule 4702.

The emission factor for PM10 is based on AP-42 section 3.2 Natural Gas-fired Reciprocating Engines. Excerpts from AP-42 are included in Appendix C.

B. Baseline Period Determination and Data

CUSA requests a baseline period of the two-year period most representative of normal source operation (NSO) for the engine. To determine NSO operating records were reviewed for the period January 2006 through November 2015. The annual average heat input the engines was determined for the period of engine operation and compared to the two-year, three-year and four-year annual average operation on a month-by-month basis for the engines. The period with the smallest difference compared with NSO was selected as the baseline. Details of NSO and baseline period are included in Appendix A.

C. Historical Actual Emissions

Historical Actual Emission (HAE) calculations were performed for each calendar quarter of the baseline period. HAEs for the engine are presented in Appendix A.

D. Actual Emissions Reductions

Actual Emission Reductions (AER) are calculated pursuant to Rule 2201, Section 4.12:

$$\text{AER} = \text{HAE} - \text{PE2}.$$

For this project, PE2 is zero, therefore, $\text{AER} = \text{HAE}$

AER is included in Appendix A and summarized in the following table:

lb/qtr	NOx	CO	PM10
Q1	191	2190	1279
Q2	211	2042	1411
Q3	193	2248	1292
Q4	231	2157	1543

E. Air Quality Improvement Deduction

In accordance with District Rule 2201, Section 4.12.1, AER shall be discounted by 10% prior-to banking, known as the Air Quality Improvement Deduction (AQID). AQID is summarized in the following table:

lb/qtr	NOx	CO	PM10
AQID Q1	19	219	128
AQID Q2	21	204	141
AQID Q3	19	225	129
AQID Q4	23	216	154

F. Increased in Permitted Emissions (IPE)

The engines have been shutdown. An IPE is not associated with this project.

G. Bankable Emissions Reductions

Bankable emission reductions are summarized in the following table:

lb/qtr	NOx	CO	PM10
Bankable Q1	172	1971	1151
Bankable Q2	190	1838	1270
Bankable Q3	174	2023	1163
Bankable Q4	208	1941	1941

VI. Compliance:

A. Real

Emission reductions have been calculated based on actual heat input to the engines and certified source test results for the baseline period. Therefore, the reductions are real.

B. Enforceable

The engines have been removed from service, no further emissions will occur without submittal of a new permit application, subject to the requirements of Rule 2201. Therefore, the reductions are enforceable.

C. Quantifiable

Emissions from the engines have been calculated based on actual heat input measurements and certified source test results. Therefore, the reductions are quantifiable.

D. Permanent

The engines have been removed from service, no further emissions from the engines will occur without submittal of a new permit application, subject to the requirements of Rule 2201. CUSA does not operate any other IC engines at the Lost Hills Gas Compression Source. Therefore, the reductions are permanent.

E. Surplus

Emission credits for NO₂ are consistent with the most stringent applicable level in Rule 4702. No other emission reductions in this application were mandated by existing rules or are contained in any existing or proposed agreement, nor used to offset onsite increases in potential to emit.

Actual emissions were below permit limits, below applicable Rule requirements. Therefore, the reductions are surplus.

F. Was application timely?

The engines were removed in December 2015 the Permits to Operate will be surrendered once the engines are removed. This application was filed in a timely manner.

VII. Recommendation:

Issue Emission Reduction Credits be issued as indicated above.

APPENDIX A
DATA TABLES

Normal Source Operation K5 and K6

Month			Total
	MSCF	Btu/scf	MMBtu
Dec-05		1,020	
Jan-06	11,745	1,020	11,980
Feb-06	11,101	1,020	11,323
Mar-06	11,988	1,020	12,228
Apr-06	11,125	1,020	11,348
May-06	12,052	1,020	12,293
Jun-06	11,015	1,020	11,235
Jul-06	8,665	1,020	8,838
Aug-06	12,746	1,020	13,001
Sep-06	12,559	1,020	12,810
Oct-06	12,594	1,020	12,846
Nov-06	13,391	1,020	13,659
Dec-06	10,509	1,020	10,719
Jan-07	11,658	1,020	11,891
Feb-07	11,745	1,020	11,980
Mar-07	12,173	1,020	12,416
Apr-07	10,055	1,020	10,256
May-07	7,761	1,020	7,916
Jun-07	10,279	1,020	10,485
Jul-07	12,445	1,020	12,694
Aug-07	13,108	1,020	13,370
Sep-07	12,203	1,020	12,447
Oct-07	11,332	1,020	11,559
Nov-07	12,558	1,020	12,809
Dec-07	11,785	1,020	12,021
Jan-08	12,687	1,020	12,941
Feb-08	12,754	1,020	13,009
Mar-08	10,642	1,020	10,855
Apr-08	11,434	1,020	11,663
May-08	11,045	1,020	11,266
Jun-08	11,071	1,020	11,292
Jul-08	11,777	1,020	12,013
Aug-08	11,012	1,020	11,232
Sep-08	9,917	1,020	10,115
Oct-08	11,245	1,020	11,470
Nov-08	11,119	1,020	11,341
Dec-08	11,683	1,020	11,917
Jan-09	15,049	1,020	15,350
Feb-09	11,246	1,020	11,471
Mar-09	15,125	1,020	15,428
Apr-09	13,874	1,020	14,151
May-09	15,220	1,020	15,524
Jun-09	10,234	1,020	10,439
Jul-09	14,069	1,020	14,350
Aug-09	14,505	1,020	14,795
Sep-09	14,413	1,020	14,701
Oct-09	13,963	1,020	14,242
Nov-09	13,584	1,020	13,856
Dec-09	9,899	1,020	10,097
Jan-10	12,506	1,020	12,756
Feb-10	11,893	1,020	12,131
Mar-10	13,100	1,020	13,362
Apr-10	12,705	1,020	12,959
May-10	13,453	1,020	13,722
Jun-10	12,646	1,020	12,899
Jul-10	12,647	1,020	12,900
Aug-10	12,864	1,020	13,121
Sep-10	12,980	1,020	13,240
Oct-10	12,737	1,020	12,992
Nov-10	12,448	1,020	12,697
Dec-10	13,208	1,020	13,472

Jan-11	13,515	1,020	13,785
Feb-11	12,264	1,020	12,509
Mar-11	13,177	1,020	13,441
Apr-11	12,707	1,020	12,961
May-11	12,951	1,020	13,210
Jun-11	13,042	1,020	13,303
Jul-11	12,888	1,020	13,146
Aug-11	10,732	1,020	10,947
Sep-11	11,013	1,020	11,233
Oct-11	11,017	1,020	11,237
Nov-11	7,372	1,020	7,519
Dec-11	10,306	1,020	10,512
Jan-12	12,600	1,020	12,852
Feb-12	11,359	1,020	11,586
Mar-12	10,787	1,020	11,003
Apr-12	9,380	1,020	9,568
May-12	12,990	1,020	13,250
Jun-12	13,143	1,020	13,406
Jul-12	13,703	1,020	13,977
Aug-12	13,735	1,020	14,010
Sep-12	14,456	1,020	14,745
Oct-12	14,142	1,020	14,425
Nov-12	12,508	1,020	12,758
Dec-12	7,031	1,020	7,172
Jan-13	12,672	1,020	12,925
Feb-13	10,644	1,020	10,857
Mar-13	13,492	1,020	13,762
Apr-13	12,050	1,020	12,291
May-13	12,592	1,020	12,844
Jun-13	6,566	1,020	6,697
Jul-13	5,911	1,020	6,029
Aug-13	12,213	1,020	12,457
Sep-13	13,449	1,020	13,718
Oct-13	13,090	1,020	13,352
Nov-13	13,418	1,020	13,687
Dec-13	13,534	1,020	13,805
Jan-14	14,060	1,020	14,341
Feb-14	12,737	1,020	12,991
Mar-14	13,736	1,020	14,011
Apr-14	13,256	1,020	13,521
May-14	4,516	1,020	4,606
Jun-14	7,179	1,020	7,322
Jul-14	11,343	1,020	11,570
Aug-14	13,345	1,020	13,612
Sep-14	12,974	1,020	13,233
Oct-14	13,907	1,020	14,185
Nov-14	12,651	1,020	12,904
Dec-14	11,456	1,020	11,685
Jan-15	7,509	1,020	7,659
Feb-15	0	1,020	0
Mar-15	0	1,020	0
Apr-15	12,539	1,020	12,790
May-15	15,162	1,020	15,465
Jun-15	13,236	1,020	13,501
Jul-15	11,301	1,020	11,527
Aug-15	10,666	1,020	10,879
Sep-15	12,611	1,020	12,863
Oct-15	11,565	1,020	11,796
Nov-15	10,506	1,020	10,717
Dec-15		1,020	

NSO Average 12,000

Historical Actual Emissions (HAE)

Month	C-2885-57 MSCF	C-2885-57 Btu/scf	Total MMBtu	24 Month	36 Month	48 Month	PM10 EF* lb/MMBtu	PM10 lb	Month
				Block Differences vs NSO	Block Differences vs NSO	Block Differences vs NSO			
Dec-10	13,208	1,020	13,472						Dec-10
Jan-11	13,515	1,020	13,785						Jan-11
Feb-11	12,264	1,020	12,509						Feb-11
Mar-11	13,177	1,020	13,441						Mar-11
Apr-11	12,707	1,020	12,961						Apr-11
May-11	12,951	1,020	13,210						May-11
Jun-11	13,042	1,020	13,303						Jun-11
Jul-11	12,888	1,020	13,146						Jul-11
Aug-11	10,732	1,020	10,947						Aug-11
Sep-11	11,013	1,020	11,233						Sep-11
Oct-11	11,017	1,020	11,237						Oct-11
Nov-11	7,372	1,020	7,519						Nov-11
Dec-11	10,306	1,020	10,512				0.01941	204	Dec-11
Jan-12	12,600	1,020	12,852				0.01941	204	Jan-12
Feb-12	11,359	1,020	11,586				0.01941	249	Feb-12
Mar-12	10,787	1,020	11,003				0.01941	225	Mar-12
Apr-12	9,380	1,020	9,568				0.01941	214	Apr-12
May-12	12,990	1,020	13,250				0.01941	186	May-12
Jun-12	13,143	1,020	13,406				0.01941	257	Jun-12
Jul-12	13,703	1,020	13,977				0.01941	260	Jul-12
Aug-12	13,735	1,020	14,010				0.01941	271	Aug-12
Sep-12	14,456	1,020	14,745				0.01941	272	Sep-12
Oct-12	14,142	1,020	14,425				0.01941	286	Oct-12
Nov-12	12,508	1,020	12,758	452			0.01941	280	Nov-12
Dec-12	7,031	1,020	7,172	190			0.01941	248	Dec-12
Jan-13	12,672	1,020	12,925	154			0.01941	139	Jan-13
Feb-13	10,644	1,020	10,857	85			0.01941	251	Feb-13
Mar-13	13,492	1,020	13,762	99			0.01941	211	Mar-13
Apr-13	12,050	1,020	12,291	71			0.01941	267	Apr-13
May-13	12,592	1,020	12,844	55			0.01941	239	May-13
Jun-13	6,566	1,020	6,697	220			0.01941	249	Jun-13
Jul-13	5,911	1,020	6,029	516			0.01941	130	Jul-13
Aug-13	12,213	1,020	12,457	454			0.01941	117	Aug-13
Sep-13	13,449	1,020	13,718	350			0.01941	242	Sep-13
Oct-13	13,090	1,020	13,352	262			0.01941	266	Oct-13
Nov-13	13,418	1,020	13,687	5	74		0.01941	259	Nov-13
Dec-13	13,534	1,020	13,805	132	83				Dec-13
Jan-14	14,060	1,020	14,341	194	98				Jan-14
Feb-14	12,737	1,020	12,991	253	112				Feb-14
Mar-14	13,736	1,020	14,011	378	127				Mar-14
Apr-14	13,256	1,020	13,521	543	143				Apr-14
May-14	4,516	1,020	4,606	183	96				May-14
Jun-14	7,179	1,020	7,322	71	262				Jun-14
Jul-14	11,343	1,020	11,570	171	306				Jul-14
Aug-14	13,345	1,020	13,612	188	232				Aug-14
Sep-14	12,974	1,020	13,233	251	176				Sep-14
Oct-14	13,907	1,020	14,185	261	94				Oct-14
Nov-14	12,651	1,020	12,904	255	55	99			Nov-14
Dec-14	11,456	1,020	11,685	66	88	9			Dec-14
Jan-15	7,509	1,020	7,659	286	57	36			Jan-15
Feb-15	0	1,020	0	738	378	82			Feb-15
Mar-15	0	1,020	0	1,312	684	99			Mar-15
Apr-15	12,539	1,020	12,790	1,291	595	62			Apr-15
May-15	15,162	1,020	15,465	1,182	533	66			May-15
Jun-15	13,236	1,020	13,501	898	530	327			Jun-15
Jul-15	11,301	1,020	11,527	669	598	607			Jul-15
Aug-15	10,666	1,020	10,879	735	685	610			Aug-15
Sep-15	12,611	1,020	12,863	770	738	563			Sep-15
Oct-15	11,565	1,020	11,796	835	811	559			Oct-15
Nov-15	10,506	1,020	10,717	959	867	593			Nov-15

NSO Average MMBtu/Month 12,000
 December 2011 to November 2013
 MMBtu/Month 11,995

Quarter	MMSCF	MMBtu
First	71,554	72,985
Second	66,721	68,056
Third	73,467	74,936
Fourth	70,495	71,906

PM10
 lb/qtr
 1,279
 1,411
 1,292
 1,543

Historical Actual Emissions (HAE)

Month			Total MMBtu	24 Month	36 Month	48 Month	NOx EF* lb/MMBtu	CO EF* lb/MMBtu	NOx lb	CO lb	Month
	MSCF	Btu/scf		Differences vs NSO	Differences vs NSO	Differences vs NSO					
*Average Source Tests											
Dec-10	13,208	1,020	13,472								Dec-10
Jan-11	13,515	1,020	13,785								Jan-11
Feb-11	12,264	1,020	12,509								Feb-11
Mar-11	13,177	1,020	13,441								Mar-11
Apr-11	12,707	1,020	12,961								Apr-11
May-11	12,951	1,020	13,210								May-11
Jun-11	13,042	1,020	13,303								Jun-11
Jul-11	12,888	1,020	13,146								Jul-11
Aug-11	10,732	1,020	10,947								Aug-11
Sep-11	11,013	1,020	11,233								Sep-11
Oct-11	11,017	1,020	11,237								Oct-11
Nov-11	7,372	1,020	7,519								Nov-11
Dec-11	10,306	1,020	10,512				0.0029	0.03	30	315	Dec-11
Jan-12	12,600	1,020	12,852				0.0029	0.03	30	386	Jan-12
Feb-12	11,359	1,020	11,586				0.0029	0.03	37	348	Feb-12
Mar-12	10,787	1,020	11,003				0.0029	0.03	34	330	Mar-12
Apr-12	9,380	1,020	9,568				0.0029	0.03	32	287	Apr-12
May-12	12,990	1,020	13,250				0.0029	0.03	28	398	May-12
Jun-12	13,143	1,020	13,406				0.0029	0.03	38	402	Jun-12
Jul-12	13,703	1,020	13,977				0.0029	0.03	39	419	Jul-12
Aug-12	13,735	1,020	14,010				0.0029	0.03	41	420	Aug-12
Sep-12	14,456	1,020	14,745				0.0029	0.03	41	442	Sep-12
Oct-12	14,142	1,020	14,425				0.0029	0.03	43	433	Oct-12
Nov-12	12,508	1,020	12,758	452			0.0029	0.03	42	383	Nov-12
Dec-12	7,031	1,020	7,172	190			0.0029	0.03	37	215	Dec-12
Jan-13	12,672	1,020	12,925	154			0.0029	0.03	21	388	Jan-13
Feb-13	10,644	1,020	10,857	85			0.0029	0.03	37	326	Feb-13
Mar-13	13,492	1,020	13,762	99			0.0029	0.03	31	413	Mar-13
Apr-13	12,050	1,020	12,291	71			0.0029	0.03	40	369	Apr-13
May-13	12,592	1,020	12,844	55			0.0029	0.03	36	385	May-13
Jun-13	6,566	1,020	6,697	220			0.0029	0.03	37	201	Jun-13
Jul-13	5,911	1,020	6,029	516			0.0029	0.03	19	181	Jul-13
Aug-13	12,213	1,020	12,457	454			0.0029	0.03	17	374	Aug-13
Sep-13	13,449	1,020	13,718	350			0.0029	0.03	36	412	Sep-13
Oct-13	13,090	1,020	13,352	262			0.0029	0.03	40	401	Oct-13
Nov-13	13,418	1,020	13,687	5	74		0.0029	0.03	39	411	Nov-13
Dec-13	13,534	1,020	13,805	132	83						Dec-13
Jan-14	14,060	1,020	14,341	194	98						Jan-14
Feb-14	12,737	1,020	12,991	253	112						Feb-14
Mar-14	13,736	1,020	14,011	378	127						Mar-14
Apr-14	13,256	1,020	13,521	543	143						Apr-14
May-14	4,516	1,020	4,606	183	96						May-14
Jun-14	7,179	1,020	7,322	71	262						Jun-14
Jul-14	11,343	1,020	11,570	171	306						Jul-14
Aug-14	13,345	1,020	13,612	188	232						Aug-14
Sep-14	12,974	1,020	13,233	251	176						Sep-14
Oct-14	13,907	1,020	14,185	261	94						Oct-14
Nov-14	12,651	1,020	12,904	255	55	99					Nov-14
Dec-14	11,456	1,020	11,685	66	88	9					Dec-14
Jan-15	7,509	1,020	7,659	286	57	36					Jan-15
Feb-15	0	1,020	0	738	378	82					Feb-15
Mar-15	0	1,020	0	1,312	684	99					Mar-15
Apr-15	12,539	1,020	12,790	1,291	595	62					Apr-15
May-15	15,162	1,020	15,465	1,182	533	66					May-15
Jun-15	13,236	1,020	13,501	898	530	327					Jun-15
Jul-15	11,301	1,020	11,527	669	598	607					Jul-15
Aug-15	10,666	1,020	10,879	735	685	610					Aug-15
Sep-15	12,611	1,020	12,863	770	738	563					Sep-15
Oct-15	11,565	1,020	11,796	835	811	559					Oct-15
Nov-15	10,506	1,020	10,717	959	867	593					Nov-15

NSO Average MMBtu/Month 12,000
 December 2011 to November 2013
 MMBtu/Month 11,995

Quarter	MMSCF	MMBtu
First	71,554	72,985
Second	66,721	68,056
Third	73,467	74,936
Fourth	70,495	71,906

NOx lb/qtr	CO lb/qtr
191	2,190
211	2,042
193	2,248
231	2,157

APPENDIX B
SOURCE TESTS

Source Test Results K5 and K6

Summary	Results in PPM at 15% O2			
	K5 NOx	K6 NOx	K5 CO	K6 CO
2013	0.78	0.22	3.1	1.3
2014		0.2		7
2015	2		44	
Average NOx both engines			0.8	
Average CO both engines			13.9	
Average NOx lb/MM Btu			0.0029	
Average CO lb/MMBtu			0.003	



Tim Braly
Compliance Team

Health, Environmental &
Safety
Chevron North America
Exploration and Production Co.
P.O. Box 1392
Bakersfield, CA 93302
Tel 661-654-7787
Fax 661-654-7133
tdpx@chevron.com

Hand Delivered

February 26, 2015

Mr. Greg LaFore
Senior Air Quality Inspector
San Joaquin Valley APCD
34946 Flyover Court
Bakersfield, CA 93308

Re: IC Engine Compliance Test Results

Dear Mr. LaFore:

Listed below are the results of the annual compliance tests conducted on **January 15, 2015** for Chevron's IC Engine in Lost Hills. Test results and emission limits are summarized in the table below and in Project Report #104-8942B.

SJVAPCD PTO Number	Chevron I.D. Number	Compliance Test Results			
		NO _x ppm @ 15%	CO ppm @ 15%	Sulfur lb-SO _x /MMBtu	VOC ppm @ 15%
S-55-13-8	K-5	2	44	<0.17	0.0
Emission Sampling Limits		11	70	.00285	30

Please contact me at (661) 654-7485 if you have any questions.

Sincerely,

Glenn Slitor
Compliance Team

Attachments



Tim Braly
Compliance Team

Health, Environmental &
Safety
Chevron North America
Exploration and Production Co.
P.O. Box 1392
Bakersfield, CA 93302
Tel 661-654-7787
Fax 661-654-7133
tdpx@chevron.com

Hand Delivered

January 22, 2015

Mr. Greg LaFore
Senior Air Quality Inspector
San Joaquin Valley APCD
34946 Flyover Court
Bakersfield, CA 93308

Re: IC Engine Compliance Test Results

Dear Mr. LaFore:

Listed below are the results of the annual compliance tests conducted on **December 17, 2014** for Chevron's IC Engine in Lost Hills. Test results and emission limits are summarized in the table below and in Project Report #104-8942A.

SJVAPCD PTO Number	Chevron I.D. Number	Compliance Test Results			
		NO _x ppm @ 15%	CO ppm @ 15%	Sulfur lb/MMscf	VOC ppm @ 15%
S-55-14-6	K-6	0.2	7	<0.17	0.0
Emission Sampling Limits		25	70	0.6	30

Please contact me at (661) 654-7485 if you have any questions.

Sincerely,

Glenn Slitor
Compliance Team

Attachments



Tim Braly
Compliance Team

Health, Environmental & Safety
Chevron North America
Exploration and Production Co.
P.O. Box 1392
Bakersfield, CA 93302
Tel 661-654-7787
Fax 661-654-7133
tdpx@chevron.com

February 26, 2013

Mr. Greg LaFore
Senior Air Quality Inspector
San Joaquin Valley APCD
34946 Flyover Court
Bakersfield, CA 93308

FedEx Delivery Confirmation
7946 1476 7016

Re: IC Engine Compliance Test Results

Dear Mr. Lafore:

Listed below are the results of the annual compliance tests conducted on **January 9th & 10th, 2013** for Chevron's IC Engines in Lost Hills. Test results and emission limits are summarized in the table below and in Project Report #104-8091.

SJVAPCD PTO Number	Chevron I.D. Number	Compliance Test Results			
		NO _x ppm @ 15%	CO ppm @ 15%	Sulfur lb/MMscf	VOC ppm @ 15%
S-55-13-6	K-5	0.78	3.1	<0.1661	0.1
S-55-14-6	K-6	0.22	1.3	<0.1661	0.1
Emission Sampling Limits		25	70	0.6	30

Please contact me at (661) 654-7787 if you have any questions.

Sincerely,

Tim Braly
Compliance Team

Attachments

APPENDIX C
PM Emission Factor

3.2 Natural Gas-fired Reciprocating Engines

3.2.1 General¹⁻³

Most natural gas-fired reciprocating engines are used in the natural gas industry at pipeline compressor and storage stations and at gas processing plants. These engines are used to provide mechanical shaft power for compressors and pumps. At pipeline compressor stations, engines are used to help move natural gas from station to station. At storage facilities, they are used to help inject the natural gas into high pressure natural gas storage fields. At processing plants, these engines are used to transmit fuel within a facility and for process compression needs (e.g., refrigeration cycles). The size of these engines ranges from 50 brake horsepower (bhp) to 11,000 bhp. In addition, some engines in service are 50 - 60 years old and consequently have significant differences in design compared to newer engines, resulting in differences in emissions and the ability to be retrofitted with new parts or controls.

At pipeline compressor stations, reciprocating engines are used to power reciprocating compressors that move compressed natural gas (500 - 2000 psig) in a pipeline. These stations are spaced approximately 50 to 100 miles apart along a pipeline that stretches from a gas supply area to the market area. The reciprocating compressors raise the discharge pressure of the gas in the pipeline to overcome the effect of frictional losses in the pipeline upstream of the station, in order to maintain the required suction pressure at the next station downstream or at various downstream delivery points. The volume of gas flowing and the amount of subsequent frictional losses in a pipeline are heavily dependent on the market conditions that vary with weather and industrial activity, causing wide pressure variations. The number of engines operating at a station, the speed of an individual engine, and the amount of individual engine horsepower (load) needed to compress the natural gas is dependent on the pressure of the compressed gas received by the station, the desired discharge pressure of the gas, and the amount of gas flowing in the pipeline. Reciprocating compressors have a wider operating bandwidth than centrifugal compressors, providing increased flexibility in varying flow conditions. Centrifugal compressors powered by natural gas turbines are also used in some stations and are discussed in another section of this document.

A compressor in storage service pumps gas from a low-pressure storage field (500 - 800 psig) to a higher pressure transmission pipeline (700 - 1000 psig) and/or pumps gas from a low-pressure transmission line (500 - 800 psig) to a higher pressure storage field (800 - 2000 psig).

Storage reciprocating compressors must be flexible enough to allow operation across a wide band of suction and discharge pressures and volume variations. The compressor must be able to compress at high compression ratios with low volumes and compress at low compression ratios with high volumes. These conditions require varying speeds and load (horsepower) conditions for the reciprocating engine powering the reciprocating compressor.

Reciprocating compressors are used at processing plants for process compression needs (e.g. refrigeration cycles). The volume of gas compressed varies, but the pressure needed for the process is more constant than the other two cases mentioned above.

3.2.2 Process Description¹⁻³

Natural gas-fired reciprocating engines are separated into three design classes: 2-cycle (stroke) lean-burn, 4-stroke lean-burn, and 4-stroke rich-burn. Two-stroke engines complete the power cycle in a

Table 3.2-3. UNCONTROLLED EMISSION FACTORS FOR 4-STROKE RICH-BURN ENGINES^a
(SCC 2-02-002-53)

Pollutant	Emission Factor (lb/MMBtu) ^b (fuel input)	Emission Factor Rating
Criteria Pollutants and Greenhouse Gases		
NO _x ^c 90 - 105% Load	2.21 E+00	A
NO _x ^c <90% Load	2.27 E+00	C
CO ^c 90 - 105% Load	3.72 E+00	A
CO ^c <90% Load	3.51 E+00	C
CO₂^d	1.10 E+02	A
SO ₂ ^e	5.88 E-04	A
TOC ^f	3.58 E-01	C
Methane ^g	2.30 E-01	C
VOC ^h	2.96 E-02	C
PM10 (filterable)^{ij}	9.50 E-03	E
PM2.5 (filterable) ^j	9.50 E-03	E
PM Condensable^k	9.91 E-03	E
Trace Organic Compounds		
1,1,2,2-Tetrachloroethane ^l	2.53 E-05	C
1,1,2-Trichloroethane ^l	<1.53 E-05	E
1,1-Dichloroethane	<1.13 E-05	E
1,2-Dichloroethane	<1.13 E-05	E
1,2-Dichloropropane	<1.30 E-05	E
1,3-Butadiene ^l	6.63 E-04	D
1,3-Dichloropropene ^l	<1.27 E-05	E
Acetaldehyde ^{l,m}	2.79 E-03	C
Acrolein ^{l,m}	2.63 E-03	C
Benzene ^l	1.58 E-03	B
Butyr/isobutyraldehyde	4.86 E-05	D
Carbon Tetrachloride ^l	<1.77 E-05	E

9.5
9.91
19.41 x 10⁻³
0.01941
lb/MMBtu

PUBLIC NOTICE CHECK LIST

PROJECT #: S-55 PROJECT #: S-1154368

REQST. COMPL.

ERC FINAL PUBLIC NOTICE

Newspaper Notice Emailed to Clerical (Check box and tab to generate Notice)

Send email to "OA-PublicNotices" containing the following:

SUBJECT: facility name, facility id#, project #, type of notice (prelim/final)

BODY: project description and why it is being noticed (Emission Reduction Credit banking)

ENCLOSED DOCUMENTS REQUIRE:

- Enter Correct Date, Print All Documents from File and Obtain Director's Signature and District Seal Embossed on ERC Certificates
- Email **FINAL** Newspaper Notice for Publication in Bakersfield Californian
Pub Date: 4/11
- Mail **FINAL** Notice Letter to Applicant by Certified Mail including the following attachments:
 Original ERC Certificates
 Newspaper Notice
- Email **FINAL** Public Notice package to EPA
- Email **FINAL** Public Notice package to CARB
- Email **FINAL** Newspaper Notice, Aviso en Español and Public Notice package to "webmaster"
- After posted on website, send email with weblink of Newspaper notice, Aviso en Español, and full public notice package to:
 specific [C, S, or N] region **and** District wide permitting notification list-serves (both English and Spanish list serves)
 facility specific distribution list, (AQE – enter email address from PAS facility details notifications tab, if none enter NONE below):
none.
- Mail the newspaper notice and aviso en español (NN/AE), or full public notice package (FPNP) to the persons on facility specific distribution list, as follows (entered by AQE, if none, enter NONE below):
 NN/AE or FPNP Name/address: none
 NN/AE or FPNP Name/address: none
- Send **FINAL** Public Notice package to EDMS
- Assign Mailing Date
- Other Special Instructions (please specify): _____

Date Completed [DATE COMPLETED] /By David Torii

CALIFORNIA NEWSPAPER SERVICE BUREAU

DAILY JOURNAL CORPORATION

Mailing Address : 915 E FIRST ST, LOS ANGELES, CA 90012
 Telephone (213) 229-5300 / Fax (213) 229-5481
 Visit us @ WWW.LEGALADSTORE.COM

Diseree Gomez
 SAN JOAQUIN VALLEY AIR POLL CONTROL DIST
 1990 E. GETTYSBURG AVE.
 FRESNO, CA 93726

CNS 2996821

COPY OF NOTICE

Notice Type: GPN GOVT PUBLIC NOTICE
 Ad Description: ERC Final Public Notice for Chevron USA, Inc., Project #S-1154368, Bakersfield

To the right is a copy of the notice you sent to us for publication in the THE BAKERSFIELD CALIFORNIAN. Please read this notice carefully and call us with any corrections. The Proof of Publication will be filed with the County Clerk, if required, and mailed to you after the last date below. Publication date(s) for this notice is (are):

04/11/2017

The charge(s) for this order is as follows. An invoice will be sent after the last date of publication. If you prepaid this order in full, you will not receive an invoice.

Daily Journal Corporation
 Serving your legal advertising needs throughout California. Call your local

BUSINESS JOURNAL, RIVERSIDE	(951) 784-0111
DAILY COMMERCE, LOS ANGELES	(213) 229-5300
LOS ANGELES DAILY JOURNAL, LOS ANGELES	(213) 229-5300
ORANGE COUNTY REPORTER, SANTA ANA	(714) 543-2027
SAN FRANCISCO DAILY JOURNAL, SAN FRANCISCO	(800) 640-4829
SAN JOSE POST-RECORD, SAN JOSE	(408) 287-4866
THE DAILY RECORDER, SACRAMENTO	(916) 444-2355
THE DAILY TRANSCRIPT, SAN DIEGO	(619) 232-3486
THE INTER-CITY EXPRESS, OAKLAND	(510) 272-4747

NOTICE OF FINAL ACTION FOR THE ISSUANCE OF EMISSION REDUCTION CREDITS

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Chevron USA, Inc. for emission reductions generated by the shutdown of two IC engines, in Lost Hills. The quantity of ERCs to be issued is 571 lb-NOx/yr, 2,573 lb-PM10/yr and 7,487 lb-CO/yr.

No comments were received following the District's preliminary decision on this project.

The application review for Project #S-1154368 is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm, the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308, and at any other District office. For additional information, please contact the District at (661) 392-5500. 4/11/17
 CNS-2996821#
 THE BAKERSFIELD CALIFORNIAN



U.S. Postal Service™ CERTIFIED MAIL® RECEIPT
 Domestic Mail Only

For delivery information, visit our website at www.usps.com®.

OFFICIAL USE

7016 2070 0000 6527 6740

Certified Mail Fee	\$	
Extra Services & Fees (check box, add fee as appropriate)	\$	
<input type="checkbox"/> Return Receipt (hardcopy)	\$	
<input type="checkbox"/> Return Receipt (electronic)	\$	
<input type="checkbox"/> Certified Mail Restricted Delivery	\$	
<input type="checkbox"/> Adult Signature Required	\$	
<input type="checkbox"/> Adult Signature Restricted Delivery	\$	
Postage	\$	
Total	\$	
Sent	\$	
Street		
City		

Postmark Here

Gregory Pritchett
 Chevron USA, Inc.
 P.O. Box 1392
 Bakersfield, CA 93302

PS Form 3800, April 2015 PSN 7530-02-000-9047 See Reverse for Instructions

Diseree Gomez

From: Diseree Gomez
Sent: Thursday, April 6, 2017 3:32 PM
To: 'Gerardo C. Rios - EPA (SJV_T5_Permits@epamail.epa.gov)'; 'Tung Le (tle@arb.ca.gov)'
Subject: ERC Final Public Notice for Chevron USA, Inc., Facility # S-55, Project #S-1154368
Attachments: Final S-1154368.pdf; Newspaper, S-1154368.pdf

Importance: High

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Chevron USA, Inc. for emission reductions generated by the shutdown of two IC engines, in Lost Hills. The quantity of ERCs to be issued is 571 lb-NOx/yr, 2,573 lb-PM10/yr and 7,487 lb-CO/yr.

Thank You,

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org



HEALTHY AIR LIVING™

www.healthyairliving.com

Make one change for clean air!

Diseree Gomez

From: Microsoft Outlook
To: 'Gerardo C. Rios - EPA (SJV_T5_Permits@epamail.epa.gov)'
Sent: Thursday, April 6, 2017 3:33 PM
Subject: Relayed: ERC Final Public Notice for Chevron USA, Inc., Facility # S-55, Project #S-1154368

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

'Gerardo C. Rios - EPA (SJV_T5_Permits@epamail.epa.gov)' (SJV_T5_Permits@epamail.epa.gov)
<mailto:SJV_T5_Permits@epamail.epa.gov>

Subject: ERC Final Public Notice for Chevron USA, Inc., Facility # S-55, Project #S-1154368

Diseree Gomez

From: Diseree Gomez
Sent: Thursday, April 6, 2017 3:36 PM
To: WebTeam
Subject: valleyair.org update: ERC Final Public Notice for Chevron USA, Inc., Facility # S-55, Project #S-1154368
Attachments: Final S-1154368.pdf; Newspaper, S-1154368.pdf; Aviso, S-1154368.pdf

April 6, 2017 (Facility S-55 Project S-1154368) NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Chevron USA, Inc. for emission reductions generated by the shutdown of two IC engines, in Lost Hills. The quantity of ERCs to be issued is 571 lb-NOx/yr, 2,573 lb-PM10/yr and 7,487 lb-CO/yr.

Newspaper Notice

Aviso

Public Notice Package

Thank You,

Diseree Gomez
Office Assistant II
San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Ave
Fresno, CA. 93726
559.230.6003
Diseree.Gomez@valleyair.org



HEALTHY AIR LIVING™

www.healthyairliving.com

Make one change for clean air!

**AVISO DE DECISIÓN FINAL
PARA LA OTORGACIÓN DE
CERTIFICADOS DE REDUCCIÓN DE EMISIONES**

POR EL PRESENTE SE NOTIFICA que el Oficial para el Control de la Contaminación del Aire a otorgado Certificados de Reducción de Emisiones (ERCs, por sus siglas en inglés) a Chevron USA, Inc. por la reducción de emisiones generadas por el cierre de dos motores de combustión interna en Lost Hills. La cantidad de ERCs que serán otorgados son 571 lb-NOx/año, 2,573 lb-PM10/año y 7,487 lb-CO/año.

No se recibieron comentarios acerca de este proyecto despues del aviso de decisión preliminar del Distrito.

La revisión de la solicitud del Proyecto #S-1154368 está disponible para la inspección del público en http://www.valleyair.org/notices/public_notices_idx.htm, el DISTRITO PARA EL CONTROL DE LA CONTAMINACIÓN DEL AIRE DEL VALLE DE SAN JOAQUIN, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308, y en cualquiera de las oficinas del Distrito. Para más información en Español, por favor comuníquese con el Distrito al (661) 392-5500.

**NOTICE OF FINAL ACTION
FOR THE ISSUANCE OF
EMISSION REDUCTION CREDITS**

NOTICE IS HEREBY GIVEN that the Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Chevron USA, Inc. for emission reductions generated by the shutdown of two IC engines, in Lost Hills. The quantity of ERCs to be issued is 571 lb-NOx/yr, 2,573 lb-PM10/yr and 7,487 lb-CO/yr.

No comments were received following the District's preliminary decision on this project.

The application review for Project #S-1154368 is available for public inspection at http://www.valleyair.org/notices/public_notices_idx.htm, the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, 34946 FLYOVER COURT, BAKERSFIELD, CA 93308, and at any other District office. For additional information, please contact the District at (661) 392-5500.



APR 06 2017

Gregory Pritchett
Chevron USA, Inc.
PO Box 1392
Bakersfield, CA 93302

RE: Notice of Final Action – Emission Reduction Credits
Facility Number: S-55
Project Number: S-1154368

Dear Mr. Pritchett:

The Air Pollution Control Officer has issued Emission Reduction Credits (ERCs) to Chevron USA, Inc. for emission reductions generated by the shutdown of two IC engines, in Lost Hills. The quantity of ERCs to be issued is 571 lb-NOx/yr, 2,573 lb-PM10/yr and 7,487 lb-CO/yr.

Enclosed are the ERC Certificates and a copy of the notice of final action to be published approximately three days from the date of this letter.

Notice of the District's preliminary decision to issue the ERC Certificates was published on 2/28/17. The District's analysis of the proposal was also sent to CARB and US EPA Region IX on 2/22/17. No comments were received following the District's preliminary decision on this project.

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-8475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-382-5585

Mr. Gregory Pritchett
Page 2

Thank you for your cooperation in this matter. If you have any questions, please contact Mr. Leonard Scandura at (661) 392-5500.

Sincerely,

A handwritten signature in black ink that reads "Arnaud Marjollet". The signature is written in a cursive style and is positioned above a horizontal line.

Arnaud Marjollet
Director of Permit Services

AM:dbt

Enclosures

cc: Tung Le, CARB (w/enclosure) via email
cc: Gerardo C. Rios, EPA (w/enclosure) via email



Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate
S-4659-2

ISSUED TO: CHEVRON USA INC LOST HILLS GP
ISSUED DATE: April 3, 2017
LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For NOx Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
72 lbs	68 lbs	74 lbs	72 lbs

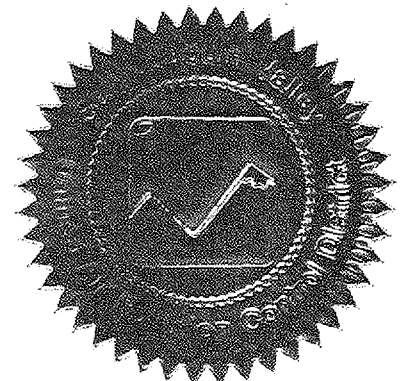
Method Of Reduction

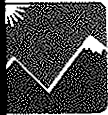
- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services





Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate
S-4659-3

ISSUED TO: CHEVRON USA INC LOST HILLS GP
ISSUED DATE: April 3, 2017
LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For CO Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
949 lbs	885 lbs	975 lbs	935 lbs

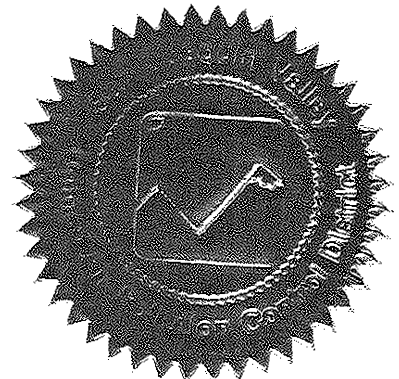
Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet
Arnaud Marjollet, Director of Permit Services





Southern Regional Office • 34946 Flyover Court • Bakersfield, CA 93308

Emission Reduction Credit Certificate
S-4659-4

ISSUED TO: CHEVRON USA INC LOST HILLS GP

ISSUED DATE: April 3, 2017

LOCATION OF REDUCTION: LOST HILLS GAS PLANT
LOST HILLS, CA

For PM10 Reductions In The Amount Of:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
328 lbs	306 lbs	337 lbs	324 lbs

Portion of above PM10 Reductions that is PM2.5:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
100.0%	100.0%	100.0%	100.0%
328 lbs	306 lbs	337 lbs	324 lbs

Method Of Reduction

- Shutdown of Entire Stationary Source
- Shutdown of Emissions Units
- Other

Use of these credits outside the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) is not allowed without express written authorization by the SJVUAPCD.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet

Arnaud Marjollet, Director of Permit Services

