San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

MAY 0 9 2018

Mr. Rolando I. Trevino
Pacific Gas & Electric Company
Attn: Air Permits
PO Box 7640
San Francisco, CA 94120

Re: Proposed ATC / Certificate of Conformity (Significant Mod)
Facility Number: N-608
Project Number: N-1171593

Dear Mr. Trevino:

Enclosed for your review is the District's analysis of an application for Authorities to Construct for the facility identified above. You requested that Certificates of Conformity with the procedural requirements of 40 CFR Part 70 be issued with this project. The proposed project include changes to permits for natural gas dehydration systems, and pipeline condensate transfer and storage operations.

After addressing all comments made during the 30-day public notice and the 45-day EPA comment periods, the District intends to issue the Authorities to Construct with Certificates of Conformity. Please submit your comments within the 30-day public comment period, as specified in the enclosed public notice. Prior to operating with modifications authorized by the Authorities to Construct, the facility must submit an application to modify the Title V permit as an administrative amendment, in accordance with District Rule 2520, Section 11.5.

If you have any questions, please contact Mr. Nick Peirce, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,

Arnaud Marjollet
Director of Permit Services

Enclosures

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

San Joaquin Valley Air Pollution Control District

Authority to Construct Application Review

Modifications to Permits to Operate at Natural Gas Processing Facility

Facility Name:	Pacific Gas & Electric Company	Date:	April 30, 2018
Mailing Address:	PO Box 7640 San Francisco, CA 94120	Engineer: Lead Engineer:	Jag Kahlon Nick Peirce
Contact Person:	Emily McKeon, Consultant		
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Application #(s):	N-608-7-7, '-24-6, '-25-8, '-26-8, '-30-3, '-31-3, '-32-1 and '-33-1		
Project #:	N-1171593		
Deemed Complete:	January 22, 2018		

I. Proposal

N-608-7-7, '-24-6: Natural gas dehydration systems at Turner Cut station
N-608-25-8 and '-26-8: Natural gas dehydration systems at Whiskey Slough station

PG&E operates four natural gas dehydration systems – two at Turner Cut station and two at Whiskey Slough station. Each dehydration system consists of 2 triethylene glycol (TEG) and natural gas contact towers, 3-phase gas separator unit, a permit-exempt natural gas-fired reboiler unit, and associated piping to handle various process streams. To reduce VOC emissions, vapors from each re-boiler are routed to a thermal oxidizer system at each station. Each station is also equipped with a natural gas odorizing system. Following modifications are proposed to these permits:

- Reduce source testing frequency from at least once a year to at least once every 24-months. This change would make source testing frequency requirements consistent with the requirements in Section 5.1.3.2 of District Rule 4408 – Glycol Dehydration Systems (12/19/02) for a similar emission control equipment.

  Currently, each thermal oxidizer is required to be source tested annually to verify on-going compliance with a combined VOC emissions limit of 1.95 pounds per hour and a VOC control efficiency of 97.5% in permits N-608-7 and '-24 and N-608-25 and '-26. Review of the annual source testing results of both thermal oxidizers from 2015 through 2017 revealed that VOC emissions are significantly below the permitted combined VOC limit and the control efficiency is more than the required control efficiency limit (Refer to **Appendix C** for source test summary results). Further, each thermal oxidizer is required to be operated at or above 1400°F to ensure on-going compliance with the VOC as well as control efficiency limits. Given the fact that thermal oxidation is a very reliable technology to abate VOC emissions, and the source test results show a significant margin of compliance, the District recommends reducing source testing frequency from at least once a year to at least once every 24-months.

Continuous monitoring of the thermal oxidizer chamber temperature will ensure on-going compliance with the combined VOC emission limit and VOC control efficiency between the biennial source tests.

Note that the proposed change to the source testing frequency is not a "Modification" under Rule 2201. However, this change is a relaxation to the monitoring or source testing of emissions under District Rule 2520 - Federally Mandated Operating Permits, and is therefore considered a "Significant Modification" to the Title V permit.

- Revise the equipment description of each permit (N-608-7, '-24, '-25 and '-26) to reflect that reboiler with heat input rate of 5 MMBtu/hr (or less) is a permit exempt unit (see e-mail from PG&E on Dec 21, 2017 in the project file). Note that the reboilers have Permit-Exempt Equipment Registrations N-608-PEER-1-0 through N-608-PEER-4-0.

  District Rule 2020 – Exemptions, Section 6.1, states that no Authority to Construct or Permit to Operate shall be required for steam generators, steam superheaters, water boilers, water heaters, steam cleaners, and closed indirect heat transfer systems that have a maximum input heat rating of 5,000,000 Btu per hour (gross) or less and is equipped to be fired exclusively with natural gas containing no more than 5% by weight of hydrocarbons heavier than butane and no more than 1.0 grain of total sulfur per 100 standard cubic feet of gas.

  Per guidance in the above paragraph, the equipment descriptions will be revised to state that reboilers are permit-exempt units.

  Since PG&E is not proposing any physical or operational changes to equipment (e.g., retrofit, replacement, etc.) to increase equipment's rating over the permit exempt threshold (5 MMBtu/hr), the proposed change is not a "Modification" under Rule 2201.

- Correct heat input rate of the thermal oxidizer shared among permit units N-608-7 and '-24.

  Thermal oxidizer rating in the Permits to Operate (PTO) N-608-7-6 and '-24-5 is 6.75 MMBtu/hr thermal oxidizer. This appeared to be a rating of the old thermal oxidizer that was replaced sometime in November 2014. Note that PG&E replaced their old thermal oxidizer that was rated at 6.75 MMBtu/hr with a new 11.23 MMBtu/hr in November 2014 under Authority to Construct (ATC) permits N-608-7-5 and N-608-24-4 (Project # N-1140284). These ATCs were implemented into PTOs; however, the new oxidizer heat input rate was not included in the PTOs. This is a mistake on District's part and is being administratively corrected under this project.

  Since the PG&E is not making any physical or operational changes to the thermal oxidizer, the proposed change is not a "Modification" under Rule 2201.

N-608-33-1: Pipeline liquid transfer, storage and loadout operation
For each tank under above permits, PG&E has proposed to establish requirements for Voluntary Tank Preventative Inspection and Maintenance and Tank Interior Cleaning Program from Section 5.7 of Rule 4623 – Storage of Organic Liquids (5/19/05).

N-608-30-3: 27,000-gallon condensate storage tank at Turner Cut station
N-608-31-3: 27,000-gallon condensate storage tank at Whiskey Slough station
PG&E has proposed the following modifications to each permit:

- Establish actual gauge volume in the equipment description.

  PG&E states that actual gauge volumes of each tank is 27,707 gallons. Therefore, the gauge capacity should be included in the equipment description. Note that the applicant did not make any physical changes to the equipment; rather they are proposing to include equipment's as-built capacity.

- Establish requirements for Voluntary Tank Preventative Inspection and Maintenance and Tank Interior Cleaning Program from Section 5.7 of Rule 4623 – Storage of Organic Liquids (5/19/05).

N-608-32-1: Pipeline liquid transfer, storage and loadout operation
PG&E has proposed the following modifications to this permit:

- Increase the number of disconnects for truck loadout operation from "2 disconnects/day" to "3 disconnects/day".

- Establish requirements for Voluntary Tank Preventative Inspection and Maintenance and Tank Interior Cleaning Program from Section 5.7 of Rule 4623 – Storage of Organic Liquids (5/19/05).

- Revise periodic inspection of components (i.e., valve, flanges, connectors, etc.) from "once every 12-months" to "at least annually" to stay consistent with their other similar permits.

PG&E was issued their renewed Title V Permit on July 19, 2016. The proposed project is a Title V Significant modification pursuant to Rule 2520, as this project relaxes the testing frequency of permit units N-608-7, '-24, '-25 and '-26. Consequently, this project will be published in the local newspaper, Stockton Record, and on District's website (http://www.valleyair.org/notices/public_notices_idx.htm#Permitting and Emission Reduction Credit Certificate Notices) for public review and comments. The public comment period will last 30 days from the date of publication. The facility has also proposed to obtain Authority to Construct (ATC) permits with Certificate of Conformity (COC), which is EPA's 45-day review before the issuance of final ATCs. Both COC and public notice will run concurrently. PG&E must submit Title V administrative amendment application package (TVForm-008 and TVForm-009) before operating under these permits. Upon successful inspection, the District will incorporate the ATCs permits into Title V permit.

II. Applicable Rules

Rule 2201	New and Modified Stationary Source Review Rule (2/18/16)
Rule 2410	Prevention of Significant Deterioration (6/16/11)
Rule 2520	Federally Mandated Operating Permits (6/21/01)
Rule 4001	New Source Performance Standards (4/14/99)
Rule 4002	National Emissions Standards for Hazardous Air Pollutants (5/20/04)
Rule 4101	Visible Emissions (2/17/05)
Rule 4102	Nuisance (12/17/92)
Rule 4201	Particulate Matter Concentration (12/17/92)
Rule 4301	Fuel Burning Equipment (12/17/92)
Rule 4408	Glycol Dehydration Systems (12/19/02)
Rule 4623	Storage of Organic Liquids (5/19/05)
Rule 4624	Transfer of Organic Liquid (12/20/07)
Rule 4801	Sulfur Compounds (12/17/92)
CH&SC 41700	Health Risk Assessment
CH&SC 42301.6	School Notice

Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location

The facility is located at McDonald Island, Holt, California. There is no K-12 school within 1,000 feet of this location. Therefore, school notice is not required under California Health & Safety Code 42301.6.

IV. Process Description

PG&E receives natural gas from a pipeline and store it underground in geologic formations until it is withdrawn and placed back into the pipeline. While in storage, the natural gas accumulates water that must be removed prior to returning it to the pipeline. The necessary water removal is performed with the use of natural gas dehydration systems (N-608-7, '-24, '-25 and '-26). The other support equipment (N-608-30-3, '-31-3, '-32-1 and '-33-1) is essential to optimally operate the natural gas dehydration systems.

V. Equipment Listing

Pre-Project Equipment Description:

N-608-7-6: NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-24) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-24) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#1).

N-608-24-5: NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-7) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-7) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#2)

N-608-25-6: NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-26) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-26) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#3).

N-608-26-6: NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-25) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-25) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#4).

N-608-30-2: 27,000 GALLON CONDENSATE STORAGE TANK (TURNER CUT STATION)

N-608-31-2: 27,000 GALLON CONDENSATE STORAGE TANK (WHISKY SLOUGH STATION)

N-608-32-0: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-10) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

N-608-33-0: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-1A) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

Proposed Modification:

N-608-7-7: MODIFICATION OF NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-24) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-24) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#1): REDUCE SOURCE TESTING FREQUENCY, REVISE HEAT INPUT RATING OF THE THERMAL OXIDIZER, AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

N-608-24-6: MODIFICATION OF NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-7) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-7) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#2): REDUCE SOURCE TESTING

FREQUENCY, REVISE HEAT INPUT RATING OF THE THERMAL OXIDIZER, AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

N-608-25-7: MODIFICATION OF NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-26) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-26) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#3): REDUCE SOURCE TESTING FREQUENCY AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

N-608-26-7: MODIFICATION OF NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-25) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-25) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#4): REDUCE SOURCE TESTING FREQUENCY AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

N-608-30-3: MODIFICATION OF 27,000 GALLON CONDENSATE STORAGE TANK (TURNER CUT STATION): ESTABLISH ACTUAL GAUGE VOLUME IN THE EQUIPMENT DESCRIPTION, AND ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

N-608-31-3: MODIFICATION OF 27,000 GALLON CONDENSATE STORAGE TANK (WHISKY SLOUGH STATION): ESTABLISH ACTUAL GAUGE VOLUME IN THE EQUIPMENT DESCRIPTION, AND ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

N-608-32-1: MODIFICATION OF: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-10) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT: INCREASE NUMBER OF DISCONNECTS FOR TRUCK LOADOUT OPERATION, ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM, AND REVISE LANGUAGE OF COMPONENT INSPECTION REQUIREMENT

N-608-33-1: MODIFICATION OF PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-1A) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT: ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

Post Project Equipment Description:

N-608-7-7: NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-24) INCLUDING TWO CONTACT TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY AN 11.23 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-24) AND A PERMIT EXEMPT REBOILER (#1)

N-608-24-6: NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-7) INCLUDING TWO CONTACT TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY AN 11.23 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-7) AND A PERMIT EXEMPT REBOILER (#2)

N-608-25-7: NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-26) INCLUDING TWO CONTACT TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-26) AND A PERMIT EXEMPT REBOILER (#3)

N-608-26-7: NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-25) INCLUDING TWO CONTACT TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-25) AND A PERMIT EXEMPT REBOILER (#4)

N-608-30-3: 27,000 GALLON NOMINAL (27,707 GALLON GAUGE) CONDENSATE STORAGE TANK (TURNER CUT STATION)

N-608-31-3: 27,000 GALLON NOMINAL (27,707 GALLON GAUGE) CONDENSATE STORAGE TANK (WHISKY SLOUGH STATION)

N-608-32-1: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-10) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

N-608-33-1: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-1A) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

VI. Emission Control Technology Evaluation

PG&E is not proposing to make any changes to the existing emission control equipment. Therefore, emission control equipment evaluation is not required.

VII. General Calculations

Except for permit unit N-608-32, changes to permit units (as discussed in Section I of this document) do not meet the criteria for a Rule 2201 "Modification", as defined in Section 3.25; consequently, these units are not subject to the requirements of Rule 2201. Therefore, for these units, formal calculations for Rule 2201 are not necessary. Potential emissions (PE) from each units are summarized in the following section.

N-608-7 and '-24:
The combined total emissions from both permit units are summarized in the following section. These emissions are taken from the application review under project N-1140284.

Pollutant	PE (lb/day)	PE (lb/yr)
NOx	27.0	9,837
SOx	0.8	280
PM10	2.0	748
CO	22.6	8,263
VOC	46.8	17,082

N-608-25 and '-26:
The combined total emissions from both permit units are summarized in the following section. These emissions are taken from the application review under project N-1120252.

Pollutant	PE1 (lb/day)	PE1 (lb/yr)
NOx	27.5	10,021
SOx	0.8	286
PM10	2.1	762
CO	23.1	8,418
VOC	46.8	17,082

N-608-30, '-31:
For each permit, the potential emissions are taken from the application review under project N-1063164.

PE = 0.4 lb-VOC/day and 160 lb-VOC/yr

N-608-33:
The potential emissions are taken from the application review under project N-1153488.

PE = 7.1 lb-VOC/day and 1,237 lb-VOC/yr

N-608-32:
The detailed calculations for this permit unit are presented below:

A. Assumptions

- Assumptions will be stated as they are made during the evaluation.

- To streamline emission calculations, PM2.5 emissions are assumed to be equal to PM10 emissions. Only if needed to determine if a project is a Federal major modification for PM2.5, then specific PM2.5 emission calculations will be performed.

B. Emission Factors

1. Pre-Project Emission Factors (EF1)

N-608-32-0
Mass emissions are available from the previous permitting action; therefore, EFs are not listed here. Please refer to section VII.C.1 of this document.

2. Post-Project Emission Factors (EF2)

N-608-32-1
The applicant is not proposing any changes to the existing emission factors. Please refer to section VII.C.2 of this document.

C. Calculations

1. Pre-Project Potential to Emit (PE1)

N-608-32-0:
Tank emissions
PE1 = 1.9 lb-VOC/day, 58 lb-VOC/yr (Source: Project N-1143830)

Truck loadout process
Truck loading emissions:
PE1 = 1.8 lb-VOC/day, 14 lb-VOC/yr (Source: Project N-1143830)

Connect/disconnect hoses during truck loading:
Current permit lists an emission factor of 0.019 lb-VOC/disconnect and limits the number of disconnects to 2 disconnects per day and 24 disconnects/year. Thus,

PE1 = (0.019 lb-VOC/disconnect)(2 disconnect/day)
= 0.038 lb-VOC/day
≈ 0.0 lb-VOC/day

PE1 = (0.019 lb-VOC/disconnect)(24 disconnect/yr)
= 0 lb-VOC/yr

Fugitive emissions from equipment leaks:
PE1 = 5.7 lb-VOC/day, 2,063 lb-VOC/yr (Source: Project N-1143830)

2. Post Project Potential to Emit (PE2)

N-608-32-1:
Tank emissions:
The applicant is not proposing any changes to the equipment and associated throughput rates. Therefore,

PE2 = PE1 = 1.9 lb-VOC/day, 58 lb-VOC/yr

Truck loadout process
Truck loading emissions:
PG&E is not proposing any changes to the throughput rates. Therefore,

PE2 = PE1 = 1.8 lb-VOC/day, 14 lb-VOC/yr

Connect/disconnect hoses during truck loading:
PG&E has proposed to increase the number of disconnects from 2 disconnects per day to 3 disconnects per day. Thus,

PE2 = (0.019 lb-VOC/disconnect)(3 disconnect/day)
= 0.057 lb-VOC/day ≈ 0.1 lb-VOC/day,

The applicant is not proposing any changes to the annual number of disconnects. Therefore,

PE2 = PE1 = 0 lb-VOC/yr

Fugitive emissions from equipment leaks:
PG&E is not proposing any changes to the emission factors or number of components. Therefore,

PE2 = PE1 = 5.7 lb-VOC/day, 2,063 lb-VOC/yr

3. Pre-Project Stationary Source Potential to Emit (SSPE1)

Pursuant to District Rule 2201, the SSPE1 is the Potential to Emit (PE) from all units with valid Authorities to Construct (ATC) or Permits to Operate (PTO) at the Stationary Source and the quantity of Emission Reduction Credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions (AER) that have occurred at the source, and which have not been used on-site.

The SSPE1 can be calculated by adding the PE1 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site ($Total_{ERC}$).

$SSPE1_{Total} = SSPE1_{Permit\ Unit} + Total_{ERC}$

Except for the units under this project, the potential emissions for each permit unit are taken from the application review under project N-1171051.

SSPE1 (lb/year)					
Permit Unit	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
N-608-1-6	2,315	1	9	95	147
N-608-2-6	2,315	1	9	95	147
N-608-3-6	2,315	1	9	95	147
N-608-4-6	2,315	1	9	95	147
N-608-7-6	**9,837**	**280**	**748**	**8,263**	**17,082**
N-608-24-5					
N-608-8-5	0	0	0	0	479
N-608-13-6	830	0	59	178	67
N-608-14-6	830	0	59	178	67
N-608-15-3	0	0	0	0	0
N-608-16-4	0	0	0	0	1
N-608-17-4	0	0	0	0	1
N-608-25-6	**10,021**	**286**	**762**	**8,418**	**17,082**
N-608-26-6					
N-608-27-2	1,711	269	489	11,611	2,958
N-608-28-2	1,711	269	489	11,611	2,958
N-608-29-2	1,711	269	489	11,611	2,958
N-608-30-2	**0**	**0**	**0**	**0**	**160**
N-608-31-2	**0**	**0**	**0**	**0**	**160**
N-608-32-0	**0**	**0**	**0**	**0**	**2,135**
N-608-33-0	**0**	**0**	**0**	**0**	**1,237**
N-608-34-0	113	0	3	137	4
$SSPE1_{Permit\ Unit}$	36,024	1,377	3,134	52,387	47,937
ERC N-126-3	0	0	0	60,300	0
ERC N-1382-1	0	0	0	0	10,267
$Total_{ERC}$	0	0	0	60,300	10,267
SSPE1	**36,024**	**1,377**	**3,134**	**112,687**	**58,204**

4. Post Project Stationary Source Potential to Emit (SSPE2)

Pursuant to District Rule 2201, the SSPE2 is the PE from all units with valid ATCs or PTOs at the Stationary Source and the quantity of ERCs which have been banked since September 19, 1991 for AER that have occurred at the source, and which have not been used on-site.

The SSPE2 can be calculated by adding the PE2 from all units with valid ATCs or PTOs and the sum of the ERCs that have been banked at the source and which have not been used on-site ($Total_{ERC}$).

$SSPE2_{Total} = SSPE2_{Permit\ Unit} + Total_{ERC}$

SSPE2 (lb/year)					
Permit Unit	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
N-608-1-6	2,315	1	9	95	147
N-608-2-6	2,315	1	9	95	147
N-608-3-6	2,315	1	9	95	147
N-608-4-6	2,315	1	9	95	147
N-608-7-7	**9,837**	**280**	**748**	**8,263**	**17,082**
N-608-24-6					
N-608-8-5	0	0	0	0	479
N-608-13-6	830	0	59	178	67
N-608-14-6	830	0	59	178	67
N-608-15-3	0	0	0	0	0
N-608-16-4	0	0	0	0	1
N-608-17-4	0	0	0	0	1
N-608-25-8	**10,021**	**286**	**762**	**8,418**	**17,082**
N-608-26-8					
N-608-27-2	1,711	269	489	11,611	2,958
N-608-28-2	1,711	269	489	11,611	2,958
N-608-29-2	1,711	269	489	11,611	2,958
N-608-30-3	**0**	**0**	**0**	**0**	**160**
N-608-31-3	**0**	**0**	**0**	**0**	**160**
N-608-32-1	**0**	**0**	**0**	**0**	**2,135**
N-608-33-1	**0**	**0**	**0**	**0**	**1,237**
N-608-34-0	113	0	3	137	4
$SSPE2_{Permit\ Unit}$	36,024	1,377	3,134	52,387	47,937
ERC N-126-3	0	0	0	60,300	0
ERC N-1382-1	0	0	0	0	10,267
$Total_{ERC}$	0	0	0	60,300	10,267
SSPE2	**36,024**	**1,377**	**3,134**	**112,687**	**58,204**

5. Major Source Determination

Rule 2201 Major Source Determination:
Pursuant to District Rule 2201, a Major Source is a stationary source with a SSPE2 equal to or exceeding one or more of the following threshold values. For the purposes of determining major source status the following shall not be included:

- Any ERCs associated with the stationary source

- Emissions from non-road IC engines (i.e. IC engines at a particular site at the facility for less than 12 months)
- Fugitive emissions, except for the specific source categories specified in 40 CFR 51.165

Rule 2201 Major Source Determination (lb/year)						
Category	**NO_X**	**SO_X**	**PM_{10}**	***$PM_{2.5}$**	**CO**	**VOC**
SSPE1	36,024	1,377	3,134	3,134	52,387	47,937
SSPE2	36,024	1,377	3,134	3,134	52,387	47,937
Major Source Threshold	20,000	140,000	140,000	140,000	200,000	20,000
Major Source?	Yes	No	No	No	No	Yes

*$PM_{2.5}$ is assumed to be equal to PM_{10}

As seen in the table above, the facility is an existing Major Source for NOx and VOC emissions.

Rule 2410 Major Source Determination:
The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). Therefore the PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination (tons/year)						
Category	**NO_2**	**VOC**	**SO_2**	**CO**	**PM**	**PM_{10}**
Estimated Facility PE before Project Increase	18.0	24.0	0.7	26.2	1.6	1.6
PSD Major Source Thresholds	250	250	250	250	250	250
PSD Major Source ? (Y/N)	N	N	N	N	N	N

As shown above, the facility is not an existing PSD major source for any regulated NSR pollutant expected to be emitted at this facility.

6. Baseline Emissions (BE)

The BE calculation (in lb/year) is performed pollutant-by-pollutant for each unit within the project to calculate the QNEC, and if applicable, to determine the amount of offsets required.

Pursuant to District Rule 2201, BE = PE1 for:

- Any unit located at a non-Major Source,
- Any Highly-Utilized Emissions Unit, located at a Major Source,
- Any Fully-Offset Emissions Unit, located at a Major Source, or

- Any Clean Emissions Unit, located at a Major Source.

Otherwise,

BE = Historic Actual Emissions (HAE), calculated pursuant to District Rule 2201.

N-608-32-1:
Tank emissions:
The applicant is not proposing any changes to the tank; therefore, baseline emission calculations are not required.

Truck loadout process
Truck loading emissions:
PG&E is not proposing any changes to the truck loading emissions. Therefore, baseline emission calculations are not required.

Connect/disconnect hoses during truck loading:
For conservative calculations, BE is presumed 0.

Fugitive emissions from equipment leaks:
PG&E is not proposing any changes to the fugitive emissions from equipment leaks. Therefore, baseline emission calculations are not required.

7. SB 288 Major Modification

SB 288 Major Modification is defined in 40 CFR Part 51.165 as "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

Page 3 of the District's draft policy "Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 Major Modifications and Federal Major Modifications"[1] states,

"...calculated emission increases using the procedures below from new or modified emission units that are less than or equal to 0.5 lb/day are rounded to 0 (consistent with District Policy APR-1130 Increases Maximum Daily Permitted Emissions Less Than or Equal to 0.5 lb/day). This calculation is performed on an emission unit by emission unit basis. New or modified emission units with emission increases that round to 0 shall not constitute an SB-288 Major Modification".

Due to the proposed changes to permit unit N-608-32, the average emissions increase is 0.1 lb-VOC/day from connect/disconnect operation during truck loading process, which is below the 0.5 lb/day threshold. Therefore, this increase is deminimus, and the proposed change is not an SB-288 Major Modification.

[1] http://www.valleyair.org/busind/draft-policies/Rule2201draftmajormodpolicyFeb2011.pdf

8. Federal Major Modification

District Rule 2201 states that a Federal Major Modification is the same as a "Major Modification" as defined in 40 CFR 51.165 and part D of Title I of the CAA.

Page 5 of the District's draft policy "Implementation of Rule 2201 (as amended on 12/18/08 and effective on 6/10/10) for SB288 Major Modifications and Federal Major Modifications" states,

"...calculated emission increases using the procedures below from new or modified emission units that are less than or equal to 0.5 lb/day are rounded to 0 (consistent with District Policy APR-1130 Increases Maximum Daily Permitted Emissions Less Than or Equal to 0.5 lb/day). This calculation is performed on an emission unit by emission unit basis". New or modified emission units with emission increases that round to 0 shall not constitute a Federal Major Modification".

Due to the proposed changes to permit unit N-608-32, the average emissions increase is 0.1 lb-VOC/day from connect/disconnect operation during truck loading process, which is below the 0.5 lb/day threshold. Therefore, this increase is deminimus, and the proposed change is not a Federal Major Modification.

9. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination

Rule 2410 applies to any pollutant regulated under the Clean Air Act, except those for which the District has been classified nonattainment. The pollutants which must be addressed in the PSD applicability determination for sources located in the SJV and which are emitted in this project are: (See 52.21 (b) (23) definition of significant)

- NO2 (as a primary pollutant)
- SO2 (as a primary pollutant)
- CO
- PM
- PM10

I. Project Emissions Increase - New Major Source Determination

The post-project potentials to emit from all new and modified units are compared to the PSD major source thresholds to determine if the project constitutes a new major source subject to PSD requirements.
The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b)(1)(iii). The PSD Major Source threshold is 250 tpy for any regulated NSR pollutant.

PSD Major Source Determination: Potential to Emit (tons/year)						
Category	NO_2	VOC	SO_2	CO	PM	PM_{10}
Total PE from New and Modified Units (N-608-32-1)	0	1.0	0	0	0	0
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

As shown in the table above, the potential to emit for the project, by itself, does not exceed any PSD major source threshold. Therefore Rule 2410 is not applicable and no further analysis is required.

10. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in **Appendix E**.

VIII. Compliance Determination

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT)

1. BACT Applicability

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis. Unless specifically exempted by Rule 2201, BACT shall be required for the following actions*:

a. Any new emissions unit with a potential to emit exceeding two pounds per day,
b. The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding two pounds per day,
c. Modifications to an existing emissions unit with a valid Permit to Operate resulting in an Adjusted Increase in Permitted Emissions (AIPE) exceeding two pounds per day, and/or
d. Any new or modified emissions unit, in a stationary source project, which results in an SB 288 Major Modification or a Federal Major Modification, as defined by the rule.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2 lb/day

N-608-32-1:
There are no new emissions units proposed under this permit unit. Therefore BACT for new units with PE > 2 lb/day purposes is not triggered.

b. Relocation of emissions units – PE > 2 lb/day

N-608-32-1:
None of the emissions units are being relocated from one stationary source to another; therefore BACT is not triggered.

c. Modification of emissions units – AIPE > 2 lb/day

AIPE = PE2 – HAPE

Where,
AIPE = Adjusted Increase in Permitted Emissions, (lb/day)
PE2 = Post-Project Potential to Emit, (lb/day)
HAPE = Historically Adjusted Potential to Emit, (lb/day)

HAPE = PE1 x (EF2/EF1)

Where,
PE1 = The emissions unit's PE prior to modification or relocation, (lb/day)
EF2 = The emissions unit's permitted emission factor for the pollutant after modification or relocation. If EF2 is greater than EF1 then EF2/EF1 shall be set to 1
EF1 = The emissions unit's permitted emission factor for the pollutant before the modification or relocation

AIPE = PE2 – (PE1 * (EF2 / EF1))

N-608-32-1:
Tank emissions:
The applicant is not proposing any changes to the tank; therefore, AIPE calculations are not required.

Truck loadout process
Truck loading emissions:
PG&E is not proposing any changes to the truck loading emissions. Therefore, AIPE calculations are not required.

Connect/disconnect hoses during truck loading:
EF2 = EF1 = 0.019 lb-VOC/disconnect and PE2 = 0.1 lb-VOC/day, PE1 = 0.0 lb-VOC/day

AIPE = 0.1 – (0.0 * (0.019/0.019))
= 0.1 lb-VOC/day

As demonstrated above, the AIPE is not greater than 2.0 lb/day. Therefore, BACT is not triggered.

Fugitive emissions from equipment leaks:
PG&E is not proposing any changes to the number of components or associated emission factors. Therefore, AIPE calculations are not required.

d. SB 288/Federal Major Modification

As discussed in Sections VII.C.7 and VII.C.8 above, this project does not constitute an SB 288 and/or Federal Major Modification for any pollutant. Therefore BACT is not triggered for any pollutant.

B. Offsets

1. Offset Applicability

Offset requirements shall be triggered on a pollutant by pollutant basis and shall be required if the SSPE2 equals or exceeds the offset threshold levels in Table 4-1 of Rule 2201.

The SSPE2 is compared to the offset thresholds in the following table.

Offset Determination (lb/year)					
Category	**NO_X**	**SO_X**	**PM_{10}**	**CO**	**VOC**
SSPE2	36,024	1,377	3,134	112,687	58,204
Offset Thresholds	20,000	54,750	29,200	200,000	20,000
Offsets triggered?	Yes	No	No	No	Yes

2. Quantity of Offsets Required

As seen above, the SSPE2 is greater than the offset thresholds for NOx and VOC emissions only. However, permit unit N-608-32 involves only VOC emissions. Therefore, the discussion is limited to VOC emissions only.

Per section VII.C.2 of this document, the proposed increase in VOC emissions from connect/disconnect operation during truck loading process is deminimus per District Policy APR-1130. Therefore, offsets are not required.

C. Public Notification

1. Applicability

Public noticing is required for:
a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications,
b. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
c. Any project which results in the offset thresholds being surpassed,
d. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant, and/or
e. Any project which results in a Title V significant permit modification

a. New Major Sources, Federal Major Modifications, and SB 288 Major Modifications

New Major Sources are new facilities, which are also Major Sources. Since this is not a new facility, public noticing is not required for this project for New Major Source purposes.

As demonstrated in Sections VII.C.7 and VII.C.8, this project does not constitute an SB 288 or Federal Major Modification; therefore, public noticing for SB 288 or Federal Major Modification purposes is not required.

b. PE > 100 lb/day

Applications which include a new emissions unit with a PE greater than 100 pounds during any one day for any pollutant will trigger public noticing requirements. There are no new emissions units associated with this project. Therefore public noticing is not required for this project for PE > 100 lb/day.

c. Offset Threshold

The SSPE1 and SSPE2 are compared to the offset thresholds in the following table.

Offset Thresholds				
Pollutant	**SSPE1 (lb/year)**	**SSPE2 (lb/year)**	**Offset Threshold**	**Public Notice Required?**
NO_X	36,024	36,024	20,000 lb/year	No
SO_X	1,377	1,377	54,750 lb/year	No
PM_{10}	3,134	3,134	29,200 lb/year	No
CO	112,687	112,687	200,000 lb/year	No
VOC	58,204	58,204	20,000 lb/year	No

As detailed above, there were no thresholds surpassed with this project; therefore public noticing is not required for offset purposes.

d. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a SSIPE of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE = SSPE2 – SSPE1. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table.

SSIPE Public Notice Thresholds					
Pollutant	**SSPE2 (lb/year)**	**SSPE1 (lb/year)**	**SSIPE (lb/year)**	**SSIPE Public Notice Threshold**	**Public Notice Required?**
NO_x	36,024	36,024	0	20,000 lb/year	No
SO_x	1,377	1,377	0	20,000 lb/year	No
PM_{10}	3,134	3,134	0	20,000 lb/year	No
CO	112,687	112,687	0	20,000 lb/year	No
VOC	58,204	58,204	0	20,000 lb/year	No

As demonstrated above, the SSIPE for each pollutant is less than 20,000 lb/year; therefore public noticing for SSIPE purposes is not required.

e. Title V Significant Permit Modification

As shown in the Discussion of Rule 2520 below, this project constitutes a Title V significant modification. Therefore, public noticing for Title V significant modifications is required for this project.

2. Public Notice Action

As discussed above, public noticing is required for this project. Therefore, public notice documents will be submitted to the California Air Resources Board (CARB) and a public notice will be published in a local newspaper of general circulation prior to the issuance of the ATCs under this project.

D. Daily Emission Limits (DELs)

DELs and other enforceable conditions are required by Rule 2201 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. The DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT.

Proposed Rule 2201 (DEL) Conditions:
N-608-32-1:
Tank emissions:
Since PG&E is not proposing any changes to the tank emissions, the existing DELs from PTO will be replicated in the ATC under this project.

Truck loadout process

Truck loading emissions:

Since PG&E is not proposing any changes to the truck loading emissions, the existing DELs from PTO will be replicated into the ATC being issued under this project.

Connect/disconnect hoses during truck loading:

- The organic liquid drainage from disconnections associated with the tanker truck loadout equipment shall not exceed 10 mL per disconnect. [District Rule 2201]

- The total number of disconnects shall not exceed any of the following limits: 3 disconnects/day and 24 disconnects/year (12-month rolling basis). [District Rule 2201]

Fugitive emissions from equipment leaks:

Since PG&E is not proposing any changes to the fugitive emissions from components (i.e., valves, connectors, etc.), the existing DELs from PTO will be replicated into the ATC being issued under this project.

E. Compliance Assurance

1. Source Testing

N-608-32-1:

No additional source testing is required. Any existing source testing requirements will be replicated in the permit being issued under this project.

2. Monitoring

N-608-32-1:

No additional monitoring is required. Any existing monitoring requirements will be replicated in the permit being issued under this project.

3. Recordkeeping

N-608-32-1:

No additional monitoring is required. Any existing recordkeeping requirements will be replicated in the permit being issued under this project.

4. Reporting

N-608-32-1:

No additional reporting is required. Any existing reporting requirements will be replicated in the permit being issued under this project.

F. Ambient Air Quality Analysis (AAQA)

Per Section 4.14 of Rule 2201, ambient air quality analysis (AAQA) shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse the violation of an Ambient Air Quality Standard (AAQS).

There is no AAQS for VOC, so AAQA is not required.

Compliance is expected with this rule.

Rule 2410 Prevention of Significant Deterioration

As shown in Section VII.C.9 above, this project does not result in a new PSD major source or PSD major modification. No further discussion is required.

Rule 2520 Federally Mandated Operating Permits

This facility is subject to this Rule, and has received their Title V Operating Permit. A significant permit modification is defined as a "permit amendment that does not qualify as a minor permit modification or administrative amendment."

Minor permit modifications do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions. The proposed project will relax source testing (monitoring) frequency from at least once a year to at least once every 24-months for permit unit N-608-7, '-24, '-25 and '-26, as noted in Section I of this document. As a result, the proposed project constitutes a Significant Modification to the Title V Permit.

As discussed above, the facility has applied for a Certificate of Conformity (COC); therefore, the facility must apply to modify their Title V permit with an administrative amendment, prior to operating with the proposed modifications. Therefore, compliance is expected with this rule.

The following permit conditions will be included in each permit to ensure compliance with this rule:

- This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201]

- Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4]

Rule 4001 New Sources Performance Standards

40 CFR Part 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984

§60.110b (a) states that except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

N-608-32 and '-33:
Each permit includes a 2000-gallon condensate storage vessel that was installed in May 2016 and April 2017 respectively.

Since the storage capacity of each vessel is less than 19,813 gallons (75 m^3), these tanks are not subject to the requirements of this rule.

§60.110b (b) states that this subpart does not apply to storage vessels with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) or with a capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure less than 15.0 kPa.

N-608-30 and '-31:
Each permit includes a 27,000-gallon nominal (27,707-gallon gauge, equates to 105 m^3) condensate storage tank. The maximum true vapor pressure of the condensate liquid is 1.2 psia (equates to 8.2 kPa) under all storage conditions. These tanks are presumed to have commenced construction after July 23, 1984.

Since the maximum true vapor pressure of the liquid stored in each 105 m^3 tank is less than 15.0 kPa, these tanks are not subject to the requirements of this subpart.

40 CFR Part 60 Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

§60.5365: Applicability
This subpart applies to the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (g) of this section for which you commence construction, modification or reconstruction after August 23, 2011.

§60.5365(e) states each storage vessel affected facility, which is a single storage vessel located in the oil and natural gas production segment, natural gas processing segment or natural gas transmission and storage segment, and has the potential for VOC emissions equal to or greater than 6 tpy as determined according to this section by October 15, 2013 for Group 1 storage vessels and by April 15, 2014, or 30 days after startup (whichever is later) for Group 2 storage vessels, except as provided in paragraphs (e)(1) through (4) of this section. The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology, based on the maximum average daily throughput determined for a 30-day period of production prior to the applicable emission determination deadline specified in this section.

The determination may take into account requirements under a legally and practically enforceable limit in an operating permit or other requirement established under a Federal, State, local or tribal authority.

The potential VOC emissions from each tank under permit N-608-30, '-31, '-32, '-33 are below the threshold of 6 tons/year (as mentioned in the above paragraph). Therefore, these tanks are not subject to the requirements of this subpart.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR Part 63 Subpart HH—National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities
§63.760: Applicability and designation of affected source

(a) This subpart applies to the owners and operators of the emission points, specified in paragraph (b) of this section that are located at oil and natural gas production facilities that meet the specified criteria in paragraphs (a)(1) and either (a)(2) or (a)(3) of this section.

(1) Facilities that are major or area sources of hazardous air pollutants (HAP) as defined in §63.761. Emissions for major source determination purposes can be estimated using the maximum natural gas or hydrocarbon liquid throughput, as appropriate, calculated in paragraphs (a)(1)(i) through (iii) of this section. As an alternative to calculating the maximum natural gas or hydrocarbon liquid throughput, the owner or operator of a new or existing source may use the facility's design maximum natural gas or hydrocarbon liquid throughput to estimate the maximum potential emissions. Other means to determine the facility's major source status are allowed, provided the information is documented and recorded to the Administrator's satisfaction in accordance with §63.10(b)(3). A facility that is determined to be an area source, but subsequently increases its emissions or its potential to emit above the major source levels, and becomes a major source, must comply thereafter with all provisions of this subpart applicable to a major source starting on the applicable compliance date specified in paragraph (f) of this section. Nothing in this paragraph is intended to preclude a source from limiting its potential to emit through other appropriate mechanisms that may be available through the permitting authority.

(2) Facilities that process, upgrade, or store hydrocarbon liquids.

(3) Facilities that process, upgrade, or store natural gas prior to the point at which natural gas enters the natural gas transmission and storage source category or is delivered to a final end user. For the purposes of this subpart, natural gas enters the natural gas transmission and storage source category after the natural gas processing plant, when present. If no natural gas processing plant is present, natural gas enters the natural gas transmission and storage source category after the point of custody transfer.

Per **Appendix D** of this document, PG&E (N-608) is an area source of HAP emissions, and the facility stores hydrocarbon liquids. Therefore, this subpart applies to this facility.

(b) The affected sources for major sources are listed in paragraph (b)(1) of this section and for area sources in paragraph (b)(2) of this section.

This facility is an area source; therefore, the affected sources are mentioned in paragraph (b)(2) of this section.

Section (b)(2) states that for area sources, the affected source includes each triethylene glycol (TEG) dehydration unit located at a facility that meets the criteria specified in paragraph (a) of this section.

The proposed project does not involve any changes to glycol dehydration units that would increase their potential emissions to major source level and becomes a major source. Therefore, no further discussion is required.

40 CFR Part 63 Subpart HHH—National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities

§63.1270(a) states that this subpart applies to owners and operators of natural gas transmission and storage facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final end user (if there is no local distribution company), and that are major sources of hazardous air pollutants (HAP) emissions as defined in §63.1271.

Section 63.1270(b) states that the affected source is each new and existing glycol dehydration unit specified in paragraphs (b)(1) through (3) of this section.

Per **Appendix D** of this document, PG&E (N-608) is not a major source of HAP emissions. Further, this project does not involve changes to potential emissions of glycol dehydration units. Therefore, they are not subject to the requirements in this subpart.

Rule 4101 Visible Emissions

Rule 4101 states that no person shall discharge into the atmosphere emissions of any air contaminant aggregating more than 3 minutes in any hour which is as dark as or darker than Ringelmann 1 (or 20% opacity). The following condition in facility-wide permit N-608-0-3 ensures on-going compliance with the requirements of this rule:

- No air contaminants shall be discharged into the atmosphere for a period or periods aggregating more than 3 minutes in any one hour which is as dark or darker than Ringelmann #1 or equivalent to 20% opacity and greater, unless specifically exempted by District Rule 4101 (02/17/05). If the equipment or operation is subject to a more stringent visible emission standard as prescribed in a permit condition, the more stringent visible emission limit shall supersede this condition. [District Rule 4101, and County Rules 401 (in all eight counties in the San Joaquin Valley)]

Rule 4102 Nuisance

Section 4.0 prohibits discharge of air contaminants, which could cause injury, detriment, nuisance or annoyance to the public. The following condition in facility-wide permit N-608-0-3 ensures on-going compliance with the requirements of this rule:

- No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 – *Risk Management Policy for Permitting New and Modified Sources* specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

The proposed changes to permit unit N-608-32 do not result in an increase in hourly or annual emissions, therefore a health risk assessment is not necessary and no further risk analysis is required.

Rule 4201 Particulate Matter Concentration
Rule 4301 Fuel Burning Equipment

PG&E is not proposing any changes to the emission factors, process rates or any other parameters that would increase the existing potential emissions. Furthermore, these rules are not updated since the previous permitting actions. Therefore, continued compliance is expected with these rules.

Rule 4408 Glycol Dehydration Systems

Section 2.0 – Applicability
This rule applies to any glycol dehydration system with a glycol dehydration vent that is subject to permitting requirements pursuant to Regulation II (Permits).

This rule is applicable to the equipment under permits N-608-7, '-24, '-25 and '-26.

Section 5.0 - Requirements
Section 5.1 requires that no person shall operate a glycol dehydration system unless the VOC emissions from the glycol dehydration vents are controlled using one of the following:

- A system that direct all vapors to a vapor recovery system, a fuel gas system or a sales gas system, or
- A system in which VOC emissions are combusted by a flare, incinerator, reboiler, or **thermal oxidizer**. This system shall have all of the following features, as a minimum:

  - Operate continually in a smokeless mode;
  - Electronically controlled ignition system with a malfunction alarm system if the pilot flame fails,
  - Liquid knock-out system to condense any condensable vapors, and
  - Sight glass ports, if the flame is not visible

- Any other emission control system that controls glycol dehydration vent VOC emissions by at least 95 percent, averaged over 1 hour, or that controls glycol dehydration vent VOC emissions to a level no higher than 1.7 pounds of VOC per million dry standard cubic feet of gas dehydrated, averaged over 24 hours.

  - The control efficiency shall be determined by comparing the measurements of VOC emissions from the uncontrolled glycol dehydration vent with measurements of VOC emissions from the emission control system. For both measurements, the glycol dehydration system shall operate under similar conditions for the following parameters: glycol flowrate, reboiler temperature, gas flowrate, and gas moisture removal efficiency.

  - Systems subject to this requirement shall test, according to the methods listed in 6.2, 6.3.1, and 6.4, for compliance upon installation and not less than once every 24 months thereafter.

PG&E utilize thermal oxidizers to combust the VOC emissions from the glycol dehydration systems. Therefore compliance with section 5.1.2 is expected.

As stated previously, PG&E has requested to revise the existing source testing frequency from at least once a year to at least once every 24 months. This request was made on the basis that similar emission control system (section 5.1.3) is required to be tested at least once every 24-months.

The following condition will be included in permits N-608-7, '-24, '-25 and '-26:

- Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-x and '-x shall be conducted at least once every 24-months. [District Rule 1081]

Section 5.2 requires that the condensed hydrocarbon liquid stream from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. The following condition will be included in permits N-608-7, '-24, '-25 and '-26:

- The condensed hydrocarbon liquid stream (if any) from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408]

Section 5.3 requires that all control systems shall be maintained in a leak-free condition. A leak-free condition shall be determined by utilizing the test method in Section 6.3.2. The following condition(s) will be included in permits N-608-7, '-24, '-25 and '-26:

- All control systems shall be maintained in a leak-free condition. A leak-free condition is a condition without a gas leak or a liquid leak. Gas leak is defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with the procedure in EPA Method 21. Liquid leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs. [District Rule 4408]

For control system components (i.e., valves, flanges, connectors, etc.), this rule does not provide monitoring/testing frequency, time period to fix a component when leak is detected, and associated record retention. The following conditions will be included in permits N-608-7, '-24, '-25 and '-26:

- All control system components (i.e., valves, fitting, flanges, etc.) shall be inspected annually to ensure compliance with leak-free condition. [District Rule 2520]

- If any of the control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2520]

- Upon detection of any leaking components, operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2520]

- If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2520]

- The owner or operator shall keep records for each component inspected: (1) the date, (2) name of component and its location, (3) measured ppmv value, and (4) the name of the operator and the company conducting the leak inspection. [District Rule 1070]

- The owner or operator shall maintain an inspection log containing the following: (1) type of component leaking; (2) date and time of leak detection, and method of detection; (3) date and time of leak repair, and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070]

Section 6.0 – Administrative Requirements

Section 6.1 requires the owner or operator to keep records of the following items:

- Monthly records of the amount of gas dehydrated (MMSCF);

- Information to assist with rule compliance:

  - Facility name, APCD permit number,
  - Location, size of glycol dehydrator reboiler (MMBtu/hr) and type of glycol used,
  - Description of any installed VOC control system,

- Flow diagram of dehydrator and any VOC controls,
- Maintenance records of the VOC control system,
- Reports of source tests as required by section 5.1.3, and
- All records necessary to document the inputs to and outputs of GRI-GLYCalc™ software, if used.

- These records shall be retained on the premises for a period of not less than five years and made available to any District representative upon request.

The following condition(s) in permits N-608-7, '-24, '-25 and '-26 ensure on-going compliance with this section:

- The owner or operator shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-x and -x. [District Rules 2201 and 4408]

- The owner or operator shall maintain the following records: Facility name, APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rules 2201 and 4408]

- All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408]

Section 6.2 lists glycol dehydration vent testing methods. PG&E is complying with the requirements of 5.1.2 via combusting VOC emissions in a thermal oxidizer. These testing methods are for facilities complying with section 5.1.3. Therefore, no further discussion is required.

Section 6.3 lists method for emission control system testing. PG&E is complying with the requirements of 5.1.2 via combusting VOC emissions in a thermal oxidizer. These testing methods are applicable for the facilities complying with section 5.1.3. Therefore, no further discussion is required.

Section 6.4 lists requirements for utilization of the Gas Research Institute's GLYCalcTM software to determine flow rates in lieu of methods listed in section 6.2.2.6, 6.2.2.7, and 6.3.1.2, and requires APCO and EPA approval prior to the use of such software.

Section 6.5 states that all ASTM test methods referenced in this Section are the most recently EPA approved version that appears in the Code of Federal Regulations as Materials Approved for Incorporation by Reference.

PG&E is complying with the requirements of this rule by complying with section 5.1.2. The requirements in 6.2.2.6, 6.2.2.7, and 6.3.1.2 are applicable to those sources that use emissions control equipment per Section 5.1.3. Therefore, no further discussion is required.

Section 7.0 – Compliance Schedule
This section requires that all owner/operators shall comply with the applicable provisions of this rule by December 31, 2003. PG&E is expected to continually comply with the applicable requirements of this rule.

Compliance is expected with this Rule.

Rule 4623 Storage of Organic Liquids

Section 2.0 - Applicability
This rule applies to any tank with a capacity of 1,100 gallons or greater in which any organic liquid is placed, held, or stored.

The storage container under the following permits are subject to the requirements of this rule:

N-608-30: 27,000-gallon condensate storage tank at Turner Cut station
N-608-31: 27,000-gallon condensate storage tank at Whiskey Slough station
N-608-32: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-10)
N-608-33: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-1A)

Section 5.1 - VOC Control System Requirements
Except for small producers who are required to comply with the VOC control system requirements in Section 5.1.2, an operator shall not place, hold, or store organic liquid in any tank unless such tank is equipped with a VOC control system identified in Table 1.

The specifications for the VOC control system are described in Sections 5.2, 5.3, 5.4, 5.5, and 5.6. Section 5.1.1 identifies the following VOC control systems.

Tank Design Capacity (TDC) (gallon)	True Vapor Pressure (TVP) of Organic Liquid		
	0.5 psia < TVP <1.5 psia	1.5 psia < TVP <11 psia	TVP≥ 11 psia
1,100 ≤ TDC ≤ 19,800	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System
19,800 < TDC ≤ 39,600	Pressure Vacuum Relief Valve, Or Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System
TDC > 39,600	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Internal Floating Roof, Or External Floating Roof, Or Vapor Recovery System	Pressure Vessel, Or Vapor Recovery System

N-608-30: 27,000-gallon condensate storage tank at Turner Cut station (C-30)
The latest vapor pressure test report dated September 9, 2016 (Tested on August 22, 2016) indicates that RVP is 0.65 psia. The calculated TVP using this RVP value is 0.63 psia. This tank is equipped with a pressure vacuum relief valve. The following condition in the existing permit ensures on-going compliance with the requirements of the above table. Note that Rule 4623 reference is added to this condition.

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rules 2201, 4623 and 4624]

N-608-31: 27,000-gallon condensate storage tank at Whiskey Slough station (C-30)
The latest vapor pressure test report dated September 9, 2016 (Tested on August 22, 2016) indicates that RVP is 0.70 psia. The calculated TVP using this RVP value is 0.80 psia. This tank is equipped with a pressure vacuum relief valve. The following condition in the existing permit ensures on-going compliance with the requirements of the above table. Note that Rule 4623 reference is added to this condition.

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rules 2201, 4623 and 4624]

N-608-32: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-10)
N-608-33: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-1A)
Per application review under project N-1143830, RVP of the liquid stored in a 2,000 gallon tank is 3.3 psia. Using this value, TVP is estimated to be 1.5 psia. Based on this information, the rule requires PG&E to install a pressure vacuum relief valve, or internal floating roof, or external floating roof, or vapor recovery system. These tanks are equipped with pressure vacuum relief valve. Thus, compliance is expected with this section. The following condition in each permit ensures on-going compliance with this section:

- The Reid vapor pressure (RVP) of the organic stored in the tank shall not exceed 3.3 psia. [District Rules 2201 and 4623]

Note that equipment description will state that the tank is equipped with a pressure vacuum relief valve. Therefore, no additional condition is necessary.

Section 5.2 - Specifications for Pressure-Vacuum Relief Valve
The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure.

The following condition in each permit N-608-30 through '-33 will ensure on-going compliance with the above section:

- The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623]

Section 5.7, Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program

Only operators who elect to participate in the voluntary tank preventive inspection and maintenance, and tank interior cleaning program (program) shall be allowed to use the provisions specified in Tables 3 to 5 and Section 5.7.5. When using Tables 3 to 5 and Section 5.7.5 provisions, operators shall perform the procedures as expeditiously as practicable and minimize emissions to the maximum extent practicable. To participate in this program, the operator shall comply with the requirements of Sections 5.7.1 through 5.7.4.

5.7.1 Submit a letter to the APCO prior to conducting tank inspection, maintenance, and cleaning activities. The letter shall contain a list of each tank that will be subject to this program. The list shall include the tank identification number and location, and/or PTO numbers.

5.7.2 Keep in their facility at all times a copy of the letter sent to the APCO and maintain the records of annual tank inspection, maintenance and cleaning activities, to document their participation in the program.

5.7.3 The absence of a copy of the letter and/or failure to maintain appropriate records shall be deemed as non-participation in the program, and therefore the operator will not be eligible to use the provisions specified in Tables 3 to 5 and Section 5.7.5. Those who have not voluntarily participated in the program but are found to be using the provisions of Tables 3 to 5, and Section 5.7.5 shall be deemed to be in violation of this rule.

5.7.4 Operators who elect to participate in this program but who fail to comply with all of the requirements specified in Tables 3 to 5 and Section 5.7.5 shall be deemed to be a violation of the provisions of this rule.

As stated in the proposal section (Section I of this document), PG&E has requested to participate in *Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program* for the tanks under permits N-608-30 through '-33. They have proposed to establish all applicable requirements in these permits. Therefore, requirements of section 5.7.1 through 5.7.4 are met. The following condition will be included in each permit:

- The fixed-roof tank under this permit is a part of Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program. Failure to comply with applicable requirements of Table 3 and Section 5.7.5 shall be deemed to be a violation of the provisions of Rule 4623 (5/19/05). [District Rule 4623]

Section 5.7.5 lists requirements for storage tank degassing and interior cleaning. These requirements are discussed below:

5.7.5.1 Notification
Operators of storage tanks subject to the requirements of Section 5.7 shall notify the APCO in writing at least three (3) days prior to performing tank degassing and interior tank cleaning activities. Written notification shall include the following information:
5.7.5.1.1 The PTO number and physical location of the tank being degassed,
5.7.5.1.2 The date and time that tank degassing and cleaning activities will begin,
5.7.5.1.3 The degassing method, as allowed pursuant to Section 5.7.5.4, to be used,
5.7.5.1.4 The method to be used to clean the tank, including any solvents to be used, and
5.7.5.1.5 The method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport.

The tanks under permits N-608-30 through '-33 are fixed-roof tanks; each of these tanks is equipped with a PV relief valve. Pursuant to section 5.7.5.3.1, these tanks are not subject to the degassing requirements in section 5.7.5.4. The following requirement will be included in the permits:

- The owner or operator shall notify the District in writing at least three days prior to performing interior tank cleaning activities. Written notification shall include the following information: (a). Permit to Operate number, (b) the date and time that tank cleaning activities will begin, (c) the method to be used to clean the tank, including any solvents to be used, and (d) the method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623]

5.7.5.2 Records

Operators shall maintain records of tank cleaning activities for a period of 5 years and present said records to the APCO upon request. Records should include the final details of the planned activities submitted pursuant to Section 5.7.5.1. The following requirement will be included in the permits:

- The owner or operator shall maintain records of tank cleaning activities for a period of 5 years and present these records to the District upon records. Records should include the final details of the planned activities submitted pursuant to section 5.7.5.1 (in the above condition). [District Rule 4623]

5.7.5.3 Fixed-Roof Tanks Operating Only a Pressure-Vacuum Relief Valve

5.7.5.3.1 Except for complying with Section 5.7.5.3.2 requirements, fixed-roof tanks allowed, pursuant to Tables 1 and 2 of this rule, to operate a pressure-vacuum relief valve as the primary VOC control system are not subject to the degassing requirements specified in Section 5.7.5.4.

5.7.5.3.2 Operators shall comply with the requirements of Section 5.2 during the process of draining, and refilling the tank with an organic liquid having a TVP of 0.5 psia or greater.

5.7.5.3.3 The requirements specified in Sections 5.1 and 5.2 shall not apply to the tank during interior cleaning or maintenance activities.

The tanks under permits N-608-30 through '-33 are fixed-roof tanks; each of these tanks is equipped with a PV relief valve. Therefore, these tanks are not subject to the degassing requirements in section 5.7.5.4.

The following requirement(s) will be included in the permits:

- The owner or operator shall comply with the requirements of Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) during the process of draining and refilling the tank with an organic liquid having TVP of 0.5 psia or greater. [District Rule 4623]

- The requirements of Section 5.1 (i.e., use of pressure-vacuum relief valve) and Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) shall not apply to the tank during interior cleaning or maintenance activities. [District Rule 4623]

5.7.5.4 Tank Degassing Requirements

The tanks under permits N-608-30 through '-33 are fixed-roof tanks; each of these tanks is equipped with a PV relief valve. Therefore, these tanks are not subject to the degassing requirements in this section.

5.7.5.5 Tank Cleaning

5.7.5.5.1 While performing tank cleaning activities, operators may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302°F, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less.

5.7.5.5.2 Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March.

The following requirement(s) will be included in the permits:

- While performing tank cleaning activities, owner or operator may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees Fahrenheit, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. [District Rule 4623]

- Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March. [District Rule 4623]

5.7.5.6 Removed Sludge

Operators of tanks containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions:

5.7.5.6.1 During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent.

5.7.5.6.2 Operators shall transport removed sludge in closed, liquid leak-free containers.

5.7.5.6.3 Notwithstanding Section 5.7.5.6.2, operators shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements. Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request.

The following requirement(s) will be included in the permits:

- Tank containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions: (a) During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent, (b) Operators shall transport removed sludge in closed, liquid leak-free containers, and (c) Notwithstanding item b, operator shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements of Rule 4623 (i.e., use of pressure-vacuum relief valve). Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request. [District Rule 4623]

Table 3, fixed roof tank preventive inspection and maintenance, lists components, maintenance schedule, emission minimization and additional requirements. The following requirement(s) will be included in the permits:

- Hatch, tank seals and seams, cable seals, piping components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors etc. shall be inspected annually using a portable hydrocarbon detection instrument in accordance with EPA Method 21 for components in gas service, visual inspection for components in liquid service, or visual or ultrasonic testing (as appropriate) for external shells and roofs of uninsulated tanks for structural integrity of the tank. [District Rule 4623]

- Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623]

- Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623]

- For leaking components, the operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, date/time the component was repaired to a leak-free condition, and method used to minimize the gas leak to the lowest possible level within 8 hours after detection. [District Rule 4623]

- Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623]

- If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623]

- Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623]

Section 6.2, Administrative Requirements: TVP and API Gravity Testing of Stored Organic Liquid in Uncontrolled Fixed Roof Tanks
Section 6.2.1.1 states that an operator shall conduct an initial TVP testing of each uncontrolled fixed roof tank.

Section 6.2.2.2 states that the TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. If the tank stores crude oil or petroleum distillates, the operator shall also conduct an API gravity testing.

Section 6.2.2 requires an operator to conduct a TVP testing of each uncontrolled fixed roof tank at least once every 24 months during summer (July – September), and/or whenever there is a change in the source or type of organic liquid stored in each tank. The operator shall submit the records of TVP and/or API gravity testing to the APCO as specified in Section 6.3.6.

The following condition in each permit N-608-30 through '-33 will ensure on-going compliance with the above section:

- The owner or operator shall determine TVP within at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623]

- TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rule 4623]

Section 6.3, Administrative Requirements: Recordkeeping
Section 6.3.1 requires an operator to keep an accurate record of each organic liquid stored in each tank, including its storage temperature, TVP, and API gravity (crude oil or petroleum distillate) for a period of at least five years.

The following condition in each permit N-608-30 through '-33 will ensure on-going compliance with the above section:

- The owner or operator shall keep records of the date, name of the organic liquid stored, organic liquid RVP, TVP and storage temperature when RVP/TVP samples are taken. [District Rule 4623]

- All records shall be retained for a minimum of five years and shall be made available to the District, ARB, or EPA during normal business hours and submitted upon request. [District Rule 4623]

Section 6.4, Administrative Requirements: Test Methods
Section 6.4.3 states that the TVP of any organic liquid shall be determined by measuring the Reid Vapor Pressure (RVP) using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B of Rule 4623. Appendix B of Rule 4623 is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989.

The following condition in each permit N-608-30 through '-33 will ensure on-going compliance with the above section:

- TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and

Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rule 4623]

Section 7.1, Compliance Schedule

Section 7.1 states that any tank subject to the requirements of this rule that is installed or constructed on and after May 19, 2005, shall be in full compliance with this rule upon initial operation, and thereafter.

Tanks under permits N-608-30 through '-33 are expected to be operated in full compliance with this rule.

Rule 4624 Transfer of Organic Liquid

Section 2.0 – Applicability

This rule shall apply to organic liquid transfer facilities as defined in this rule.

N-608-30: 27,000-gallon condensate storage tank at Turner Cut station
N-608-31: 27,000-gallon condensate storage tank at Whiskey Slough station
Section 4.3, except for Section 6.1, the requirements of this rule shall not apply to the transfer of organic liquids with TVP less than 1.5 psia at the storage container's maximum organic liquid storage temperature.
Section 6.1.2 states that an operator claiming exemption under section 4.3 of this rule shall maintain accurate daily records of liquid TVP.

6.1.2.1 Liquid TVP shall be determined using Appendix A of Rule 4623 or the applicable test method in Section 6.3.
6.1.2.2 The TVP shall be determined whenever there is a change in the type of liquid being transferred.
6.1.2.3 An operator may use a material safety data sheet (MSDS) in place of TVP testing if the transferred organic liquid is not crude oil or a petroleum distillate.

The tanks under permit N-608-30 and '-31 store condensate liquid, which is a mixture of several organic compounds. The liquid is hauled via tanker truck to an offsite facility for further processing; therefore, this activity is analyzed under this rule.

The latest 2016 TVP testing (August 22, 2016) shows TVP of 0.63 psia for the condensate stored in the tank under permit N-608-30 and TVP of 0.8 TVP for condensate stored in the tank under permit N-608-31. The existing PTOs requires the operator to store, place and hold organic liquid with a TVP of less than 1.2 psia under all storage conditions, and requires a TVP testing at least once every 24 months during summer (July –September) and/or when there is a change in the source or type of organic liquid stored in the tank. The following conditions in each permit ensures on-going compliance:

- This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rules 2201, 4623 and 4624]

- Permittee shall conduct TVP testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rules 4623 and 4624]

Note that reference to Rule 4624 is added to the above conditions.

N-608-32: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-10)
N-608-33: Pipeline liquid transfer, storage and loadout operation (2,000-gallon convault aboveground fixed roof storage tank D-1A)
Section 4.1 of this rule states that the requirements of Section 5.0 of this rule shall not apply to organic liquid transfer facilities which transfer less than 4,000 gallons of organic liquids in any one day. The operator shall meet the applicable recordkeeping requirements of Section 6.1.1.

Section 6.1.1 states that an operator claiming exemption under Section 4.1 shall keep records of daily liquid throughput.

In each permit, PG&E is limited to transfer 2,000 gal/day of liquid condensate into a tanker truck. They're required to keep record of daily loadout rate. The following conditions in each permit ensures on-going compliance:

- The organic liquid loading into tanker truck(s) shall not exceed any of the following limits: 2,000 gallons/day and 16,000 gallons/yr (12-month rolling basis). [District Rules 2201 and 4624]

- The owner or operator shall keep records of: a.) date, b.) amount of organic liquid loaded into a tanker truck (gallons/day), c.) amount of organic liquid loaded into a tanker truck (gallons/month), and d.) cumulative total amount of organic liquid loaded into a tanker truck in a consecutive 12-month rolling period. [District Rules 2201 and 4624]

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

California Environmental Quality Act (CEQA)

CEQA requires each public agency to adopt objectives, criteria, and specific procedures consistent with CEQA Statutes and the CEQA Guidelines for administering its responsibilities under CEQA, including the orderly evaluation of projects and preparation of environmental documents. The District adopted its *Environmental Review Guidelines* (ERG) in 2001. The basic purposes of CEQA are to:

- Inform governmental decision-makers and the public about the potential, significant environmental effects of proposed activities;
- Identify the ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

Greenhouse Gas (GHG) Significance Determination

It is determined that no other agency has or will prepare an environmental review document for the project. Thus the District is the Lead Agency for this project.

The District's engineering evaluation (this document) demonstrates that the project would not result in an increase in project specific greenhouse gas emissions. The District therefore concludes that the project would have a less than cumulatively significant impact on global climate change.

District CEQA Findings

The District is the Lead Agency for this project because there is no other agency with broader statutory authority over this project. The District performed an Engineering Evaluation (this document) for the proposed project and determined that for each emissions unit affected by the project the potential project emission increase is equal to or less than 2 lbs per day per pollutant. Therefore, the potential project emission increase is considerably below all annual criteria emissions CEQA significant thresholds. The activity will occur at an existing facility and involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. Therefore, the District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15301 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061(b)(3)).

Indemnification Agreement/Letter of Credit Determination

According to District Policy APR 2010 (CEQA Implementation Policy), when the District is the Lead or Responsible Agency for CEQA purposes, an indemnification agreement and/or a letter of credit may be required. The decision to require an indemnity agreement and/or a letter of credit is based on a case-by-case analysis of a particular project's potential for litigation risk, which in turn may be based on a project's potential to generate public concern, its potential for significant impacts, and the project proponent's ability to pay for the costs of litigation without a letter of credit, among other factors.

The criteria pollutant emissions and toxic air contaminant emissions associated with the proposed project are not significant, and there is minimal potential for public concern for

this particular type of facility/operation. Therefore, an Indemnification Agreement and/or a Letter of Credit will not be required for this project in the absence of expressed public concern.

IX. Recommendation

Compliance with all applicable rules and regulations is expected. Pending a successful Public Noticing period, issue ATCs N-608-7-7, '-24-6, '-25-8, '-26-8, '-30-3, '-31-3, '-32-1 and '-33-1 subject to the permit conditions on the attached draft ATC in **Appendix A**.

X. Billing Information

Annual Permit Fees			
Permit Number	**Fee Schedule**	**Fee Description**	**Annual Fee**
N-608-7-7	3020-02 G	5.612 MMBtu/hr	$893
N-608-24-6	3020-02 G	5.612 MMBtu/hr	$893
N-608-25-8	3020-02 G	5.72 MMBtu/hr	$893
N-608-26-8	3020-02 G	5.72 MMBtu/hr	$893
N-608-30-3	3020-05 C	27,707 gallons	$149
N-608-31-3	3020-05 C	27,707 gallons	$149
N-608-32-1	3020-05 A	2,000 gallons	$83
N-608-33-1	3020-05 A	2,000 gallons	$83

Appendixes

A: Draft ATCs
B: Current PTOs
C: Source Test Summaries
D: HAP Calculations
E: Quarterly Net Emissions Change

Appendix A
Draft ATCs

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-7-7

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-24) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-24) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#1): REDUCE SOURCE TESTING FREQUENCY, REVISE HEAT INPUT RATING OF THE THERMAL OXIDIZER, AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

N-608-7-7 May 7 2018 4:51PM -- KAHLONJ Joint Inspection NOT Required

6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The condensed hydrocarbon liquid stream (if any) from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 pounds per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and '-24 shall be conducted at least once every 24-months. [District Rules 1081] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rule 1081] Federally Enforceable Through Title V Permit
19. All control systems shall be maintained in a leak-free condition. A leak-free condition is a condition without a gas leak or a liquid leak. Gas leak is defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with the procedure in EPA Method 21. Liquid leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs. [District Rule 4408] Federally Enforceable Through Title V Permit
20. All control system components (i.e., valves, fitting, flanges, etc.) shall be inspected annually via EPA Method 21 (gas leak) and visually (liquid leak) to ensure compliance with leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
21. If any of the control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Upon detection of any leaking components, operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

23. If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2520] Federally Enforceable Through Title V Permit

24. The owner or operator shall keep records for each component inspected: (1) the date, (2) name of component and its location, (3) measured ppmv value, and (4) the name of the operator and the company conducting the leak inspection. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The owner or operator shall maintain an inspection log containing the following: (1) type of component leaking; (2) date and time of leak detection, and method of detection; (3) date and time of leak repair, and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

26. The owner or operator shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and '-24. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

27. The owner or operator shall maintain the following records: Facility name, APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rule 2201 and 4408] Federally Enforceable Through Title V Permit

28. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-24-6

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-7) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-7) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#2): REDUCE SOURCE TESTING FREQUENCY, REVISE HEAT INPUT RATING OF THE THERMAL OXIDIZER, AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

N-608-24-6 May 7 2018 4:51PM - KAHLONJ Joint Inspection NOT Required

6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The condensed hydrocarbon liquid stream (if any) from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 pounds per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and '-24 shall be conducted at least once every 24-months. [District Rules 1081] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rule 1081] Federally Enforceable Through Title V Permit
19. All control systems shall be maintained in a leak-free condition. A leak-free condition is a condition without a gas leak or a liquid leak. Gas leak is defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with the procedure in EPA Method 21. Liquid leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs. [District Rule 4408] Federally Enforceable Through Title V Permit
20. All control system components (i.e., valves, fitting, flanges, etc.) shall be inspected annually via EPA Method 21 (gas leak) and visually (liquid leak) to ensure compliance with leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
21. If any of the control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Upon detection of any leaking components, operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

23. If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2520] Federally Enforceable Through Title V Permit

24. The owner or operator shall keep records for each component inspected: (1) the date, (2) name of component and its location, (3) measured ppmv value, and (4) the name of the operator and the company conducting the leak inspection. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The owner or operator shall maintain an inspection log containing the following: (1) type of component leaking; (2) date and time of leak detection, and method of detection; (3) date and time of leak repair, and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

26. The owner or operator shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and '-24. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

27. The owner or operator shall maintain the following records: Facility name, APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rule 2201 and 4408] Federally Enforceable Through Title V Permit

28. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-25-8

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-26) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-26) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#3): REDUCE SOURCE TESTING FREQUENCY AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

DRAFT

Arnaud Marjollet, Director of Permit Services

N-608-25-8 May 7 2016 4:51PM – KAHLONJ Joint Inspection NOT Required

6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The condensed hydrocarbon liquid stream (if any) from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 pounds per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and '-24 shall be conducted at least once every 24-months. [District Rules 1081] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rule 1081] Federally Enforceable Through Title V Permit
19. All control systems shall be maintained in a leak-free condition. A leak-free condition is a condition without a gas leak or a liquid leak. Gas leak is defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with the procedure in EPA Method 21. Liquid leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs. [District Rule 4408] Federally Enforceable Through Title V Permit
20. All control system components (i.e., valves, fitting, flanges, etc.) shall be inspected annually via EPA Method 21 (gas leak) and visually (liquid leak) to ensure compliance with leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
21. If any of the control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Upon detection of any leaking components, operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

23. If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2520] Federally Enforceable Through Title V Permit

24. The owner or operator shall keep records for each component inspected: (1) the date, (2) name of component and its location, (3) measured ppmv value, and (4) the name of the operator and the company conducting the leak inspection. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The owner or operator shall maintain an inspection log containing the following: (1) type of component leaking; (2) date and time of leak detection, and method of detection; (3) date and time of leak repair, and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

26. The owner or operator shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and '-24. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

27. The owner or operator shall maintain the following records: Facility name, APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rule 2201 and 4408] Federally Enforceable Through Title V Permit

28. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408] Federally Enforceable Through Title V Permit

DRAFT

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-26-8

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-25) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-25) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#4): REDUCE SOURCE TESTING FREQUENCY AND CLARIFY PERMIT EXEMPT THRESHOLD FOR REBOILER UNIT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

N-608-26-8 May 7 2008 4:51PM - KAHLONJ Joint Inspection NOT Required

6. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
7. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
8. The condensed hydrocarbon liquid stream (if any) from the glycol dehydration vent shall be stored and handled in a manner that will not cause or allow evaporation of VOC to the atmosphere. [District Rule 4408] Federally Enforceable Through Title V Permit
9. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rule 2201] Federally Enforceable Through Title V Permit
10. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
13. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 pounds per hour. [District Rule 2201] Federally Enforceable Through Title V Permit
15. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and '-24 shall be conducted at least once every 24-months. [District Rules 1081] Federally Enforceable Through Title V Permit
16. 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] Federally Enforceable Through Title V Permit
17. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit
18. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rule 1081] Federally Enforceable Through Title V Permit
19. All control systems shall be maintained in a leak-free condition. A leak-free condition is a condition without a gas leak or a liquid leak. Gas leak is defined as a reading as methane in excess of 10,000 ppm above background when measured at a distance of one (1) centimeter from the potential source in accordance with the procedure in EPA Method 21. Liquid leak is defined as the dripping at a rate of more than three (3) drops per minute of liquid containing VOCs. [District Rule 4408] Federally Enforceable Through Title V Permit
20. All control system components (i.e., valves, fitting, flanges, etc.) shall be inspected annually via EPA Method 21 (gas leak) and visually (liquid leak) to ensure compliance with leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
21. If any of the control system components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rule 2520] Federally Enforceable Through Title V Permit
22. Upon detection of any leaking components, operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rule 2520] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

23. If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 2520] Federally Enforceable Through Title V Permit

24. The owner or operator shall keep records for each component inspected: (1) the date, (2) name of component and its location, (3) measured ppmv value, and (4) the name of the operator and the company conducting the leak inspection. [District Rule 1070] Federally Enforceable Through Title V Permit

25. The owner or operator shall maintain an inspection log containing the following: (1) type of component leaking; (2) date and time of leak detection, and method of detection; (3) date and time of leak repair, and emission level of recheck after leak is repaired; (4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

26. The owner or operator shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and '-24. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

27. The owner or operator shall maintain the following records: Facility name, APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rule 2201 and 4408] Federally Enforceable Through Title V Permit

28. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-30-3

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF 27,000 GALLON CONDENSATE STORAGE TANK (TURNER CUT STATION): ESTABLISH ACTUAL GAUGE VOLUME IN THE EQUIPMENT DESCRIPTION, AND ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit
4. Daily fluid throughput of the tank shall not exceed 840 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The owner or operator shall determine TVP within at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

N-608-30-3 May 7 2018 4:51PM - KAHLONJ Joint Inspection NOT Required

6. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit

7. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

8. The owner or operator shall keep records of the date, name of the organic liquid stored, measured organic liquid RVP, calculated TVP and storage temperature when samples are taken. [District Rule 4623] Federally Enforceable Through Title V Permit

9. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

10. This tank shall be operated in a leak-free condition. A leak-free condition means a condition without a gas leak or a liquid leak. Gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit

11. The fixed-roof tank under this permit is a part of Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program. Failure to comply with applicable requirements of Table 3 and Section 5.7.5 shall be deemed to be a violation of the provisions of Rule 4623 (5/19/05). [District Rule 4623] Federally Enforceable Through Title V Permit

12. The owner or operator shall notify the District in writing at least three days prior to performing interior tank cleaning activities. Written notification shall include the following information: (a). Permit to Operate number, (b) the date and time that tank cleaning activities will begin, (c) the method to be used to clean the tank, including any solvents to be used, and (d) the method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

13. The owner or operator shall maintain records of tank cleaning activities for a period of 5 years and present these records to the District upon records. Records should include the final details of the planned activities submitted pursuant to section 5.7.5.1 (in the above condition). [District Rule 4623] Federally Enforceable Through Title V Permit

14. The owner or operator shall comply with the requirements of Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) during the process of draining and refilling the tank with an organic liquid having TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

15. The requirements of Section 5.1 (i.e., use of pressure-vacuum relief valve) and Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) shall not apply to the tank during interior cleaning or maintenance activities. [District Rule 4623] Federally Enforceable Through Title V Permit

16. While performing tank cleaning activities, owner or operator may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees Fahrenheit, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. [District Rule 4623] Federally Enforceable Through Title V Permit

17. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

18. Tank(s) containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions: (a) During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent, (b) Operators shall transport removed sludge in closed, liquid leak-free containers, and (c) Notwithstanding item b, operator shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements of Rule 4623 (i.e., use of pressure-vacuum relief valve). Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

19. Hatch, tank seals and seams, cable seals, piping components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors etc. shall be inspected annually using a portable hydrocarbon detection instrument in accordance with EPA Method 21 for components in gas service, visual inspection for components in liquid service, or visual or ultrasonic testing (as appropriate) for external shells and roofs of uninsulated tanks for structural integrity of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit

20. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

21. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

22. For leaking components, the operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, date/time the component was repaired to a leak-free condition, and method used to minimize the gas leak to the lowest possible level within 8 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

23. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit

24. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623] Federally Enforceable Through Title V Permit

25. Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit

26. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-31-3

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF 27,000 GALLON CONDENSATE STORAGE TANK (WHISKY SLOUGH STATION): ESTABLISH ACTUAL GAUGE VOLUME IN THE EQUIPMENT DESCRIPTION, AND ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit
4. Daily fluid throughput of the tank shall not exceed 840 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The owner or operator shall determine TVP within at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

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Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services
N-608-31-3 May 7 2018 4:51PM – KAHLONJ Joint Inspection NOT Required

6. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rules 4623 and 4624] Federally Enforceable Through Title V Permit

7. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rule 4623] Federally Enforceable Through Title V Permit

8. The owner or operator shall keep records of the date, name of the organic liquid stored, measured organic liquid RVP, calculated TVP and storage temperature when samples are taken. [District Rule 4623] Federally Enforceable Through Title V Permit

9. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

10. This tank shall be operated in a leak-free condition. A leak-free condition means a condition without a gas leak or a liquid leak. Gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit

11. The fixed-roof tank(s) under this permit is a part of Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program. Failure to comply with applicable requirements of Table 3 and Section 5.7.5 shall be deemed to be a violation of the provisions of Rule 4623 (5/19/05). [District Rule 4623] Federally Enforceable Through Title V Permit

12. The owner or operator shall notify the District in writing at least three days prior to performing interior tank cleaning activities. Written notification shall include the following information: (a). Permit to Operate number, (b) the date and time that tank cleaning activities will begin, (c) the method to be used to clean the tank, including any solvents to be used, and (d) the method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

13. The owner or operator shall maintain records of tank cleaning activities for a period of 5 years and present these records to the District upon records. Records should include the final details of the planned activities submitted pursuant to section 5.7.5.1 (in the above condition). [District Rule 4623] Federally Enforceable Through Title V Permit

14. The owner or operator shall comply with the requirements of Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) during the process of draining and refilling the tank with an organic liquid having TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

15. The requirements of Section 5.1 (i.e., use of pressure-vacuum relief valve) and Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) shall not apply to the tank during interior cleaning or maintenance activities. [District Rule 4623] Federally Enforceable Through Title V Permit

16. While performing tank cleaning activities, owner or operator may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees Fahrenheit, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. [District Rule 4623] Federally Enforceable Through Title V Permit

17. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

18. Tank(s) containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions: (a) During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent, (b) Operators shall transport removed sludge in closed, liquid leak-free containers, and (c) Notwithstanding item b, operator shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements of Rule 4623 (i.e., use of pressure-vacuum relief valve). Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

19. Hatch, tank seals and seams, cable seals, piping components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors etc. shall be inspected annually using a portable hydrocarbon detection instrument in accordance with EPA Method 21 for components in gas service, visual inspection for components in liquid service, or visual or ultrasonic testing (as appropriate) for external shells and roofs of uninsulated tanks for structural integrity of the tank. [District Rule 4623] Federally Enforceable Through Title V Permit

20. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

21. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

22. For leaking components, the operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, date/time the component was repaired to a leak-free condition, and method used to minimize the gas leak to the lowest possible level within 8 hours after detection. [District Rule 4623] Federally Enforceable Through Title V Permit

23. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit

24. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rule 4623] Federally Enforceable Through Title V Permit

25. Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rule 4623] Federally Enforceable Through Title V Permit

26. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

DRAFT

PERMIT NO: N-608-32-1

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF: PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-10) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT: INCREASE NUMBER OF DISCONNECTS FOR TRUCK LOADOUT OPERATION, ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM, AND REVISE LANGUAGE OF COMPONENT INSPECTION REQUIREMENT

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. The Reid vapor pressure (RVP) of the organic stored in the tank shall not exceed 3.3 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
4. The organic liquid transfer into the tank shall not exceed any of the following limits: 900 gallons/day and 16,000 gallons/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit
5. VOC emissions from transferring and storage of organic liquid in the tank shall not any of the following limits: 1.9 lb/day and 58 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

N-608-32-1 May 7 2018 4:51PM – KAHLONJ Joint Inspection NOT Required

6. The owner or operator shall determine TVP at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit

7. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit

8. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

10. VOC emissions from tanker truck loading operation shall not exceed 0.9 lb/1,000 gallons of pipeline condensate liquid loaded. [District Rule 2201] Federally Enforceable Through Title V Permit

11. The organic liquid loading into tanker truck(s) shall not exceed any of the following limits: 2,000 gallons/day and 16,000 gallons/yr (12-month rolling basis). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

12. The organic liquid drainage from disconnections associated with the tanker truck loadout equipment shall not exceed 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit

13. The total number of disconnects shall not exceed any of the following limits: 3 disconnects/day and 24 disconnects/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit

14. Fugitive VOC emissions from components (i.e., valves and connectors located within 60 feet of piping to the D-10 tank) used to route the organic liquid into the tank shall not exceed any of the following limits: 5.7 lb/day and 2,063 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Fugitive VOC emissions shall be calculated using the EPA "Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017 (November 1995), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Except as otherwise provided in this permit, all piping, valves, and fittings under this permit shall be constructed and maintained in a leak-free condition. Leak free condition is defined as a condition without a gas leak or a liquid leak. [District Rule 2201] Federally Enforceable Through Title V Permit

17. A leak-free condition is a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

18. All piping, fittings, and valves under this permit shall be inspected annually to ensure compliance with leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit

19. The fixed-roof tank under this permit is a part of Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program. Failure to comply with applicable requirements of Table 3 and Section 5.7.5 shall be a violation of the provisions of Rule 4623 (5/19/05). [District Rule 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The owner or operator shall notify the District in writing at least three days prior to performing interior tank cleaning activities. Written notification shall include the following information: (a). Permit to Operate number, (b) the date and time that tank cleaning activities will begin, (c) the method to be used to clean the tank, including any solvents to be used, and (d) the method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

21. The owner or operator shall maintain records of tank cleaning activities for a period of 5 years and present these records to the District upon records. Records should include the final details of the planned activities submitted pursuant to section 5.7.5.1 (in the above condition). [District Rule 4623] Federally Enforceable Through Title V Permit

22. The owner or operator shall comply with the requirements of Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) during the process of draining and refilling the tank with an organic liquid having TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

23. The requirements of Section 5.1 (i.e., use of pressure-vacuum relief valve) and Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) shall not apply to the tank during interior cleaning or maintenance activities. [District Rule 4623] Federally Enforceable Through Title V Permit

24. While performing tank cleaning activities, owner or operator may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees Fahrenheit, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. [District Rule 4623] Federally Enforceable Through Title V Permit

25. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

26. Tank containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions: (a) During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent, (b) Operators shall transport removed sludge in closed, liquid leak-free containers, and (c) Notwithstanding item b, operator shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements of Rule 4623 (i.e., use of pressure-vacuum relief valve). Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

27. Hatch, tank seals and seams, cable seals, piping components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors etc. shall be inspected annually using a portable hydrocarbon detection instrument in accordance with EPA Method 21 for components in gas service, visual inspection for components in liquid service, or visual or ultrasonic testing (as appropriate) for external shells and roofs of uninsulated tanks for structural integrity of the tank. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

28. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

29. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

30. For leaking components, the operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, date/time the component was repaired to a leak-free condition, and method used to minimize the gas leak to the lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

31. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

32. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

33. Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

34. All components greater than 5 feet from the tank and within 60 ft of the D-10 tank equipment that are found leaking shall be tagged and repaired or replaced within 72 hours of detection. The repaired or replaced equipment must be re-inspected to ensure compliance with leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit

35. For the components covered under this permit, the owner or operator shall keep records of the type of component, number of components, emission factors, total daily (lb/day) and annual VOC emissions (lb/year). [District Rule 2201] Federally Enforceable Through Title V Permit

36. For each component inspected, the owner or operator shall keep records of the date, name of component, its location, measured ppmv value, the name of the operator and the company conducting the leak inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

37. The owner or operator shall keep records of the date, name of the organic liquid stored in tank D-10, measured organic liquid RVP, calculated TVP and storage temperature when samples are taken. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

38. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid transferred into the tank D-10 (gallons/day), c.) amount of organic liquid transferred into the tank D-10 (gallons/month), and d.) cumulative total amount of organic liquid transferred into the tank in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

39. The owner or operator shall keep records of: a.) date, b.) number of disconnects (disconnects/day), c.) number of disconnects (gallons/month), and d.) cumulative total number of disconnects in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

40. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid loaded into a tanker truck (gallons/day), c.) amount of organic liquid loaded into a tanker truck (gallons/month), and d.) cumulative total amount of organic liquid loaded into a tanker truck in a consecutive 12-month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

41. All records shall be retained for a minimum of five years and shall be made available to the District, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit

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San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

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PERMIT NO: N-608-33-1

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: PACIFIC GAS & ELECTRIC CO.
MAILING ADDRESS: ATTN: AIR QUALITY PERMITS
P O BOX 7640
SAN FRANCISCO, CA 94120

LOCATION: MCDONALD ISLAND COMPRESSOR STATION
HOLT, CA 95234

EQUIPMENT DESCRIPTION:
MODIFICATION OF PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-1A) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT: ESTABLISH REQUIREMENTS FOR VOLUNTARY TANK PREVENTATIVE INSPECTION AND MAINTENANCE, AND TANK INTERIOR CLEANING PROGRAM

CONDITIONS

1. {1830} This Authority to Construct serves as a written certificate of conformity with the procedural requirements of 40 CFR 70.7 and 70.8 and with the compliance requirements of 40 CFR 70.6(c). [District Rule 2201] Federally Enforceable Through Title V Permit
2. {1831} Prior to operating with modifications authorized by this Authority to Construct, the facility shall submit an application to modify the Title V permit with an administrative amendment in accordance with District Rule 2520 Section 5.3.4. [District Rule 2520, 5.3.4] Federally Enforceable Through Title V Permit
3. Tank breather vent setting shall be -0.31 psig vacuum and +0.90 psig. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The Reid vapor pressure (RVP) of the organic stored in the tank shall not exceed 3.3 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
5. The organic liquid transfer into the tank shall not exceed any of the following limits: 900 gallons/day and 16,000 gallons/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

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Arnaud Marjollet, Director of Permit Services

N-608-33-1 May 7 2016 4:51PM – KAHLONJ Joint Inspection NOT Required

6. VOC emissions from transferring and storage of organic liquid in the tank shall not any of the following limits: 1.8 lb/day and 25 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

7. The owner or operator shall determine at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

8. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

9. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

10. The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit

11. VOC emissions from tanker truck loading operation shall not exceed 1.0 lb/1,000 gallons of pipeline condensate liquid loaded. [District Rule 2201] Federally Enforceable Through Title V Permit

12. The organic liquid loading into tanker truck(s) shall not exceed any of the following limits: 2,000 gallons/day and 16,000 gallons/yr (12-month rolling basis). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

13. The organic liquid drainage from disconnections associated with the tanker truck loadout equipment shall not exceed 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit

14. The total number of disconnects shall not exceed any of the following limits: 3 disconnects/day and 24 disconnects/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit

15. Fugitive VOC emissions from components (i.e., valves and connectors located within 60 feet of piping to the D-1A tank used to route the organic liquid into the tank) shall not exceed any of the following limits: 3.3 lb/day and 1,175 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Fugitive VOC emissions shall be calculated using the EPA "Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017 (November 1995), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

17. Except as otherwise provided in this permit, all piping, valves, and fittings under this permit shall be constructed and maintained in a leak-free condition. Leak free condition is defined as a condition without a gas leak or a liquid leak. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

18. A leak-free condition is a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

19. All piping, fittings, and valves under this permit shall be inspected annually to ensure compliance with leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

20. The fixed-roof tank under this permit is a part of Voluntary Tank Preventive Inspection and Maintenance, and Tank Interior Cleaning Program. Failure to comply with applicable requirements of Table 3 and Section 5.7.5 shall be a violation of the provisions of Rule 4623 (5/19/05). [District Rule 4623] Federally Enforceable Through Title V Permit

21. The owner or operator shall notify the District in writing at least three days prior to performing interior tank cleaning activities. Written notification shall include the following information: (a). Permit to Operate number, (b) the date and time that tank cleaning activities will begin, (c) the method to be used to clean the tank, including any solvents to be used, and (d) the method to be used to dispose of the removed sludge, including methods that will be used to control emissions from the receiving vessel and emissions during transport. [District Rule 4623] Federally Enforceable Through Title V Permit

22. The owner or operator shall maintain records of tank cleaning activities for a period of 5 years and present these records to the District upon records. Records should include the final details of the planned activities submitted pursuant to section 5.7.5.1 (in the above condition). [District Rule 4623] Federally Enforceable Through Title V Permit

23. The owner or operator shall comply with the requirements of Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) during the process of draining and refilling the tank with an organic liquid having TVP of 0.5 psia or greater. [District Rule 4623] Federally Enforceable Through Title V Permit

24. The requirements of Section 5.1 (i.e., use of pressure-vacuum relief valve) and Section 5.2 (i.e., pressure-vacuum relief valve setting to be within 10% of the maximum allowable working pressure of the tank) shall not apply to the tank during interior cleaning or maintenance activities. [District Rule 4623] Federally Enforceable Through Title V Permit

25. While performing tank cleaning activities, owner or operator may use the following cleaning agents: diesel, solvents with an initial boiling point of greater than 302 degrees Fahrenheit, solvents with a vapor pressure of less than 0.5 psia, or solvents with 50 grams per liter VOC content or less. [District Rule 4623] Federally Enforceable Through Title V Permit

26. Steam cleaning shall be allowed at locations where wastewater treatment facilities are limited or during the months of December through March. [District Rule 4623] Federally Enforceable Through Title V Permit

27. Tank containing an organic liquid with a TVP of 1.5 psia or greater shall control emissions from the removed sludge by complying with all of the following provisions: (a) During sludge removal the operator shall control emissions from the receiving vessel by operating an APCO-approved vapor control device that reduces emissions of organic vapors by at least 95 percent, (b) Operators shall transport removed sludge in closed, liquid leak-free containers, and (c) Notwithstanding item b, operator shall store removed sludge, until final disposal, in leak-free containers, or tanks complying with Section 5.1 requirements of Rule 4623 (i.e., use of pressure-vacuum relief valve). Sludge that is to be used to manufacture roadmix, as defined in Rule 2020 (Exemptions), is exempt from this requirement. Roadmix manufacturing operations exempt pursuant to Rule 2020, shall maintain documentation of their compliance with Rule 2020, and promptly make said documentation available to the APCO upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

28. Hatch, tank seals and seams, cable seals, piping components directly affixed to the tank and within five feet of the tank, including but not limited to valves, flanges, connectors etc. shall be inspected annually using a portable hydrocarbon detection instrument in accordance with EPA Method 21 for components in gas service, visual inspection for components in liquid service, or visual or ultrasonic testing (as appropriate) for external shells and roofs of uninsulated tanks for structural integrity of the tank. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

29. Upon detection of a liquid leak, defined as a leak rate of greater than or equal to 30 drops per minute, operator shall repair the leak within 8 hours. For leaks with a liquid leak rate of between 3 and 30 drops per minute, the leaking component shall be repaired within 24 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

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CONDITIONS CONTINUE ON NEXT PAGE

30. Upon detection of a gas leak, defined as a VOC concentration of greater than 10,000 ppmv measured in accordance with EPA Method 21, operator shall take one of the following actions: 1) eliminate the leak within 8 hours after detection; or 2) if the leak cannot be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices, and eliminate the leak within 48 hours after minimization. In no event shall the total time to minimize and eliminate a leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

31. For leaking components, the operator shall immediately affix a tag and maintain records of liquid leak and gas leak detection readings, date/time leak was discovered, date/time the component was repaired to a leak-free condition, and method used to minimize the gas leak to the lowest possible level within 8 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

32. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of the District Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

33. If a component type for a given tank is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

34. Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of the District Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

35. All components greater than 5 feet from the tank and within 60 ft of the D-1A tank equipment that are found leaking shall be tagged and repaired or replaced within 72 hours of detection. The repaired or replaced equipment must be re-inspected to ensure compliance with leak-free condition. [District Rule 2201] Federally Enforceable Through Title V Permit

36. For the components covered under this permit, the owner or operator shall keep records of the type of component, number of components, emission factors, total daily (lb/day) and annual VOC emissions (lb/year). [District Rule 2201] Federally Enforceable Through Title V Permit

37. For each component inspected, the owner or operator shall keep records of the date, name of component, its location, measured ppmv value, the name of the operator and the company conducting the leak inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

38. The owner or operator shall keep records of the date, name of the organic liquid stored in tank D-1A, measured organic liquid RVP, calculated TVP and storage temperature when samples are taken. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

39. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid transferred into the tank D-1A (gallons/day), c.) amount of organic liquid transferred into the tank D-1A (gallons/month), and d.) cumulative total amount of organic liquid transferred into the tank in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

40. The owner or operator shall keep records of: a.) date, b.) number of disconnects (disconnects/day), c.) number of disconnects (gallons/month), and d.) cumulative total number of disconnects in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

41. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid loaded into a tanker truck (gallons/day), c.) amount of organic liquid loaded into a tanker truck (gallons/month), and d.) cumulative total amount of organic liquid loaded into a tanker truck in a consecutive 12-month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

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42. All records shall be retained for a minimum of five years and shall be made available to the District, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit

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Appendix B
Current PTOs

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-7-6 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-24) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-24) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#1).

PERMIT UNIT REQUIREMENTS

1. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall operate at all times when dehydration is taking place. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only glycol shall be used as the dehydration medium. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District NSR Rule and District Rule 4408, 5.1.3] Federally Enforceable Through Title V Permit
7. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
8. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
9. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
10. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and -24 shall be conducted annually. [District Rules 1081, 7.2 and 4408, 5.1.3.2] Federally Enforceable Through Title V Permit
13. 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, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

15. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rules 1081, 5.0 and 4408, 6.2.2.4] Federally Enforceable Through Title V Permit

16. Permittee shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and -24. [District NSR Rule and District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

17. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District NSR Rule and District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

18. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408, 6.1.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-24-5 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
NATURAL GAS DEHYRATION SYSTEM (TURNER CUT STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-7) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 6.75 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-7) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#2)

PERMIT UNIT REQUIREMENTS

1. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District NSR Rule] Federally Enforceable Through Title V Permit
2. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District NSR Rule] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District NSR Rule] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall operate at all times when dehydration is taking place. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Only glycol shall be used as the dehydration medium. [District NSR Rule] Federally Enforceable Through Title V Permit
6. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District NSR Rule and District Rule 4408, 5.1.3] Federally Enforceable Through Title V Permit
7. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
8. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
9. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
10. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District NSR Rule] Federally Enforceable Through Title V Permit
11. The combined VOC emissions from dehydration units N-608-7 and N-608-24, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 lb/hr. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-7 and -24 shall be conducted annually. [District Rules 1081, 7.2 and 4408, 5.1.3.2] Federally Enforceable Through Title V Permit
13. 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, 7.1] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081, 7.3] Federally Enforceable Through Title V Permit

15. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rules 1081, 5.0 and 4408, 6.2.2.4] Federally Enforceable Through Title V Permit

16. Permittee shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-7 and -24. [District NSR Rule and District Rule 4408, 6.1.1] Federally Enforceable Through Title V Permit

17. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District NSR Rule and District Rule 4408, 6.1.2] Federally Enforceable Through Title V Permit

18. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rule 4408, 6.1.4] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-25-6 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-26) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-26) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#3).

PERMIT UNIT REQUIREMENTS

1. 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]
2. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
8. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The combined VOC emissions from dehydration units N-608-25 and N-608-26, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-25 and -26 shall be conducted annually. [District Rules 1081, 2201, and 4408] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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] Federally Enforceable Through Title V Permit

15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

16. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit

17. Permittee shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-25 and -26. [District Rules 2201and 4408] Federally Enforceable Through Title V Permit

18. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

19. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-26-6 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
NATURAL GAS DEHYDRATION SYSTEM (WHISKY SLOUGH STATION) AND ODORIZING SYSTEM (SHARED WITH N-608-25) INCLUDING TWO CONTACTOR TOWERS AND A 3-PHASE GAS SEPARATOR SERVED BY A 11.44 MMBTU/HR THERMAL OXIDIZER (SHARED WITH N-608-25) AND A PERMIT EXEMPT < 5 MMBTU/HR REBOILER (#4).

PERMIT UNIT REQUIREMENTS

1. 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]
2. The thermal oxidizer shall be fired solely on PUC quality natural gas. [District Rule 2201] Federally Enforceable Through Title V Permit
3. The thermal oxidizer shall be equipped with an operational temperature indicator at the combustion chamber. The temperature shall be monitored and recorded continuously. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The thermal oxidizer shall be heated to at least 1400 degrees Fahrenheit prior to any contaminated air steam entering the oxidizer, and shall operate at a minimum temperature of 1400 degrees Fahrenheit. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The thermal oxidizer shall operate at all times when dehydration is taking place. [District Rule 2201] Federally Enforceable Through Title V Permit
6. Only glycol shall be used as the dehydration medium. [District Rule 2201] Federally Enforceable Through Title V Permit
7. The VOC control efficiency of the thermal oxidizer shall not be less than 97.5%. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit
8. NOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.1 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
9. CO emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.084 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
10. PM10 emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.0076 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
11. SOx emissions from natural gas combustion in the thermal oxidizer shall not exceed 0.00285 lb/MMBtu. [District Rule 2201] Federally Enforceable Through Title V Permit
12. The combined VOC emissions from dehydration units N-608-25 and N-608-26, including the combustion contaminants from the thermal oxidizer, shall not exceed 1.95 lb/hr. [District Rule 2201] Federally Enforceable Through Title V Permit
13. Source testing to determine the thermal oxidizer VOC control efficiency and the combined VOC emissions from units N-608-25 and -26 shall be conducted annually. [District Rules 1081, 2201, and 4408] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

14. 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] Federally Enforceable Through Title V Permit

15. The results of each source test shall be submitted to the District within 60 days thereafter. [District Rule 1081] Federally Enforceable Through Title V Permit

16. VOC emissions shall be measured by EPA Method 25, 25A, 25B, or 18. [District Rules 1081 and 4408] Federally Enforceable Through Title V Permit

17. Permittee shall maintain monthly records of the amount of gas dehydrated by dehydration units N-608-25 and -26. [District Rules 2201and 4408] Federally Enforceable Through Title V Permit

18. Permittee shall maintain the following records: APCD permit number; location, size of glycol dehydrator reboiler (MMBTU/hr), and type of glycol used; description of any installed VOC control system; flow diagram of the dehydrator and any VOC controls; maintenance records of the VOC control system; reports of source tests; all records necessary to document inputs to and outputs of the GRI-GLYCalc software, if used. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

19. All records shall be retained for a minimum of 5 years, and shall be made available for District inspection upon request. [District Rules 2201 and 4408] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-30-2 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
27,000 GALLON CONDENSATE STORAGE TANK (TURNER CUT STATION)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Daily fluid throughput of the tank shall not exceed 840 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall conduct TVP testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 4623] Federally Enforceable Through Title V Permit
7. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
8. This tank shall be operated in a leak-free condition. A leak-free condition means a condition without a gas leak or a liquid leak. Gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-31-2 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
27,000 GALLON CONDENSATE STORAGE TANK (WHISKY SLOUGH STATION)

PERMIT UNIT REQUIREMENTS

1. This tank shall only store, place, or hold organic liquid with a true vapor pressure (TVP) of less than 1.2 psia under all storage conditions. [District Rule 2201] Federally Enforceable Through Title V Permit
2. Daily fluid throughput of the tank shall not exceed 840 gallons. [District Rule 2201] Federally Enforceable Through Title V Permit
3. Permittee shall conduct TVP testing of the organic liquid stored in this tank at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in this tank in order to maintain exemption from the rule. [District Rule 4623] Federally Enforceable Through Title V Permit
4. The TVP testing shall be conducted at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
5. Permittee shall submit the records of TVP testing to the APCO within 45 days after the date of testing. The records shall include the tank identification number, Permit to Operate number, type of stored organic liquid, TVP of the organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
6. The permittee shall keep accurate records of each organic liquid stored in the tank, including its storage temperature, and TVP. [District Rule 4623] Federally Enforceable Through Title V Permit
7. This tank shall be equipped with a pressure-vacuum (PV) relief valve set to within 10% of the maximum allowable working pressure of the tank, permanently labeled with the operating pressure settings, properly maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve's set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
8. This tank shall be operated in a leak-free condition. A leak-free condition means a condition without a gas leak or a liquid leak. Gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Test Method 21. A reading in excess of 10,000 ppmv above background is a violation of this permit and Rule 4623. Liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. [District Rule 4623] Federally Enforceable Through Title V Permit
9. All records required to be maintained by this permit shall be maintained for a period of at least five years and shall be made readily available for District inspection upon request. [District Rule 4623] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-32-0 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-10) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

PERMIT UNIT REQUIREMENTS

1. The Reid vapor pressure (RVP) of the organic stored in the tank shall not exceed 3.3 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
2. The organic liquid transfer into the tank shall not exceed any of the following limits: 900 gallons/day and 16,000 gallons/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit
3. VOC emissions from transferring and storage of organic liquid in the tank shall not any of the following limits: 1.9 lb/day and 58 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
4. The owner or operator shall determine TVP within 60 days of initial startup and at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rule 4623] Federally Enforceable Through Title V Permit
5. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rule 4623] Federally Enforceable Through Title V Permit
6. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
8. The owner or operator shall keep records of the date, name of the organic liquid stored, organic liquid RVP, TVP and its storage temperature. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
9. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid transferred into the tank (gallons/day), c.) amount of organic liquid transferred into the tank (gallons/month), and d.) cumulative total amount of organic liquid transferred into the tank in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

10. VOC emissions from tanker truck loading operation shall not exceed 0.9 lb/1,000 gallons of pipeline condensate liquid loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
11. The organic liquid loading into tanker truck(s) shall not exceed any of the following limits: 2,000 gallons/day and 16,000 gallons/yr (12-month rolling basis). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
12. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid loaded into a tanker truck (gallons/day), c.) amount of organic liquid loaded into a tanker truck (gallons/month), and d.) cumulative total amount of organic liquid loaded into a tanker truck in a consecutive 12-month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit
13. The organic liquid drainage from disconnections associated with the tanker truck loadout equipment shall not exceed 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit
14. The total number of disconnects shall not exceed any of the following limits: 2 disconnects/day and 24 disconnects/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit
15. The operator shall determine an average organic liquid drainage for three consecutive disconnects to demonstrate compliance with the permitted organic liquid drainage limit of 10 mL per disconnect. The drainage shall be determined within 60 days of initial startup of the tanker truck transfer operation and the associated records shall be submitted within 45 days after the testing. [District Rule 2201] Federally Enforceable Through Title V Permit
16. The owner or operator shall keep records of: a.) date, b.) number of disconnects (disconnects/day), c.) number of disconnects (gallons/month), and d.) cumulative total number of disconnects in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit
17. Fugitive VOC emissions from components (i.e., valves and connectors located within 60 feet of piping to the D-10 tank) used to route the organic liquid into the tank shall not exceed any of the following limits: 5.7 lb/day and 2,063 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
18. Fugitive VOC emissions shall be calculated using the EPA "Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017 (November 1995), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit
19. For the components covered under this permit, the owner or operator shall keep records of the type of component, number of components, emission factors, total daily (lb/day) and annual VOC emissions (lb/year). [District Rule 2201] Federally Enforceable Through Title V Permit
20. Except as otherwise provided in this permit, all piping, valves, and fittings under this permit shall be constructed and maintained in a leak-free condition. Leak free condition is defined as a condition without a gas leak or a liquid leak. [District Rule 2201] Federally Enforceable Through Title V Permit
21. Gas leak is a reading in excess of 10,000 parts per million by volume (ppmv), as methane, above background on a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the test method in Section 6.4.8 of Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
22. Liquid Leak is dripping of organic liquid at a rate of more than 3 drops per minute. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
23. Upon detection of a leaking component covered under this permit, the operator shall affix to that component a weatherproof readily visible tag with the date and time of leak detection, the date and time of leak measurement, and for gas leaks, the leak concentration in ppmv. The tag shall remain affixed to the component until the component is repaired or replaced. [District Rule 2201] Federally Enforceable Through Title V Permit
24. All equipment that are found leaking shall be repaired or replaced within 72 hours of detection. The repaired or replaced equipment must be re-inspected. [District Rule 2201] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

25. The owner or operator shall inspect the components (i.e., valves and connectors) under this permit unit within 60 days of initial startup and at least once every 12 months thereafter. The leak inspections shall be performed using a portable hydrocarbon detection instrument in accordance with the procedures specified in EPA Method 21. The instrument shall be calibrated with methane in accordance with the procedures specified in EPA Method 21 or the manufacturer's instructions, as appropriate, not more than 30 days prior to its use. The operator shall record the calibration date of the instrument. [District Rule 2201] Federally Enforceable Through Title V Permit

26. For each component inspected, the owner or operator shall keep records of the date, name of component, its location, measured ppmv value, the name of the operator and the company conducting the leak inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

27. All records shall be retained for a minimum of five years and shall be made available to the District, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit

San Joaquin Valley
Air Pollution Control District

PERMIT UNIT: N-608-33-0 **EXPIRATION DATE:** 10/31/2020

EQUIPMENT DESCRIPTION:
PIPELINE LIQUID TRANSFER, STORAGE, AND LOADOUT OPERATION CONSISTING OF A 2,000 GALLON CONVAULT ABOVEGROUND FIXED ROOF STORAGE TANK (D-1A) EQUIPPED WITH A PRESSURE VACUUM RELIEF VALVE, AND TANKER TRUCK LOADOUT EQUIPMENT

PERMIT UNIT REQUIREMENTS

1. Tank breather vent setting shall be -0.31 psig vacuum and +0.90 psig. [District Rule 2201] Federally Enforceable Through Title V Permit
2. The Reid vapor pressure (RVP) of the organic stored in the tank shall not exceed 3.3 psia. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
3. The organic liquid transfer into the tank shall not exceed any of the following limits: 900 gallons/day and 16,000 gallons/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit
4. VOC emissions from transferring and storage of organic liquid in the tank shall not any of the following limits: 1.8 lb/day and 25 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit
5. The owner or operator shall determine at least once every 24 months during summer (July - September), and/or whenever there is a change in the source or type of organic liquid stored in the tank. The records of TVP testing shall be submitted within 45 days after the date of testing. The records shall include the tank identification number, permit number, type of stored organic liquid, TVP of the stored organic liquid, test methods used, and a copy of the test results. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
6. TVP shall be determined at actual storage temperature of the organic liquid in the tank. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
7. TVP of the organic liquid shall be determined by measuring the RVP using ASTM D 323-94 (Test Method for Vapor Pressure for Petroleum Products), and converting the RVP to TVP at the tank's maximum organic liquid storage temperature. The conversion of RVP to TVP shall be done in accordance with the procedures in Appendix B. Appendix B is an excerpt from the oil and gas section of "ARB Technical Guidance Document to the Criteria and Guidelines Regulation for AB 2588", dated August 1989. Should the permittee want to use different methodology, then that methodology should be first approved by the District and or the EPA. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit
8. The pressure-vacuum relief valve shall be set to within 10 percent of the maximum allowable working pressure of the tank. The pressure-vacuum relief valve shall be permanently labeled with the operating pressure settings. The pressure-vacuum relief valve shall be properly installed and maintained in good operating order in accordance with the manufacturer's instructions, and shall remain in leak-free condition except when the operating pressure exceeds the valve set pressure. [District Rule 4623] Federally Enforceable Through Title V Permit
9. VOC emissions from tanker truck loading operation shall not exceed 1.0 lb/1,000 gallons of pipeline condensate liquid loaded. [District Rule 2201] Federally Enforceable Through Title V Permit
10. The organic liquid loading into tanker truck(s) shall not exceed any of the following limits: 2,000 gallons/day and 16,000 gallons/yr (12-month rolling basis). [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

11. The organic liquid drainage from disconnections associated with the tanker truck loadout equipment shall not exceed 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit

12. The total number of disconnects shall not exceed any of the following limits: 3 disconnects/day and 24 disconnects/year (12-month rolling basis). [District Rule 2201] Federally Enforceable Through Title V Permit

13. The operator shall determine an average organic liquid drainage for three consecutive disconnects to demonstrate compliance with the permitted organic liquid drainage limit of 10 mL per disconnect. [District Rule 2201] Federally Enforceable Through Title V Permit

14. Fugitive VOC emissions from components (i.e., valves and connectors located within 60 feet of piping to the D-1A tank used to route the organic liquid into the tank) shall not exceed any of the following limits: 3.3 lb/day and 1,175 lb/year. [District Rule 2201] Federally Enforceable Through Title V Permit

15. Fugitive VOC emissions shall be calculated using the EPA "Protocol for Equipment Leak Emissions Estimates (EPA-453/R-95-017 (November 1995), Table 2-1, Synthetic Organic Chemical Manufacturing Industry (SOCMI) Average Emission Factors. [District Rule 2201] Federally Enforceable Through Title V Permit

16. Except as otherwise provided in this permit, all piping, valves, and fittings under this permit shall be constructed and maintained in a leak-free condition. Leak free condition is defined as a condition without a gas leak or a liquid leak. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

17. A leak-free condition is a condition without a gas leak or a liquid leak. A gas leak is defined as a reading in excess of 10,000 ppmv, above background, as measured by a portable hydrocarbon detection instrument that is calibrated with methane in accordance with the procedures specified in EPA Test Method 21. A liquid leak is defined as the dripping of organic liquid at a rate of more than 3 drops per minute. A gas leak or a liquid leak is a violation of this permit and Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

18. All piping, fittings, and valves on this tank shall be inspected annually by the facility operator in accordance with EPA Method 21, with the instrument calibrated with methane, to ensure compliance with the leaking provisions of this permit. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

19. If any of the tank components are found to be leaking, operator shall immediately affix a tag and maintain records of gas leak detection readings, date/time leak was discovered, and date/time the component was repaired to a leak-free condition. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

20. Upon detection of any leaking components (having a gas leak >10,000 ppmv, measured in accordance with EPA Method 21 by a portable hydrocarbon detection instrument that is calibrated with methane) operator shall: (a) eliminate or minimize the leak within 8 hours after detection, (b) if the leak can not be eliminated, then minimize the leak to the lowest possible level within 8 hours after detection by using best maintenance practices and eliminate the leak within 48 hours after detection. In no event shall the total time to minimize and eliminate the leak exceed 56 hours after detection. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

21. Leaking tank components affixed to the tank or within five feet of the tank that have been discovered by the operator and that have been immediately tagged and repaired within the specified deadlines, shall not constitute a violation of the District Rule 4623. However, leaking components discovered during inspections by District staff that were not previously identified and/or tagged by the operator, and/or any leaks that were not repaired within specified deadlines, shall constitute a violation of SJVUAPCD Rule 4623. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

22. If a component type is found to leak during an annual inspection, then conduct quarterly inspections of that component type on the tank or tank system for four consecutive quarters. If a component type is found to have no leak after four consecutive quarterly inspections, then revert to annual inspections. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

23. Any component affixed to the tank or within 5 feet of the tank that is found to be leaking on two consecutive annual inspections is in violation of SJVUAPCD Rule 4623, even if it is under the voluntary inspection and maintenance program. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

24. This permit authorizes tank cleaning that is not the result of breakdowns or poor maintenance as a routine maintenance activity. [District Rule 2020] Federally Enforceable Through Title V Permit

25. Permittee shall comply with all applicable Tank Interior Cleaning Program requirements specified in Table 3 of Rule 4623. [District Rule 4623] Federally Enforceable Through Title V Permit

26. All components greater than 5 feet from the tank and within 60 ft of the D-1A tank equipment that are found leaking shall be tagged and repaired or replaced within 72 hours of detection. The repaired or replaced equipment must be re-inspected. [District Rule 2201] Federally Enforceable Through Title V Permit

27. For the components covered under this permit, the owner or operator shall keep records of the type of component, number of components, emission factors, total daily (lb/day) and annual VOC emissions (lb/year). [District Rule 2201] Federally Enforceable Through Title V Permit

28. For each component inspected, the owner or operator shall keep records of the date, name of component, its location, measured ppmv value, the name of the operator and the company conducting the leak inspection. [District Rule 2201] Federally Enforceable Through Title V Permit

29. The owner or operator shall keep records of the date, name of the organic liquid stored in tank D-1A, organic liquid RVP, TVP and storage temperature when RVP/TVP samples are taken. [District Rules 2201 and 4623] Federally Enforceable Through Title V Permit

30. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid transferred into the tank D-1A (gallons/day), c.) amount of organic liquid transferred into the tank D-1A (gallons/month), and d.) cumulative total amount of organic liquid transferred into the tank in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

31. The owner or operator shall keep records of: a.) date, b.) number of disconnects (disconnects/day), c.) number of disconnects (gallons/month), and d.) cumulative total number of disconnects in a consecutive 12-month rolling period. [District Rule 2201] Federally Enforceable Through Title V Permit

32. The owner or operator shall keep records of: a.) date, b.) amount of organic liquid loaded into a tanker truck (gallons/day), c.) amount of organic liquid loaded into a tanker truck (gallons/month), and d.) cumulative total amount of organic liquid loaded into a tanker truck in a consecutive 12-month rolling period. [District Rules 2201 and 4624] Federally Enforceable Through Title V Permit

33. Operator shall maintain an inspection log containing the following 1) type of component leaking; 2) date and time of leak detection, and method of detection; 3) date and time of leak repair, and emission level of recheck after leak is repaired; 4) method used to minimize the leak to lowest possible level within 8 hours after detection. [District Rule 1070] Federally Enforceable Through Title V Permit

34. Permittee shall keep in their facility at all times a copy of the letter sent to the APCO requesting participation in the Rule 4623 Fixed Roof Tank Preventive Inspection and Maintenance Program, and Tank Interior Cleaning Program, and maintain the records of annual tank inspections, maintenance, and cleaning to document the participation in the program. [District Rule 4623] Federally Enforceable Through Title V Permit

35. All records shall be retained for a minimum of five years and shall be made available to the District, ARB, or EPA during normal business hours and submitted upon request. [District Rules 2201, 4623 and 4624] Federally Enforceable Through Title V Permit

Appendix C
Source Test Summaries

The Avogadro Group, LLC

SOURCE TEST REPORT
2015 EMISSION COMPLIANCE TESTS
THERMAL OXIDIZERS AT PG&E WHISKY SLOUGH STATION & TURNER CUT STATION
HOLT, CALIFORNIA

Prepared For:

Pacific Gas And Electric Company
6111 Bollinger Canyon Road, #3150-B
San Ramon, California 94583

For Submittal To:

San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto, California 95356

Prepared By:

The Avogadro Group, LLC
2825 Verne Roberts Circle
Antioch, California 94509
(925) 680-4300

January 29, 2015

TABLE 1-1
SUMMARY OF AVERAGE RESULTS
THERMAL OXIDIZER INLETS AND OUTLETS
PG&E WHISKY SLOUGH AND TURNER CUT STATIONS
HOLT, CALIFORNIA
JANUARY 6 & 7, 2015

Unit:	Turner Cut Station	Whisky Slough	Permit Limits
Date:	1/06/14	1/07/14	--
Process Data:			--
Gas MMscf/hr	19.228	0.835	--
Gas MMscf/day	461.5	20.1	--
Outlet (Stack) Gas:			
Temp, °F	1533	1512	>1400 F
H_2O, % volume	8.07	9.69	--
Flow rate, dscfm	5,129	3,714	--
VOC ppm vol dry as CH_4	*< 0.2*	*< 0.2*	--
VOC lb/hr as CH_4	*<0.01*	*< 0.01*	1.95
VOC lb/MMscf	*< 0.0001*	*< 0.0025*	--
Inlet A Gas:			
Temp, °F	199.3	211.1	--
H_2O, % volume	87.6	79.8	--
Flow rate, wscfm	111	125	--
VOC ppm vol dry as CH_4	59,333	61,433	--
VOC lb/hr as CH_4	2.05	3.92	--
Inlet B Gas:			
Temp, °F	200.5	203.7	--
H_2O, % volume	86.5	84.6	--
Flow rate, wscfm	107	100	--
VOC ppm vol dry as CH_4	52,967	65,700	--
VOC lb/hr as CH_4	1.94	2.55	--
Total Inlet VOC, lb/hr:	3.99	6.47	--
Removal Efficiency, %:	99.93	99.97	> 97.5

Note: Results presented above in italics were measured below the detection limit and are presented here at the detection limit.

The Avogadro Group, LLC

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NORTHERN REGION

SOURCE TEST REPORT
2016 EMISSION COMPLIANCE TESTS
THERMAL OXIDIZERS AT PG&E WHISKY SLOUGH STATION & TURNER CUT STATION
HOLT, CALIFORNIA

Prepared For:

Pacific Gas And Electric Company
2730 Gateway Oaks Drive, Suite 230, 277C
Sacramento, California 95833

For Submittal To:

San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto, California 95356

Prepared By:

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2825 Verne Roberts Circle
Antioch, California 94509
(925) 680-4300

March 15, 2016

N-608
1/12/16

P.M. 3/15/16

TABLE 1-1
SUMMARY OF AVERAGE RESULTS
THERMAL OXIDIZER INLETS AND OUTLETS
PG&E WHISKY SLOUGH AND TURNER CUT STATIONS
HOLT, CALIFORNIA

Unit:	Turner Cut Station	Whisky Slough	Permit Limits
Date:	1/13/16	1/14/16	--
Process Data:			--
Gas MMscf/hr	16.939	16.866	--
Gas MMscf/day	406.5	404.8	--
Outlet (Stack) Gas:			
Temp, °F	1,401	1,461	>1400 F ✓
H_2O, % volume	10.5	8.35	--
Flow rate, dscfm	5,208	3,937	--
VOC ppm vol dry as CH_4	*0.29*	5.35	--
VOC lb/hr as CH_4	*0.004*	0.055	1.95 ✓
VOC lb/MMscf	*0.0002*	0.0033	--
Inlet A Gas:			
Temp, °F	151.3	88.6	--
H_2O, % volume	34.7	14.5	--
Flow rate, wscfm	120	119	--
VOC ppm vol dry as CH_4	69,337	64,823	--
VOC lb/hr as CH_4	13.9	17.0	--
Inlet B Gas:			
Temp, °F	162.4	76.8	--
H_2O, % volume	47.9	44.5	--
Flow rate, wscfm	112	100	--
VOC ppm vol dry as CH_4	59,167	34,774	--
VOC lb/hr as CH_4	8.68	4.90	--
Total Inlet VOC, lb/hr:	22.6	21.9	--
Removal Efficiency, %:	99.98	99.75	> 97.5 ✓

Note: Results presented above in italics were measured below the detection limit and are presented here at the detection limit.

The Avogadro Group, LLC

SOURCE TEST REPORT
2017 EMISSION COMPLIANCE TESTS
THERMAL OXIDIZERS AT PG&E WHISKY SLOUGH STATION & TURNER CUT STATION
HOLT, CALIFORNIA

Prepared For:

Pacific Gas And Electric Company
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For Submittal To:

San Joaquin Valley Air Pollution Control District
4800 Enterprise Way
Modesto, California 95356

Prepared By:

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(925) 680-4300

February 15, 2017

TABLE 1-1
SUMMARY OF AVERAGE RESULTS
THERMAL OXIDIZER INLETS AND OUTLETS
PG&E WHISKY SLOUGH AND TURNER CUT STATIONS
HOLT, CALIFORNIA

Unit:	Turner Cut Station	Whisky Slough	Permit Limits
Date:	1/11/17	1/12/17	--
Process Data:			--
Gas MMscf/hr	16.609	19.167	--
Gas MMscf/day	398.6	460.0	--
Outlet (Stack) Gas:			
Temp, °F	1,422	1,462	>1,400 °F
H_2O, % volume	12.3	15.1	--
Flow rate, dscfm	4,317	4,116	--
VOC ppm vol dry as CH_4	3.3	0.7	--
VOC lb/hr as CH_4	0.04	0.007	1.95
VOC lb/MMscf	0.0022	0.0004	--
Inlet A Gas:			
Temp, °F	181.7	183.8	--
H_2O, % volume	64.3	63.2	--
Flow rate, wscfm	118	118	--
VOC ppm vol dry as CH_4	66,485.9	71,997.3	--
VOC lb/hr as CH_4	7.10	7.89	--
Inlet B Gas:			
Temp, °F	182.1	183.1	--
H_2O, % volume	70.8	70.1	--
Flow rate, wscfm	118	119	--
VOC ppm vol dry as CH_4	64,389.6	62,277.3	--
VOC lb/hr as CH_4	5.64	5.62	--
Total Inlet VOC, lb/hr:	12.74	13.51	--
Removal Efficiency, %:	99.7	99.9	> 97.5

Appendix D
HAP Calculations

Major Air Toxics Source Determination

To determine whether the facility is a Major Air Toxics Source, the facility-wide hazardous air pollutant (HAP) emissions will be compared to the Major Air Toxics Source thresholds. Those thresholds are 10 tons/yr of any single HAP or combined HAP emissions of 25 tons/yr. To determine the facility-wide potential to emit of HAPS, the facility-wide natural gas and diesel usage limits will be applied to the appropriate emission factor. The emission factors are from the California Air Toxics Emission Factors (CATEF) database.

Unless otherwise noted, all HAP emission factors were taken from the previous Title V renewal project under project N-1092120.

Natural Gas fired IC Engines (>650 bhp):

Permit #	Maximum Fuel Usage (MMScf/yr)
N-608-27-2	95.6208
N-608-28-2	95.6208
N-608-29-2	95.6208
Total	286.8624

The hourly fuel usages are from various application materials, and the annual quantities were arrived at utilizing the appropriate operating hour limits.

Toxic Emissions (natural Gas fired IC Engines > 650 bhp)		
Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Acenaphthene	0.000217	0.062
Acenaphthylene	0.000735	0.211
Acetaldehyde	2.62	751.579
Acrolein	0.161	46.185
Anthracene	0.000171	0.049
Benzene	0.259	74.297
Benzo(a)anthracene	0.0000992	0.028
Benzo(a)pyrene	0.000003880	0.001
Benzo(b)fluoranthene	0.0000798	0.023
Benzo(g,h,i)perylene	0.0000171	0.005
Benzo(k) fluoranthene	0.0000121	0.003
1,3 Butadiene	0.415	119.048

Continue...

Toxic Emissions (natural Gas fired IC Engines > 650 bhp)		
Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Chrysene	0.0000225	0.006
Dibenz(a,h)anthracene	0.00000388	0.001
Ethylbenzene	0.115	32.989
Fluoranthene	0.000475	0.136
Fluorene	0.000798	0.229
Formaldehyde	20.9	5995.424
Indeno(1,2,3cd)pyrene	0.0000109	0.003
Napthalene	0.0310	8.893
Phenanthrene	0.00275	0.789
Propylene	12.1	3471.035
Pyrene	0.000326	0.094
Toluene	0.394	113.024
Xylene (total)	0.965	276.822
Total	---	10,891

Natural Gas fired IC Engines (<650 bhp):

Permit #	Maximum Fuel Usage (MMScf/yr)
N-608-1-6	0.5016
N-608-2-6	0.5016
N-608-3-6	0.5016
N-608-4-6	0.5016
N-608-15-3	0.1502
Total	2.1566

The hourly fuel usages are from various application materials, and the annual quantities were arrived at utilizing the appropriate operating hour limits.

Toxic Emissions (natural Gas fired IC Engines < 650 bhp)		
Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Acenaphthene	0.00393	0.008
Acenaphthylene	0.0162	0.035
Acetaldehyde	1.82	3.925
Acrolein	1.37	2.955
Anthracene	0.00226	0.005
Benzene	10.2	21.997
Benzo(a)anthracene	0.000339	0.001

Continue...

Toxic Emissions (natural Gas fired IC Engines < 650 bhp)		
Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Benzo(a)pyrene	0.000151	0.000
Benzo(b)fluoranthene	0.000301	0.001
Formaldehyde	0.14	0.302
Benzo(k) fluoranthene	0.000117	0.000
Chrysene	0.000395	0.001
Dibenz(a,h)anthracene	0.0000145	0.000
Ethylbenzene	0.0144	0.031
Fluoranthene	11.4	24.585
Fluorene	0.00904	0.019
Indeno(1,2,3cd)pyrene	0.000207	0.000
Napthalene	0.0866	0.187
Phenanthrene	0.00885	0.019
Propylene	42.0	90.577
Pyrene	0.00264	0.006
Toluene	2.62	5.650
Xylene (total)	0.0738	0.159
Benzo(g,h,i)perylene	0.000245	0.001
1,3 Butadiene	0.105	0.226
Total	---	151

Natural Gas Dehydration Units:

Permit #	Maximum Fuel Usage (MMBtu/yr)	Maximum Fuel Usage (MMscf/yr)
N-608-7-6	98,374.8	98.3748
N-608-24-5		
N-608-25-6	100,214.4	100.2144
N-608-26-6		
Total		198.5892

The conversion from MMBtu/yr to MMscf/yr was made assuming a natural gas heat content of 1,000 Btu/scf.

Toxic Emissions (natural Gas fired IC Engines)		
Compound	Emission Factor (lb/MMscf)	Potential to Emit (lb/yr)
Benzene	0.283	56.201
Ethylbenzene	0.00915	1.817
Formaldehyde	0.0000490	0.010
Hydrogen Sulfide	0.115	22.838
Toluene	0.192	38.129
Xylene (m)	0.0231	4.587
Xylene (o)	0.00858	1.704
Xylene (p)	0.00781	1.551
Total	---	127

Gasoline Dispensing Operation (N-608-8-4):
Gasoline vapors are listed on the CARB list of AB-2588 pollutants.

$PE_{Gasoline}$ = 24 lb/yr (EE for Project N-1143262)

Methanol Storage Tanks (N-608-16-2 and N-608-17-2):
As explained in the Application Review document for project N-1071202, the emissions will consist solely of natural gas, which is the blanketing gas. Natural gas does include some constituents that are VOC. The VOC emission quantities were determined during the processing of the applications for the above mentioned project to be 1 pound per year per tank.

As shown in the CARB VOC speciation manual (Code 520), natural gas includes the following fraction of these constituents:

Ethane 0.0510
Isobutane 0.0010
Methane 0.9370
N-Butane 0.0010
Propane 0.01

An examination of the Clean Air Act Amendments of 1990 List of Hazardous Air Pollutants showed that none of these items is a hazardous air pollutant. Therefore, no hazardous air pollutant emissions are expected.

Diesel Fired IC Engines:

Permit #	Maximum Fuel Usage (gallons per year)
N-608-13-6	1,450
N-608-14-6	1,450
Total	2,900 (2.900×10^3)

The hourly fuel usages are from various application material, and the annual quantities were arrived at utilizing the appropriate operating hour limits.

Toxic Emissions (Emergency Diesel Fired IC Engines)		
Compound	Emission Factor ($lb/10^3$ gal)	Potential to Emit (lb/yr)
Acenaphthene	0.000867	0.00251
Acenaphthylene	0.00132	0.00383
Acetaldehyde	0.00646	0.0187
Acrolein	0.00179	0.00519
Anthracene	0.000289	0.000838
Benzene	0.104	0.302
Benzo(a)anthracene	0.0000969	0.000281
Benzo(a)pyrene	0.0000477	0.000138
Dibenz(a,h)anhracene	0.000280	0.000812
ethylbenzene	0.00803	0.0233
fluoranthene	0.000330	0.000957
fluorene	0.00124	0.00360
formaldehyde	0.176	0.510
Hexane	0.00147	0.00426
Indeno(1,2,3-cd)pyrene	0.000280	0.000812
Napthalene	0.0319	0.0925
phenanthrene	0.00648	0.0188
propylene	0.345	1.00
pyrene	0.000280	0.000812
toluene	0.111	0.322
Xylene (total)	0.0206	0.0597
Total	---	2

Condensate Storage Tanks (N-608-30-2 and N-608-31-2):
Per prioritization worksheets under project N-1063164, each tank results in:

Xylene (mixed) = 0.4 lb/yr
Benzene = 0.28 lb/yr
Toluene = 0.4 lb/yr

Condensate Transfer, Storage and Loadout (N-608-32-0):
Per RMR worksheets under project N-1143830,

HAP	CAS#	Fugitives (lb/yr)	Tank emissions (lb/yr)	Truck disconnect (lb/yr)	Truck loading (lb/yr)	Total (lb/yr)
Benzene	71432	41.30	1.16	0.02	0.3	43
Ethylbenzene	100414	20.60	0.58	0.01	0.15	21
Hexane	110543	371.00	10.44	0.18	2.7	384
Toluene	108883	165.00	4.64	0.08	1.2	171
Xylenes	1330207	206.00	5.8	0.1	1.5	213

Condensate Transfer, Storage and Loadout (N-608-33-0):
Per RMR worksheets under project N-1153488, the total emissions from all processes are summarized in the following table:

HAP	CAS#	Total (lb/yr)
Benzene	71432	0.537
Ethylbenzene	100414	0.268
Toluene	108883	2.147
Hexane	110543	4.831
Xylenes (mixed)	1330207	2.684

Summary of HAP Emissions (Annual Total Individual)

Compound	IC Engines (lb/yr)			Dehydration	Storage/Dispensing/Loadout (lb/yr)					Total (lb/yr)
	Natural gas fired > 650 bhp	Natural gas fired < 650 bhp	Diesel (all)	Dehydrators (lb/yr)	Cond. Storage Tanks (lb/yr)	Methanol (lb/yr)	Gasoline (lb/yr)	Cond. Transfer, Storage and loadout (lb/yr)	Cond. Transfer, Storage and loadout (lb/yr)	
Acenaphthene	0.062	0.008	0.00251	--	--	--	--	--	--	0.1
1,3 Butadiene	119.048	0.226	--	--	--	--	--	--	--	119.3
Acenaphthylene	0.211	0.035	0.00383	--	--	--	--	--	--	0.2
Acetaldehyde	751.579	3.925	0.0187	--	--	--	--	--	--	755.5
Acrolein	46.185	2.955	0.00519	--	--	--	--	--	--	49.1
Anthracene	0.049	0.005	0.000838	--	--	--	--	--	--	0.1
Benzene	74.297	21.997	0.302	56.201	0.28	--	--	43	0.537	196.6
Benzo(a)anthracene	0.028	0.001	0.000281	--	--	--	--	--	--	0.0
Benzo(a)pyrene	0.001	0	0.000138	--	--	--	--	--	--	0.0
Benzo(b)fluoranthene	0.023	0.001	--	--	--	--	--	--	--	0.0
Benzo(g,h,i)perylene	0.005	0.001	--	--	--	--	--	--	--	0.0
Benzo(k) fluoranthene	0.003	0	--	--	--	--	--	--	--	0.0
Chrysene	0.006	0.001	--	--	--	--	--	--	--	0.0
Dibenz(a,h)anhracene	--	--	0.000812	--	--	--	--	--	--	0.0
Dibenz(a,h)anthracene	0.001	0	--	--	--	--	--	--	--	0.0
Ethylbenzene	32.989	0.031	0.0233	1.817	--	--	--	21	0.268	56.1
Fluoranthene	0.136	24.585	0.000957	--	--	--	--	--	--	24.7
Fluorene	0.229	0.019	0.0036	--	--	--	--	--	--	0.3
Formaldehyde	5995.424	0.302	0.51	0.01	--	--	24*	--	--	6020.2
Hexane	--	--	0.00426	--	--	--	--	384	4.831	388.8
Hydrogen Sulfide	--	--	--	22.838	--	--	--	--	--	22.8
Indeno(1,2,3cd)pyrene	0.003	0	--	--	--	--	--	--	--	0.0
Indeno(1,2,3-cd)pyrene	--	--	0.000812	--	--	--	--	--	--	0.0
Napthalene	8.893	0.187	0.0925	--	--	--	--	--	--	9.2
Phenanthrene	0.789	0.019	0.0188	--	--	--	--	--	--	0.8
Propylene	3471.035	90.577	1	--	--	--	--	--	--	3562.6
Pyrene	0.094	0.006	0.000812	--	--	--	--	--	--	0.1
Toluene	113.024	5.65	0.322	38.129	0.4	--	--	171	2.147	330.7
Xylene (total)	276.822	0.159	0.0597	7.842	0.4	--	--	213	2.684	501.0
									Total:	12,038

*Gasoline vapors emissions 24 lb/yr are added to the pollutant with the highest emissions to determine if the PE>10 tons/yr

As can be seen, the combined potential HAP emissions from the permitted equipment at the facility are less than 25 tons per year and the potential to emit of each single HAP is less than 10 tons per year. Therefore, the facility is not a major source of HAP emissions.

Appendix E
Quarterly Net Emissions Change

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC = Quarterly Net Emissions Change for each emissions unit, lb/qtr.
PE2 = Post Project Potential to Emit for each emissions unit, lb/qtr.
PE1 = Pre-Project Potential to Emit for each emissions unit, lb/qtr.

$PE2_{quarterly}$ = $PE2_{annual}$ ÷ 4 quarters/year
$PE1_{quarterly}$= $PE1_{annual}$ ÷ 4 quarters/year

For each permit, annual PE2 is equal to annual PE1. Therefore, QNEC is equal to zero for each permit unit.