

DRAFT as of August 3, 2022

Statement of Basis - Narrative
NSR Permit

Type of Permit Action: Regular-Significant Revision

Facility: Salado Draw 23 Compressor Station & Tank Battery
Company: Chevron USA Inc
Permit No(s): 6832M8
Tempo/IDEA ID No.: 36802 - PRN20210001
Permit Writer: Joseph Mashburn

Fee Tracking (not required for Title V)

Tracking	NSR tracking entries completed: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	NSR tracking page attached to front cover of permit folder: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Paid Invoice Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Balance Due Invoice Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Invoice Comments: Paid in Full 1/31/2022

Permit Review	Date to Enforcement: N/A	Date of Enforcement Reply: N/A
	Date to Applicant: 2/25/2022	Date of Applicant Reply: 3/4/2022
	Date to EPA: N/A	Date of EPA Reply: N/A
	Date to Supervisor: Draft 2/18/2022, 8/02/2022	

1.0 Plant Process Description:

The Salado Draw 23 Compressor Station and Tank Battery is designed to remove water and hydrocarbon liquids from natural gas produced in the surrounding area, and to compress the gas into a pipeline for delivery to a processing plant. The site will include 4 compressor engines, 6 heaters, 1 dehydration unit and associated condenser, reboiler, and glowplug, 3 condensate tanks, 4 water tanks, 2 slop tanks (one produced water, one condensate), 1 flash gas compressor, water truck loading, a flare and VRU system with redundant capacity.

Startup, Shutdown, and Maintenance (SSM) and Malfunction Emissions (EPNs: SITE-SSM, MALF)

Startup, Shutdown, and Maintenance (SSM) emissions are accounted for via individual calculations for SSM flaring, dehydrator blowdowns, VRU blowdowns, and compressor blowdowns (EPN SITE-SSM). An additional 10.0 tpy VOC is included to permit upset and malfunction emissions (EPN: MALF), as allowed by the NMED SSM Guidance.

2.0 Description of this Modification:

In this revision application, gas analyses were updated, tank working and standing emissions calculations were updated and due to the updated gas analyses, the glycol dehydrator emissions estimation and the ProMax simulation were rerun with the updated values; DHY-2 is removed. With the most recent revision to the application, the 10 tpy VOC SSM is being replaced by 10 tpy VOC MALF.

3.0 Source Determination:

1. The emission sources evaluated are entirely at the Salado Draw 23 Compressor Station and Tank Battery.

2. Single Source Analysis:

A. SIC Code: Do the facilities belong to the same industrial grouping (i.e., same two-digit SIC code grouping, or support activity)? Yes

B. Common Ownership or Control: Are the facilities under common ownership or control? Yes

C. Contiguous or Adjacent: Are the facilities located on one or more contiguous or adjacent properties? Yes

3. Is the source, as described in the application, the entire source for 20.2.70, 20.2.72, 20.2.73, or 20.2.74 NMAC applicability purposes? Yes

4.0 PSD Applicability:

A. The source, as determined in 3.0 above, is a minor source before and after this modification.

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
6832M8	TBD	Significant Revision	In this revision, gas analyses were updated, tank working and standing emissions calculations were updated and due to the updated gas analyses, the glycol dehydrator emissions estimation and the ProMax simulation were rerun with the updated values. DHY-2 is removed.
6832M7*	1/14/2020	Significant Revision	The proposed revision will add a 4 th produced water tank to the existing facility. To control the emissions from the tank battery, a 3 rd VRU will be installed. There will also be a LACT unit added to the tank battery and a water transfer pump. Thus, truck loading emissions reflect only the slop water tank.
6832M6	9/24/2019	Significant Revision	The proposed revision is to replace six CAT 3516B LE compressor engines with four CAT 3606 compressor engines over a transition period. Truck loading, heater treaters, fugitives, SSMs, and condensate slop tank emissions are updated with more recent gas and oil analyses from October 2018.
6832M5	3/20/2018	Significant Revision	This modification consists of converting an existing GCP-4 permit to an NSR and adding two engines, updating fugitive counts, and updating representative analyses at the site.
6832M4	6/12/2017	GCP4–Modification	Addition of a Caterpillar G3516B (ENG-4). Additionally, the engine specifications and facility emissions were updated.
6832M3	1/05/2017	GCP4–Modification	The engines specifications and emission were updated.

5.0 History (In descending chronological order, showing NSR and TV): *The asterisk denotes the current active NSR and Title V permits that have not been superseded.

Permit Number	Issue Date	Action Type	Description of Action (Changes)
6832M2	11/13/2016	GCP4–Modification	The site throughputs have been updated, a redundant VRU has been removed from the oil slop tank, and a flare to control SSM emission has been added.
6832M1	7/28/2016	GCP4–Modification	Revised tank sizes, catalyst housing/element model # and evaluated NSPS OOOOa applicability.
6832	4/1/2016	GCP4 - New	Initial issuance.

6.0 Public Response/Concerns: As of February 24, 2022, or the issuance date of this permit, this permit writer is aware of limited public comment. WildEarth Guardians submitted written comment on February 1, 2022, expressing interest in reviewing and commenting on the application and the Bureau’s analysis when available.

7.0 Compliance Testing:

ENG-1 is EngineID-1957

ENG-2 is EngineID-1965

(ENG-3 and ENG-4 are not installed at time of application.)

Unit No.	Compliance Test	Report Submitted	Test Completed
EngineID-1957	Periodic Quarterly	TBD	4/4/2022 (Pending)
EngineID-1965	Periodic Quarterly	TBD	4/4/2022 (Pending)
EngineID-1957	Periodic Quarterly	1/25/2022	1/3/2022
EngineID-1965	Periodic Quarterly	1/25/2022	1/3/2022
EngineID-1957	Periodic Quarterly	10/27/2021	10/4/2021
EngineID-1965	Periodic Quarterly	10/27/2021	10/4/2021
EngineID-1957	Periodic Quarterly & JJJJ	9/1/2021	7/28/2021
EngineID-1965	Periodic Quarterly & JJJJ	9/1/2021	7/28/2021
EngineID-1957	Periodic Quarterly	5/3/2021	4/7/2021
EngineID-1965	Periodic Quarterly	5/3/2021	4/7/2021
EngineID-1957	Periodic Quarterly	2/4/2021	1/6/2021
EngineID-1965	Periodic Quarterly	2/4/2021	1/6/2021
EngineID-1957	Periodic Quarterly	11/12/2020	10/19/2020
EngineID-1965	Periodic Quarterly	11/12/2020	10/19/2020
EngineID-1957	Initial JJJJ	8/27/2020	7/28/2020
EngineID-1965	Initial JJJJ	9/12/2020	8/12/2020

8.0 Startup and Shutdown:

- A. If applicable, did the applicant indicate that a startup, shutdown, and emergency operational plan was developed in accordance with 20.2.70.300.D(5)(g) NMAC? **N/A**
- B. If applicable, did the applicant indicate that a malfunction, startup, or shutdown operational plan was developed in accordance with 20.2.72.203.A.5 NMAC? **Yes**
- C. Did the applicant indicate that a startup, shutdown, and scheduled maintenance plan was developed and implemented in accordance with 20.2.7.14.A and B NMAC? **Yes**
- D. Does the facility have emissions due to routine or predictable startup, shutdown, and maintenance? **Yes**. If so, have all emissions from startup, shutdown, and scheduled maintenance operations been permitted? **Yes**

9.0 Compliance and Enforcement Status: Per 2/7/2022 email from Teri Waldron in the Enforcement Section, “There is no outstanding notice of violation and no settlement agreement for which all actions have not been completed. Conditions from a settlement agreement, or any other applicable requirements, do not need to be included in the NSR permit.”

10.0 Modeling: No modeling was required for this permitting action. The applicant provides the basis for this determination in Section 16, Air Dispersion Modeling, by checking the box with this statement: This application does not require modeling according to 20.2.70.7.E(11), 20.2.72.203.A(4), 20.2.74.303, 20.2.79.109.D NMAC, and in accordance with the Air Quality Bureau’s Modeling Guidelines.

In the modeling report dated July 11, 2019, for NSR 6832M6, according to Rhett Zyla, “This modeling analysis demonstrates that operation of the facility described in this report neither causes nor contributes to any exceedances of applicable air quality standards. The standards relevant at this facility are NAAQS for CO, NO2, PM2.5, and SO2; NMAAQS for CO, NO2, and SO2; and Class I and Class II PSD increments for NO2 and SO2.”

11.0 State Regulatory Analysis (NMAC/AQCR):

Citation 20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Justification:
2.1	General Provisions	Yes	Entire Facility	The facility is subject to Title 20 Environmental Protection Chapter 2 Air Quality of the New Mexico Administrative Code so is subject to Part 1 General Provisions, Update to Section 116 of regulation for Significant figures & rounding. Applicable with no permitting requirements.
2.3	Ambient Air Quality Standards NMAAQS	Yes, for NSR	Entire Facility	NSR: 20.2.3 NMAC is a SIP approved regulation that limits the maximum allowable concentration of Sulfur Compounds, Carbon Monoxide and Nitrogen Dioxide.
2.7	Excess Emissions	Yes	Entire Facility	Applies to all facilities' sources

Citation 20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Justification:
2.38	Hydrocarbon Storage Facilities	Yes	TK-1, TK-2, TK-3, TK-S2	<p><u>20.2.38</u> NMAC This regulation could apply to storage tanks at petroleum production facilities, processing facilities, tanks batteries, or hydrocarbon storage facilities.</p> <p>-Since the total capacity of the condensate tanks (TK-1, TK-2, TK-3, and TK-S2 (condensate slop tank)) is greater than 65,000 gallons, the Facility is subject to 20.2.38.112.</p> <p>-The Facility is also subject to 20.2.38.109 due to the storage tank capacity <u>and throughput</u> for TK-1, TK-2, TK-3.</p> <p>-The Facility meets the requirements of 20.2.38.112 and 20.2.38.109 by capturing tank vapors with the redundant Vapor Recovery System (VRU-1, VRU-2 & VRU-4) for the condensate tanks and using VRU-3 for the condensate slop tank.</p> <p>-There are no requirements for the water storage tanks or the water slop tank, PW-1, PW-2, PW-3, PW-4, and TK-S1.</p>
2.61	Smoke and Visible Emissions	Yes	ENG-1, ENG-2, ENG-3, ENG-4, HTR-1, HTR-2, HTR-3, HTR-4, HTR-5, HTR-6, REB-1, FLARE	This regulation limits opacity to 20% and applies to Stationary Combustion Equipment, such as engines, boilers, heaters, and flares unless your equipment is subject to another state regulation that limits particulate matter such as 20.2.19 NMAC (see 20.2.61.109 NMAC).
2.70	Operating Permits	No	Entire Facility	The source is not a Title V Major Source as defined at 20.2.70.7 NMAC.
2.72	Construction Permits	Yes	Entire Facility	2.72.200.A.2 applies as PER > 10 pph or 25 tpy for NOx and CO, criteria pollutants. NSR permits are subject to 20.2.72 NMAC applicable requirements.
2.73	NOI & Emissions Inventory Requirements	Yes	Entire Facility	Applicable to all facilities that require a permit. PER > 10 tpy for a regulated air contaminant. An emissions inventory report will be submitted upon request by NMED.
2.75	Construction Permit Fees	Yes	Entire Facility	This facility is subject to 20.2.72 NMAC. A filing fee of \$500 is being submitted according to 20.2.75.10.A NMAC. The filing fee will be applied to the total permit fee determined from 20.2.75.11 NMAC.

Citation 20 NMAC	Title	Applies (Y/N)	Unit(s) or Facility	Justification:
2.77	New Source Performance Standards	Yes	See Sources subject to 40 CFR 60: ENG-1, ENG-2, ENG-3, ENG-4 Also, compressors for: ENG-1, ENG-2, ENG-3, ENG-4 FUG	Applies to any stationary source constructing or modifying and which is subject to the requirements of 40 CFR Part 60. Subpart JJJJ applies to ENG-1, ENG-2, ENG-3, and ENG-4 Subpart OOOOa applies to compressors for ENG-1, ENG-2, ENG-3, ENG-4, and FUG
2.82	MACT Standards for Source Categories of HAPs	Yes	See sources subject to 40 CFR 63: ENG-1, ENG-2, ENG-3 ENG-4, DHY-1	This regulation applies to all sources emitting hazardous air pollutants, which are subject to the requirements of 40 CFR Part 63. ENG-1, ENG-2, ENG-3, and ENG-4 are subject to Subpart ZZZZ. DHY-1 is subject to Subpart HH.

12.0 Federal Regulatory Analysis:

Federal Regulation	Title	Applies (Y/N)	Unit(s) or Facility	Comments
Air Programs Subchapter C (40 CFR 50)	National Primary and Secondary Ambient Air Quality Standards	Yes	Entire Facility	Independent of permit applicability; applies to all sources of emissions for which there is a Federal Ambient Air Quality Standard.
NSPS Subpart A (40 CFR 60)	General Provisions	Yes	See sources subject to a Subpart in 40 CFR 60: ENG-1, ENG-2, ENG-3, ENG-4 Also, compressors for: ENG-1,	Applies if any other subpart applies. Subpart JJJJ applies to ENG-1, ENG-2, ENG-3, and ENG-4 Subpart OOOOa applies to compressors for ENG-1, ENG-2, ENG-3, ENG-4, and FUG These tanks are NOT “storage vessel affected facilities” under subpart OOOOa: TK-1, TK-2, TK-3; PW-1, PW-2, PW-3, PW-4; TK-S1 and TK-S2

<u>Federal Regulation</u>	<u>Title</u>	<u>Applies (Y/N)</u>	<u>Unit(s) or Facility</u>	<u>Comments</u>
			ENG-2, ENG-3, ENG-4 FUG	
40 CFR 60, Subpart Kb	Standards of Performance for Storage Vessels for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	No		The facility has storage vessels TK-1, TK-2, TK-3, and TK-S2. Each has a storage capacity greater than 75 m ³ and is used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after 7/23/84. <u>-However</u> , this subpart does not apply because of 60.110b(d)(4). Each vessel has a design capacity less than 10,000 bbl (1,589.874 m ³) and storage is prior to custody transfer.
40 CFR Part 60 Subpart JJJJ (Quad -J)	Standards of Performance for Stationary Spark-Ignition Internal Combustion Engines	Yes	ENG-1, ENG-2, ENG-3, ENG-4	The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (5) of section 60.4230. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator. Engines ENG-1 through ENG-4 are all 4SLB, 1875 hp with a construction date of February 2019 or later. ENG-3 and ENG-4 are not installed yet, so the construction date is TBD. Therefore, the 4 units are subject to this subpart, per §60.4230(a): Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured: (i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP). Per 60.4233(e), the engines must meet the emission limitations in Table 1 of the Subpart.
NSPS 40 CFR Part 60 Subpart OOOO (Quad -O)	Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which construction, modification or reconstruction commenced after	No		The rule applies to “affected” facilities that are constructed, modified, or reconstructed after Aug 23, 2011 (40 CFR 60.5365): gas wells, including fractured and hydraulically refractured wells, centrifugal compressors, reciprocating compressors, pneumatic controllers, certain equipment at natural gas processing plants, sweetening units at natural gas processing plants, and storage vessels. NSPS OOOO does not apply to the storage tanks because they were <u>constructed after 09/18/15</u> .

<u>Federal Regulation</u>	Title	Applies (Y/N)	Unit(s) or Facility	Comments
	August 23, 2011 and before September 18, 2015			
NSPS 40 CFR Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015	Yes	compressors for: ENG-1, ENG-2, ENG-3, ENG-4 FUG	<p><u>Reciprocating compressors</u> for ENG-1, ENG-2, ENG-3, and ENG-4 are subject to this subpart as per §60.5365a(c)</p> <p><u>FUG emissions</u> are subject per §60.5365a(j)</p> <p>-Tanks TK-1, TK-2, TK-3; PW-1, PW-2, PW-3, PW-4; TK-S1 and TK-S2 are NOT “storage vessel affected facilities” under subpart OOOOa since the PTE from each storage vessel is controlled to less than 6 tpy. Per §60.5365a(e)(3)(v): (v) If a storage vessel battery meeting all of the criteria specified in paragraphs (e)(3)(i) through (iii) of this section through legally and practicably enforceable standards in a permit or other requirements established under Federal, state, local, or tribal authority, emits less than 6 tpy of VOC emissions averaged across the number of storage vessels in the battery, none of the storage vessels in the battery are storage vessel affected facilities.</p> <p>Note: There will be conditions in the permit to assure the criteria specified in paragraphs (e)(3)(i) through (iii) are met.</p> <p>-FGC-1, the Flogistix Flash Gas Compressor, is not regulated under OOOOa. It is a rotary screw compressor, not regulated.</p> <p>-Pneumatic pumps are not affected facilities since they will not be gas driven</p>
MACT Subpart A (40 CFR 63)	General Provisions	Yes	See sources subject to a Subpart in 40 CFR 63: ENG-1, ENG-2, ENG-3 ENG-4, DHY-1	<p>Applies if any other subpart applies.</p> <p>ENG-1, ENG-2, ENG-3, and ENG-4 are subject to Subpart ZZZZ.</p> <p>DHY-1 is subject to Subpart HH.</p>
40 CFR 63.760 Subpart HH	Oil and Natural Gas Production Facilities –	Yes	DHY-1	<p>AREA SOURCE (Minor for HAPs):</p> <p>DHY-1 is subject, per below. DHY-1 emissions are controlled by a BTEX condenser and a glowplug when the reboiler cycles off.</p> <p>1) The facility contains affected sources (TEG glycol dehydrators, 63.760(b)(2)). However, as actual <u>benzene emissions are less than one ton per year</u> (63.764(e)(ii)), the dehydrators are exempt, and the records of the determination must be maintained as required in §63.774(d)(1).</p>

<u>Federal Regulation</u>	<u>Title</u>	<u>Applies (Y/N)</u>	<u>Unit(s) or Facility</u>	<u>Comments</u>
40 CFR 63 Subpart ZZZZ (Quad Z)	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE MACT)	Yes	ENG-1, ENG-2, ENG-3, ENG-4	<p>A facility is subject to this subpart if they own or operate a stationary RICE at a major OR area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.</p> <p><u>Subpart ZZZZ applies to ENG-1, ENG-2, ENG-3, and ENG-4 per §63.6590(a)(2)(iii): A stationary RICE located at an area source of HAP emissions is new if you commenced construction of the stationary RICE on or after June 12, 2006.</u></p> <p>The four Caterpillar G3606 RICE engines (4SLB, stationary, 1875 hp) will comply with 40 CFR 63, Subpart ZZZZ by compliance through 40 CFR 60, Subpart JJJJ as per §63.6590(c)(1): (c) Stationary RICE subject to Regulations under 40 CFR Part 60. An affected source that meets any of the criteria in paragraphs (c)(1) through (7) of this section must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for <u>spark ignition engines</u>. No further requirements apply for such engines under this part.</p>

13.0 **Exempt and/or Insignificant Equipment that do not require monitoring:** NONE listed in the application

14.0 **Permit specialist's notes to other NSR or Title V permitting staff concerning changes and updates to permit conditions.**
A. None