

# INFORMATION RELATIVE TO THE DRAFT TITLE V OPERATING PERMIT February 2025

## GENERAL FACILITY INFORMATION

**Facility Name:** Formentera Operations LLC, West Nancy Field  
**Facility Address:** 11570 County Road 280, Vossburg, MS 39366  
**County:** Clarke  
**SIC Code(s):** 1311  
**NAICS Code(s):** 21111

## APPLICATION SUMMARY

<b>Permit No.:</b> 0440-00011	<b>NSPS (Part 60):</b> N/A
<b>Permit Action:</b> Significant Modification	<b>NESHAP (Part 61):</b> N/A
<b>Permit Folder:</b> PER20240001	<b>NESHAP (Part 63):</b> N/A
<b>Application Receipt Date:</b> 05/07/2024	<b>112(r) / RMP:</b> N/A
<b>Application Deemed Complete:</b> 11/22/2024	<b>Other:</b> N/A
<b>CBI Submitted?:</b> No	

## FACILITY DESCRIPTION

The Formentera Operations LLC, West Nancy Field Facility is an existing crude oil and natural gas production facility located in Vossburg, Mississippi (Clarke County). The facility operates a power oil pump, water knockout separator, various tanks for storage of produced oil and water, and a waste gas flare that combusts off-gases from the production process as referenced in the table below. The flare also serves as a control device to control emissions of hydrogen sulfide (H<sub>2</sub>S) from the water knockout separator, process storage tanks, and truck loading activities. Emissions from the storage tanks and truck loading are routed to the primary flare or to a vapor recovery unit (VRU) which collects the gas to be compressed and transferred to a sales gas line, if available. Operations at the facility fall primarily within SIC Code 1311. The following table contains the emission points at the facility.

Emission Point	Description
AA-020	Tank truck loading process with emissions routed through a vapor recovery unit (VRU) to the flare, Emission Point AA-034 (Ref. No. TTL)
AA-025	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions routed through a vapor recovery unit (VRU) to Emission Point AA-034 (Ref. No. TK10)
AA-026	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. TK11)
AA-027	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. TK12)

Emission Point	Description
AA-030	1,500 barrel (63,000 gallon) fixed-roof crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. 22a-10-OST-CV)
AA-031	400 barrel (16,800 gallon) fixed-roof bad crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. 22b-10-OST-CV)
AA-032	400 barrel (16,800 gallon) fixed-roof bad crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. 22c-10-OST-CV)
AA-033	Two (2), 400 barrel (16,800 gallon) fixed-roof produced water storage tanks with emissions routed through a VRU to Emission Point AA-034 (Ref. Nos. 22d-10-WST-CV and 22e-10-WST-CV)
AA-034	Control flare to combust relief gas from the vapor recovery unit (VRU) which collects emissions from the process oil tanks and the tank truck loading process. The flare also handles VRU discharge during gas line downtime and during process upsets. (Ref. No. 23-10-F)
AA-035	Fugitive emissions from process equipment and components (Ref. No. FE-01)
AA-036	300 barrel (12,600 gallon) fixed-roof crude oil storage tank with emissions routed through a VRU to Emission Point AA-034 (Ref. No. 22f-22-OST-CV)
AA-037	Water knockout with low pressure relief gas routed to Emission Point AA-034

### TITLE V SOURCE APPLICABILITY

The facility's potential-to-emit (PTE) exceeds the Title V major source threshold of 100 tons per year (tpy) for the criteria air pollutant Sulfur Dioxide (SO<sub>2</sub>). The facility's potential-to-emit hazardous air pollutants (HAPs) does not exceed the Title V major source thresholds of 25 tpy of total HAPs and 10 tpy for any individual HAPs since all gas is required to be routed to the flare for combustion by 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2).

### **Facility-Wide Potential-to-Emit Summary<sup>1</sup>**

Pollutant	PTE Emissions (tons/yr)
Particulate Matter (TSP)	0.37
PM <sub>10</sub>	0.60
PM <sub>2.5</sub>	0.60
Sulfur Dioxide (SO <sub>2</sub> )	231.03
Nitrogen Oxides (NO <sub>x</sub> )	62.03
Carbon Monoxide (CO)	70.35
Volatile Organic Compounds (VOC)	14.18
Total Reduced Sulfur (TRS)	3.70
Lead	0.00
CFC/HCFC	0.00
Total HAP	1.80

<sup>1</sup> The PTE emissions reflect any emission limits or enforceable restrictions included in the proposed permit.

#### PREVENTION OF SIGNIFICANT DETERIORATION (PSD) APPLICABILITY

The facility is not one of the 28 categorical facilities listed in 40 CFR 52.21(b)(1)(i)(a); therefore, the PSD threshold for a major source is 250 tpy. The facility has the potential to emit less than 250 tpy of each of the regulated NSR pollutants; therefore, it is an existing minor source under the PSD program. This permitting action will not change the current PSD status of the facility.

#### FACILITY MODIFICATIONS AND/OR PERMIT CHANGES

The facility is proposing the following changes as a part of this modification permitting action.

- The facility is requesting to modify the CAM plan for the facility to better reflect the operations on site and ensure continuous compliance with the CAM program. The previous permit application and permit indicated that the facility had H<sub>2</sub>S monitors on site for measuring the H<sub>2</sub>S concentration at the flare tip. However, this was incorrect, and the CAM plan is being update accordingly.
- The facility is proposing to remove Emission Point AA-038 (power oil engine) because the engine is out of service and has been removed from the facility.

#### COMPLIANCE ASSURANCE MONITORING (CAM) APPLICABILITY

40 CFR Part 64 specifies the requirements for CAM. The general applicability of this rule can be found in 40 CFR 64.2 and requires a Title V source to comply with the CAM requirements if all three of the following criteria are met for a pollutant-specific emission unit (PSEU):

1. The unit is subject to an emission limitation or standard for a regulated air pollutant other than exemptions under 40 CFR 64.2(b)(1);
2. The unit uses a control device to comply with the standard; and
3. The unit has pre-control emissions exceeding Title V major source threshold.

The facility flare is utilized as a control device to burn gas containing greater than 1 grain of H<sub>2</sub>S/100scf. The requirement to burn off gases is found in 11 Miss. Admin. Code Pt. 2, R. 1.4.B(2) and is considered to be a work practice. As defined in the CAM regulation at 40 CFR 64.1, an emission limitation may be expressed in the form of a work practice, process parameter, or other form of specific design. Thus, all three criteria are met, and CAM is applicable and shall be utilized to ensure compliance with the requirement to burn the off gases. The parameters chosen to indicate that off gases are being burned shall be the presence of a flame or spark at the flare tip and continuously monitoring the temperature at the flare tip.

#### NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) APPLICABILITY

- 40 CFR 63, Subpart HH, NESHAP from Oil and Natural Gas Production Facilities - This standard applies to specific emission sources at both major and area sources of HAPS that are at an oil and natural gas production facility. While the facility is an area source for HAPs, it does not operate a triethylene glycol (TEG) dehydration unit, so it is not subject to the requirements of Subpart HH.

- 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines – The facility does not own or operate any engines that would be subject to this subpart.

#### NEW SOURCE PERFORMANCE STANDARDS (NSPS) APPLICABILITY

- 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 3, 1984 – All storage tanks at the facility are excluded from this subpart per §60.110b(d)(4) since they are each less than 420,000 gallons and are used to store petroleum or condensate stored, processed, or treated prior to custody transfer.
- 40 CFR 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines – The facility does not operate a reciprocating internal combustion engine. An electric motor is used instead.
- 40 CFR 60, Subpart OOOO, Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which Construction, Modification, or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015 – This subpart is not applicable since the potentially affected emission sources were constructed prior to or after the applicability dates.
- 40 CFR 60, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015 – This subpart is not applicable since the potentially affected emission sources were constructed prior to the applicability date, except for the 300 bbl crude oil storage tank, Emission Point AA-036, constructed after September 18, 2015. The emissions from the tank are required to be routed to the flare, therefore Subpart OOOOa is not applicable.

#### SPECIFIC APPLICABLE REQUIREMENTS

Emission Point No.	Pollutant	Permit Emission Limits	Monitoring Requirements
Facility-Wide	H <sub>2</sub> S	Work practice for H <sub>2</sub> S concentration $\geq 1$ grain/100scf	A flare is used to comply with the work practice standard. The flare is subject to operating requirements and CAM monitoring as shown below for Emission point AA-001.
AA-034	H <sub>2</sub> S	Work practice for H <sub>2</sub> S concentration $\geq 1$ grain/100scf	CAM monitoring requirements: <ul style="list-style-type: none"> <li>• Daily visual monitoring for presence of flare flame</li> <li>• Continuous flare auto-ignitor</li> <li>• Continuous monitoring of the temperature at the flare tip</li> </ul>
AA-034	H <sub>2</sub> S, VOC, HAP	Operating and maintenance requirements	<ul style="list-style-type: none"> <li>• Annual sample of flare gas heat of combustion</li> <li>• Monthly Visible Emissions (VE) test</li> <li>• Auto-ignitor design, operation and maintenance requirements</li> </ul>

Emission Point No.	Pollutant	Permit Emission Limits	Monitoring Requirements
AA-034	SO <sub>2</sub>	70 lb/hr (24-hr average)	Analyze the H <sub>2</sub> S content in the sour gas going to the flare on a monthly basis and record the volume of sour gas routed to the flare and hours the gases were flared on a daily basis. This data shall be used to calculate 24-hour average lb/hr emission rate. Flow meter calibration was changed from monthly to quarterly to coincide with 40 CFR subpart A requirements.

OTHER REQUIREMENTS:

N/A