SEP ESCAMBIA, LLC

FLOMATON/FANNY CHURCH OIL AND GAS PRODUCTION FACILITY

FACILITY NO: 502-0005

FLOMATON, ESCAMBIA COUNTY, AL

MAJOR SOURCE OPERATING PERMIT

FIFTH TITLE V RENEWAL

AUGUST 25, 2025

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STATEMENT OF BASIS

This proposed Title V Major Source Operating Permit (MSOP) renewal is issued under the provisions of ADEM Admin. Code r. 335-3-16. The above named applicant has requested authorization to perform the work or operate the facility shown on the application and drawings, plans, and other documents attached hereto or on file with the Air Division of Alabama Department of Environmental Management, in accordance with the terms and conditions of this permit.

Escambia Operating Company (EOC), LLC (a subsidiary of Grizzly Operating LLC at the time) was issued its fourth MSOP renewal on June 5, 2020, with an effective date of June 8, 2020, and an expiration date of June 7, 2025, for the Flomaton/Fanny Church Oil and Gas Production Facility (FFC Plant) located in Flomaton, Alabama. On March 1, 2021, Escambia Operating Company (EOC), LLC and its Escambia Assets Company, LLC was acquired by Blue Diamond Energy; however, EOC remained the operator, and no name change occurred on the MSOP. On May 30, 2025, Escambia Operating Company (EOC), LLC and its Escambia Assets Company, LLC were acquired by SEP Escambia, LLC. The renewal permit will be issued to the new owners.

Per ADEM Rule 335-3-16-.12(2), an application for permit renewal shall be submitted at least six (6) months, but not more than eighteen (18) months, before the date of expiration of the permit. The initial renewal application, dated May 7, 2025, was received late on May 14, 2025. A deficiency letter was sent to the facility on June 10, 2025, July 23, 2025, and July 29, 2025, to address items that needed to be modified or to address missing items in the application. This information was submitted to the Department on June 18, 2025, and July 30, 2025. Revisions to the original permit application were submitted on August 1, 2025 (Revision 2), and August 21, 2025 (Revision 3, dated August 15, 2025). A complete permit application was received on August 21, 2025.

The facility is located in Escambia County, which is currently listed as attainment, unclassifiable, or attainment/unclassifiable with all National Ambient Air Quality Standards (NAAQS).

There are no current or ongoing enforcement actions against the facility necessitating additional requirements to achieve compliance with the proposed permit conditions. The enforcement and compliance history for the facility can be found at https://echo.epa.gov/ (Search using Facility ID No.: 110007917102)

NOTABLE CHANGES

During this renewal, the following changes will be made:

- The owner of the facility will change from Blue Diamond Energy, LLC to SEP Escambia, LLC during this renewal. An updated ADEM Form 103 was submitted on August 21, 2025.
- A section for storage vessels is being included in the permit renewal to address requirements proposed by the Department on these units.
- All major facilities are now required to submit a Facility-Wide Fugitive Dust Plan, if necessary. There are no raw materials, storage piles, products, etc. capable of generating fugitive dust at this facility. All plant roads are paved or graveled, thereby significantly limiting the potential for fugitive dust. In other words, emissions are expected to be insignificant, as is the likelihood that the facility will violate the general SIP requirements related to fugitive dust. Therefore, additional specific requirements for fugitive dust, including additional monitoring, recordkeeping, or reporting requirements, are not necessary for this facility in order to assure compliance with the SIP.

Permit Shield

The FFC Plant has requested a permit shield to be applied to their fifth Title V renewal per ADEM Admin. Code r. 335-3-16-.10. The permit shield request was included in the application.

FACILITY DESCRIPTION

The FFC Plant is a sour natural gas production facility which collects full well streams (consisting of condensate, sour natural gas, and produced water) from the Fanny Church Oil Field which is located six (6) miles south of the FFC Plant. The plant is equipped with the following equipment:

- Process Flare (EU HP/LP Flare)
- Electric Driven Reciprocating Compressor (EU COMP1)
- 4,000 Barrel Produced Water Storage Tank (EU T6000)
- 280 Barrel Gun Barrel Storage Tank (EU T6100)
- 100 Barrel Slop Oil Storage Tank (EU T6200)
- 4,200 Gallon Miscellaneous Storage Tank storing Lube Oil, Methanol (MeOH) and anti-freeze (EU MISCTK)
- Pressurized Condensate Storage Tank
- Produced water loading operation (PWLOAD)
- Slop Oil, Lube Oil, MeOH, anti-freeze Loading Operations (EU MISCLOAD)

The full well stream enters the FFC Plant where it is separated into three streams via the bulk separator. The sour gas stream, with entrained liquids, is not processed at the FFC Plant. That stream is compressed and transported via pipeline, for processing and treatment, at the Big Escambia Operating Plant (BEC Plant) which is also owned and operated by SEP Escambia, LLC. The condensate stream from the separator is stored in the pressurized tank until it is transported for treatment and stabilization at the BEC Plant via a separate pipeline. The produced water stream is routed to the gun barrel tank where impurities are skimmed and sent to a slop oil tank. The remaining water is sent to a water storage tank until it is loaded and trucked offsite for disposal. Approximately 100 barrels per year of slop oil is loaded from the slop oil tank for disposal.

The HP/LP Flare is used to combust both high-pressure and low-pressure gas. Vapors from the full-well stream, pressurized condensate pressure relief vents, produced water tank, truck loading operations, and upset events are routed to the flare for combustion.

PERMITTING HISTORY

ACTION DATE	PERMITTING ACTION	DESCRIPTION
July 5, 1972	Application Submitted	Humble Oil and Refining Company submitted qn application for the Flomaton Oil Production and Gas Processing Facility, which consisted of the Flomaton Field and the gas treating plant.
January 1, 1973	Name Change	Humble Oil and Refining Company merged into its parent corporation, Exxon Company U.S.A.
February 14, 1973	Permit issued	Exxon Company, U.S.A. was issued operating permits for its gas treating plant, sulfur recovery plant, and emergency flare.
June 20, 1974 and July 30, 1974	Conditional Operating Permits issued	Exxon Company, U.S.A was issued conditional operating permits to allow them to address the Alabama Air Pollution Control's reclassification of SO_2 emissions in Escambia County.
March 21, 1975	Non-applicability determination	Exxon Company, U.S.A. requested permission to send sour crude oil directly from the newly developed Fanny Church Oil Field wells through flow lines to the Flomaton Oil Production and Gas Treating Facility. No permitting was required.
March 26, 1975	Permits Issued	Exxon Company, U.S.A, was issued operating permits for the Flomaton/Fanny Church Oil Production and Gas Treating Facility.
August 10, 1976	Permit issued	Fanny Church Oil Production Field was permitted for a smokeless flare. This permit was voided on May 23, 1997.
June 13, 1979	Application Submitted	Exxon Company, U.S.A. submitted a construction permit application for the addition of an inlet separation and compression facility at the Flomaton Oil Production Field.
July 3, 1979	Permit issued	A construction permit was issued for the compressor station with a smokeless flare. On March 25, 1981, an operating permit was issued.
November 28, 1984	Permit issued	Exxon Company, U.S.A. requested to be able to substitute a 243 MMBtu/hr boiler for two, 97 MMBtu/hr boilers that was currently permitted. They also wanted to be allowed to use the two existing boilers as backups. The 243 MMBtu/hr boiler was re-located from one of the company's plants located in Louisiana. The facility was issued a construction permit for the 243 MMBtu/hr boiler; one of the permit provisos for the boiler was revised on January 10, 1985.
November 15, 1996	Ownership change	Vintage Petroleum, Inc. acquired the Flomaton/Fanny Church Oil Production and Gas Treating Facility from Exxon Company, U.S.A. Air permits were issued in Vintage's name on May 20, 1997.
June 12, 1998	Permit Modification	Air Permit No. 502-0005-Z004 was re-issued to include the custom fuel monitoring and reporting schedule for the turbines (reference letter dated October 17, 1997).
April 26, 2000	Permit Issued	Initial Title V permit Major Operating Permit No. 502-0007 was issued.
June 22, 2000	Initial notification submitted	Vintage Petroleum, Inc. submitted an initial notification to address its applicability to 40 CFR 63 Subpart HH. The facility requested to

ACTION DATE	PERMITTING ACTION	DESCRIPTION
		be a minor source of hazardous air pollutants (HAPs) to demonstrate compliance with this subpart. On July 15, 2002, the facility installed a BTEX Buster on the glycol dehydration system to comply with this subpart.
July 25, 2006	Permit Issued	1st Title V Renewal Permit issued to Vintage Petroleum, Inc.
September 6, 2006	Permit Modification	Title V permit was modified to reflect change of ownership of the Flomaton/Fanny Church Oil Production and Gas Treating Facility to Escambia Operating Company, LLC from Vintage Petroleum, Inc. The acquisition occurred on January 1, 2006.
August 1, 2007	Non-applicability determination	Escambia Operating Company, LLC, became a wholly owned subsidiary of Eagle Rock Energy Partners LP. No name change was required.
March 13, 2009	Air Permit No. 502-0005-X006 issued	Escambia Operating Company, LLC, was issued a permit for the addition of a 5.0 MMscf of gas/day Refrigeration Plant. ThE units associated with this project were never installed at the facility.
May 12, 2009	502(b)(10) Mod	A 502(b)(10) modification was issued for the exchange of 1,140 HP turbine (304B) with one of the same make, model, rating and vintage. The determination request was submitted April 28, 2009.
October 24, 2009	Renewal Application Received	The Department received the 2nd Title V renewal application for the plant. A completed application was received on February 25, 2010.
April 23, 2010	Permit Renewal Issued	Escambia Operating Company, LLC was issued the second Title V renewal for the FFC Plant with an effective date of April 25, 2010.
October 18, 2010	Air Permits 502-0005-X007 and 502-0005-X008 issued	An application was received on September 28, 2010, for the installation of new equipment and a request to use temporary sources at the FFC Plant. A revised application was submitted October 7, 2010. This project also allowed for the use of temporary sources at the plant until permanent sources could be installed. This was referred to as Phase I of the plant modification in which the oil and gas production, treating and natural gas processing facility would be converted to a condensate stabilization and sour gas compression facility. The sulfur recovery unit, thermal oxidizer, condensate tanks, 243 MMBtu/hr power boiler, amine treating unit, and tri-ethylene glycol dehydration unit would all be shut down during this phase. Air Permit X007 covered a condensate truck loading rack with a closed vent system. Air Permit X008 covered an 84,000-gallon fixed roof condensate storage tank, four 42,0000-gallon fixed roof condensate storage tank, a closed vent system with condensate loading/tank flare, and a closed vent system with a vapor recovery unit.
July 9, 2013	Non-applicability determination	An application was received on July 3, 2013, regarding the temporary use of a 31.0 MMBtu/hr portable boiler and 500 kW Diesel-Fired Generator Engine during the two-phase modification proposed for the plant. No permitting action was required.

ACTION DATE	PERMITTING ACTION	DESCRIPTION
April 9, 2014	Air Permit 502-0005-X009 issued	An application was received on February 4, 2014, requesting the conversion of temporary emission sources operating at the plant as of July 9, 2013, to permanent sources. It was determined that these sources would be necessary beyond the temporary 12-month period granted. This permit contained a 31.0 MMBtu/hr Natural Gas Fired Boiler, 809 HP hour stroke rich burn diesel fired engine, 755 HP four stroke rich burn diesel fired engine, and a 2,000-gallon diesel storage tank. This project was referred to as Part A of Phase II for the plant conversion.
July 29, 2014	Air Permit 502-0005-X010 issued	On July 2, 2014, an application was received regarding the completion of the plant conversion. This project was referred to as Part B of Phase II of the conversion. All previously permitted emission sources at the plant were decommissioned and only the following emission sources remained at the plant: 16,800-gallon produced water storage tank, electric driven reciprocating compressor, loading for produced water and miscellaneous fluids, pressurized condensate storage tanks, miscellaneous source tanks (slop oil, lube oil, methanol), a low pressure/hp pressure facility flare with a closed vent system. The facility accepted a 1,000 tons per twelve months sulfur dioxide limit for the plant. This limit was based on flaring the full gas stream no more than ten percent of the operating year for normal operations, upset events, maintenance, and shutdowns/startups.
November 6, 2014	Non-applicability determination	A 280-barrel gun barrel storage tank and a 100-barrel slop oil storage tank were added to the facility. No permitting action was required.
November 19, 2014	Permits Voided	Air Permits for all emission sources not permitted under X010 were voided (including X007, X008, and X009)
December 30, 2014	Non-applicability determination	The facility requested to use the GEN-SET 1 and GEN-SET 2 diesel generator engine temporarily for 180 days. These generators had previously been permitted under Air Permit X009 and were decommissioned but were needed until electricity could be supplied to the plant. No permitting action was required.
June 9, 2015	Permit Renewal Issued	Third renewal permit was issued to EOC (a subsidiary of Eagle Rock Energy LLC). FFC Plant was no longer a natural gas processing plant subject to 40 CFR 60 Subpart KKK and no longer subject to 40 CFR 63 Subpart HH because the tri-ethylene glycol dehydration unit was removed. Requirements under 40 CFR 60 Subpart OOOO were added for the compressor. The Department received the 3rd Title V renewal application for the plant on October 24, 2014.
October 15, 2015	Change of Ownership	Eagle Rock Energy G&P, LLC merged with Vanguard Natural Resources, LLC to acquire Escambia Operating Company LLC and Escambia Asset Company, LLC. Vanguard became the new owner and the operator's name remained Escambia Operating Company, LLC.

ACTION DATE	PERMITTING ACTION	DESCRIPTION
June 5, 2017	Non-applicability determination	The Department was notified that the Flomaton Plant would no longer be continuously manned by plant personnel throughout the day. The facility requested the use of an existing flare camera located at the company's Big Escambia Creek (BEC) Plant to monitor the flare at the Flomaton Plant. The flare camera was already trained on the Flomaton flare. No permitting action was required, and a non-app letter was sent to the facility on June 26, 2017.
2019	Change of Ownership	Grizzly Energy LLC changed its name from Vanguard Natural Resources LLC after its bankruptcy. The operator's name remained Escambia Operating Company, LLC for both Escambia Operating Company LLC and Escambia Asset Company, LLC
June 5, 2020	Permit Renewal Issued	Escambia Operating Company LLC (a subsidiary of Grizzly Energy) was issued its 4th Title V renewal for the FFC Plant with an effective date of June 8, 2020. The Department received the 4th Title V renewal application for the plant on February 12, 2020, and an addendum to the application was submitted on April 15, 2020.
March 1, 2021	Change of Ownership	Escambia Operating Company and the Escambia Asset Company LLC were acquired by Blue Diamond Energy from Grizzly Energy, LLC. Escambia Operating Company LLC continued to operate all assets.
April 2, 2023	Notification	The Department was notified that the Blue Diamond Energy filed bankruptcy.
May 13, 2025	Renewal Application Received	The Department received the fifth Title V renewal application for the plant. This application was deemed late. A completed application was received on June 18, 2025.
May 30, 2025	Change of Ownership	Escambia Operating Company and the Escambia Asset Company were acquired by SEP Escambia, LLC from Blue Diamond Energy, LLC.

FACILITY-WIDE REQUIREMENTS

Applicable regulations for the FFC Plant are found in the following table:

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT	REGULATIONS
SOURCES:				
Petroleum Production Facility that handles gas or refinery gas containing 0.10 grains of H_2S/Scf		H_2S	Burn gas with 0.10 grains or more of H_2S/Scf	Rule 335-3-5-.03(1)
			Burn gas to maintain the offsite concentration at 20 ppbv or less	Rule 335-3-5-.03(2)
All Stationary Sources		Opacity	Except during one six (6) minute period in any sixty (60) minute period, no emission source shall discharge into the atmosphere particulate of an opacity greater than twenty percent (20%) opacity, as determined by a six (6) minute average. AND	Rule 335-3-4-.01(1)(a)
			During the one six (6)-minute period in any sixty (60) minute period, emissions sources may not discharge into the atmosphere particulate of an opacity greater than forty percent (40%).	Rule 335-3-4-.01(1)(b)
All Stationary Sources		SO_2	1,000 Tons per rolling 12-month period	Rule 335-3-14-.04 [Anti-PSD]

The following sections address state and federal regulations which may or may not be applicable to the FFC Plant.

STATE REGULATIONS

APPLICABILITY

ADEM Admin Code r. 335-3-4-.01, "Visible Emission" for Control of Particulate Emissions

This regulation controls particulate matter (PM) emissions by restricting visible emissions from stationary sources. This regulation would be applicable to the facility flare. The specific monitoring and recordkeeping requirements are discussed in the flare section of this analysis.

APPLICABILITY

ADEM Admin Code r. 335-3-5-.03, "Petroleum Production" for Control of Sulfur Compound Emissions

This regulation applies to the control of sulfur compound emissions from each petroleum production facility that handles gas or refinery gas that contains 0.10 grains of hydrogen sulfide (H_2S) per standard cubic foot (Scf) (~160 parts per million (ppmv)) or more. The FFC Plant handles sour gas with a H_2S concentration of 160 ppmv or more; therefore, the facility is subject to the applicable requirements of this regulation. The flare is used to comply with this regulation; therefore, the requirements are discussed in the flare section of this analysis.

APPLICABILITY

ADEM Admin Code r. 335-3-10, "Standards of Performance for New Stationary Sources [NSPS]"

This chapter covers standards under 40 CFR Part 60 and its Appendices that have been incorporated by reference in the Alabama Administrative Code as they exist in 40 CFR Part60 (July 1, 2023). The emission standards in this chapter supersede the emissions standards in chapters 335-3-3, -4, -5, -6, -7, and -8 provided that both the criteria in ADEM Admin. Code r. 335-3-10-.01(2) are met.

APPLICABILITY

ADEM Admin. Code r. 335-3-11, "National Emission Standard for Hazardous Air Pollutants [NESHAP]"

This chapter covers standards under 40 CFR Part 61 and 40 CFR Part 63 and the Appendices that have been incorporated by reference in the Alabama Administrative Code as they exist in 40 CFR Part 61 (2021) and 40 CFR Part 63 (July 1, 2023). If there are conflicts between the regulations found in this chapter and regulations contained in other chapters, the more stringent regulations will take precedence. Any overlap will be addressed in the applicable sections.

APPLICABILITY

ADEM Admin Code r. 335-3-14-.04, "Prevention of Significant Deterioration (PSD) Permitting"

The facility accepted a PSD limit to avoid undergoing a PSD review when the natural gas processing plant and all its associated equipment were removed from the plant. A netting analysis was conducted in July 2014, and the sulfur dioxide (SO_2) emissions from the facility were limited based on the facility flaring for no more than ten percent (10%) of the year. The total emissions from the plant included emissions from normal operations, upset events, maintenance, and plant startup/shutdown. Since the flare is the primary source of SO_2 emissions from the plant, the limit will be addressed in the flare section of this analysis.

APPLICABILITY

ADEM Admin Code r. 335-3-14-.06, "Determinations for Major Sources in Accordance with Clean Air Act Section 112(g)"

This regulation applies to major sources of hazardous air pollutants (HAPs) constructed after March 27, 1998, and emitting ten (10) tons per year (TPY) or more of a single HAP or twenty-five (25) TPY or more of a

combination of HAPs. Since this facility is not a major source of HAPs, a 112(g) case by case MACT review would not be necessary.

APPLICABILITY

ADEM Admin Code r. 335-3-16-.03, "Major Source Operating Permits"

The FFC Plant has been deemed a major source of criteria pollutants for emissions since emissions would exceed the 100 TPY threshold for a criteria pollutant. The facility wide HAPs emissions are not expected to exceed the 10 TPY threshold for a single HAPs or the 25 TPY threshold for a combination of HAPs; therefore, the facility is not a major source for HAPs emissions and is designated as an area source of HAPs. Compliance with this regulation shall be met by maintaining records of emissions from stationary sources and conducting monitoring and testing as required by the permit.

FEDERAL REGULATIONS

NEW SOURCE PERFORMANCE STANDARDS (NSPS)

APPLICABILITY

40 CFR Part 60 Subpart A, "General Provisions" | ADEM Admin. Code R. 335-3-10-.02(1)

Provided that affected sources located at the plant are subject to one of the applicable subparts found under this part, the facility shall comply with this subpart as specified in the applicable subpart. Table 3 of 40 CFR 60 Subpart OOOO [NSPS OOOO] covers the applicable requirements of this subpart that apply to affected sources under NSPS OOOO [40 CFR §60.5425].

APPLICABILITY

40 CFR Part 60 Subpart VVa, "Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemical Manufacturing Industry"

This subpart is only applicable by reference in NSPS OOOO. Since 40 CFR §60.5400 does not apply to equipment leaks from an oil and gas production facility, there are no requirements under this subpart.

APPLICABILITY

40 CFR Part 60 Subpart OOOO, "Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution" [NSPS OOOO] | ADEM Admin. Code R. 335-3-10-.02(91)

This regulation was promulgated by the United States Environmental Protection Agency (EPA) on April 17, 2012, and it contains SO_2 and volatile organic compound (VOC) requirements for natural gas production wells and natural gas processing plants constructed, reconstructed, or modified after August 23, 2011, and on or before September 18, 2015 [40 CFR §60.5360]. The FFC Plan was modified during this period and has affected facilities under this subpart.

Affected sources under this subpart include requirements for storage vessels and reciprocating compressors [40 CFR §60.5365]. This subpart also addresses fugitive equipment standards; however, because the plant no longer meets the definition of a natural gas processing plant, there are no applicable requirements for the FFC Plant

fugitive emission components under this subpart. The applicable requirements under this subpart will be discussed in the appropriate sections of this analysis. Emissions from fugitive components are 11.35 TPY.

APPLICABILITY

40 CFR Part 60 Subpart OOOOa, "Standards of Performance for Crude Oil and Natural Gas Facilities"| ADEM Admin. Code R. 335-3-10-.02(91)(a)

This regulation was promulgated on June 3, 2016, to control VOC and SO_2 emissions from affected facilities that commence construction, modification, or reconstruction after September 18, 2015, and on or before December 6, 2022 [40 CFR §60.5360a]. This facility is currently not equipped with any affected facilities under this subpart.

APPLICABILITY

40 CFR Part 60 Subpart OOOOb, "Standards of Performance for Crude Oil and Natural Gas Facilities"

This regulation was promulgated on March 8, 2024, to control pollutant greenhouse gases (GHG) by limiting emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction after December 6, 2022. This regulation also established emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO_2) emissions from affected facilities that commence construction, modification, or reconstruction after December 6, 2022 [40 CFR §60.5360b(a)]. This facility is currently not equipped with any affected facilities under this subpart.

APPLICABILITY

40 CFR Part 60 Subpart OOOOc, "Emission Guidelines for Greenhous Gas Emission from Existing Crude Oil and Natural Gas Facilities"

This regulation was promulgated on March 8, 2024, to establish emission guidelines and compliance schedules for the control of GHG by limiting emissions of methane from affected facilities in the crude oil and natural gas source category that commence construction, modification, or reconstruction on or before December 6, 2022 [40 CFR §60.5360c, 40 CFR §60.5361c(a)]. At the time of this renewal, the Department is in the process of developing a plan that implements the emission guidelines contained in this subpart. The plan is due to be submitted to EPA by March 9, 2026 [40 CFR §60.5362c(c)]. Currently, the FFC Plant would be required to be in compliance with the requirements established under this subpart by March 9, 2029 [Table 1 to Subpart OOOOc of Part 60, Title 40].

The FFC Plant would be designated as a centralized production facility (CPF) under this subpart. This subpart would establish requirements for designated facilities:

- Each reciprocating compressor located at a CPF [40 CFR §60.5386c(c)]
- Except as specified in 40 CFR §60.5386c(d), each process controller, which is the collection of natural gas-driven process controllers at a CPF
- Each storage vessel designated facility, which is a tank battery that has the potential for methane emissions equal to or greater than 20 TPY.

- Except as specified in 40 CFR §60.5386c(d), each pump designated facility, which is the collection of natural gas-driven diaphragm and piston pumps at a CPF
- Each fugitive emissions components designated facility, which is the collection of fugitive emissions components at a CPF [40 CFR §60.5386c(a),(d), (e), (g) and (h)].

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

APPLICABILITY

40 CFR Part 63 Subpart A, "General Provisions" | ADEM Admin. Code r. 335-3-11-.02(1)

Provided that affected sources located at the plant are subject to one of the applicable subparts found under 40 CFR Part 63, the facility shall comply with this subpart as specified in the applicable subpart.

APPLICABILITY

40 CFR Part 63 Subpart HH, "NESHAP from Oil and Natural Gas Production Facilities" [Oil and Gas MACT] | ADEM Admin. Code r. 335-3-11-.06(33)

This subpart is applicable to area sources of HAPS that process, upgrade or store hydrocarbon liquids [40 CFR §63.670(a)(1) and (2)]. The FFC Plant is an area source of HAPs, and it also stores condensate; however, the plant is not equipped with an affected facility for this subpart which includes a tri-ethylene glycol (TEG) dehydration unit; therefore, this plant will not be subject to the requirements under this subpart [40 CFR §63.670(b)(2)].

40 CFR PART 64, "COMPLIANCE ASSURANCE MONITORING" (CAM)

APPLICABILITY

This subpart is applicable to an emission source provided the source meets all of the following criteria: it is subject to an emission limit or standard, it uses a control device to achieve compliance with the emissions limit or standard, and the emission source has pre-controlled emissions from a regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source [40 CFR §64.2(a)]. Applicability to this subpart will be discussed in the individual sections for each applicable emission source.

FACILITY-WIDE EMISSIONS

The primary sources of emissions from the plant are the EU HP/LP Flare and fugitive VOC emissions from equipment components. Uncontrolled emissions from the methanol (MeOH), lube oil, and antifreeze miscellaneous tanks storage (MISCTKS) and compressor seals (COMP1) are also included in the table below. The waste gas combustion emissions were updated based on a more recent gas analysis (dated August 16, 2023) provided by the plant on June 18, 2025. The emissions for the flare are based on flaring the full well gas stream for no more the ten percent of the year. Potential uncontrolled emissions for the facility are found below in Table 1a and expected controlled emissions are found in Table 1b.

EMISSION TYPE	POLLUTANT	POTENTIAL EMISSIONS TONS PER YEAR (TPY)						
		MISCTKS/ LOADING EMISSIONS	LP/HP FLARE (PILOT)	LP/HP FLARE (WASTE)	FUGITIVE EMISSIONS	COMP1	TOTAL EMISSIONS	PERMIT LIMIT
CRITERIA POLLUTANT EMISSIONS	$PM_{2.5/10}$	-	0.002	0.92	-		0.922	-
	SO_2	-	0.00	999.7	-		999.7	**1,000**
	NO_X	-	0.029	8.45	-		8.48	-
	CO	-	0.025	72.43	-		72.45	-
	VOC	2.693	0.002	46.35	11.35	8.81	69.21	-
	Total HAPs	0.00	5.52E-04	0.221	-	-	0.222	-
GHG EMISSIONS	CO_{2e}	-	17, 214.8			380.7	17,596	-

Table 1a

Table 1b below shows expected emissions from the plant once vapors from the pressurized condensate tank's pressure relief valves, the produced water tank, truck loading operations, compressor seal gas, and vapors from full well stream flaring during upset events are routed to the flare for combustion. The flare is designed with a destruction efficiency of 98%.

EMISSION TYPE	POLLUTANT	EXPECTED EMISSIONS TONS PER YEAR (TPY)						
		MISCTKS/LOADING EMISSIONS	LP/HP FLARE (PILOT)	LP/HP FLARE (WASTE)	FUGITIVE EMISSIONS	COMP1	TOTAL EMISSIONS	PERMIT LIMIT
CRITERIA POLLUTANT EMISSIONS	$PM_{2.5/10}$	-	0.002	0.92	-		0.922	-
	SO_2	-	0.00	999.7	-		999.7	**1,000**
	NO_X	-	0.029	8.45	-		8.48	-
	CO	-	0.025	72.43	-		72.45	-
	VOC	1.55	0.002	46.35	11.35	0.18	59.23	-
	Total HAPs	0.00	5.52E-04	0.221	-	-	0.222	-
GHG EMISSIONS	CO_{2e}	-	17, 214.8			7.61	17,222.41	-

Table 1b

Actual emissions from the FFC Plant (found in Table 2 below) were obtained from the 2023 Air Emissions reported to the Department.

EMISSION TYPE	POLLUTANT	ACTUAL EMISSIONS TONS PER YEAR (TPY)					
		MISCTKS AND LOADING EMISSIONS	LP/HP FLARE (NORMAL)	LP/HP FLARE (UPSET)	FUGITIVE EMISSIONS	TOTAL EMISSIONS	PERMIT LIMIT
CRITERIA POLLUTANT EMISSIONS	**$PM_{2.5/10}$**	0.00	0.001	0.00	-	0.00	-
	SO_2	0.00	2.08	0.00	-	2.08	**1,000**
	NO_X	0.00	0.01	0.00	-	0.06	-
	CO	0.00	0.089	0.00	-		-
	VOC	0.00	0.074	0.00	10.18	10.254	-
	Total HAPs	0.00	0.00	0.00	0.00	0.00	-

Table 2

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FLARE REQUIREMENTS

The FFC Plant consists of one Low Pressure/High Pressure flare. This process flare is used to combust both high-pressure and low-pressure gas from nearby wells. Vapors from the full-well stream, pressurized condensate pressure relief vents, a produced water tank, truck loading operations, compressor seal gas, and upset events are routed to the flare for combustion.

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT	REGULATIONS
LP/HP Flare; w/ closed vent system		Opacity	Except during one six (6) minute period in any sixty (60) minute period, no emission source shall discharge into the atmosphere particulate of an opacity greater than twenty percent (20%) opacity, as determined by a six (6) minute average.	Rule 335-3-4-.01(1)(a)
			AND	
			During the one six (6)-minute period in any sixty (60) minute period, emissions sources may not discharge into the atmosphere particulate of an opacity greater than forty percent (40%).	Rule 335-3-4-.01(1)(b)
		H_2S	Burn gas with 0.10 grains or more of H_2S/Scf	Rule 335-3-5-.03(1)
			Burn gas to maintain the offsite concentration at 20 ppbv or less	Rule 335-3-5-.03(2)
		SO_2	1,000 tons per rolling 12-month period	Rule 335-3-14-.04 [Anti-PSD]

The following section addresses state regulations which may or may not be applicable to the facility flare. Other than CAM regulations, there are no other applicable federal regulations for the flare.

STATE REGULATIONS

APPLICABILITY

ADEM Admin Code r. 335-3-4-.01, "Visible Emission" for Control of Particulate Emissions

EMISSION STANDARDS

ADEM Admin Code r. 335-3-4-.01(a) states that no person shall emit into the atmosphere particulate of an opacity of greater than twenty percent (20%) over a six (6) minute period. **ADEM Admin Code r. 335-3-4-.01(b)** states that for one six-minute period during any sixty-minute period a person may discharge into the

atmosphere from any source of emissions, particulate of an opacity not greater than that designated as forty percent (40%) opacity.

The LP/HP flare serves as a process flare rather than an emergency flare, and it is subject to these regulations. Compliance with these regulations is met by conducting daily visual inspections of the flare for the presence or absence of visible emissions. Provided that visible emissions are observed from the flare at any time, either a visible emissions observation or a visual inspection of the flare to determine the duration of smoke from the flare shall be conducted.

COMPLIANCE AND PERFORMANCE TEST METHODS AND PROCEDURES

Method 9 or Method 22 found in 40 CFR part 60, appendix A would be used to demonstrate compliance with the opacity standards or requirements.

EMISSIONS MONITORING

When Method 22 is used to determine the duration of smoke emissions from the flare, the method must be conducted by an individual who is familiar with its procedures. When Method 9 is used to determine opacity, this method must be conducted by an individual who is certified to use this procedure. Visual inspections, visible emission observations, or visual determinations of smoke emissions shall all be conducted during daylight hours.

The flare at the FFC is monitored via a camera located at the BEC Plant that is also owned and operated by SEP. A daily inspection of the flare is conducted from the BEC Plant; however, if any visible emissions are observed at anytime by the operators at the BEC Plant, one of the allowed methods must be completed.

A deviation triggers an immediate inspection, corrective action, and reporting within 48 hours or two workdays. After corrective action is completed, an additional VEO or visual smoke determination shall be conducted to confirm that the flare is in compliance with the opacity standards. A deviation is defined as follows;

- anytime the observed 6-minute average opacity exceeds 20% for the 2nd time when utilizing Method 9
- anytime the observed 6-minute average opacity exceeds 40% for the 1st time when utilizing Method 9
- anytime the accumulated time in which smoke emissions were observed exceeds 6 minutes per observation when utilizing Method 22

RECORDKEEPING AND REPORTING REQUIREMENTS

A record of each daily visual inspection of the flare and each visible emission observation or each visual determination shall be recorded and maintained. The record of the daily visual inspection shall include the date, time, and results of each inspection. If a Method 9 observation is conducted, the results should be documented on the "Visible Emission Observation Form" available in EPA's Visible Emissions Field Manual. If a Method 22 determination is conducted, the results should be documented on the field data sheet (Figure 22-1) in EPA's Visible Emissions Field Manual. A deviation shall be reported to the Department within 48 hours or 2 working days when a visible emission event occurs.

APPLICABILITY

ADEM Admin Code r. 335-3-4-.03, "Fuel Burning Equipment" for Control of Particulate Emissions

This regulation would not apply to the process flare. Flares are not considered fuel burning equipment since they do not combust fuel for the purpose of generating energy.

APPLICABILITY

ADEM Admin Code r. 335-3-5-.01, "Fuel Combustion" for Control of Sulfur Compound Emissions

This regulation would not apply to the process flare. Flares are not considered fuel burning equipment since they do not combust fuel for the purpose of generating energy.

APPLICABILITY

ADEM Admin Code r. 335-3-5-.03, "Petroleum Production" for Control of Sulfur Compound Emissions

The FFC Plant handles sour gas with a concentration of 0.10 grains/Scf or more of H_2S (~160 ppmv); therefore, the facility is subject to the applicable requirements of this regulation.

EMISSION STANDARDS

ADEM Admin. Code r. 335-3-5-.03(2) requires that all process gas streams containing greater than 0.10 grains/Scf of H_2S shall be burned such that the offsite H_2S concentration is 20 ppbv or less, as averaged over a 30-minute period. The process flare is used to comply with the requirement to burn sour gas containing 160 ppmv or more of H_2S. Vapors from the tanks and compressor seals and the flaring of full gas well streams are routed to the flare for combustion. The H_2S feedrate to the flare is not allowed to exceed 500 lbs/hr. The feedrate is used as an indicator to show that compliance with the offsite concentration is being met. This indicator limit was based on historical experience with air quality modeling of sources combusting acid gas streams and sour gas steams that contained significantly higher quantities of sulfur than those that would be expected to be emitted from this source during normal operations. Provided the available sulfur rates exceeds 500 Lbs/Hour, the Department shall require air quality modeling to be undertaken to determine if off site hydrogen sulfide concentration limits were exceeded and/or to establish a new modified indicator limit

ADEM Admin. Code r. 335-3-5-.03(3) requires that SO_2 emissions from a facility that is designed to dispose of or process natural gas containing 0.10 grains/Scf of H_2S or more do not exceed the allowable limit based on the available sulfur coming into the facility. The FFC Plant disposes of sour natural gas meeting this criterion. Provided that the available sulfur disposed of does not exceed 5 Long tons per day (LTD) for a Category I County (which includes Escambia County), the SO_2 emissions from the facility would be unlimited. However, the facility has elected to limit their potential flare SO_2 emissions (including emissions from normal operations, upset events, maintenance, and shutdown/startups) to 1,000 tons per rolling twelve-month period.

COMPLIANCE AND PERFORMANCE TEST METHODS AND PROCEDURES

The H_2S concentration of any gas stream that can be flared must be determined no less than annually using chromatographic analysis procedures found in ASTM E260, stain tube procedures found in GPA 2377-86, or those provided by the stain tube manufacturer that have been approved by EPA.

EMISSION MONITORING

The flare must be in operation anytime vapors can be routed to it for combustion. The presence of a spark or flame at the flare tip is an indicator that vapors are being combusted. A daily visual inspection of the flare is required to check for a spark or flame at the flare tip.

RECORDKEEPING AND REPORTING REQUIREMENTS

Records of the daily inspection of the flare, volume of gas flared, H_2S concentration of the flared gas, and flare emissions shall be recorded and maintained. The H_2S federate is calculated monthly based on the data collected for the flare. Provided that a spark or flame was not present when sour gas was routed to the flare, and/or the H_2S federate to the flare exceeds 500 pounds per hour (lbs/hr), a deviation report must be submitted to the Department within two (2) working days or 48 hours.

APPLICABILITY

ADEM Admin Code r. 335-3-14-.04, "Prevention of Significant Deterioration (PSD) Permitting"

In 2014, the FFC Plant accepted a 1,000 tons per rolling 12-month period facility-wide Anti-PSD limit for SO_2 emissions to avoid undergoing a PSD review when the natural gas processing plant and all its associated equipment were removed from the plant and the plant was converted into an oil stabilization and compression facility in 2014. Prior to the conversion, SO_2 emissions were unlimited under Rule 335-3-5-.03(3). When the two-phase conversion was proposed, a netting analysis was completed based on the two-year averaging period for 2011 and 2012 (see EA for Air Permit X010). The calculated average SO_2 emissions from the facility during this period was 3,935.84 tons per year. This project significantly reduced emissions from the flare. The facility is required to maintain a record of flare emissions to demonstrate compliance with the permit limit. At any time that the allowable limit is exceeded, a deviation report shall be submitted to the Department within two working days or 48 hours.

APPLICABILITY

ADEM Admin Code r. 335-3-16-.03, "Major Source Operating Permits"

The flare is located at a facility that is a major source under this subpart for criteria pollutants. The facility is required to maintain records of flare emissions, monitor and sample the well streams to determine the volatile organic compound (VOC) and Btu content of the streams routed to the flare, and to submit a semi-annual periodic monitoring report (PMR) to the Department.

FEDERAL REGULATIONS

NEW SOURCE PERFORMANCE STANDARDS (NSPS)

APPLICABILITY

40 CFR Part 60, Subpart A, "General Provisions" | ADEM Admin. Code r. 335-3-10-.02(1)

Currently the process flare is not used to control emissions from an affected facilities under this subpart. However, if the facility is required to use the flare in the future to comply with an applicable subpart under 40 CFR Part 60, the flare would be required to comply with the more stringent opacity standards found in 40 CFR §60.18.

APPLICABILITY

40 CFR Part 60, Subpart OOOO, "Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution" [NSPS OOOO] | ADEM Admin. Code r. 335-3-10-.02(91)

When the flare was originally permitted, it was not used to demonstrate compliance with this subpart by controlling emissions from an affected facilities under this subpart and there have not been any modifications to an affected facility that would trigger applicability; therefore, there are no requirements under this subpart for the existing flare.

APPLICABILITY

40 CFR Part 60, Subpart OOOOc, "Emission Guidelines for Greenhous Gas Emission from Existing Crude Oil and Natural Gas Facilities"

If it is determined that the FFC Plant must demonstrate compliance with this subpart and the existing flare is used to control emissions from an affected facility subject to this subpart, the facility must comply by the effective date under this subpart.

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

APPLICABILITY

40 CFR Part 63 Subpart A, "General Provisions" | ADEM Admin. Code r. 335-3-11-.02(1)

Currently the process flare is not used to control emissions from any affected facilities under this subpart. However, if the facility is required to use the flare in the future to comply with an applicable subpart under 40 CFR Part 63, the flare would be required to comply with the more stringent opacity standards found in 40 CFR §63.11(b).

40 CFR PART 64, "COMPLIANCE ASSURANCE MONITORING" (CAM)

APPLICABILITY

The process flare is utilized as a control device to burn gas containing greater than 0.10 grains of H_2S/Scf. The requirement to burn off gases is considered a work practice standard and not an emission limitation. As defined in the CAM regulation, an emission limitation may be expressed in the form of a work practice, process parameter or other form of specific design. Thus, CAM is applicable to the flare and shall be utilized to assure compliance with the requirement to burn sour gases. The parameter chosen to indicate that sour gases are being burned shall be the presence of a flame or spark at the flare tip when sour gases can be vented to it.

EMISSION STANDARDS

Burn all process gas containing greater than 0.10 grains of H_2S/Scf in the process flare during emergencies, plant startup, shutdown, or any time a gas stream (other than the pilot) can be routed to the flare.

COMPLIANCE AND PERFORMANCE TEST METHODS AND PROCEDURES

Unless the flare is equipped with a continuous spark flame igniter or with a continuous burning pilot light that is monitored with a thermocouple or an equivalent device, a daily visual inspection of the flare shall be conducted.

EMISSION MONITORING

The visual inspection of the flare (if required) shall be conducted daily during daylight hours to detect the presence or absence of a spark or flame at the flare tip. As previously mentioned, the flare is monitored daily for the presence of a spark or flame from a camera monitored at the BEC Plant.

RECORDKEEPING AND REPORTING REQUIREMENTS

A record of the date, time, observer, and results of each visual inspection of the flare shall be maintained. A record of the time, date, and results of each calibration shall be maintained if a flame igniter or a thermocouple is being used. Each occurrence when a spark or flame is not maintained at the flare tip shall be reported as a deviation. Provided that there are more than six deviations that occur in a semi-annual reporting period when a spark or flame is not present at the flare tip, a Quality Improvement Plan (QIP) shall be developed and implemented.

Periodic monitoring reports (PMR) are required to be submitted to the Department on a semi-annual basis, and they are required to include deviations reported during the semi-annual reporting period.

FLARE EMISSIONS

Potential emissions from the flare are summarized in the table below. The potential flare emissions include pilot gas and vapors from the pressurized condensate tank's pressure relief valves (MSS waste gas) produced water tank, compressor seal gas, truck loading operations and vapors from full well stream flaring during upset events. Flaring of the full well stream gas is restricted to less than 10% of the year. The following emission factors were used to determine emissions from the flare:

- AP-42 Chapter 1.4 emission factors were used to determine emission particulate matter and HAPS emissions
- 40 CFR Subpart 98, Tables C-1 and C-2 emission factors were used to determine greenhouse gas (GHG) emissions
- Carbon monoxide (CO) and nitrogen oxide (NO_X) were based on TCEQ Technical guidance for chemical sources: Flares and Vapor Oxidizer: October 2000
- SO_2 emissions and volatile organic compound emissions for the flare were calculated based on the H_2S and VOC content of the waste gas stream

FLARE POTENTIAL EMISSIONS TPY							
$PM_{2.5/10}$	SO_2	NO_X	CO	VOC	H_2S	Total HAPs	GHG
0.922	999.7	8.45	72.43	46.35	10.62	0.221	17,214.8

Table 3

COMPRESSOR REQUIREMENTS

EMISSION POINT	DESCRIPTION	POLLUTANT	EMISSION LIMIT	REGULATIONS
Electric Driven Reciprocating Compressor (COMP1)		VOC	Work Practice	40 CFR §60.5365(c), Subpart OOOO [NSPS OOOO]

The following section addresses state and federal regulations which may or may not be applicable to the reciprocating compressor. The requirements for internal combustions engines are not applicable because the engine is powered by electricity.

STATE REGULATIONS

APPLICABILITY

ADEM Admin Code r. 335-3-6, "Control of Organic Emissions"

ADEM Admin Code r. 335-3-6-.09 applies to compressors; however, sources with a potential volatile organic compound (VOC) emission rate of less than 100 TPY are not subject to this regulation. Therefore, the compressor is not subject.

APPLICABILITY

ADEM Admin Code r. 335-3-16-.03, "Major Source Operating Permits"

The compressor is located at a facility that is a major source under this subpart for criteria pollutants. The facility is required to maintain records of compressor emissions and to submit a semi-annual periodic monitoring report (PMR) to the Department.

FEDERAL REGULATIONS

NEW SOURCE PERFORMANCE STANDARDS (NSPS)

APPLICABILITY

40 CFR Part 60 Subpart A, "General Provisions"

The requirements under this subpart are applicable by reference for affected facilities in subparts covered under Part 60. Table 3 of 40 CFR 60 Subpart OOOO [NSPS OOOO] covers the applicable sections of this subpart which will apply to affected facilities under NSPSOOOO [40 CFR §60.5425].

APPLICABILITY

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

Reciprocating compressors are affected facilities under the requirements of this subpart.

EMISSION STANDARDS

The compressor at the FFC Plant is a reciprocating compressor which is subject to the standards found in 40 CFR §60.5385(a)(2). The plant elected to comply with the requirement to replace the compressor rod packing prior to 36 months from the date of the most recent rod packing replacement to demonstrate compliance with this subpart. The facility must also comply with the general requirements found in 40 CFR §60.5370(a), (b). At all times, including periods of startup, shutdown, and malfunction, the compressor shall be in compliance with the standards under NSPS OOOO upon startup and the owners and operators shall maintain and operate the compressor, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.

COMPLIANCE AND PERFORMANCE TEST METHODS AND PROCEDURES

N/A

EMISSION MONITORING

Monitoring is in the form of maintaining records of the number of months since the last rod packing replacement and maintaining records of each replacement of the rod packing.

RECORDKEEPING AND REPORTING REQUIREMENTS

The plant demonstrated initial compliance for this compressor by recording the number of months of operation since the initial startup of the compressor and by submitting the first annual report containing the information specified in 40 CFR §60.5420 (b)(1) and (4). The initial annual report covering the period from October 15, 2014, through October 14, 2015, was submitted to the Department on December 17, 2015 (within ninety (90) days after the end of the initial compliance period as required) [40 CFR §60.5410, 40 CFR §60.5415(c)(2), 40 CFR §60.5420(b)].

Continuous compliance for the compressor is met by continuously recording the months of operation since the last rod packing replacement, by replacing the compressor rod packing 36 months from the date of the most recent rod packing, and by submitting subsequent annual reports to the Department by January 13 [40 CFR §60.5410(c), 40 CFR §60.5415(c)(1), (3)]. Report submittals can coincide with Title V reports if all the required content is included and if the schedule does not extend the reporting period [40 CFR §60.541(c)(2), 40 CFR §60.5420(b)].

There are no notification requirements or testing requirements for reciprocating compressors [40 CFR §60.5420(a)(1)]. The records specified in 40 CFR §60.7(f) and 40 CFR §60.5420 (c)(3) shall be maintained either onsite or at the nearest local field office for at least five (5) years.

APPLICABILITY

40 CFR Part 60 Subpart OOOOc, "Emission Guidelines for Greenhous Gas Emission from Existing Crude Oil and Natural Gas Facilities"

The Department is currently in the process of establishing guidelines for affected facilities subject to this subpart. Existing reciprocating compressors located at a centralized processing facility (CPF) is a designated facility under this subpart; therefore, the COMP1 reciprocating compressor would be required to comply with 40 CFR §60.5386c(c).

40 CFR PART 64, "COMPLIANCE ASSURANCE MONITORING" (CAM)

CAM would not be applicable for the compressor since the three applicable criteria were not met for this unit.

COMPRESSOR EMISSIONS

Potential VOC emissions from the compressor seals are found in Table 4 below. The emission factors for total organic compounds were determined using Table 2-1 of EPA Protocol for Equipment Leak Emission Estimates. Table 4.2 in the CCAC OGMP – Technical Guidance Document Number 4: Reciprocating Compressors Modified: April 2017 was used to provide emission factors GHG emissions. The worst-case operating scenario based on the gathering and boosting industry sector was used to calculate GHG emissions (primarily methane) from the compressor. Controlled emissions are based on burning compressor seal gas to the flare for combustion. The flare is assumed to have a 98% destruction efficiency.

COMPRESSOR POTENTIAL EMISSIONS TPY		
Type of Emissions	**VOC**	**GHG**
Uncontrolled Emissions	**8.81**	**380.7**
Controlled Emissions	**0.18**	**7.61**

Table 4

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STORAGE VESSEL/LOADING REQUIREMENTS

The following section addresses state and federal regulations which may or may not be applicable to storage vessels located at the FFC Plant:

The FFC Plant is equipped with the following storage vessels/tanks:

- 16,800 Gallon (4,000 Barrel) Produced Water Storage Tank (EU T6000)
- 11,760 Gallon (280 Barrel) Gun Barrel Storage Tank (EU T6100)
- 4,200 Gallon (100 Barrels) Slop Oil Storage Tank (EU T6200)
- 4,200 Gallon Miscellaneous Storage Tank storing Lube oil, Methanol (MeOH) and anti-freeze (EU MISCTKS)
- Pressurized Condensate Storage Tank

STATE REGULATIONS

APPLICABILITY

ADEM Admin Code r. 335-3-5-.03, "Petroleum Production" for Control of Sulfur Compound Emissions

This regulation applies to the control of sulfur compound emissions from each petroleum production facility that handles gas or refinery gas that contains more than 0.10 grains of hydrogen sulfide (H_2S) per standard cubic foot (Scf) (160 ppmv). The FFC Plant handles sour gas with a concentration of 0.10 grains/Scf or more of H_2S; therefore, the facility is subject to the applicable requirements of this regulation. Vapors from the condensate, produced water, gun barrel, and slop oil tanks could have an H_2S concentration of 160 ppmv or more which would require those vapors to be burned. The flare is used to combust vapors from these tanks; therefore, compliance with the requirement to burn the tank vapors will be met by complying with the requirements for the flare.

APPLICABILITY

ADEM Admin Code r. 335-3-16-.03, "Major Source Operating Permits"

The storage vessels are located at a facility that is a major source under this subpart for criteria pollutants. The facility is required to maintain records showing that the vapors from the tanks and tank loading are routed to the flare for combustion and that the facility conducts monthly audible, visual, olfactory (AVO) inspections of the closed vent system (CVS) and storage vessels as proposed by the Department. Periods when tank vapors are not routed to the flare or when the AVO inspections are not conducted on the CVS or storage vessel are considered deviations that are required to be reported in the semi-annual PMR submitted to the Department.

FEDERAL REGULATIONS

NEW SOURCE PERFORMANCE STANDARDS (NSPS)

APPLICABILITY

40 CFR Part 60 Subpart A, "General Provisions"

Provided that affected sources located at the plant are subject to one of the applicable subparts found under 40 CFR Part 60, the facility shall comply with this subpart as specified in the applicable subpart.

APPLICABILITY

40 CFR Part 60 Subpart Kb, "Standards of Performance for Storage Vessels from Petroleum Liquids"

This subpart applies to volatile organic liquid (VOL) storage vessels (including petroleum liquid storage vessels) for which construction, reconstruction, or modification commenced after July 23, 1984.

The pressurized condensate storage tank is not subject to this subpart because pressure vessels designed to operate in excess of 204.9 kilopascals (kPa) and without emissions to atmosphere are exempt from any requirements under this subpart [40 CFR §60.110b(d)(2)]. This tank will be pressurized at 50 pounds per square inch (psig) (345 kPa), and there will be no emissions vented to atmosphere since the pressure relief valves for the tank are routed to the flare for combustion.

The gun barrel tank, slop oil tank, and the miscellaneous storage tank are not subject to the requirements of this subpart because they do not meet the capacity and vapor pressure requirements for applicability under this subpart [40 CFR §60.110b(a), 40 CFR §60.112b].

The produced water storage tank does not contain a VOL as defined in 40 CFR §60.111b; therefore, this tank is not subject to this subpart.

APPLICABILITY

40 CFR Part 60 Subpart Kc, "Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) [NSPS Kc]

This subpart has not yet been adopted by the Department; however, requirements under this subpart may be applicable to the storage vessels.

This subpart applies to each storage vessel with a capacity greater than or equal to 20,000 gallons (75.7 m^3) that is used to store volatile organic liquid (VOL) for which construction, reconstruction, or modification is commenced after October 4, 2023 [40 CFR§60.110c(a)]. None of the tanks at the FFC Plant meet the design capacity requirements for applicability under this subpart; therefore, there are no requirements for storage vessels under this subpart.

APPLICABILITY

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

Storage vessels located at an oil and gas production segment are affected sources under this subpart if their potential for VOC emissions is equal to or greater than 6 TPY for a single storage vessel [40 CFR §60.5365(e)].

The 400-barrel produced water storage tank would meet the definition of a Group 2 storage vessel under this subpart as defined in 40 CFR §60.5430. This tank was constructed after April 15, 2014; however, it is not subject to the requirements of this subpart since its potential volatile organic compound (VOC) emissions are not equal to or greater than 6 TPY. The calculated uncontrolled VOC emissions from the produced water storage tank are expected to be 0.195 TPY. Even though the tank would not be subject to this subpart, the vapors from the tanks will still be controlled by the flare since there is a requirement to burn gas containing more than 160 ppmv H_2S.

The pressurized condensate storage tank is exempt under this subpart because it is a pressure vessel that is designed to operate in excess of 204.9 kPa (29.72 psia) and there will be no emissions routed to atmosphere since the pressure relief valves are routed to the flare [40 CFR §60.5430]. The miscellaneous storage tanks (MISCTKS) are not subject to the requirements of this subpart since they would not meet the definition of a storage vessel under 40 CFR §60.5430 due to the liquids stored in these units.

There are no applicable requirements under this subpart for storage vessels located at the FFC Plant.

APPLICABILITY

40 CFR 60 Subpart OOOOc, "Emission Guidelines for Greenhous Gas Emission from Existing Crude Oil and Natural Gas Facilities"

Each storage vessel designated facility, which is a tank battery that has the potential for methane emissions equal to or greater than 20 TPY, is subject to this subpart. If after review it is determined that the existing tank battery is designated as an affected storage vessel facility under this subpart because it has the potential for methane emissions equal to or greater than 20 TPY, except as specified in 40 CFR §60.5386c(d), the FFC Plant must demonstrate compliance with this subpart by the effective date under this subpart.

NEW SOURCE PERFORMANCE STANDARDS (NSPS)

APPLICABILITY

40 CFR Part 63, Subpart A, "General Provisions"

Provided that affected sources located at the plant are subject to one of the applicable subparts found under 40 CFR Part 63, the facility shall comply with this subpart as specified in the applicable subpart.

APPLICABILITY

40 CFR Part 63, Subpart EEEE, "National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)"

This subpart establishes national emission limitations, operating limits, and work practice standards for organic hazardous air pollutants (HAP) emitted from organic liquids distribution (OLD) (non-gasoline) operations at major sources of HAP emissions. The FFC Plant is not a major source of HAP emission. Additionally, this subpart does not apply to oil and natural gas production field facilities [40 CFR §63.2334(c)(1)]. Therefore, this subpart does not apply to the storage tanks or loading operations.

40 CFR PART 64, "COMPLIANCE ASSURANCE MONITORING" (CAM)

APPLICABILITY

CAM would not be applicable to the storage vessels since the three applicable criteria were not met for these units (e.g., the storage tanks are not subject to an emission limit).

STORAGE VESSEL AND LOADING EMISSIONS

Vapors from the miscellaneous storage tank are not controlled by the flare; however, vapors from all other storage tanks are routed through a closed vent system to the flare for combustion. Tank VOC emissions, only including emissions from the miscellaneous storage tank, were calculated to be 1.533 TPY. Emission factors found in AP-42 Section 7.1: Organic Liquid Storage Tanks (June 2020) were used to calculate Emissions from all other storage vessels are routed to the flare for combustion.

Emission factors for truck loading were found in Tables 5.2-1 of AP 42 Section 5.2: Transportation and Marketing of Petroleum Liquids. Per the application, the efficiency of the vapor collection system is 98% for both produced water (PW) and miscellaneous loading. Uncontrolled VOC emissions from loading operations are 1.16 TPY. These vapors are routed to the flare for combustion.

RECOMMENDATIONS

Based on the information provided in the permit application and supplemental attachments, I recommend that the Department issue the fifth renewal of Major Source Operating Permit No.: 502-0005 for the Flomaton/Fanny Church Oil and Gas Production Facility.

Provided that the terms and conditions in the permit are adhered to, SEP Escambia LLC. should be able to comply with all applicable State and Federal Air Pollution regulations. Pending the 30-day public comment period and 45-day EPA review period, I recommend issuance of this renewal permit.

_____

Harlotte M. Bolden-Wright
Industrial Minerals Section
Energy Branch
Air Division

August 22, 2025
Draft

APPENDIX A: DRAFT PROVISOS