

Prevention of Significant Air Quality Deterioration Review

Final Determination

March 2024

Facility Name: Talbot Energy Facility

City: Box Springs

County: Talbot

AIRS Number: 04-13-263-00013

Application Number: 767450

Date Application Received: September 7, 2023



State of Georgia
Department of Natural Resources
Environmental Protection Division
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BACKGROUND

On September 7, 2023, Talbot Energy Facility submitted an application for an air quality permit to modify four existing simple-cycle combustion turbines to burn fuel oil in addition to natural gas which is currently permitted for the turbines. The facility is located at 9125 Cartledge Road in Box Springs, Talbot County. The project will modify combustion turbines T1, T2, T3, and T4, which are rated at 108 MW each, for the new fuel and increase the allowed operating hours of these turbines. In addition, two new fuel oil storage tanks with a capacity of 1.58 million gallons each and one new fire pump engine rated at 455 horsepower will be added to support the operation of the modified turbines.

On February 12, 2024, the Division issued a Preliminary Determination stating that the modifications described in Application No. 767450 should be approved. The Preliminary Determination contained a draft Air Quality Permit for the construction and operation of the modified equipment.

The Division requested that Talbot Energy Facility place a public notice in a newspaper of general circulation in the area of the existing facility notifying the public of the proposed construction and providing the opportunity for written public comment. Such public notice was placed in the *Talbotton New Era* (legal organ for Talbot County) on February 22, 2024. The public comment period expired on March 25, 2024.

During the comment period, comments were received from U.S. EPA Region IV. There were no comments received from the facility or the general public.

A copy of the final permit is included in Appendix A. A copy of written comments received during the public comment period is provided in Appendix B.

U.S. EPA REGION 4 COMMENTS

Comments were received from Brad Akers, Air Permits Section Manager, U.S. EPA Region 4, by letter dated March 11, 2024. The comments are typed, verbatim, below and were the result of reviews by Kathleen Weil of U.S. EPA Region 4.

Comment 1

VOC BACT—The preliminary determination lists combustion process design as BACT for VOC emissions from combustion turbines T1-T4; however, there is no mention of combustion process design in the permit. Please include a condition requiring the permittee to implement this BACT requirement.

EPD Response:

The Division agrees with the comment. In researching this comment, the Division also noted that the preliminary determination similarly lists combustion process design as BACT for CO emissions from combustion turbines T1-T4, and, similarly, there was no mention of combustion process design in the permit for CO. Consequently, the condition requiring the implementation of this BACT requirement was also updated for CO emissions. Therefore, Condition 3.3.24d. is updated to read as follows:

- d. For carbon monoxide and volatile organic compounds, use combustion process design and use good combustion and operating practices.

Comment 2

Level of Detail—The permit requires “good combustion and operating practices” for the combustion turbines, fire pump engine, and storage tanks but does not specify what these practices are or how they will be enforced. In addition, condition 3.3.33 requires the use of “clean fuel.” Please define these terms and include monitoring, recordkeeping, and reporting conditions to make the requirements enforceable.

EPD Response:

The Division agrees with this comment and has added language to Conditions 3.3.24, 3.3.33, and 3.3.34. The following language was added to the end of Condition 3.3.24:

Determination of whether good combustion, operating, and/or maintenance practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the sources.

Condition 3.3.33 has been updated to read as follows:

- 3.3.33 The Permittee shall use good combustion practices, limit the hours of operation, and use clean fuels as BACT on the emergency fire pump engine with ID Nos. FP1. Determination of whether good combustion practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. Clean fuels shall mean a fuel that meets the requirements of Condition 3.3.29.
[40 CFR 52.21(j)]

Condition 3.3.34c has been updated to read as follows:

- c. Use good operating and maintenance practices. Determination of whether good operating and maintenance practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the sources.

Comment 3

Applicable Requirement—Condition 3.3.30 cites 40 CFR 60.4211(c) but omits the requirement to purchase a certified engine. Please include this requirement in the permit.

EPD Response:

The Division agrees and has updated Condition 3.3.30 to read as follows:

- 3.3.30 For the ~~The~~ emergency fire pump engine with ID No. FP1, the Permittee shall purchase an engine certified to meet the applicable requirements in 40 CFR 60 Subpart IIII. The engine shall each be installed and configured according to the specifications and instructions provided by the manufacturers.
[40 CFR 60.4211(c)]

Comment 4

Typographical Error—Condition 4.2.3 states that the requirements apply “when the combustion turbine is fired with natural gas,” but should say “when the combustion turbine is fired with fuel oil.” Please correct the condition accordingly.

EPD Response:

The Division agrees and has updated Condition 4.2.3 to read as follows

- 4.2.3 Within 60 days after achieving the maximum production rate at which each combustion turbine with ID Nos. T1, T2, T3, and T4 will be operated on fuel oil following modification to allow for fuel oil combustion, but not later than 180 days after the initial startup of each turbine following modification, the Permittee shall conduct the following performance tests when the combustion turbine is fired with ~~natural gas~~ fuel oil and furnish to the Division a written report of the results of each performance tests:

APPENDIX A

AIR QUALITY PERMIT

4911-263-0013-V-07-1

APPENDIX B

WRITTEN COMMENTS RECEIVED DURING COMMENT PERIOD