

STATEMENT OF BASIS

Title V Air Operation Permit Renewal
Permit No. 0990005-051-AV

APPLICANT

The applicant for this project is Okeelanta Corporation/New Hope Power Company (NHPC). The applicant's responsible official and mailing address are: Jose Gonzalez, Vice President of Industrial Operations, Okeelanta Corporation, Okeelanta Cogeneration Plant/Okeelanta Sugar Mill and Refinery, 8001 U.S. Highway 27 South, South Bay, FL 33493.

FACILITY DESCRIPTION

The applicant operates the existing Okeelanta Cogeneration Plant/Okeelanta Sugar Mill and Refinery, which is in Palm Beach County at 8001 U.S. Highway 27 South, South Bay, Florida.

The facility consists of two adjacent plants. Okeelanta Corporation (ARMS ID No. 0990005) operates an existing sugar mill (SIC No. 2061) and sugar refinery (SIC No. 2062) including sugar packaging and transshipment activities. New Hope Power Company (ARMS ID No. 0990332) operates an existing 140-megawatt (MW) cogeneration plant (nominal generating capacity) that provides process steam for the sugar mill and refinery operations as well as generating electricity for sale to the power grid (SIC 4911). The cogeneration plant, sugar mill, and sugar refinery are all considered a single facility for purposes of the PSD and Title V regulatory programs.

The primary sources of air pollution include: three 760 million British thermal units per hour (MMBtu/hour) cogeneration boilers; one 337.7 MMBtu/hour package boiler to support the cogeneration boilers; transfer and storage of wood chip and bagasse fuels; transfer and storage of sugar; a paint spray booth; and multiple emergency and non-emergency engines. The facility includes other miscellaneous unregulated emissions units and activities.

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

REGULATED EMISSIONS UNIT IDENTIFICATION NUMBERS AND DESCRIPTIONS

ARMS ID No. 0990005 – Okeelanta Corporation		
EU No.	Emissions Unit Description	Process Area
<i>Regulated Emissions Units</i>		
018	Central Vacuum System No. 1	Transshipment Facility
019	Sugar Packaging Lines 0-4, 5A and 9	Transshipment Facility
020	Sugar Grinder	Transshipment Facility
021	Rotary Dryer, Central Dust Collection System No. 1 with Rotoclone No. 1	Sugar Refinery
022	Central Dust Collection System No. 2 with Rotoclone (No.2) "B" System	Sugar Refinery
023	Cooler No. 1 with Rotoclone No. 3	Sugar Refinery
024	Cooler No. 2 with Rotoclone No. 4	Sugar Refinery
025	Fluidized Bed Dryer/Cooler with Baghouse	Sugar Refinery
030	Sugar Silos Nos. 1, 2, and 3 (Points #1101-1103)	Transshipment Facility
034	Bulk Load-Out Operation with baghouse	Sugar Refinery
035	Transfer Bulk Load-Out Station	Sugar Refinery
043	Sugar Refinery Alcohol Usage	Sugar Refinery
045	Powdered Sugar Dryer/Cooler, Packaging Lines 8A, 8B, 12, 13, and	Transshipment Facility

STATEMENT OF BASIS

ARMS ID No. 0990005 – Okeelanta Corporation		
EU No.	Emissions Unit Description	Process Area
	14	
046	Powdered Sugar Grinder	Transshipment Facility
048	Paint Booth	Okeelanta Shop
049	Baghouse (currently inactive)	Transshipment
054	“A” System – Wet Rotoclone (No. 6)	Sugar Refinery
055	“C” System – Wet Rotoclone (No. 7)	Sugar Refinery
057	Specialty Sugar Product 300 hp gas-fired package boiler	Refined Sugar Warehouse No. 3
059	Pkg. Lines 17, 18, 19 and bulk bag line with baghouse	Warehouse 3
060	Okeelanta – Emergency Fire Pumps	Okeelanta Sugar Mill
061	Okeelanta – Non-Emergency CI Engines (Tier 3 Certified)	Okeelanta Sugar Mill
062	Okeelanta – Non-Emergency CI Engine (Tier 4 Certified)	Okeelanta Sugar Mill
063	DC Fire Pump	Okeelanta Sugar Mill
<i>Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)</i>		
033	Sugar Refinery Miscellaneous Support Equipment	Sugar Refinery
036	Shop Operations	Sugar Mill
037	Sugar Mill Boiler House	Sugar Mill
038	Sugarcane Dumping Area	Sugar Mill
039	Sugarcane Processing Facility	Sugar Mill
040	Fuel Tank Farm	Facility
041	Potable Water System	Facility
042	Sewer Plant	Facility
044	Okeelanta Facility - Miscellaneous Unregulated Activities	Okeelanta Facility
050	Transshipment Facility, Miscellaneous Support Equipment	Transshipment Facility
ARMS ID No. 0990332 – New Hope Power Company		
EU No.	Emissions Unit Description	Process Area
<i>Regulated Emissions Units</i>		
001	Cogeneration Boiler A	Cogeneration Plant
002	Cogeneration Boiler B	Cogeneration Plant
003	Cogeneration Boiler C	Cogeneration Plant
004	Cogeneration Plant – Material Handling and Storage	Cogeneration Plant
007	Cogeneration Plant – Emergency Fire Pumps	Cogeneration Plant
008	Cogeneration Plant – NHPC Fire Water Makeup (Emergency RICE)	Cogeneration Plant
009	Cogeneration Plant – Air Compressor #2 (Emergency RICE)	Cogeneration Plant
<u>010</u>	<u>Sugar Mill Refinery Package Boiler</u>	<u>Cogeneration Plant</u>
<i>Unregulated Emissions Units and Activities (see Appendix U, List of Unregulated Emissions Units and/or Activities)</i>		

STATEMENT OF BASIS

ARMS ID No. 0990005 – Okeelanta Corporation		
EU No.	Emissions Unit Description	Process Area
005	Cogeneration Plant – Miscellaneous Support Equipment	Cogeneration Plant

APPLICABLE REGULATIONS

Based on the Title V air operation permit renewal application received on August 3, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table:

Regulation	EU No. (ARMS ID 0990005)	EU No. (ARMS ID 0990332)
<i>Federal Rule Citations</i>		
40 CFR 60, Subpart A, NSPS General Provisions	061, 062, 063	001, 002, 003, 008, 009
40 CFR 60, Subpart Da, Electric Utility Steam Generating Units for which Construction is Commenced after September 18, 1978		001, 002, 003
40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units		010
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	061, 062, 063	008, 009
40 CFR 63, Subpart A, NESHAP General Provisions	057, 060, 061, 062, 063	001, 002, 003, 007, 008, 009
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines	060, 061, 062, 063	007, 008, 009
40 CFR 63, Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.	057	001, 002, 003
<i>State Rule Citations</i>		
Rule 62-213.400, F.A.C., Prevention of Significant Deterioration.		001, 002, 003
Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)		001, 002, 003
Rule 62-296.405, F.A.C., Fossil Fuel Fired Steam Generators with More Than 250 MMBtu/hour Heat Input.		001, 002, 003
Rule 62-296.406, F.A.C., Fossil Fuel Fired Steam Generators with Less Than 250 MMBtu/hour Heat Input.	057	
Rule 62-296.410, F.A.C., Carbonaceous Fuel Burning Requirements.		001, 002, 003
Rule 62-296.570, F.A.C., F.A.C., Reasonably Available Control Technology (RACT) – Requirements for Major VOC- and NOx-Emitting Facilities		010

This facility also includes miscellaneous unregulated/insignificant emissions units and/or activities.

STATEMENT OF BASIS

PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility. This renewal incorporates concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T), removes references to emission units and other equipment that have been removed from the facility, revises existing conditions based on the current federal and state regulations, and makes miscellaneous revisions based on the current Title V air operation permit template.

PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation (Title V) Permit Renewal received **August 3, 2024**

Application for a concurrent Air Construction (AC) Permit received **September 30, 2024**

Draft Title V permit renewal package and concurrent draft AC permit package issued on **December 26, 2024**

Revised draft Title V permit renewal package and concurrent draft AC permit package issued on **February 4, 2025**

Proposed Title V permit renewal package and concurrent draft AC permit package issued on **March 25, 2025**

PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 2062 – Cane Sugar Refinery.

North American Industry Classification System (NAICS): 311314 – Cane Sugar Manufacturing.

HAP: The facility is identified as a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

CAM: Compliance Assurance Monitoring (CAM) the Cogeneration Boilers A, B and C (respectively referred to as emissions units 001, 002 and 003) for the controlled emissions of particulate matter (PM). The cogeneration boilers utilize mechanical dust collectors and an electrostatic precipitator (ESP) to comply with the applicable emission standards for PM.

GHG: The facility is identified as a major source of greenhouse gas (GHG) pollutants.

PROJECT REVIEW

Concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T) authorized activated carbon injection system removal requirements and a reduction in visible emissions (VE) testing frequency for the sugar refinery, which have been incorporated into this Title V permit. Conditions were revised to reflect revisions made to NSPS and NESHAP regulations for 40 CFR 60, Subparts A and III and 40 CFR 63, Subparts A and DDDDD. EU No. 010 and 40 CFR 60, Subpart Db have been incorporated into the permit. Appendices were updated based on current federal and state regulations. Miscellaneous changes were made to reflect the current Title V air operation template. Permit conditions and descriptive language were revised to reflect the removal of fly ash and activated carbon storage silos, EU Nos. 009, 018, 021, and 049. Descriptive language and permit conditions were revised to reflect reclassification of the engines under EU Nos. 061 and 062. Appendices were updated to reflect the current federal and state regulations. Appendix CP was removed to reflect the removal of EU No. 021. Appendix U was revised to reflect the removal of a distillate oil storage tank and reclassification of engines. Changes to the permit made as part of this revision are shown in ~~strike-through~~ format for deletions and in double underline format for additions. For ease of identification, all changes have also been **highlighted in yellow** within the permit document.

STATEMENT OF BASIS

General Changes

1. Miscellaneous changes were made throughout the permit to reflect the current Title V air operation permit template.
2. Headers and footers have been revised to reflect that the Okeelanta Cogeneration Plant and Okeelanta Sugar Mill and Refinery are one facility for Title V and PSD permitting purposes.
3. Minor typographical errors were made throughout the permit.

Table of Contents Changes

4. The Table of Contents has been revised to reflect the removal of EU Nos. 009 (Cogeneration Plant – Air Compressor #2 (Emergency RICE)) and 018 (Central Vacuum System No. 1), the addition of EU No. 010 (Sugar Mill Refinery Package Boiler), the removal of EU No. 049 (Inactive Transshipment Facility Baghouse), and the addition of 40 CFR 60, Subpart Db as an applicable set of regulations to facility EUs.

Section I (Facility Information) Changes

5. The facility description in Subsection A has been revised to reflect the addition of EU No. 010 (Sugar Mill Refinery Package Boiler).
6. The summary of EUs in Subsection B has been revised to the addition of EU No. 010 (Sugar Mill Refinery Package Boiler) and the removal of EU Nos. 018 (Central Vacuum System No. 1), 009 (Cogeneration Plant – Air Compressor #2 (Emergency RICE)), 021 (Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1), and 049 (Inactive Transshipment Facility Baghouse).
7. The summary of applicable regulations has been revised to reflect the addition of EU No. 010 (Sugar Mill Refinery Package Boiler) and corresponding applicable requirements 40 CFR 60, Subpart Db and Rule 62-296.570, F.A.C. and the removal of EU No. 009 (Cogeneration Plant – Air Compressor #2 (Emergency RICE)).

Section II (Facility-Wide Conditions) Changes

8. Section II was revised to reflect the current version of the Florida Administrative Code (F.A.C.).
9. To reflect the current Title V air operation permit template, a summary of reporting requirements has been added below Facility-Wide Condition **FW9**.

Section III (Emissions Units and Specific Conditions) Changes

Subsection A

10. To reflect the removal of the requirements to operate the optional activated carbon injection (ACI) systems authorized by concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T), the permitting note below Specific Condition **A.5** (Control Equipment) has been removed, and Specific Conditions **A.15** (Process Control Parameters) and **A.18** (Compliance Requirements) have been revised.
11. Specific Condition **A.8** (Emissions Standards) has been revised to reflect the current version of 40 CFR 63, Subpart DDDDD.
12. Specific Condition **A.19** (Common Testing Requirements) has been revised to reflect the current version of the F.A.C.
13. Specific Conditions **A.23** through **A.27** have been added to reflect applicable requirements from 40 CFR 60, Subpart Da and 40 CFR 63, Subpart DDDDD.

Subsection B

14. The EU description has been revised to reflect removal of the requirements to operate the optional activated carbon injection (ACI) systems authorized by concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T) and the removal of the activated carbon and fly ash storage silos.

STATEMENT OF BASIS

15. Specific Condition **B.1** (Methods of Operation) has been revised to reflect the removal of the requirements to operate the optional activated carbon injection (ACI) systems authorized by concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T).
16. Specific Conditions **B.3** (Baghouses), **B.6** (Baghouse Vents), **B.8** (Baghouse Vents), **B.9** (Test Reports) have been removed to reflect the removal of a fly ash storage silo and associated baghouse opacity limits and compliance requirements.

Subsection C

17. The EU description has been revised to reflect that Fire Pump #2 has been removed from the facility.
18. Specific Condition **C.1** (Hours of Operation) has been revised to reflect the current version of 40 CFR 63, Subpart ZZZZ.

Subsection D

19. The EU description has been revised to reflect the removal of EU No. 009 (Cogeneration Plant – Air Compressor #2 (Emergency RICE)).
20. Specific Conditions **D.1-D.6**, **D.8**, and **D.9** have been revised to reflect current language in 40 CFR 60, Subpart IIII that applies to emergency engines.
21. Specific Conditions **D.5** (Carbon Monoxide) and **D.6** (Particulate Matter) have been revised to reflect the removal of EU No. 009 (Cogeneration Plant – Air Compressor #2 (Emergency RICE)).
22. Specific Condition **D.10** (Common Testing Requirements) has been revised to reflect the current version of the F.A.C.

Subsection E

23. Permit No. 0990332-026-AC authorized the construction of EU No. 010 (Sugar Mill Refinery Package Boiler), a natural gas fired boiler regulated under 40 CFR 60, Subpart Db and 40 CFR 63, Subpart DDDDD. Federal regulations and regulations established in this air construction permit have been incorporated into this subsection, which has been created solely for EU No. 010. All subsequent subsections have been renamed accordingly.

Subsection F

24. The EU description has been revised to reflect the removal of EU No. 021 (Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1) from the facility.
25. Specific Condition **F.1** (Permitted Capacities) has been revised to reflect the incorporation of Administration Correction No. 0990005-050-AV and the removal of EU No. 021 (Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1) from the facility.
26. Specific Conditions **F.3** (Methods of Operation), **F.5** (Cyclonic Control Devices), **F.7** (Visible Emissions), **F.9** (Potential PM/PM₁₀ Emissions), and **F.10** (PM/PM₁₀ Emission Factors) have been revised to reflect the removal of EU No. 021 (Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1) from the facility.
27. Specific Condition **F.13** (Common Testing Requirements) has been revised to reflect the current version of the F.A.C.
28. Specific Condition **F.14** (Annual Compliance Tests Required) has been removed to reflect the removal of annual testing requirements authorized by concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T).

Subsection G

29. To reflect that EU Nos. 018 (Central Vacuum System No. 1) and 049 (Inactive Transshipment Facility Baghouse) have been removed from the facility, these EUs have been removed from the EU description.

STATEMENT OF BASIS

30. Specific Condition **G.7** (Common Testing Requirements) has been revised to reflect the current version of the F.A.C.

Subsection I

31. Minor clarifications of the emergency engine model numbers were added to the EU description.
32. Specific Condition **I.1** (Hours of Operation) has been revised to reflect the current version of 40 CFR 63, Subpart ZZZZ.

Subsection J

33. 5 engines that drive irrigation pumps were removed from EU No. 061, because these engines, previously classified as stationery, have been moved throughout the facility frequently due to the changing design of the facility canal system. The EU description has been revised to reflect this reclassification.
34. Specific Condition **J.3** (Operation and Maintenance) has been revised to reflect the current version of 40 CFR 60, Subpart IIII.
35. Specific Conditions **J.4** (NO_x + NMHC Emissions) and **J.6** (PM Emissions) have been revised to reflect that one engine regulated under EU No. 061 is a non-emergency engine with a model year of 2014 and capacity of 125 kilowatts (kW), thereby subjecting it to different emissions standards in 40 CFR 60, Subpart IIII. These conditions were corrected to reflect the correct emissions standards.
36. Specific Condition **J.8** (Testing Requirements) has been revised to reflect the addition of applicable testing requirements in 40 CFR 60, Subpart IIII for new engines.

Subsection K

37. Specific Condition **K.12** (Annual Compliance Report) has been revised to incorporate the reporting deadline from 40 CFR 63, Subpart DDDDD.

Subsection L

38. Specific Condition **L.2** (Hours of Operation) has been revised to reflect the current version of 40 CFR 60, Subpart IIII. Language that is not applicable to fire pump engines has been removed from this condition.
39. Specific Condition **L.9** (Compliance Test Prior to Renewal) has been removed because Rule 62-297.310, F.A.C. does not apply to emergency engines.
40. Specific Condition **L.13** (Special Annual Report) has been removed because the underlying 40 CFR 60, Subpart IIII reporting requirement, does not apply to fire pump engines.

Appendices Changes

41. Appendix CP (Compliance Plan) has been removed because EU Nos. 021 (Rotary Dryer, Central Dust Collection System No. 1/Wet Rotoclone No. 1), 031 (Railcar Receiver No. 1), and 032 (Railcar Receiver No. 2), which are regulated under Appendix CP, have been removed from the facility.
42. The Operating and Maintenance Plan in Appendix OM has been revised to reflect the removal of the requirement to operate ACI systems authorized by concurrent Air Construction Permit No. 0990332-030-AC (PSD-FL-196T).
43. Appendices NSPS Subpart A, NSPS Subpart IIII, NESHAP Subpart A, and NESHAP Subpart ZZZZ have been revised to reflect the current versions of corresponding federal regulations.
44. Because EU No. 010 (Sugar Mill and Refinery Package Boiler) has been incorporated into this permit, Appendix NSPS Subpart Db has been added to reflect the applicability of this regulation to EU No. 010.
45. Appendix RR, Appendix TR, and Appendix TV have been revised to reflect the current version of the F.A.C.
46. The 5 stationary engines that were formerly part of EU No. 061 and have been reclassified as nonstationary have been moved to Appendix U (List of Unregulated Emissions Units and/or Activities).

STATEMENT OF BASIS

47. A 50,000-gallon distillate oil storage tank has been removed from Appendix U (List of Unregulated Emissions Units and/or Activities) because it has been removed from the facility.
48. Table H (Permit History) has been updated with entries corresponding to permits that have been issued or withdrawn since the issuance of the previous Title V air operation permit renewal.

CONCLUSION

This project renews the initial Title V air operation permit No. 0990005-044-AV, which was effective on March 18, 2020. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.