Title V Air Operation Permit Revision
Permit No. 0510003-057-AV

## APPLICANT

The applicant for this project is United States Sugar Corporation. The applicant's responsible official and mailing address are: Mr. Neil Smith, Vice President and General Manager, United States Sugar Corporation, 111 Ponce de Leon Avenue, Clewiston, FL 33440.

## FACILITY DESCRIPTION

The applicant operates the Clewiston Sugar Refinery, which is located at the intersection of W.C. Owens Avenue and State Road 832 in Hendry County, Florida. The facility has boilers and process equipment to refine sugar from raw sugar feedstock. The operation is subject to an approved Compliance Assurance Monitoring Plan (CAM) as part of the Title V air permit conditions, to provide compliance assurance of meeting pollutant limitations.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

## PROJECT DESCRIPTION

The purpose of this permitting project is to revise the existing Title V air operation permit No. 0510003-053-AV. This is the third revision to the Title V air operation permit. This Title V air operation permit revision incorporates three air construction permits: Nos. 0510003-054-AC, 0510003-055-AC and 0510003-056-AC. This permit revision also incorporates the NESHAP requirements for Industrial, Commercial, and Institutional Boilers and Process Heaters and Reciprocation Internal Combustion Engines.

## PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Revision received September 3, 2013. The complete application was substantially modified on April 9, 2014.

## PRIMARY REGULATORY REQUIREMENTS

Title III: 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 does operate units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

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

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies, as defined in the Title V permit.

## PROJECT REVIEW

REVISION REQUESTED BY APPLICANT

Air Construction Permit 0510003-054-AC authorized replacing the fuel oil burners with natural gas burners in the granular carbon regeneration furnace and in its associated control equipment (afterburner). The air construction permit also changes the allowable fuel from distillate oil to natural gas in the granular carbon regeneration furnace. This revision incorporates the construction permit as follows:

The description for EU-017 is revised to reflect the consumption rates of natural gas instead of fuel oil.

Permit Condition F.1. Authorized Fuel is changed to natural gas.

Permit Condition F.10, Renewal Compliance Tests has been revised to specify the test dates.

Air Construction Permit 0510003-055-AC authorized the construction of a new baghouse to replace the existing Sugar Packaging Line baghouse and to relocated the existing Packaging Line baghouse to serve the Bulk Loadout Operations. This revision incorporates the construction permit as follows:

Page 3 and Page 38: A new emission unit number and description, 045 Bulk Loadout Operations, are added to the tables of Regulated Emission Units.

Condition G.4 Baghouse Emission Limits is modified to include the emission limits for each baghouse.

Condition G.10 Renewal Compliance Tests is added to the permit.

The results of Initial Compliance Testing have not been submitted at the time of this Draft. A condition to test, G.8., and a condition to report, G.14., have been added to the permit.

Air Construction Permit 0510003-056-AC authorized the sides and rear waterwalls in Boiler No. 7 with modern membrane style waterwalls. This revision incorporates the construction permit as follows:

The description in Section 3, Subsection C of Boiler 7 (EU-014) is changed to reflect that the boiler is a hybrid suspension-grate boiler.

The results of Initial Compliance Testing have not been submitted at the time of this Draft. A condition to test, C.16., and a condition to report, C.30., have been added to the permit.

The permittee requested that the description of the maximum design processing rate of the granular carbon regenerative furnace (GCRF) (EU-017) be revised to from 40,000 pounds of cane sugar per day to 60,000 pounds of regenerative carbon (dry basis) per day. BSP Thermal Systems, Inc. confirmed the operating capacity of the furnace (letter dated June 18, 2014).

The permittee stated that the agricultural field and cane engines are not support facilities for the sugar mill. Pursuant to U.S. Sugar's request dated November 21, 2013, agricultural field engines and cane engines are not addressed by this permitting action and are not included in this Title V permit for the Clewiston sugar mill. The regulatory status of these engines will be handled separate from this permit and permitting action. The permitting note on page 3 of the permit about the agricultural field and cane engines is removed and references to these engines in Appendix E have been removed. (The permittee also stated that no permitting of these engines is required under the CAA. The Department has not concurred, but will address the regulatory status and permitting requirements of these engines separately from this permit and permitting action.).

The Department determined that three stationary field engines may be part of this Title V facility. The permittee converted the pumps powered by these engines to electric powered pumps; therefore, the stationary engines no longer exist.

The permittee requested revisions to Permit Conditions A.19 and B.20. to delete references to 40 CFR 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units. Boilers 1, 2 and 4 are not subject to Subpart Dc because of the sizes of the boilers. The boilers are not subject to 40 CFR Subpart Db, New Source Performance Standards [NSPS] for Industrial-Commercial-Institutional Steam Generating Units, because the construction dates of the boilers precede the applicability date of the code.

## REVISIONS REQUIRED BY RULE CHANGE

NESHAP Provisions: The boilers of the facility are subject to 40 CFR 63 Subparts A and DDDDD, General Conditions and Industrial, Commercial, and Institutional Boilers and Process Heaters. Appendix O of this permit summarizes these provisions.

Permit Conditions C.30, D.26 and J.14 are added to the permit for Boiler 7, Boiler 8 and the refinery package boiler, respectively.

Appendix O is revised to include the new requirements of 40 CFR 63 Subpart DDDDD.

## CONCLUSION

The operating permit has changes in the following Sections:

| SECTION | SUB SECTION | UNIT | REVISED CONDITION | PAGES |
|---|---|---|---|---|
| 1 | B | Summary of Regulated Emissions Units | Table and permitting note | 3, 4 |
| 3 | C | Boiler 7 | Description, C.16., C.30. and C.32. | 20, 22, 23 and25 |
| 3 | C | Boiler 8 | D.26. | 33 |
| 3 | F | GCRF | Description, F.1., F.11. | 35-37 |
| 3 | G | Miscellaneous Sugar Refinery Sources | Description, G.4, G.8, G.10. andG.14. | 38 - 40 |
| 3 | J | Refinery Package Boiler | J.1 and J.14. | 46, 47 |
| 4 | App. O | Industrial, Commercial, and Institutional Boilers and Process Heaters | NESHAP Subpart: DDDDD | O-120 – O-222 |

This revision is issued under the provisions of Chapter 403, Florida Statues (F.S.), and Chapters 62-4, 62-210 and 62-213, F.A.C.