

Florida Department of
Environmental Protection

Memorandum

To: Jeff Koerner, Air Permitting and Compliance Section *JK*
From: Tammy McWade, Air Permitting and Compliance Section *smc*
Date: June 27, 2011
Subject: Draft Air Permit No. 0510003-048-AC
PSD-FL-415
United States Sugar Corporation
Clewiston Sugar Mill and Refinery
H₂S Degasification Project

Attached for your review is a draft PSD air construction permit package for the existing U.S. Sugar Clewiston Sugar Mill and Refinery, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. The draft permit authorizes the after-the-fact construction and operation of five new water wells and two degasification systems. When the equipment was installed 2008, U.S. Sugar was unaware that a PSD air construction permit would be necessary in addition to the water permit. The degasification systems essentially strip hydrogen sulfide (H₂S) to the atmosphere. The potential H₂S emissions are approximately 18 tons per year (TPY), which exceeds the PSD significant emission rate of 10 TPY for H₂S. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance.

Day 90 of the permitting time clock is July 21, 2011.

I recommend your approval of the attached draft permit package.

Attachments

JFK/ttm

P.E. CERTIFICATION STATEMENT

PERMITTEE

United States Sugar Corporation
111 Ponce De Leon Avenue
Clewiston, FL 33440


Draft Permit No. 0510003-048-AC
PSD-FL-415
U.S. Sugar Clewiston Facility
H₂S degasification Project
Hendry County, Florida

PROJECT DESCRIPTION

U.S. Sugar Corporation operates the existing U.S. Sugar Clewiston Facility located at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. The draft permit authorizes the after-the-fact construction and operation of five new water wells and two degasification systems. When the equipment was installed 2008, U.S. Sugar was unaware that a PSD air construction permit would be necessary in addition to the water permit. The degasification systems essentially strip hydrogen sulfide (H₂S) to the atmosphere. The potential H₂S emissions are approximately 18 tons per year (TPY), which exceeds the PSD significant emission rate of 10 TPY for H₂S. Therefore, the project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (F.A.C.) and the preconstruction review requirements for major stationary sources specified in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

The Department's preliminary BACT determination for H₂S emissions is 18.0 tons per consecutive 12-months based on monitoring water flow rates to the degasification systems and monitoring the H₂S concentration in the raw well water. If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the draft permit includes a provision to request the permittee to revisit this BACT determination and investigate controls. EPA has not established an acceptable ambient monitoring method or required ambient monitoring networks for H₂S impacts; therefore, an ambient air quality analysis is not required. Based on information provided by the applicant, the addition of a packed tower scrubber to remove H₂S emissions is not cost effective at this time. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features).



Jeff Koerner, P.E.
Registration Number 49441

(Date)



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

June 27, 2011

Electronically Sent – Received Receipt Requested

Neil Smith, Vice President and General Manager
United States Sugar Corporation
111 Ponce De Leon Avenue
Clewiston, FL 33440

Re: Draft Air Permit No. 0510003-048-AC
PSD-FL-415
U.S. Sugar Clewiston Sugar Mill and Refinery
H₂S Degasification Project

Dear Mr. Smith:

On April 22, 2011, you submitted an application for an air construction permit subject to the preconstruction review requirements of Rule 62-212.400, Florida Administrative Code, for the Prevention of Significant Deterioration (PSD) of Air Quality. The purpose of the project is to obtain an after-the-fact air construction permit to construct to install and operate five new water wells and two hydrogen sulfide (H₂S) degasification systems. This work was conducted at the existing U.S. Sugar Clewiston Facility, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. Enclosed are the following documents: Written Notice of Intent to Issue Air Permit; Public Notice of Intent to Issue Air Permit; Technical Evaluation and Preliminary Determination; and Draft Permit with Appendices.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the Project Engineer, Tammy McWade, at 850/717-9086.

Sincerely,

Jeffery F. Koerner, Program Administrator
Permitting and Compliance Section
Division of Air Resource Management

Enclosures

JFK/ttm

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

United States Sugar Corporation
111 Ponce De Leon Avenue
Clewiston, FL 33440

Authorized Representative:
Neil Smith, Vice President and General Manager

Draft Permit No. 0510003-048-AC
PSD-FL-415
U.S. Sugar Clewiston Sugar Mill and Refinery
H₂S Degasification Project
Hendry County, Florida

Facility Location: United States Sugar Corporation operates the existing U.S. Sugar Clewiston Sugar Mill and Refinery, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida.

Project: The purpose of the project is to obtain an after-the-fact air construction permit to construct and operate five new water wells and two hydrogen sulfide (H₂S) degasification systems. The project is subject to the preconstruction review requirements of Rule 62-212.400, Florida Administrative Code (F.A.C), the Prevention of Significant Deterioration (PSD) of Air Quality, for hydrogen sulfide H₂S. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at the address or phone number listed above. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit and requests for a public meeting for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. In addition, if a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within fourteen 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

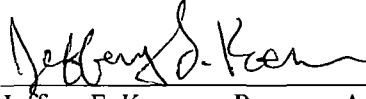
A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Jeffery F. Koerner, Program Administrator
Permitting and Compliance Section
Division of Air Resource Management

6-27-11

Date

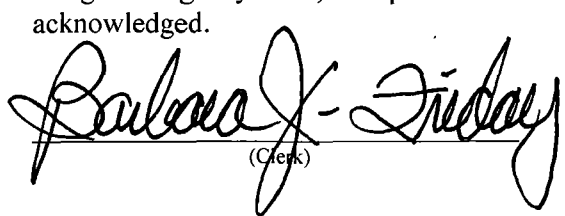
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 6/27/11 to the persons listed below.

- Mr. Neil Smith, U.S. Sugar Corporation (nsmith@ussugar.com)
- Mr. Keith Tingberg, U.S. Sugar Corporation (ktingberg@ussugar.com)
- Mr. David Buff, P.E., Golder Associates, Inc. (dbuff@golder.com)
- Mr. Ajaya Satyal, South District Office (ajaya.satyal@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
- Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

6/27/11
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation

Draft Air Permit No. 0510003-048-AC / PSD-FL-415
United States Sugar Corporation, Clewiston Sugar Mill and Refinery
Hendry County, Florida

Applicant: The applicant for this project is United States Sugar Corporation. The applicant's authorized representative and mailing address is: Neil Smith, Vice President and General Manager, United States Sugar Corporation, U.S. Sugar Clewiston Facility, 111 Ponce De Leon Avenue, Clewiston, Florida, 33440.

Facility Location: The United States (U.S.) Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida.

Project: The applicant requests authorization to install and operate (after-the-fact) five wells, pumps, piping, two degasification systems, three transfer pumps, a 600 gallon day tank and a 17,100 gallon horizontal storage tank for the sulfuric acid feed system. The degasification systems essentially strip hydrogen sulfide (H₂S) to the atmosphere. The equipment was installed in 2008 in accordance with a Department water quality permit. At the time of the initial installation, the applicant was unaware that an air construction permit was required subject to the preconstruction review requirements of Rule 62-212.400, Florida Administrative Code (F.A.C) for the Prevention of Significant Deterioration (PSD) of Air Quality. Subsequently, the applicant determined that potential H₂S emissions are approximately 18 tons per year (TPY), which exceeds the PSD significant emission rate for of 10 TPY.

For each PSD-significant pollutant, the Department is required to determine the Best Available Control Technology (BACT) and evaluate the applicant's Air Quality Analysis regarding ambient impacts due to the project. EPA has not established an acceptable ambient monitoring method or required ambient monitoring networks for H₂S impacts; therefore, an ambient air quality analysis is not required. Based on information provided by the applicant, the addition of a packed tower scrubber to remove H₂S emissions is not cost effective at this time. The Department's preliminary BACT determination for H₂S emissions is 18.0 tons per consecutive 12-months based on monitoring water flow rates to the degasification systems and monitoring the H₂S concentration in the raw well water. If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the draft permit includes a provision to request the permittee to revisit this BACT determination and investigate controls.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Florida Department of Environmental Protection's Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Bureau of Air Regulation's physical address is 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301 and the mailing address is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation's phone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site by entering draft permit number:
<http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all

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PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

applicable provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit and requests for a public meeting for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. In addition, if a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received comments result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

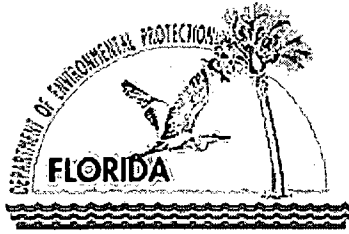
Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

(Public Notice to be Published in the Newspaper)



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

United States Sugar Corporation
111 Ponce De Leon Avenue
Clewiston, FL 33440

U.S. Sugar Clewiston Mill and Refinery
ARMS Facility ID No. 0510003

PROJECT

Draft Permit No. PSD-FL-415
Project No. 0510003-048-AC

Hydrogen Sulfide Degasification System

COUNTY

Hendry County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Air Permitting and Compliance Section
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

June 27, 2011

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

Facility Description and Location

The United States Sugar Corporation (U.S. Sugar) operates a sugar mill and refinery in Hendry County located at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. The UTM coordinates are Zone 17, 506.1 kilometers East, and 2956.9 kilometers North. Sugarcane is harvested from nearby fields and transported to the mills by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. Molasses is also produced as a byproduct. Molasses is stored and processed into an animal feed product for sale.

Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Project Description

On April 22, 2011, U.S. Sugar submitted a complete application for an air construction permit subject to the PSD preconstruction review requirements. On February 14, 2008, U.S. Sugar was issued a water permit (Permit No. 284958-001-WC) authorizing the installation of five well pumps including piping, two hydrogen sulfide (H₂S) degasification systems, three transfer pumps, a 600 gallon day tank and a 17,100 gallon horizontal storage tank for the sulfuric acid feed system. The H₂S degasification systems essentially strip the H₂S gas in the raw water to the atmosphere. At that time, U.S. Sugar was unaware an air construction permit would be required in addition to the water permit. Based on the most current information, it was determined that H₂S emissions were approximately 18 tons per year (TPY) from the H₂S degasification system, which exceeds the PSD significant emission rate for H₂S of 10 TPY. The H₂S emissions were estimated based on the maximum water usage rate and H₂S concentration in the raw water.

The following new emissions units will be added to this project.

EU No.	Description
036	Two Hydrogen Sulfide Degasification Systems

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and determination of Best Available Control Technology (BACT), and Non-attainment Area Review); 62-213 (Title V Air Operation Permits for

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures). PSD applicability and the preconstruction review requirements of Rule 62-212.400, F.A.C. are discussed in Section 2 of this report. Additional details of the other state regulations are provided in Section 3 of this report.

Federal Regulations

The Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 identifies New Source Performance Standards (NSPS) for a variety of industrial activities. Part 61 specifies National Emissions Standards for Hazardous Air Pollutant (NESHAP) based on specific pollutants. Part 63 specifies NESHAP provisions based on the Maximum Achievable Control Technology (MACT) for given source categories. Federal regulations are adopted in Rule 62-204.800, F.A.C. Additional details of the applicable federal regulations are provided in Section 3 of this report.

2. PSD APPLICABILITY REVIEW

General PSD Applicability

For areas currently in attainment with the state and federal ambient air quality standards (AAQS) or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. An existing, new or modified facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the listed 28 PSD-major facility categories (which include Portland cement plants).

The regulated PSD pollutants include: carbon monoxide (CO); nitrogen oxides (NO_x); sulfur dioxide (SO₂); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM₁₀); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H₂S); total reduced sulfur (TRS) including H₂S; reduced sulfur compounds including H₂S; and mercury (Hg). There are additional PSD pollutants specific to municipal waste combustors and landfills.

A PSD applicability review is required for all projects at new and existing major and minor stationary sources. Once it is determined that the existing facility is, or that the new or modified facility will be, a major stationary source, the project emissions increases are then compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the PSD pollutants. If the potential emissions increase exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant. Also, note that significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m³, 24-hour average. For each significant PSD pollutant, the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be "significant" for several PSD pollutants. Rule 62-210.200, F.A.C. defines "BACT" as:

An emission limitation, including a visible emissions standard, based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account:

1. *Energy, environmental and economic impacts, and other costs;*
2. *All scientific, engineering, and technical material and other information available to the Department; and*

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

3. *The emission limiting standards or BACT determinations of Florida and any other state;*

determines is achievable through application of production processes and available methods, systems and techniques (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.

If the Department determines that technological or economic limitations on the application of measurement methodology to a particular part of an emissions unit or facility would make the imposition of an emission standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reductions achievable by implementation of such design, equipment, work practice or operation.

Each BACT determination shall include applicable test methods or shall provide for determining compliance with the standard(s) by means which achieve equivalent results.

In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, and 63.

PSD Applicability for the Project

The project is located in Hendry County, which is in an area that is currently in attainment with the state and federal AAQS or otherwise designated as unclassifiable. The project potentially emits approximately 18 TPY of H₂S, which exceeds the PSD significant emission rate of 10 TPY. Therefore, the project is subject to PSD preconstruction review for H₂S emissions in accordance with the provisions of Rule 62-212.400, F.A.C. Therefore, a BACT determination is required for H₂S emissions. An air quality modeling analysis is not required since there is no ambient air quality standard for H₂S.

3. PROJECT DETAILS

U.S. Sugar is requesting an after-the-fact air construction permit for the installation of the five water wells and two degasification systems.

Water Wells

The U.S. Sugar Clewiston Mill uses water throughout the mill for process water, cooling water and to produce steam in the boilers. Prior to installing the wells, U.S. Sugar withdrew water directly from Lake Okeechobee. Installation of the water wells helps stabilize mill operations when the water level in the lake is low due to drought and low rainfall. Additionally, the lake water is much higher in total dissolved solid than the well water, which resulted in a reduction of chemical and polymer usage in the mill's waste water treatment facility.

H₂S Degasification System

The degasification system is a fiberglass, forced-draft, which promotes the removal of carbon dioxide (CO₂) to reduce corrosion of distribution piping and fittings, reduces total dissolved solids concentration prior to treatment with anion/cation resins, increases dissolved oxygen concentration to meet the discharge criteria and strips H₂S gas to the atmosphere. The degasification process treats water by cascading down through a highly efficient polypropylene packing media. The media allows the water to break into droplets creating a highly active and larger surface area. The blower forces air up through the unit in a cross current direction for rapid and efficient gas removal. Each degasification unit has the following specifications:

- The maximum design water flow rate is 2,000 gallons per minute (gpm).
- Based on given design parameters and an influent pH of 5.0, the equipment could achieve an H₂S removal efficiency of 96.4%. This equates to an effluent H₂S concentration of 107.9 micrograms/liter (µg/L).
- The exhaust stack parameters are 3 feet in diameter and 30 feet in height with a stack flow rate of 8,021 actual cubic feet per minute (acfm).

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Daily samples were taken from the water wells between April 7, 2010, and May 27, 2010, showing an average H₂S concentration of 2,867 µg/L. The maximum annual water usage was based on a 12-month rolling average of the total water drawn from the water wells, which was 1,058,183,000 gallons. However, the maximum annual water usage from the five wells could reach an estimated 1.5 billion gallons per year (GPY). The projected annual emissions for H₂S were estimated to be 5.74 pound (lb)/hour and 17.94 TPY. Annual emissions from the degasification systems were estimated based on the measured H₂S concentration in the well water and the maximum annual water usage from the five new wells. However, when calculating the H₂S emissions on an hourly basis, the design of the degasification system needed to be considered using the maximum water flow rate of 2,000 GPM from each system. Therefore, the calculations used were very conservative estimations of the potential emissions for H₂S.

New Source Performance Standards (NSPS) Provisions

There are no NSPS provisions applicable to this project.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Provisions

There are no NESHAP provisions applicable to this project.

Air Quality Modeling Analysis

In accordance with the requirements of 40 CFR 52.21(m) and Rule 62-212.400, F.A.C. any application requesting a PSD permit must contain an analysis of continuous ambient air quality data in the area affected by the proposed major stationary source or major modification (preconstruction monitoring data). However, there is no approved ambient monitoring method for H₂S and no requirement to conduct such monitoring; therefore, an ambient monitoring analysis is not required.

4. BACT DETERMINATION FOR H₂S

The project to install five water wells and two H₂S degasification systems is a physical modification of the facility. As previously described, the project is subject to PSD preconstruction review for H₂S compounds from the degasification systems (EU-036).

BACT Emission Limits Proposed by Applicant (Two Degasification Systems Combined)

Pollutant	Emissions Limit	Control Technology
H ₂ S	5.74 lb/hour and 17.94 TPY	No Control Equipment

General Discussion of H₂S Emissions

The degasification systems are the source of H₂S emissions from this project. The annual H₂S emissions were based on the maximum water usage rate and H₂S concentration in the raw water. The H₂S hourly emissions were based on the actual design water flow rate of the degasification systems. The potential annual emissions produced by the degasification systems are 5.74 lb/hour and 17.94 TPY.

The applicant reviewed data in EPA's RACT/BACT/LAER Clearinghouse (RBLC) to identify control technology determinations for H₂S or TRS emissions from degasification systems and other similar processes. BACT determinations issued within the last 10 years were searched. However, no information was found identifying control technology determinations for degasification systems or similar processes.

The Florida Department of Environmental Protection (FDEP) air permit data base was also searched in order to identify other water treatment or water disposal facilities in Florida that have controls in place for H₂S emissions. The following facilities were identified:

- Miami-Dade Water and Sewer Department (Permit No. 0250600-007-AV)
- City of Largo Environmental Services Department (Permit No. 1030060-007-AV)

The Miami-Dade Water and Sewer Department operates a publicly owned treatment works that processes a

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

maximum of 49 billion GPY of water, based on a design treatment capacity of 135 million gallons/day. All liquid process units are covered and vented to an odor control scrubber units for reduction of H₂S and odors. The facility does not consider the scrubbers to be an air pollution control device. The Miami-Dade facility is approximately 50 times larger than the U.S. Sugar H₂S degasification systems in terms of water treatment capacity.

The City of Largo Environmental Services Department operates a wastewater reclamation facility. The Pelletizer building contains a sewage sludge drying operation at the wastewater treatment plant, which is controlled by an odor control system. However, the odor control system is allowed to remain in cold storage until such time as the Department, Pinellas County Department of Environmental Management, or the City of Largo receives an odor complaint.

The applicant believes that there are many more H₂S degasification systems in operation at the publicly owned treatment works facilities and industrial/electric utility plants throughout Florida, but these systems are generally not listed in their Title V operating permits. Most Title V operating permits have "wastewater liquid processes" included in the list of unregulated emissions units, which most likely have H₂S degasification systems.

BACT for H₂S

Identification of Control Technologies

The applicant provided the following control technologies:

- *Packed Tower Wet Scrubber:* Wet scrubbers are systems that involve removal of the gaseous H₂S using liquid scrubbing media. The gaseous H₂S is captured in the liquid by several different mechanisms. Wet scrubbers create a liquid waste that may require additional treatment prior to disposal. There are multiple types of wet scrubbers, such as Spray Chamber, Impingement Plate, Venturi, Orifice and Condensation. However, the packed bed scrubber is the most effective at efficiently to remove gaseous (non-particulate) pollutants.
- *Thermal Oxidizers:* Incineration, or thermal oxidation is the process of oxidizing combustible materials by raising the temperature of the material above its auto-ignition point in the presence of oxygen and maintaining it at high temperature for sufficient time to complete combustion. In the case of H₂S, this combustion results in water and SO₂ emissions to the atmosphere. Time, temperature, turbulence (for mixing) and the availability of oxygen all affect the rate and efficiency of the combustion process. The auto-ignition temperature of H₂S is 500°F. Therefore, the combustion of gases containing H₂S would require an auxiliary fuel source. The use of catalytic oxidation could reduce the temperature requirement for H₂S oxidation.

Identification of Technically Feasible Control Alternatives and Ranking

- *Packed Tower Wet Scrubber:* Wet scrubbers are technically feasible for the H₂S degasification systems. Based on the equipment manufacturer's specifications (Schutte & Koerting) the removal efficiency of H₂S is 99%. Therefore, this is the top-ranked control technology.
- *Thermal Oxidizers:* Thermal oxidizers are not practicably feasible for the H₂S degasification systems. The gas exiting the degasification systems is saturated with water vapor, and the concentration of H₂S in the gas stream would be too low to maintain an effective combustion oxidation temperature.

Evaluation of Economic, Environmental and Energy Impacts of Feasible Technologies

The only feasible control option for the H₂S degasification system is the packed tower wet scrubber. The applicant provided the following estimates of energy, environmental and economic impacts for the wet scrubber.

- *Economic Impacts:* The cost analysis for a packed tower (chlorine/caustic) wet scrubbing system shows an estimated total capital investment of \$423,060 and an annual operating cost of \$180,692 per year. The wet scrubbing system would reduce the H₂S emissions by 99%, which would result in controlled H₂S emissions

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

of 0.18 TPY for a 17.77 TPY reduction. Therefore, the cost effectiveness of the wet scrubber for H₂S control is \$10,174 per ton of H₂S reduction. Based on the cost analysis, this technology is not cost effective for the project.

- *Environmental and Energy Impacts:* There are no ambient air quality standards for H₂S and H₂S is not classified as HAP. Therefore, the only potential air quality issue is objectionable odors. Since U.S. Sugar has begun operating the water wells in 2008, there have been no known odor complaints associated with the H₂S degasification systems. However, if the wet scrubbing system was required for H₂S removal, wastewater created by the wet scrubbing system would be sent to U.S. Sugar's on-site pond system. The additional sulfur added to the ponds would increase the likelihood of creating an objectionable odor from the ponds due to the anaerobic degradation of the sulfur compounds. In addition, the wet scrubber has a high-energy usage and creates a liquid waste stream that must be treated and properly disposed.

Select or Reject the Top-Ranked Control Option

Based on the following determinations regarding control technology used for H₂S or TRS emissions from degasification systems the applicant rejects the top-ranked control, packed tower wet scrubber, for BACT and proposes no add-on controls.

- There was no control technology identified within the last 10 years on the RBLC data base for H₂S or TRS emissions for degasification systems.
- The DEP air permit data base identified other water treatment or water disposal facilities in Florida that have controls in place for H₂S emissions. The following two facilities were identified:
 - Miami-Dade Water and Sewer Department operates a publicly owned treatment works that processes a maximum of 49 billion GPY of water versus U.S. Sugars 1.5 billion GPY, which is much smaller in terms of water capacity. The facility does not consider the odor control scrubbers to be an air pollution control device.
 - City of Largo contains a sewage sludge drying operation at the wastewater treatment plant, which is controlled by an odor control system. However, the odor control system is allowed to remain in cold storage until such time an odor complaint is made.
- Other than the PSD provisions, the degasification systems are not subject to any industry-specific state or federal air quality regulations.
- EPA has not established an acceptable ambient monitoring method for H₂S.
- The estimated cost effectiveness is very high at \$10,174 per ton of H₂S removed.
- If a new wet scrubbing system was required for H₂S removal, the additional sulfur added to the ponds would enhance the probability of creating an objectionable odor due to the anaerobic degradation of the sulfur compounds.

Therefore, at this time, there are no recognized and cost-effective add-on controls for reducing H₂S emissions from the degasification systems. Therefore, the Department establishes the following the preliminary BACT determination for H₂S emissions from the degasification systems:

H₂S: 18.0 tons per consecutive 12-month rolling total based on monthly raw well water flow rates quarterly water sampling to determine the H₂S concentration in each of the water wells.

According to the applicant, the site currently has no objectionable odors. The Department's South District Office verified that there have been no odor complaints for the past several years. Therefore, the BACT should not cause or contribute to an objectionable odor. An "objectionable odor" is defined as any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

property, or which creates a nuisance.” The draft permit will also include a requirement to revisit BACT should the facility receive valid odor complaints from the degasification systems.

5. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the Draft Permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the Draft Permit. Tammy McWade is the project engineer responsible for reviewing the application and drafting the permit changes. Additional details of this analysis may be obtained by contacting the project engineer at the Department’s Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE

United States Sugar Corporation
111 Ponce De Leon Avenue
Clewiston, FL 33440

Authorized Representative:
Neil Smith, Vice President and General Manager

Air Permit No. 0510003-048-AC PSD-FL-415 Expires: <u> Date </u> U.S. Sugar Clewiston Mill and Refinery Facility ID No. 0510003 H ₂ S Degasification Systems

PROJECT

This is the final air construction permit, which authorizes the construction and operation of five water wells and two H₂S degasification systems. The proposed work will be conducted at the existing U.S. Sugar Clewiston Facility, which is categorized under the Standard Industrial Classification of Cane Sugar, Except Refining (No. 2061) and Cane Sugar Refining (No. 2062). The existing facility is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. The UTM coordinates are Zone 17, 506.1 kilometers East, and 2956.9 kilometers North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Executed in Tallahassee, Florida
For the Division of Air Resource Management

(DRAFT)

(Signature)

(Date)

(Printed Name of Above Designee)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on _____ **(DRAFT)** _____ to the persons listed below.

- Mr. Neil Smith, U.S. Sugar Corporation (nsmith@ussugar.com)
- Mr. Keith Tingberg, U.S. Sugar Corporation (ktingberg@ussugar.com)
- Mr. David Buff, P.E., Golder Associates, Inc. (dbuff@golder.com)
- Mr. Ajaya Satyal, South District Office (ajaya.satyal@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
- Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

FILED AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(DRAFT)

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

U.S. Sugar operates a sugar mill and refinery in Hendry County located at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. The UTM coordinates are Zone 17, 506.1 kilometers East, and 2956.9 kilometers North. Sugarcane is harvested from nearby fields and transported to the mills by train. In the mill, sugarcane is cut into small pieces and processed in a series of presses to squeeze juice from the cane. The juice undergoes clarification, separation, evaporation, and crystallization to produce raw, unrefined sugar. In the refinery, raw sugar is decolorized, concentrated, crystallized, dried, conditioned, screened, packaged, stored, and distributed as refined sugar. The fibrous byproduct remaining from the sugarcane is called bagasse and is burned as boiler fuel to provide steam and heating requirements for the mill and refinery. Molasses is also produced as a byproduct. Molasses is stored and processed into an animal feed product for sale.

PROPOSED PROJECT

This project will add the following emissions unit.

EU No.	Description
036	Two Hydrogen Sulfide (H ₂ S) Degasification Systems

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source of air pollution in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the South District Office at: 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902-2549.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Final BACT Determination).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Degasification Systems (EU-036)

This section of the permit addresses the following emissions unit.

EU No.	Emission Unit Description
036	Two Hydrogen Sulfide Degasification Systems

{Permitting Note: In accordance with Rule 62-212.400(PSD), F.A.C., the above emission unit is subject to a Best Available Control Technology (BACT) determination for hydrogen sulfide (H₂S). The final BACT determination is presented in Appendix D of this permit.

EQUIPMENT

1. **Degasification Systems:** The permittee is authorized to install and operate two H₂S degasification systems and the associated five water wells. [Application No. 0510003-048-AC]
2. **Water Use:** The permittee shall install, calibrate and operate flow meters (or equivalent devices) with integrators to monitor the flow rate to each from each degasification unit. [Rule 62-4.070(3) and 62-212.400(BACT), F.A.C.]

PERFORMANCE RESTRICTIONS

3. **Hours of Operation:** The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

4. **Hydrogen Sulfide:** The emissions of H₂S from the combined degasification systems shall not exceed 18.0 tons per consecutive 12-month rolling total based on monthly raw well water flow rates quarterly water sampling to determine the H₂S concentration in each of the water wells. If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the permittee may be requested to revisit the determination of BACT for H₂S emissions from degasification systems. [Rule 62-212.400(BACT), F.A.C.]
5. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. An "objectionable odor" is defined as any odor present in the outdoor atmosphere, which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance." The draft permit will also include a requirement to revisit BACT should the facility receive valid odor complaints from the degasification systems. [Rule 62-296.320(2), F.A.C.]

MONITORING AND RECORD KEEPING REQUIREMENTS

6. **Water Wells Sampling/Analysis:** On at least a quarterly basis, the permittee shall obtain representative samples of water from each well. The samples shall be taken no earlier than 90 days apart. Each sample shall have an analysis conducted to determine the H₂S concentration. [Rule 62-4.070(3) and 62-212.400(BACT), F.A.C.]
7. **Monthly Records:** Within ten calendar days following each month, the permittee shall observe and record the total monthly water pumped from the water wells to each degasification unit. This information shall be used in conjunction with the measured H₂S concentration for the given quarter to determine the H₂S emissions for the month and the previous 12 months, rolling total. [Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

SECTION 4. APPENDICES (DRAFT)

Contents

- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions
- Appendix C. Common Conditions
- Appendix D. Final BACT Determinations

SECTION 4. APPENDIX A (DRAFT)

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

µg: microgram

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System
(Department’s database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

SECTION 4. APPENDIX A (DRAFT)

Citation Formats and Glossary of Common Terms

CAA: Clean Air Act	NESHAP: National Emissions Standards for Hazardous Air Pollutants
CMS: continuous monitoring system	NO_x: nitrogen oxides
CO: carbon monoxide	NSPS: New Source Performance Standards
CO₂: carbon dioxide	O&M: operation and maintenance
COMS: continuous opacity monitoring system	O₂: oxygen
DARM: Division of Air Resource Management	Pb: lead
DEP: Department of Environmental Protection	PM: particulate matter
Department: Department of Environmental Protection	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
dscf: dry standard cubic feet	ppm: parts per million
dscfm: dry standard cubic feet per minute	ppmv: parts per million by volume
EPA: Environmental Protection Agency	ppmvd: parts per million by volume, dry basis
ESP: electrostatic precipitator (control system for reducing particulate matter)	QA: quality assurance
EU: emissions unit	QC: quality control
F: fluoride	PSD: prevention of significant deterioration
F.A.C.: Florida Administrative Code	psi: pounds per square inch
F.A.W.: Florida Administrative Weekly	PTE: potential to emit
F.D.: forced draft	RACT: reasonably available control technology
F.S.: Florida Statutes	RATA: relative accuracy test audit
FGD: flue gas desulfurization	RBLC: EPA's RACT/BACT/LAER Clearinghouse
FGR: flue gas recirculation	SAM: sulfuric acid mist
ft²: square feet	scf: standard cubic feet
ft³: cubic feet	scfm: standard cubic feet per minute
gpm: gallons per minute	SIC: standard industrial classification code
gr: grains	SIP: State Implementation Plan
HAP: hazardous air pollutant	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
Hg: mercury	SO₂: sulfur dioxide
I.D.: induced draft	TPD: tons/day
ID: identification	TPH: tons per hour
kPa: kilopascals	TPY: tons per year
lb: pound	TRS: total reduced sulfur
MACT: maximum achievable technology	UTM: Universal Transverse Mercator coordinate system
MMBtu: million British thermal units	VE: visible emissions
MSDS: material safety data sheets	VOC: volatile organic compounds
MW: megawatt	

SECTION 4. APPENDIX B (DRAFT)

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B (DRAFT)

General Conditions

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (H₂S);
 - b. Determination of Prevention of Significant Deterioration (H₂S); and
 - c. Compliance with New Source Performance Standards (not applicable to project).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C (DRAFT)

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. Emissions Computation and Reporting:
 - a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance

SECTION 4. APPENDIX C (DRAFT)

Common Conditions

with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

- b. *Computation of Emissions.* For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
- (1) **Basic Approach.** The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
- (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
- (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (2) **Continuous Emissions Monitoring System (CEMS).**
- (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
- 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
- 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
- (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
- 1) A calibrated flow meter that records data on a continuous basis, if available; or
- 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) **Mass Balance Calculations.**
- (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
- 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

SECTION 4. APPENDIX C (DRAFT)

Common Conditions

- 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
 - (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
 - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
- (a) An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
 - 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
 - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - (b) If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

SECTION 4. APPENDIX C (DRAFT)

Common Conditions

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - a. All Title V sources;
 - b. All synthetic non-Title V sources;
 - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area; and
 - d. All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

SECTION 4. APPENDIX D (DRAFT)

Final BACT Determinations

PROJECT DESCRIPTION

EU No.	Emission Unit Description
036	Two Hydrogen Sulfide (H ₂ S) Degasification Systems

U.S. Sugar Corporation operates the existing Clewiston Sugar Mill and Refinery, which is located in Hendry County at the intersection of W.C. Owens Avenue and State Road 832 in Clewiston, Florida. U.S. Sugar previously installed and currently operates five well pumps including piping, two H₂S degasification systems, three transfer pumps, a 600 gallon day tank and a 17,100 gallon horizontal storage tank for the sulfuric acid feed system.

FINAL BACT DETERMINATION

In accordance with Rule 62-212.400, F.A.C., the Department makes the following BACT determinations for the PSD-significant pollutants.

Pollutant	BACT Standard	Compliance Method
H ₂ S	18.0 tons per consecutive 12-month rolling total	Based on monthly raw well water flow rates and quarterly water sampling to determine the H ₂ S concentration in each of the water wells.

If the facility receives valid odor complaints associated with the degasification systems as verified by the Compliance Authority, the permittee may be requested to revisit the determination of BACT for H₂S emissions from degasification systems.

Friday, Barbara

To: nsmith@ussugar.com
Cc: ktingberg@ussugar.com; 'dbuff@golder.com'; Satyal, Ajaya; Kathleen Forney; abrams.heather@epamail.epa.gov; Ana Oquendo; Gibson, Victoria; McWade, Tammy
Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415
Attachments: DraftPSD-FL-415(0510001-048-AC) - SignedWrittenNotice.pdf

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Tammy McWade

Owner/Company Name: U.S. SUGAR CORPORATION CLEWISTON MILL
Facility Name: U.S. SUGAR CLEWISTON MILL AND REFINERY
Project Number: 0510003-048-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HENDRY

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0510003.048.AC.D_pdf.zip

“The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://appprod.dep.state.fl.us/air/emission/apds/default.asp>”

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday
Permitting and Compliance Section
Division of Air Resource Management (DARM)
(850)717-9095

Friday, Barbara

From: Microsoft Exchange
To: 'nsmith@ussugar.com'; 'ktingberg@ussugar.com'
Sent: Monday, June 27, 2011 2:50 PM
Subject: Relayed: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:

'nsmith@ussugar.com'

'ktingberg@ussugar.com'

Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Neil Smith [nsmith@ussugar.com]
Sent: Monday, June 27, 2011 2:56 PM
To: Friday, Barbara
Subject: RE: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

From: Friday, Barbara [<mailto:Barbara.Friday@dep.state.fl.us>]
Sent: Monday, June 27, 2011 2:49 PM
To: Neil Smith
Cc: Keith Tingberg; dbuff@golder.com; Satyal, Ajaya; 'Kathleen Forney'; abrams.heather@epamail.epa.gov; Ana Oquendo; Gibson, Victoria; McWade, Tammy
Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

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Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Tammy McWade

Owner/Company Name: U.S. SUGAR CORPORATION CLEWISTON MILL
Facility Name: U.S. SUGAR CLEWISTON MILL AND REFINERY
Project Number: 0510003-048-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HENDRY

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0510003.048.AC.D_pdf.zip

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Barbara Friday
Permitting and Compliance Section
Division of Air Resource Management (DARM)
(850)717-9095

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Friday, Barbara

From: Keith Tingberg [ktingberg@ussugar.com]
Sent: Monday, June 27, 2011 4:01 PM
Subject: Read: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Your message was read on Monday, June 27, 2011 4:00:58 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Keith Tingberg [ktingberg@ussugar.com]
Sent: Monday, June 27, 2011 4:25 PM
To: Friday, Barbara
Cc: Neil Smith
Subject: RE: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

We received documents & can access them.

Sincerely,

Keith Tingberg
Environmental Manager
U.S. Sugar Corp. - Sugar Manufacturing
(Office) 863-902-3186
(Cell) 863-233-1297
(Fax) 863-902-3149

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Monday, June 27, 2011 2:49 PM
To: Neil Smith
Cc: Keith Tingberg; dbuff@golder.com; Satyal, Ajaya; 'Kathleen Forney'; abrams.heather@epamail.epa.gov; Ana Oquendo; Gibson, Victoria; McWade, Tammy
Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

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Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Tammy McWade

Owner/Company Name: U.S. SUGAR CORPORATION CLEWISTON MILL
Facility Name: U.S. SUGAR CLEWISTON MILL AND REFINERY
Project Number: 0510003-048-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HENDRY

Click on the following link to access the permit project documents:

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Barbara Friday
Permitting and Compliance Section
Division of Air Resource Management (DARM)
(850)717-9095

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Friday, Barbara

From: Buff, Dave [DBuff@GOLDER.com]
To: Friday, Barbara
Sent: Monday, June 27, 2011 3:02 PM
Subject: Read: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Your message was read on Monday, June 27, 2011 3:01:59 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Satyal, Ajaya
To: Friday, Barbara
Sent: Monday, June 27, 2011 4:40 PM
Subject: Read: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Your message was read on Monday, June 27, 2011 4:39:49 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Satyal, Ajaya
Sent: Monday, June 27, 2011 4:41 PM
To: Friday, Barbara
Subject: RE: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Received the document. Thank you.

AJ Satyal, Program Administrator
Air Resource Management
FDEP-South District Office
(239) 344-5689

From: Friday, Barbara
Sent: Monday, June 27, 2011 2:49 PM
To: nsmith@ussugar.com
Cc: ktingberg@ussugar.com; dbuff@golder.com; Satyal, Ajaya; 'Kathleen Forney'; abrams.heather@epamail.epa.gov; Ana Oquendo; Gibson, Victoria; McWade, Tammy
Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Dear Sir/ Madam:

Attached is the official **Written Notice of Intent to Issue Air Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attention: Tammy McWade

Owner/Company Name: U.S. SUGAR CORPORATION CLEWISTON MILL
Facility Name: U.S. SUGAR CLEWISTON MILL AND REFINERY
Project Number: 0510003-048-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HENDRY

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0510003.048.AC.D_pdf.zip

“The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the “*Air Permit Documents Search*” website at <http://appprod.dep.state.fl.us/air/emission/apds/default.asp>.”

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation.

Barbara Friday
Permitting and Compliance Section
Division of Air Resource Management (DARM)
(850)717-9095

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Friday, Barbara

From: Heather Abrams [Abrams.Heather@epamail.epa.gov]
Sent: Tuesday, July 05, 2011 12:02 PM
To: Friday, Barbara
Subject: Re: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Got it

Heather Ceron
Air Permits Section
U.S. EPA - Region 4
61 Forsyth St. SW
Atlanta, Georgia 30303

Phone: 404-562-9185
Fax: 404-562-9019

From: "Friday, Barbara" <Barbara.Friday@dep.state.fl.us>
To: "nsmith@ussugar.com" <nsmith@ussugar.com>
Cc: "ktingberg@ussugar.com" <ktingberg@ussugar.com>, "dbuff@golder.com" <dbuff@golder.com>, "Satyal, Ajaya" <Ajaya.Satyal@dep.state.fl.us>, Kathleen Forney/R4/USEPA/US@EPA, Heather Abrams/R4/USEPA/US@EPA, Ana Oquendo/R4/USEPA/US@EPA, "Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>, "McWade, Tammy" <Tammy.McWade@dep.state.fl.us>
Date: 06/27/2011 02:49 PM
Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

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Attention: Tammy McWade

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Click on the following link to access the permit project documents:

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Barbara Friday
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"DraftPSD-FL-415(0510001-048-AC) - SignedWrittenNotice.pdf" deleted by Heather Abrams/R4/USEPA/US]

Friday, Barbara

From: Microsoft Exchange
To: Gibson, Victoria
Sent: Monday, June 27, 2011 2:50 PM
Subject: Delivered: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Your message has been delivered to the following recipients:

Gibson, Victoria

Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: Gibson, Victoria
To: Friday, Barbara
Sent: Monday, June 27, 2011 3:04 PM
Subject: Read: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Your message was read on Monday, June 27, 2011 3:04:20 PM (GMT-05:00) Eastern Time (US & Canada).

Friday, Barbara

From: Microsoft Exchange
To: McWade, Tammy; Satyal, Ajaya
Sent: Monday, June 27, 2011 2:50 PM
Subject: Delivered: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Your message has been delivered to the following recipients:

McWade, Tammy

Satyal, Ajaya

Subject: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY; 0510003-048-AC - PSD-FL-415

Sent by Microsoft Exchange Server 2007

Friday, Barbara

From: McWade, Tammy
To: Friday, Barbara
Sent: Monday, June 27, 2011 2:59 PM
Subject: Read: U.S. SUGAR CORPORATION - U.S. SUGAR CLEWISTON MILL AND REFINERY;
0510003-048-AC - PSD-FL-415

Your message was read on Monday, June 27, 2011 2:59:12 PM (GMT-05:00) Eastern Time (US & Canada).