



Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

Sent by Electronic Mail - Received Receipt Requested

Mr. Mark Hammond
Executive Director
Solid Waste Authority of Palm Beach County
Palm Beach Renewable Energy Park
7501 North Jog Road
West Palm Beach, Florida 33412

Re: Palm Beach Renewable Energy Park
Proposed Permit No. 0990234-037-AV, Title V Air Operation Permit Renewal

Dear Mr. Hammond:

One copy of the Proposed Permit Determination for the renewal of the Title V air operation permit for the Palm Beach Renewable Energy Park (PBREP) located at 7501 North Jog Road in West Palm Beach, Palm Beach County, is enclosed. This letter is only a courtesy to inform you that the draft permit has become a proposed permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's World Wide Web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. Interested persons may view the proposed permit by visiting the following website:

<https://fldep.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the proposed Title V air operation permit is made by the U.S. EPA within 45 days, the proposed permit will become a final permit no later than 55 days after the date on which the proposed permit was mailed (posted) to U.S. EPA. If U.S. EPA has an objection to the proposed permit, the final permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you have any questions, please contact Mr. Scott M. Sheplak, CPM, P.E. by telephone at 850/717-9074 or by email at scott.sheplak@dep.state.fl.us.

Executed in Tallahassee, Florida.

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

SA/dlr/sms

PROPOSED PERMIT DETERMINATION

Copies were sent by electronic mail to the following:

Mr. Mark Hammond, SWA: mhammond@swa.org
Ms. Marybeth Morrison, SWA: mmorrison@swa.org
Mr. Kennard Kosky, P.E., Golder Associates: kkosky@golder.com
Mr. Sal Mohammad, P.E., Golder Associates Inc.: smohammad@golder.com
Mr. Kent Edwards, DEP SED: kent.edwards@dep.state.fl.us
DEP Siting Coordination Office: SCO@dep.state.fl.us
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us
Ms. Lynn Searce, DEP OPC: lynn.searce@dep.state.fl.us
Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: oquendo.ana@epa.gov
Ms. Natasha Hazziez, U.S. EPA Region 4: hazziez.natasha@epa.gov

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.

PROPOSED PERMIT DETERMINATION

PERMITTEE

Solid Waste Authority of Palm Beach County
Palm Beach Renewable Energy Park
7501 North Jog Road
West Palm Beach, Florida 33412

PERMITTING AUTHORITY

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

PROJECT

Proposed Permit No. 0990234-037-AV
Palm Beach Renewable Energy Park

The purpose of this project is to revise the Title V air operation permit for the above referenced facility.

This Title V air operation permit was processed using a sequential review.

PUBLIC NOTICE

A Written Notice of Intent to Issue Air Permit issued to the Solid Waste Authority of Palm Beach County for the Palm Beach Renewable Energy Park located at 7501 North Jog Road in West Palm Beach, Palm Beach County, was clerked on May 10, 2016.

The Public Notice of Intent to Issue Air Permit was published in the The Palm Beach Post on May 31, 2016. The draft Title V air operation permit was available for public inspection at the permitting authority's office in Tallahassee. Proof of publication of the Public Notice of Intent to Issue Air Permit was received on June 1, 2016.

COMMENTS

No comments were received from the public during the 30-day public comment period; however, comments were received from the applicant. The comments were not considered significant enough to reissue the draft Title V air operation permit and require another Public Notice; therefore, the draft Title V air operation permit was changed. The comments are addressed below.

All changes made to the draft permit based on the applicants comments are emphasized below with **turquoise highlight**. Additions are shown with **double underline** and deletions are indicated by **strike through**. The previous **yellow highlights** in the permitting documents, i.e., permit and the appendices are kept.

Comments from the Applicant dated and submitted via email on June 27, 2016

1. Section I. Facility Information. Subsection A. Facility Description (page 2) 7th paragraph: "Additional activities at the facility include: Composting Facility..." Please remove reference to Composting Facility from the permit. The Composting Facility ceased operations in September 2014.

Response: The applicant had noted its removal of the composting facility from the site in the permit application (insignificant emissions units/activities). The correction is made on page 2 of the permit in the Facility Description of Subsection I.A. and page 1 of the Statement of Basis as follows:

Statement of Basis & Permit

"...

Additional activities at the facility include: **a composting facility**, material processing systems, a metals recovery system, storage and handling systems for RDF; lime storage and processing facilities; storage and handling systems for ash and ash treatment; and, cooling towers.

PROPOSED PERMIT DETERMINATION

...”

2. Section I. Facility Information. Subsection B. Summary of Emission Units (pages 3-4): we wish to clarify the descriptions for the following Emission Units (EUs):

EU045 - Change “Product Silo Dust Collector” to “Pellet Storage Silo for Sludge Dryer Trains 1&2” (please also change in Table of Contents)

EU031, EU032, & EU033 - change “PBREP No. 2” to “PBREF-2”

EU035 & EU036 - add “PBREF-1” to description

EU018 - change “Palm Beach Renewable Park” to “PBREF-1.”

Response: The clarifications are made. All occurrences in the Statement of Basis, Permit and/or Appendices are made as follows:

Statement of Basis, Permit and/or Appendices

E.U. ID Nos. 045: “~~Product Silo Dust Collector~~Pellet Storage Silo for Sludge Dryer Trains #1 & 2”

E.U. ID Nos. 031, 032 & 033: “~~PBREP~~ No.”

E.U. ID Nos. 035 & 036: “~~PBREF~~ No. 1 Emergency ...”

E.U. ID No. 018: ~~Palm Beach Renewable Energy Park~~PBREF No. 1

3. Subsection A. Emission Units 001, 002, & 019 (page 10), Condition A.5 a (1) & (2): Please change “...mixed municipal solid waste (MSW) from RDF...” to “...is RDF from mixed municipal solid waste (MSW)...”

Response: The Department notes the request; this is a correction. The correction is made as follows:

Permit

“

A.5. ...

Allowable Fuels.

- (1) The only fuels allowed to be burned in the MWCs ~~are mixed municipal solid waste (MSW) from RDF~~is ~~RDF from mixed municipal solid waste (MSW)~~, with natural gas as an auxiliary fuel. Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.
- (2) The primary fuel for the facility is ~~mixed municipal solid waste (MSW) from RDF~~RDF from mixed ~~municipal solid waste (MSW)~~,

...”

4. Section III. Emissions Units and Specific Conditions. Subsection A. Emission Units 001, 002, & 019 (page 13 and page 15): reference is made to *Table 1- Summary of Pollutant Standards and Terms* and *Table 2- Summary of Compliance Requirements*” in permitting notes. Please delete these permitting notes as Table 1 & 2 have been removed from the permit.

Response: The Department notes the corrections. The corrections are made to the permit.

5. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (Page 20): Please remove “& Auxiliary Burners” in the table description and permit heading. This language was not listed in the recently revised Title V Permit or Air Construction Permit for PBREF#2. Please remove this language also from the Table of Contents.

Response: The Department notes the correction. The correction is made to the Statement of Basis and Permit as follows:

Statement of Basis & Permit

“Municipal Waste Combustor ~~& Auxiliary Burners~~”

PROPOSED PERMIT DETERMINATION

6. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (Page 21) Condition B.4: Please change CFR reference from “0 CFR 60.51b.” to “40 CFR 60.51b.”

Response: The Department notes and makes the typographical correction.

7. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (Page 28) Condition B.21: “The permittee shall operate at the activated CI mass flow rate that is consistent with the documented flow rate for the given load condition.” This language implies a variable flow rate which is inconsistent with 40 CFR 60.58(m) of 40 CFR 60, Subpart Eb which sets a fixed the flow rate during dioxin/Hg testing. Please clarify or remove this language and add the correct language which references the rule.

Response: As the applicant points out the Department notes specifically in the federal regulation, 40 CFR 60.58(m)(2), that “During operation of the affected facility ... the 8-hour block average must equal or exceed the level(s) documented during the performance tests” Therefore, a variable carbon flow rate is contrary to the federal regulation. A correction and clarification is made to this language as follows:

Permit

“... ~~The permittee shall operate at the activated CI mass flow rate that is consistent with the documented flow rate for the given load condition.~~ Records shall be maintained on site and made available upon request. [40 CFR 60.58(m)(2); and, Permit No. 0990234-032-AC/PSD-FL-413C.]”

8. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (Page 28) Continuous Emissions Monitoring Requirements: The permitting note lists the continuous monitors that are installed on these emission units. Please add CO₂ to the list as “...and CO₂ or O₂.”

Response: The Department notes and makes the clarification as follows:

Permit

“*[Permitting Note: The following continuous monitors are installed on these emissions units: steam flow, inlet temperature to baghouse, opacity, SO₂, NOx, CO and CO₂ or O₂.]*”

9. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (Page 28) Condition B.24: This permit condition lists the required CEMS for the MWCs but does not include temperature requirement. Please add temperature condition to this section as listed in REF# 1 Condition A.27 Inlet Temperature to Particulate Matter Control Device.

Response: The Department notes the clarification, a specific condition similar to the one in Subsection A. which is directly from the federal regulation is added into the body of the permit as Specific Condition III.B.25. as follows:

Permit

“**B.25. Inlet Temperature to Particulate Matter Control Device.** The owner or operator shall calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized. Temperature shall be calculated in 4-hour block arithmetic averages. [Rule 62-213.440, F.A.C.; and, 40 CFR 60.34b, 40 CFR 60.53b & 40 CFR 60.58b(i)(7).]”

10. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (page 35) Condition B.51: There appears to be a typo in a reference “... Specific Condition B. 444 of this subsection...” Please correct to Specific Condition 44.

Response: The Department notes and makes the typographical correction.

11. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (page 35) Condition B.53 (old 52): It appears that Condition B.53 (old 52) Common Testing Requirements is duplicative to Permit Condition B.51 (old 50). Please remove Condition B.53 (old 52) from the permit.

PROPOSED PERMIT DETERMINATION

Response: The Department notes the correction and removes Specific Condition B.53 (old 52).

12. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (page 35) Conditions B.55 (old 54) Reporting Schedule & B.56 (old 55) Excess Emissions from Malfunctions: These two permit conditions were not in the revised Title V or Air Construction Permits for the Activated Carbon (EU 030) & Lime Storage Silos (EU 027 & EU028). Please remove conditions B.55 (old 54) & B.56 (old 55) from the permit because we do not believe these conditions are applicable to these emission units.

Response: The Department notes and makes the correction, removing both specific conditions.

13. Section III. Emissions Units and Specific Conditions. Subsection B. Emission Units 024, 025, 026, 027, 028, 030 & 034 (page 37) Conditions B.68: It appears that language is missing from this permit condition. Please add "... specified in Specific Condition B.62 of this subsection" after VE Emission Standard.

Response: The Department notes the clarification as follows:

Permit

"... During each calendar year (January 1st to December 31st), the ash handling building wet scrubber shall be tested to demonstrate compliance with its VE emission standard specified in Specific Condition B.63. of this subsection. [Permit No. 0990234-032-AC/PSD-FL-413C.]"

14. Section III. Emissions Units and Specific Conditions. Subsection C. Emission Units 004 & 008 (page 39): It states in the description that "the class III landfill is expected to close by 2016 and the Class I Landfill between 2023 and 2026". This information is outdated, and we request that it be removed from the permit.

Response: The Department understands that the most current date for closure of the Class III landfill is around year 2020 and year 2049 for the Class I landfill. The corrections to the descriptive information is made as follows:

Permit

"...

The Class III landfill is expected to close by 2016 around 2020 and the Class I landfill between 2023 and 2026 around 2049.

..."

15. Section III. Emissions Units and Specific Conditions. Subsection D. Emission Units 010, 011, 012, 014, & 045 (page 45): Please change the description of EU045 in the table from "Product Silo Dust Collector" to "Pellet Storage Silo Train 1 & 2". Emission Units are not typically the pollution control device but rather the emission source.

Response: The clarification was made as previously indicated.

16. Section III. Emissions Units and Specific Conditions. Subsection D. Emission Units 010, 011, 012, 014, & 045 (page 46 and 48): reference is made to *Table 1- Summary of Pollutant Standards and Terms* and *Table 2- Summary of Compliance Requirements*" in permitting notes. Please delete these permitting notes as Table 1 & 2 have been removed from the permit."

Response: The Department notes the corrections. The corrections are made to the permit.

17. Section III. Emissions Units and Specific Conditions. Subsection D. Emission Units 010, 011, 012, 014, & 045 (page 48) Condition D.23 Annual Compliance Test: EU 045 was inadvertently missed from this permit condition. Please add EU045 Pellet Storage Silo as a separate EU to the sentence so it reads "*Emissions Unit ID Nos. 010 and 011 (Sludge Dryer Train #1 and #2), EU012 & EU014 (Recycle Material Bins) and EU045 (Pellet Storage Silo) for Sludge Dryer Train #1 and #2 shall be tested to demonstrate compliance with the emission limitations for VE*".

Response: The Department notes the correction. The correction is made as follows:

PROPOSED PERMIT DETERMINATION

Permit

“ ...

Annual Compliance Test. Except as specified in Specific Condition **D.26.**, during each calendar year (January 1st to December 31st), Emissions Unit ID Nos. 010 and 011 (Sludge Dryer Train #1 and #2) and 012 & 014 (Recycle Material Bins & Pellet Storage Silos for Sludge Dryer Train #1 and #2) and Pellet Storage Silo for Sludge Dryer Trains #1 & 2 shall be tested to demonstrate compliance with the emission limitations for VE.

...”

18. Section III. Emissions Units and Specific Conditions. Subsection E. Emission Units 016, 021, 031, 032, 033, & 035-038, 042, 043, 046, & 047 (page 51): Please add “PBREF-1” and remove Palm Beach Renewable Energy Park (PBREP) to description of EU035 & EU036.”

Response: The Department notes and made the clarifications as previously indicated.

19. Section III. Emissions Units and Specific Conditions. Subsection E. Emission Units 016, 021, 031, 032, 033, & 035-038, 042, 043, 046, & 047 (pages 56 - 60): EU017 Woody Waste Engine has been removed from the permit. Please remove conditions E.13 through E.36 from the permit because there are no other engines in Group 3 (note: EU017 was the only engine in this group and it has been removed from the site).

Response: The Department notes and makes the correction.

20. Section III. Emissions Units and Specific Conditions. Subsection E. Emission Units 016, 021, 031, 032, 033, & 035-038, 042, 043, 046, & 047 (page 64) Condition E.55 Hours of Operation: It appears there is different language for EU033 from the AC permit than what is in the DRAFT Title V renewal permit. Please correct accordingly.

Response: The Department notes the correction. The correction is made to the Permit as follows:

Permit

“ ...

Hours of Operation. The E.U. ID No. 033 emergency generator may operate up to 100 hours per year for maintenance and testing purposes. [Permit No. 0990234-032-AC/PSD-FL-413C; and, Rules 62-210.200 (PTE) and 62-212.400 (BACT), F.A.C.]

...”

21. Section III. Emissions Units and Specific Conditions. Subsection E. Emission Units 016, 021, 031, 032, 033, & 035-038, 042, 043, 046, & 047 (page 68) Emission Standards and Limitations: There does not appear to be any NMHC+NO_x, CO, PM emissions listed for EU046 & EU047. These are new emergency generators that are replacing existing engines. The emissions were submitted with the renewal application. Please add information accordingly.

Response: In Subsection III.E. the Group 6 specific conditions apply to the engines listed, specifically, E.U. ID Nos. 037, 046 & 047. The emission standards and limitations are in the specific conditions and apply to all three engines. In brackets (“{ }’s) equivalent emissions are stated. To clarify, the equivalent emissions for the other two engines are added as follows:

Permit

“ ...

E.73. NMHC + NO_x Emissions. Non-methane hydrocarbons and nitrogen oxide emissions shall not exceed 4.7 g/KW-hr {for E.U. ID No. 037 equivalent to: 0.22 + 0.68 lb/hour; for E.U. ID Nos. 046 & 047 equivalent to: 0.8 lb/hour}. [40 CFR 60.4205(b)]

E.74. CO Emissions. Carbon monoxide emissions shall not exceed 5.0 g/KW-hr {for E.U. ID No. 037 equivalent to: 0.73 lb/hour; for E.U. ID Nos. 046 & 047 equivalent to: 0.8 lb/hour}. [40 CFR 60.4205(b)]

PROPOSED PERMIT DETERMINATION

E.75. PM Emissions. Particulate matter emissions shall not exceed 0.40 g/KW-hr {for E.U. ID No. 037 equivalent to: 0.06 lb/hour; for E.U. ID Nos. 046 & 047 equivalent to: 0.1 lb/hour}. [40 CFR 60.4205(b)]

22. Section III. Emissions Units and Specific Conditions. Subsection E. Emission Units 016, 021, 031, 032, 033, & 035-038, 042, 043, 046, & 047 (page 72) Recordkeeping Requirements: It appears that the maintenance record requirement is missing from this section. Please revise accordingly.”

Response: The Department notes and makes the correction, a maintenance record requirement similar to the one in other engine subsections is added as follows:

Permit

“...

E.98. Maintenance Records.

- a. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- b. The owner or operator must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE and after-treatment control device (if any) are operated and maintained according to its own maintenance plan.

[40 CFR 63.6655]

...”

23. APPENDIX Section: Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004 is flawed (partial pages & duplication) and needs to be re-scanned into this section.

Response: The Department notes and makes the correction.

CONCLUSION

The enclosed proposed Title V air operation permit includes the aforementioned changes to the draft Title V air operation permit.

The permitting authority hereby issues the Proposed Permit No. 0990234-037-AV, with the changes noted above.