



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

Orange County Utilities Solid Waste Division
5901 Young Pine Road
Orlando, FL 32829

Orange County Landfill

Facility ID No. 0950113

PROJECT

Project No. 0950113-007-AC
Application for Major Source Air Construction Permit
Project Name: Landfill Gas Collection System and Candlestick Flare

COUNTY

Orange County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Central District Office
3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767

August 29, 2012, September 25, 2012, and October 3 & 5, 2012

Prepared by Natrevia Gradney-Mitchell, E.I. and Jeffrey Rustin, P.E.

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GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Project Description:

A. Applicant:

Mr. James W. Becker, Manager
Orange County Utilities Solid Waste Division
5901 Young Pine Road
Orlando, Florida 32829

B. Professional Engineer:

Mr. Curtis Hartog, P.E.
Foth Infrastructure and Environment
8550 Hudson Blvd. North
Lake Elmo, Minnesota 55042

C. Project Location:

Company Name: Orange County Solid Waste Division
Plant Name: Orange County Landfill

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D. Project Summary:

This project authorizes construction of a landfill gas collection system for Cell 2 of the active Class III landfill, which will involve the installation of a new flare.

E. Application Information:

Application Received: 08/16/2012
Request for Additional Information: 09/05/2012
Information Received and Application Complete: 09/07/2012

II. PSD Applicability for Project

This project is not subject to PSD preconstruction review.

III. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-210.300, F.A.C. – Stationary Source General Requirements	Y	Not exempt from general permitting requirements.
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	Facility is not a PSD major source.
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Flaring operations could be a source of visible emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Landfills are a source of VOC and odors.
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	There is no applicable source category.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Orange County is an attainment area for ozone.
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category.
Rule 62-204.800, F.A.C. - Standards of	Y	EU No. 004 is subject to 40 CFR 60,

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Subject to:	Y/N	Comments
Performance for New Stationary Sources (NSPS– 40 CFR 60)		Subpart A and 40 CFR 60, Subpart WWW.
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	There is no applicable source category.
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	Y	EU No. 004 is subject to 40 CFR 63, Subpart A and 40 CFR 63, Subpart AAAA.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	Y	Facility is a Title V source.
Rule 62-297.310, F.A.C. - General Compliance Test Requirements	Y	Method 22 VE testing is required for EU No. 004.

IV. Summary of Emissions

Pollutant	Landfill Potential Emission before project-Cell 2 (tpy)	Current project-Cell 2 with LFG System Installation (tpy)	Significant Emissions Rate (tpy)	Landfill Potential Emission after project-Cell 2 (tpy)	Subject to PSD?
CO	122.02	50.6	100	172.62	No, PTE < 250 tpy
NO _x	26.85	2.7	40	29.55	No
PM/PM ₁₀	5.54	1.15	15	6.69	No
SO ₂	16.93	0.956	40	17.886	No
VOC	7.02	2.45	40	9.47	No
HAPS (total)	approximately 5.0 tons	0.27	N/A	approximately 5.27 tons	No

V. Federal NSPS and/or NESHAP Provisions

- A. 40 CFR 60, Subpart A- General Provisions;
- B. 40 CFR 60, Subpart WWW- NSPS Municipal Solid Waste Landfills;
- C. 40 CFR 63, Subpart A- General Provisions; and
- D. 40 CFR 63, Subpart AAAA- NESHAP Municipal Solid Waste Facilities.

VI. Conclusions

Company Name: Orange County Solid Waste Division
 Plant Name: Orange County Landfill

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The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

VII. 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. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Central District, 3319 Maguire Blvd., Ste. 232, Orlando, FL 32803-3767.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).