

Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Mr. Lee Schmudde Responsible Official Walt Disney World Company P.O. Box 10,000 Lake Buena Vista, FL 32830-1000

Final Air Construction Permit No. 0950111-022-AC Walt Disney World Resort Complex

Enclosed is Final Air Construction Permit No. 0950111-022-AC. The air construction permit is issued to reclassify three existing diesel electric generators serving the DISC building at the Walt Disney World Resort Complex from insignificant status to regulated status.

An electronic version of this document 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. The web site address is:

http://www.dep.state.fl.us/air/eproducts/airpermit/AirSearch.asp

This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

Zun & Villham

"More Protection, Less Process"

Final Air Construction Permit No. 0950111-022-AC Page 2 of 2

CERTIFICATE OF SERVICE

Lee Schmudde*
Rich Bumar, P.E., Walt Disney World Company
Len Kozlov, P.E., Central District Office
U.S. EPA, Region 4

Clerk Stamp

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(D

FINAL DETERMINATION

Walt Disney World Company Walt Disney World Resort Complex

Air Construction Permit No. 0950111-022-AC

The Department distributed a public notice package on May 11, 2004, that included an intent to issue Air Construction Permit No. 0950111-022-AC to the Walt Disney World Company for the Walt Disney World Resort Complex, located at Buena Vista Drive, Orange and Osceola Counties. The air construction permit is to reclassify three existing diesel electric generators serving the DISC building at the Walt Disney World Resort Complex from insignificant status to regulated status.

The <u>Public Notice of Intent to Issue</u> was published in the Orlando Sentinel on May 19, 2004.

COMMENTS/CHANGES

No comments were received by the Department from the public, U.S.EPA, or the applicant.

CONCLUSION

The final action of the Department is to issue the permit with no changes.



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

Final Air Construction Permit No. 0950111-022-AC

Permittee

Walt Disney World Company	File No.	0950111-022-AC
Walt Disney World Resort Complex	Facility	
•	ID No.	0950111
P.O. Box 10,000	SIC No.	7966
Lake Buena Vista, FL 32830-1000		
	Permit No.	0950111-022-AC
	Expires:	December 31, 2004
Authorized Representative:	•	
Lee Schmudde		
Responsible Official		

Project and Location

This project is to reclassify three existing diesel electric generators serving the DISC building at the Walt Disney World Resort Complex from insignificant status to regulated status. Both the annual fuel quantity used and percent sulfur, by weight, in the fuel oil shall be limited. The nameplate rating of each generator is 1.75 megawatts (MW). The manufacturer is Spectrum Detroit Diesel. The model number is 1750DS-4. The generators were installed in November, 2002, with initial plans to operate them only as conditionally exempt emergency generators. Diesel fuel for the generators is stored in three 10,000 gallon fuel tanks. This reclassification permitting action should allow increased operational flexibility for the facility.

This facility is located at 1375 Buena Vista Drive, Orange and Osceola Counties; UTM Coordinates: Zone 17, 449.70 km East and 3138.00 km North; Latitude: 28° 22' 24" North and Longitude: 81° 32' 46" West.

This Air 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 above named permittee is authorized to construct and operate in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

The attached appendix is made a part of this permit:

Appendix GC

Construction Permit General Conditions

Michael G. Cooke, Director
Division of Air Resource Management

"More Protection, Less Process"

Printed on recycled paper.

Facility Description

This facility consists of the following emissions units:

E.U. ID No. (Facility ID No.)	Brief Description
North Service Area Dry Cleaning	
<u>Plant</u>	
-001 (LDC-1)	Dry Cleaning Unit #1
North Service Area (NSA)	, ,
-005 (NSA-17)	North Service Area (NSA) Central Shops Building Annex (CSBA): Sand Blast Chamber No. 1: unregulated
-006 (NSA-18)	NSA Boat Maintenance & Painting Facility
-007 (NSA-1 thru 7, 11, 12, 14 thru	NSA Central Shops Building
16)	
-014 (NSA-8)	NSA Lofting Building PSB
-015 (NSA-9 & 10)	NSA CSBA
-020 (LBB-1a)	Laundry Boiler #1
-021 (LBB-1b)	Laundry Boiler #2
-022 (LBB-1c)	Laundry Boiler #3
Disney's Grand Floridian Hotel	
-035 (GFR2 thru 18)	16 Hot Water Heaters
Disney-MGM Studios	10 110t Hatel Hatteld
-053 (STB-1, 2A, 2B1, 2B2, 3 thru 8)	10 Hot Water Heaters
Disney-MGM Studio Tours	
-061 (MGM-10)	Paint Spray Booth (PSB)
Buena Vista Construction	·
-062 (BVC-1)	PSB
Lake Buena Vista Community Village	
-063 (LBV-1 & 2)	PSBs
Disney Village	
-065 (VM-3)	PSB
Ft. Wilderness/Golf Course	
-066 (FWR-4)	PSB
Yacht & Beach Club	
-067 (YBC-3)	PSB
EPCOT Center	
-068 (EP-1 & 2)	PSBs
-070 (EP-3)	PSB
South Service Area	
-071 (SSA-1)	PSB
Administrative Area	
-072 (LAU-1 & 2)	2 Laundry Thermal Oil Heaters
Magic Kingdom	
-075 (MK-1)	PSB
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Reedy Creek Improvement	
District/Epcot	
-076 (Epcot HWG-1 thru 3)	3 Hot Water Heaters (unregulated)
-079 (Epcot DG-1)	2.5 MW Diesel Generator
-079 (Epcot DG-1)	2.5 MW Diesel Generator
Reedy Creek Improvement District	2.5 WW Diesel Generator
-081 (CEP-2)	Hot Water Heater
Blizzard Beach	Hot water ficaler
-083 (BB-1 thru 5)	5 Hot Water Heaters
Reedy Creek Improvement District	5 Hot water heaters
-088 (CEP-1)	CCCT with natural cas fired Heat Perceyary Steam
-000 (CEF-1)	CCCT with natural gas fired Heat Recovery Steam Generator
Boardwalk Resort	Generator
-090 (BDW-1 & 2)	2 Boilers
-090 (BDW-1 & 2)	8 Hot Water Heaters
Magic Kingdom	8 Hot Water Heaters
	Hot Water Heater
-092 (MK-3)	PSB
-093 (MK-2) Boardwalk Resort	rsb
	ncn
-094 (BR-1)	PSB
Coronado Springs Resort	27.11-(37) - 11-1-
-095 (COS-1 thru 37)	37 Hot Water Heaters
Stand-by/Emergency Generators	100.0
-101	120 Stand-by/Emergency Generators Firing #2 FO,
C	NG or LP Gas
Coronado Springs Resort	non
-102 (COS-41)	PSB
Disney's Animal Kingdom	C1 II . III . II
-103 (DAKU-1 thru 51)	51 Hot Water Heaters
Necropsy Building	
-112 (DAK-1)	Crawford Model CB800 Animal Crematory
All Star Resort	
-113 (ASR-2 thru 108)	107 Hot Water Heaters
-114 (ASR-1)	PSB
Tree of Life Boiler	
-115 (DAKU-52)	1.075 MMBtu/hr boiler firing NG
Disney's MGM Studios Feature	
Animation Building	Angr
-117	2 PSBs
NSA Monorail Building	
-118 (NSA-20)	Monorail Trains PSB
Disney's Animal Kingdom	
-119	Maintenance PSB

Regulatory Classification and Project Description

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_X), carbon monoxide (CO), or volatile organic compounds (VOC) exceed 100 tons per year (TPY).

The applicant has requested a fuel limitation usage of 254,000 gallons of diesel fuel per year for these generators. Because these generators provide backup power for the DISC Building, a facility that houses extensive computer hardware for the Walt Disney World Resort Complex, the applicant believes that the requested fuel limitation is justified. There will be an increase in the potential levels of emissions of particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO2), hydrocarbons/VOC, and carbon monoxide (CO) as a result of implementing this project, as noted below. The potential to emit (PTE) calculations in the second column in this table were based on manufacturer provided emissions factor data. In the third column are the corresponding PTE values using EPA's AP-42 factors from Table 3.4-1. in that document.

Pollutant ,	Potential to emit level (Tons per year) Using manufacturer supplied data	Potential to emit level (Tons per year) Using AP-42 factors
Particulate Matter (PM)	1.6	1.3
Nitrogen Oxides (NOx)	39.4	54.3
Sulfur Dioxide (SO2) (using .5% sulfur fuel, by weight)	4.5	8.9
Hydrocarbons/VOC	10.5	1.6 (TOC)
Carbon Monoxide (CO)	17.5	14.2

The applicant is seeking to escape prevention of significant deterioration (PSD) review for this permitting action. However, this emissions unit (the three diesel fuel fired electric generators), when operated under a fuel limitation of 254,000 gallons of diesel fuel per year, will exceed the significant emission rate for NOx (40 tons per year) listed in Table 212.400-2, F.A.C., using the AP-42 factors. Alternatively, using a fuel limitation of 185,000 gallons of diesel fuel will hold the potential NOx emissions increase below the 40 ton per year threshold. Sulfur content of the fuel oil shall also be held to 0.5%, or less, by weight. With these changes, the three electric generators will now be classified collectively as a regulated emissions unit. The fuel limitations are requested by the applicant to escape PSD review, as noted above. We have determined that the upcoming MACT rule does not apply to this emissions unit, since the generators are considered existing units under the rule.

Because the net increases in potential emissions for the pollutants, as noted above in the second column, are below the significant emissions rates listed in Table 212.400-2, F.A.C., Regulated Air Pollutants – Significant Emissions Rates, it has been determined that this change constitutes a minor modification to the facility. Therefore, the modification is not subject to review under Rule 62-212.400,

Air Construction Permit No. 0950111-022-AC Facility ID No. 0950111

F.A.C., Prevention of Significant Deterioration (PSD), so neither a revised Best Available Control Technology (BACT) determination nor an analysis of the air quality impact is required. The proposed project is otherwise subject to preconstruction review requirements under the provisions of Chapter 403, Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

Project Plan

The applicant tested the emissions unit to verify the accuracy of the above NOx emissions estimate range using appropriate EPA test methodology, as noted in the next section. Steady state, startup, and shut down operational phases were tested for emissions, as detailed in the following test protocol. District and Tallahassee offices were notified prior to conducting the testing. Test results shall be provided to the Department within 30 calendar days after the test conclusion. This air construction (AC) permit initially limits the annual diesel fuel oil usage to 185,000 gallons for these three generators. Based on the results of the tests, a determination will be made by the Department as to the appropriate maximum annual level of fuel usage for these generators, and an air construction permit modification will be issued if a higher (or lower) level of fuel usage is justified.

The emission unit affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein), and all specific conditions of the facility's existing Title V Air Operation Permit No. 0950111-021-AV.

Test Protocol

The applicant provided, and the Department approved, the following test protocol and schedule: An EPA Method 1-4, 7E, and 9 on May 18th and 19th, 2004, at the Walt Disney World Complex DISC Building starting each day at 8 am. The purpose of the test was to confirm the emissions rate for NOx under various load conditions for this current permitting action.

The following test protocol was used:

- Day 1: 1 run during startup (about 1 hour or until the engine was at steady-state temperature and pressure, 3 runs at 60% load (about 4 hours total), then 1 shutdown run (about 15 min).
- Day 2: 1 run during startup (about 1 hour or until the engine was at steady-state temperature and pressure, 3 runs at 75% load, 3 runs at 100% load (about 8-hours), and 1 visible emissions test during the 100% load run, then 1 shutdown run (about 15 min).
- The only fuel allowed to be burned in this emissions unit was diesel fuel oil, with a maximum sulfur content of 0.5%, by weight.

The following data were collected during the test: Fuel consumption in gallons per hour, percent load, and power generation in megawatts. Other engine function data included revolutions per minute (rpm), engine temperature, and turbo boost in pounds per square inch (psi).

Permit Schedule

- 03/31/04 Application deemed complete.
- 03/31/04 Application received.
- 05/11/04 Draft Construction Permit clerked.
- 05/19/04 Public Notice published.

Relevant Documents

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but not all are incorporated into this permit. These documents are on file with the Department.

- Application received on March 31, 2004.
- The Department's Technical Evaluation and Final Determination issued concurrently with this permit.

Administrative Requirements

A.1. Regulating Agencies. All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation, Florida Department of Environmental Protection, at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the Department's Central District Office in Orlando, Florida. The address and telephone numbers are:

Department of Environmental Protection Central District Office 3319 Maguire Boulevard, Suite 232 Orlando, Florida 32803-3767 Telephone: 407/894-7555

- **A.2.** General Conditions. The owner and operator is subject to, and shall operate under the attached General Permit Conditions **G.1.** through **G.15.** listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- **A.3.** <u>Terminology.</u> The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code (F.A.C.).
- **A.4.** Forms and Application Procedures. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- **A.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.]

- **A.6.** Permit Extension. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Tallahassee Office no later than 60 days prior to the expiration of the permit. [Rule 62-4.080, F.A.C.]
- A.7. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit 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 Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297.
- **A.8.** Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]

Operational Requirements

- **A.9.** The facility is subject to all of the requirements specified in Title V Air Operation Permit No. 0950111-021-AV.
- **A.10.** The facility's responsible official shall apply for a Title V Air Operation Permit Revision that incorporates the terms and conditions of this air construction permit no later than 90 days prior to the expiration date of this permit. [Rule 62-213.420(1)(a)1., F.A.C.]
- **A.11.** Operating Procedures. Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
- **A.12.** Methods of Operation. Fuels. The only fuel allowed to be burned in this emissions unit is diesel fuel oil, with a maximum sulfur content of 0.5%, by weight. The amount of diesel fuel fired in the unit shall not exceed 185,000 gallons per year.

 [Rule 62-4.070(3), F.A.C.; and applicant request.]

Testing, Compliance Determination, and Reporting

A.13. A one time test procedure was performed to determine the potential annual NOx emissions for the emissions unit, as noted in the above narrative. District and Tallahassee offices were notified prior to conducting the testing. Test results shall be provided to the Department within 30 calendar days after the test conclusion. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the compliance authority to determine if the test was properly conducted and if the test results were properly computed. Based on the results of this testing, the annual diesel fuel usage

Walt Disney World Company
Walt Disney World Complex

Air Construction Permit No. 0950111-022-AC Facility ID No. 0950111

limitation of 185,000 gallons may be adjusted by the Department via an air construction permitting action.

[Rules 62-4.070(3) and 62-297.310(8), F.A.C.]

- **A.14.** Sulfur Dioxide. The permittee shall demonstrate compliance with the diesel fuel sulfur limit via a fuel analysis provided by the vendor or permittee upon each fuel delivery to the emission unit's three 10,000 gallon diesel fuel tanks.
 - The fuel sulfur content, in percent by weight, for the diesel fuel shall be evaluated using either ASTM D2622-94, ASTM D4294-90 (95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95, or the latest editions.

[Rules 62-4.070(3), 62-213.440, and 62-297.440, F.A.C.]

- A.15. Recordkeeping. The following records shall be kept at the facility:
 - Total gallons of diesel fuel oil used during each month for the three generators.
 - The sulfur content, in percent by weight, of all the diesel fuel delivered each month to the three 10,000 gallon tanks, based on the vendor or permittee provided fuel sample analyses. See Specific Condition A.14.

The records shall be maintained for a minimum of 5 years and made available to the Central District Office upon request.

[Rule 62-297.310(8), F.A.C.]

TECHNICAL EVALUATION

AND

FINAL DETERMINATION

Walt Disney World Company

Walt Disney World Resort Complex

Facility ID No. 0950111

DEP File No. 0950111-022-AC

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

June 9, 2004

TECHNICAL EVALUATION AND FINAL DETERMINATION

1.0. GENERAL INFORMATION

1.1. APPLICANT NAME AND ADDRESS

Walt Disney World Company P.O. Box 10,000 Lake Buena Vista, FL 32830-1000

Responsible Official: Lee Schmudde

1.2. REVIEW AND PROCESS SCHEDULE

March 31, 2004 Air Construction Permit Application received.
March 31, 2004 Application deemed complete.
May 11, 2004 Draft Construction Permit clerked.
May 19, 2004 Public Notice published.

2.0. FACILITY INFORMATION

This facility is located at 1375 Buena Vista Drive, Orange and Osceola Counties; UTM Coordinates: Zone 17, 449.70 km East and 3138.00 km North; Latitude: 28° 22' 24" North and Longitude: 81° 32' 46" West.

SIC codes are:

Industry Group No.	79	Amusement and Recreation Services
Industry No.	7996	Amusement Parks

This facility consists of the following emissions units:

E.U. ID No. (Facility ID No.)	Brief Description
North Service Area Dry Cleaning	
<u>Plant</u>	
-001 (LDC-1)	Dry Cleaning Unit #1
North Service Area (NSA)	
-005 (NSA-17)	North Service Area (NSA) Central Shops Building
	Annex (CSBA): Sand Blast Chamber No. 1:
	unregulated
-006 (NSA-18)	NSA Boat Maintenance & Painting Facility
-007 (NSA-1 thru 7, 11, 12, 14 thru	NSA Central Shops Building
16)	
-014 (NSA-8)	NSA Lofting Building PSB
-015 (NSA-9 & 10)	NSA CSBA
-020 (LBB-1a)	Laundry Boiler #1
-021 (LBB-1b)	Laundry Boiler #2
-022 (LBB-1c)	Laundry Boiler #3
Disney's Grand Floridian Hotel	
-035 (GFR2 thru 18)	16 Hot Water Heaters

Disney-MGM Studios	***
-053 (STB-1, 2A, 2B1, 2B2, 3 thru 8)	10 Hot Water Heaters
Disney-MGM Studio Tours	Delat Carre David (DCD)
-061 (MGM-10)	Paint Spray Booth (PSB)
Buena Vista Construction	nen
-062 (BVC-1)	PSB
Lake Buena Vista Community Village	PSBs
-063 (LBV-1 & 2)	rsbs
Disney Village	PSB
-065 (VM-3)	130
Ft. Wilderness/Golf Course	PSB
-066 (FWR-4)	130
Yacht & Beach Club -067 (YBC-3)	PSB
EPCOT Center	130
-068 (EP-1 & 2)	PSBs
-070 (EP-3)	PSB
South Service Area	102
-071 (SSA-1)	PSB
Administrative Area	
-072 (LAU-1 & 2)	2 Laundry Thermal Oil Heaters
Magic Kingdom	
-075 (MK-1)	PSB
Reedy Creek Improvement	
District/Epcot	
-076 (Epcot HWG-1 thru 3)	3 Hot Water Heaters (unregulated)
-079 (Epcot DG-1)	2.5 MW Diesel Generator
-080 (Epcot DG-2)	2.5 MW Diesel Generator
Reedy Creek Improvement District	
-081 (CEP-2)	Hot Water Heater
Blizzard Beach	1100 1/100
-083 (BB-1 thru 5)	5 Hot Water Heaters
Reedy Creek Improvement District	J Hot Water House
-088 (CEP-1)	CCCT with natural gas fired Heat Recovery Steam
-000 (CLI-1)	Generator
Boardwalk Resort	
-090 (BDW-1 & 2)	2 Boilers
-090 (BDW-1 & 2)	8 Hot Water Heaters
Magic Kingdom	O ALGO II GIGI TIGATOTO
	Hot Water Heater
-092 (MK-3)	PSB
-093 (MK-2)	1 00
Boardwalk Resort	PSB
-094 (BR-1)	130

37 Hot Water Heaters
120 Stand-by/Emergency Generators Firing #2 FO,
NG or LP Gas
PSB
51 Hot Water Heaters
Crawford Model CB800 Animal Crematory
107 Hot Water Heaters
PSB
1.075 MMBtu/hr boiler firing NG
2 PSBs
Monorail Trains PSB
Maintenance PSB

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceed 100 tons per year (TPY). This facility is also a major source of hazardous air pollutants (HAPs).

The facility is located in an area (Orange and Osceola Counties) designated "unclassifiable" for PM_{10} , "air quality maintenance" for ozone (Orange County only), and "attainment" for all the other criteria pollutants (Rule 62-204.340, F.A.C.).

The facility's existing Title V Air Operation Permit Renewal has an effective date of January 1, 2003, and will expire on December 31, 2007.

3.0. PROJECT DESCRIPTION

This project is to reclassify three existing diesel electric generators serving the DISC building from insignificant status to regulated status. Both the annual fuel quantity used and percent sulfur, by weight, in the fuel oil will be limited. The nameplate rating of each generator is 1.75 megawatts (MW). The manufacturer is Spectrum Detroit Diesel. The model number is 1750DS-4. The generators were installed in November, 2002, with initial plans to operate them only as conditionally exempt emergency generators. This reclassification permitting action should allow increased operational flexibility for the facility.

4.0. PROJECT EMISSIONS & RULE APPLICABILITY

The applicant has requested a fuel limitation usage of 254,000 gallons of diesel fuel per year for these generators. Because these generators provide backup power for the DISC Building, a facility that houses extensive computer hardware for the Walt Disney World Resort Complex, the applicant believes that the requested fuel limitation is justified. There will be an increase in the potential levels of emissions of particulate matter (PM), nitrogen oxides (NOx), sulfur dioxide (SO2), hydrocarbons/VOC, and carbon monoxide (CO) as a result of implementing this project, as noted below. The potential to emit (PTE) calculations in the second column in this table were based on manufacturer provided emissions factor data. In the third column are the corresponding PTE values using EPA's AP-42 factors from Table 3.4-1. in that document.

Pollutant	Potential to emit level (Tons per year) Using manufacturer supplied data	Potential to emit level (Tons per year) Using AP-42 factors
Particulate Matter (PM)	1.6	1.3
Nitrogen Oxides (NOx)	39.4	54.3
Sulfur Dioxide (SO2) (using .5% sulfur fuel, by weight)	4.5	8.9
Hydrocarbons/VOC	10.5	1.6 (TOC)
Carbon Monoxide (CO)	17.5	14.2

The applicant is seeking to escape prevention of significant deterioration (PSD) review for this permitting action. However, this emissions unit (the three diesel fuel fired electric generators), when operated under a fuel limitation of 254,000 gallons of diesel fuel per year, will exceed the significant emission rate for NOx (40 tons per year) listed in Table 212.400-2, F.A.C., using the AP-42 factors. Alternatively, using a fuel limitation of 185,000 gallons of diesel fuel will hold the potential NOx emissions increase below the 40 ton per year threshold. Sulfur content of the fuel oil shall also be held to 0.5%, or less, by weight. With these changes, the three electric generators will now be classified collectively as a regulated emissions unit. The fuel limitations are requested by the applicant to escape PSD review, as noted above. We have determined that the upcoming MACT rule does not apply to this emissions unit, since the generators are considered existing units under the rule.

Because the net increases in potential emissions for the pollutants, as noted above in the second column, are below the significant emissions rates listed in Table 212.400-2, F.A.C., Regulated Air Pollutants – Significant Emissions Rates, it has been determined that this change constitutes a minor modification to the facility. Therefore, the modification is not subject to review under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), so neither a revised Best Available Control Technology (BACT) determination nor an analysis of the air quality impact is required. The proposed project is otherwise subject to preconstruction review requirements under the provisions of Chapter 403,

TECHNICAL EVALUATION AND FINAL DETERMINATION

Florida Statutes, and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.).

The applicant tested the emissions unit to verify the accuracy of the above NOx emissions estimate range using appropriate EPA test methodology, as noted in the next section. Steady state, startup, and shut down operational phases were tested for emissions, as detailed in the following test protocol. District and Tallahassee offices were notified prior to conducting the testing on May 3, 2004. Test results shall be provided to the Department within 30 calendar days after the test conclusion. The air construction (AC) permit will initially limit the annual diesel fuel oil usage to 185,000 gallons for these three generators. Based on the results of the tests, a determination will be made by the Department as to the appropriate maximum annual level of fuel usage for these generators, and an air construction permit modification will be issued if a higher (or lower) level of fuel usage is justified.

The emission unit affected by this permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein), and all specific conditions of the facility's existing Title V Air Operation Permit No. 0950111-021-AV.

4.1. TEST PROTOCOL

The applicant provided, and the Department approved, the following test schedule: An EPA Method 1-4, 7E, and 9 on May 18th and 19th, 2004, at the Walt Disney World Resort Complex DISC Building starting each day at 8 am. The purpose of the test was to confirm the emissions rate for NOx under various load conditions for this current permitting action.

The following test protocol was used:

- Day 1: 1 run during startup (about 1 hour or until the engine is at steady-state temperature and pressure, 3 runs at 60% load (about 4 hours total), then 1 shutdown run (about 15 min).
- Day 2: 1 run during startup (about 1 hour or until the engine is at steady-state temperature and pressure, 3 runs at 75% load, 3 runs at 100% load (about 8-hours), and 1 visible emissions test during the 100% load run, then 1 shutdown run (about 15 min).
- The only fuel allowed to be burned in this emissions unit was diesel fuel oil, with a maximum sulfur content of 0.5%, by weight.

The following data were collected during the test: Fuel consumption in gallons per hour, percent load, and power generation in megawatts. Other engine function data included revolutions per minute (rpm), engine temperature, and turbo boost in pounds per square inch (psi).

5.0. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a final determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department will issue a final Air Construction Permit to the applicant that provides for the above changes at the facility.

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