From: Bumar, Rich
To: Costello, Martin
Cc: Holtom, Jonathan
Subject: Generator Information
Date: Wednesday, October 31, 2012 5:35:58 PM

Marty,

In speaking with the manufacturer's rep just now, he said he is pretty sure both models of the generators retard ignition timing for emission controls. He is going to verify that and I should know for sure tomorrow, along with the manufacture dates of the engines.

Rich

From: Bumar, Rich
Sent: Wednesday, October 31, 2012 3:49 PM
To: 'Costello, Martin'
Cc: Holtom, Jonathan
Subject: RE: AC permits for Dry Cleaning Plant???

Marty,

Yes, we have pretty much come to the conclusion that we must keep the status as non-emergency engines and we are going to have to install emissions controls to comply with ZZZZ.
Here are the stats for each engine:

Model	Detroit Diesel Model 1750 DS4	Detroit Diesel model 1750-CX6DT2
Date Construction Commenced	Contract secured November 2002	Contract secured late 2008
Initial Startup date	November 2003	April 17, 2009
Manufacture year	TBD*	TBD*
Overall Displacement, liters	65	57.2
No. of Cylinders	16	12
Liters per cylinder	4.1	4.8
Aspiration type	Turbocharged, intercooled	Turbocharged, intercooled
Ignition timing retard?	No	No
EPA Certification	Tier 1	Tier 2
% load	Fuel Consumption at Standby Rating, gal/hr	
100%	114.4	123
75%	87.0	93

50%	60.6	65
25%	33.6	N/A
Planned Emissions Controls and Monitors for ZZZZ Compliance		
Type of controls	Diesel oxidation catalyst	Diesel oxidation catalyst
Emissions Standard	70% CO reduction	70% CO reduction
Emissions Monitor	Continuous Parametric	Continuous Parametric
Emissions Test Frequency	Semi-annual	Semi-annual

*I am researching that now. I should have an answer by tomorrow at the latest.

I have included the spec sheets for both engines with this email.

I also got word today that we are planning to install a new emergency generator at a new resort area. The Grand Floridian Resort is expanding and they want to install an emergency generator some time next year. Can we include this engine in our list of emergency generators? It will be a WDW generator.

Here are the specs for it:

Location	Grand Floridian DVC
Generator Model	Kohler 400 REOZJ
HP	617
Output, kW	400
Fuel usage at 75% load	22.1 gal/hr
Ignition	CI
Unit Code	W109

I am also enclosing the edited spreadsheet with this new engine included in the list of WDW CI RICE Units.

Please let me know if I can help with anything else.

Rich

Please note the new phone number below.

Rich Bumar, P.E.
Environmental Engineer
Walt Disney World Resort • Environmental Control Dept. • Maingate Office Complex #2235
Phone: 407-390-5003 (tie line 8+298) • Fax: 407-938-7322/7325 and **407-390-5227** *• Mobile:321-278-6125 • DC:162*134*1071*

From: Costello, Martin [mailto:Martin.Costello@dep.state.fl.us]
Sent: Wednesday, October 31, 2012 9:35 AM
To: Bumar, Rich
Cc: Holtom, Jonathan

Subject: RE: AC permits for Dry Cleaning Plant???

Rich,

I am currently working on the DISC building generators. Last I heard you plan to use them as non-emergency engines. Can you send details (date of manufacture, hp, fuel consumption at full load, any controls like fuel timing retard, turbo or naturally aspired, if adding controls what type and what monitoring?) This is what I currently have:

3 Spectrum Detroit Diesel model 1759DS-4 with 1.75 MW generators installed 11/02
1 identical engine added in 2008 (does it really have the same emission controls? What about the non-road engine rule Tier 2 or Tier 3)

Thanks,

Martin Costello
Professional Engineer
Florida Department of Environmental Protection (DEP)
Division of Air Resource Management (DARM)
Office of Permitting and Compliance (OPC)
Power Plants Section
Phone: (850) 717-9040

Did you know that the Department may not require you to submit a Title V fee for the 2012 calendar year? To learn more, please visit us online at the following web address: www.title5feeholiday.com

Please take a few minutes to share your comments on the service you received from the department by clicking on this link. DEP Customer Survey.