ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
E04P	Emergency Diesel Engine (Stationary Fire Pump) – Bldg. 97	None – vents via E04E

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Fire protection system emergency fire pump power engine.
Manufactured date = 2010.
See attached engine nameplate photo at the end of this Attachment E.

Manufacturer:	**Model number:**	**Serial number:**
Clarke (John Deere)	JU6H-UFAD58	PE 6068L 129305
Construction date:	**Installation date:**	**Modification date(s):**
12/2010	12/2010	None

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
175 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	500 hr/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X_Direct Fired
Maximum design heat input and/or maximum horsepower rating: 175 hp	**Type and Btu/hr rating of burners:** NA

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Diesel Fuel #2 Ultra Lo-sulfur Diesel Fuel

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Diesel Fuel	15 ppm	0.01%	142,200 BTU/gal

Emissions Data

Criteria Pollutants	Potential Emissions 500 hr/yr	
	PPH	TPY
Carbon Monoxide (CO)	1.01	0.26
Nitrogen Oxides (NO_X)	1.15	0.29
Lead (Pb)	NA	NA
Particulate Matter ($PM_{2.5}$)	0.06	0.02
Particulate Matter (PM_{10})	0.06	0.02
Total Particulate Matter (TSP)	0.06	0.02
Sulfur Dioxide (SO_2)	0.36	0.09
Volatile Organic Compounds (VOC)	1.15	0.29
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Trace	---	---
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
Trace	---	---

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

NOx, CO, VOC & PM factors from Tier 3 Emission certification standards.
SO2 from AP-42.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

1. Emission limits – R30-07300003-2009-SM01 (Part 3 of 4): 7.1.1.1., 7.1.2.1.; 45CSR16; 45CSR34; 40 C.F.R. 60 Subpart IIII §§60.4205(c), Table 4 to Subpart IIII; 40 C.F.R. 63 Subpart ZZZZ §63.6590(c).

2. Operational limits – R30-07300003-2009-SM01 (Part 3 of 4): 7.1.2.2. – 7.1.2.5.; 45CSR16; 45CSR34; 40 C.F.R. 60 Subpart IIII §§60.4207(b), 60.4211(a), 60.4211(c), 60.4211(f).

_NA_ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

1. R30-07300003-2009-SM01 (Part 3 of 4): 7.1.2.1., 7.1.2.3.; 45CSR16; 40 C.F.R. 60 Subpart IIII §§60.4205(c), 60.4211(a), Table 4 to Subpart IIII.

2. R30-07300003-2009-SM01 (Part 3 of 4) 7.2.1., 7.4.1., 7.4.2.; 45CSR16; 45CSR§30-5.1.c.; 40 C.F.R. 60 Subpart IIII §§4209(a), 60.4214(b).

Are you in compliance with all applicable requirements for this emission unit? _X_Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.