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**PERMIT TO
CONSTRUCT/OPERATE EVALUATION**

Applicant's Name	LAMPS PLUS/PACIFIC COAST LIGHTING
Company ID	800428
Mailing Address	20250 PLUMMER ST., CHATSWORTH, CA 91311
Equipment Address	SAME AS ABOVE

EQUIPMENT DESCRIPTION:

A/N 539897 (New Construction)

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL NO. QSM11-G4, DIESEL-FUELED, 6 CYLINDERS, TURBOCHARGED, AFTERCOOLED, 470 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

A/N 539898

TITLE V REVISION APPLICATION, DEMINIMUS PERMIT REVISION.

BACKGROUND:

Lamps Plus submitted the permit application as Class I (New Construction) on 06/29/2012 for Permits to Construct/Operate an internal combustion engine driving an emergency generator. This is an existing facility operating under a Title V Facility permit. This facility has permits to operate for 4 Spray Booths under its facility permit. The facility requested the application be processed under district's expedited permit processing program per Rule 301 (v).

This is a Title V facility and currently operates under a Title V facility permit that was issued on July 23, 2008. Review of the compliance file for this facility reveals that there are no records of nuisance complaints reported during in last two years. The facility was issued a notice to comply E06668 (Failure to Submit SAM-500 form for the period of January 1, 2010, through June 30, 2010) in June 2011. The facility submitted the form on 7/6/11 and hence the NC was resolved.

PROCESS DESCRIPTION:

The facility is a manufacturer of decorative lighting products. The emergency engine provides power to the manufacturing building in case of utility power outage. The operating hours are 1 hr/day, 1 day/week, and 50 weeks/yr.

EMISSIONS AND ANALYSIS:

The proposed engine is an EPA Certified Tier 3 engine. This engine is pre-certified by the district. The emission factors were taken from the district application files when the manufacturer applied

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for certified permit. For emission calculations, please refer to attached spreadsheet and summary below.

	VOC	NOx	SOx	CO	PM	PM10
Emission factor, g/HP-hr	0.11	2.35	0.0049	0.45	0.06	0.06
lb/hr	0.11	2.43	0.01	0.47	0.06	0.06
lb/day Max.	0	2	0	0	0	0
lb/day Avg.	0	0.34	0	0.00	0	0
lb/yr	5.70	121.75	0.25	23.31	3.11	2.98

RULES:

- Rule 212(c)(1): This section requires a public notice for all new or modified permit units that may emit air contaminants located within 1,000 feet from the outer boundary of a school. Since there are no schools within 1,000 feet of the facility, a public notice will not be required per this section.
- Rule 212(c)(2) & (g): These sections require a public notice for all new or modified facilities which have on-site emission increases for the equipment or the facility exceeding any of the daily maximums as specified in subdivision (g). Since the daily emissions are less than specified in section (g), public notice will not be required by this section.
- Rule 212(c) (3): The MICR is less than 1 in-a million resulting from the use of emergency ICE. Therefore, a public notice will not be required per this section.
- Rule 401 With proper operation of this equipment, the visible emissions from the engines are not likely to violate requirements of this rule.
- Rule 402 Operation of equipment is not expected to create a nuisance.
- Rule 1110.2 Emergency engines are exempt from requirements of this rule.
- REG. XIII BACT for this engine is EPA Tier 3 certified emissions. This engine is certified by EPA to meet Tier 3 emissions standards as below.

BACT REQUIREMENTS (TIER 3 ENGINES)

	NOx + ROG (Gm/bhp-hr)	CO (Gm/bhp-hr)	PM (Gm/bhp-hr)
Required	3.0	2.6	0.15
Actual	2.46	0.45	0.06
Compliance	Yes	Yes	Yes

Emergency engines are exempt from Modeling and Offset requirements per section 1304 (a) (4) of Reg. XIII.

- Rule 1401: Emergency engines are exempt from the requirements of this rule as per section (g)(1)(F).

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Rule 1470: The engines are meeting NO_x+ROG and CO emissions standards specified in Table 2 of paragraph (c) (2)(C) (viii) of the rule is summarized below:

	NO_x + ROG (Gm/bhp-hr)	CO (Gm/bhp-hr)
Required	3.0	2.6
Actual	2.46	0.45
Compliance	Yes	Yes

For PM emissions limit compliance, the engine is expected to emit 0.06 gm/bhp-hr of PM, which is lower than required 0.15 gm/bhp-hr PM in paragraph (c) (2)(C) (iii) of the rule for engines. Therefore, compliance with this rule is expected.

Rule 1472: The facility does not have more than 3 emergency engines on site. Therefore, the provisions of this rule are not applicable.

40 CFR, Part 60,
Subpart IIII

Section d of this subpart requires new engines < 3000 BHP ordered after July 11, 2005 to meet appropriate Tier 2 or Tier 3 standards as applicable based on the horsepower. Since this is a new engine and is rated between >= 300 - <= 751 BHP, Tier 3 standards apply and are summarized below:

TIER 3 ENGINES

	NO_x + ROG (Gm/bhp-hr)	CO (Gm/bhp-hr)	PM (Gm/bhp-hr)
Required	3.0	2.6	0.15
Actual	2.46	0.45	0.06
Compliance	Yes	Yes	Yes

Other Requirements in the NSPS for New Emergency Engines

	NSPS Requirement	Proposed Equipment	Compliance
New Engine	Ordered After July 11, 2005	Yes	Yes
Emission Standards Pre-2007 model year	Tier 1 standards	No	Not applicable
Emission Standards 2007 model year and later	Meet Tier emission standards (Tier 2 if no Tier 3)	Certified Tier 3 engine Limits are specified in permit	Yes
Fuel Requirement	Ultra low sulfur diesel (15 ppmw)	Included in permit condition	Yes
Monitoring/Recordkeeping/Reporting	Non-resettable hour meter	Included in permit condition	Yes
Recordkeeping	If engine does not meet non-emergency standards	Recordkeeping included in permit condition	Yes
Reporting	None	None	Not applicable

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40 CFR, Part 60, Subpart JJJJ The requirements of this subpart are not applicable to Compression Ignition engines.

40 CFR, Part 63, ZZZZ Lamps Plus is an Area Source for HAPs. The requirements of this Subpart are therefore applicable. Since the engine is a new RICE (manufactured after June 12, 2006), it must meet emission standards in 40 CFR part 60 subpart IIII. The engine meets the emission limits as demonstrated above. In addition, the engine will meet all other applicable NESHAP requirements as summarized in the following table:

Other Requirements in the NESHAP for New Emergency Engines

	NESHAP Requirement	Proposed Equipment	Compliance
New Engine	Ordered On or After June 12, 2006	After June 12, 2006	Yes
Emission Standards	Meet NSPS standards	Yes	Yes
Operating Limitations	None	200 hrs/yr Included in permit condition	Yes
Fuel Requirement	None	Ultra low sulfur diesel (15 ppmw) Included in permit condition	Yes
Requirements	No limits on hours for emergency service	200 hours per year included in permit condition	Yes
	100 hrs/yr for maintenance and testing	50 hrs/yr for maintenance and testing	Yes
	No peak shaving or demand response program	Included in permit condition. DRP not allowed as per Rule 1470	Yes
Compliance requirements	Initial notification if >500 HP at major source	Engine is <500HP and located at area source	Yes
Notification	None	None	Yes
Reporting	None	None	Yes

Regulation XX: The facility is not under RECLAIM program.

Regulation XXX:

The installation of new emergency engine is considered as a “deminimus significant permit revision” to the Title V permit for this facility

Rule 3000(b)(6) defines a “deminimus significant permit revision” as any Title V permit revision where the cumulative emission increases of non-RECLAIM pollutants or hazardous air pollutants

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(HAPs) from these permit revisions during the term of the permit are not greater than any of the following emission threshold levels:

Air Contaminant	Daily Maximum (lbs/day)
HAP	30
VOC	30
NO _x	40
PM ₁₀	30
SO _x	60
CO	220

To determine if a project is considered as a “deminimus significant permit revision” for non-RECLAIM pollutants or HAPs, emission increases for non-RECLAIM pollutants or HAPs resulting from all permit revisions that are made after the issuance of the Title V renewal permit shall be accumulated and compared to the above threshold levels. This proposed project is 1st permit revision to the Title V renewal permit issued to this facility on July 23, 2008. The following table summarizes the cumulative emission increases resulting from all permit revisions since the Title V renewal permit was issued.

Title V Permit Revisions Summary

	Revision	HAP	VOC	NO_x	PM₁₀	SO_x	CO
	Title V permit issuance	0	0	0	0	0	0
1 st	Permit Revision: Installation of a New Emergency Engine (a/no. 539897).	0	0	0	0	0	0
	Cumulative Total	0	0	0	0	0	0
	Maximum Daily	30	30	40	30	60	220

Since the cumulative emission increases resulting from permit revision are not greater than any of the emission threshold levels, this proposed project is considered as a “deminimus significant permit revision”.

CONCLUSION:

The proposed project is expected to comply with all applicable District Rules and Regulations. Also, since the proposed project is considered as a “deminimus significant permit revision”, it is exempt from the public participation requirements under Rule 3006 (b). A proposed facility permit incorporating this permit revision will be submitted to EPA for a 45-day review pursuant to Rule 3003(j). If EPA does not have any objections within the review period, a revised Title V permit will be issued to this facility subject to conditions below:

CONCLUSION:

The proposed project is expected to comply with all applicable Rules and Regulations. Therefore, a revised Title V permit will be issued to this facility subject to conditions below:

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- 1-2. Standard Conditions
[RULE 204]

3. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1303(a)(1)-BACT, 1110.2, 1470, 40CFR63 SUBPART ZZZZ]

4. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1304 (a) (1) - BACT, 1110.2, 1470, 40CFR60 SUBPART III]

5. THE OPERATION OF ENGINE BEYOND 50 HOURS PER YEAR ALLOTTED FOR ENGINE MAINTENANCE AND TESTING SHALL BE ALLOWED ONLY IN THE EVENT OF A LOSS OF GRID POWER OR UP TO 30 MINUTES PRIOR TO A ROTATING OUTAGE, PROVIDED THAT THE ELECTRICAL GRID OPERATOR OR ELECTRIC UTILITY HAS ORDERED ROTATING OUTAGES IN THE CONTROL AREA WHERE THE ENGINE IS LOCATED OR HAS INDICATED THAT IT EXPECTS TO ISSUE SUCH AN ORDER AT A CERTAIN TIME, AND THE ENGINE IS LOCATED IN A UTILITY SERVICE BLOCK THAT IS SUBJECT TO THE ROTATING OUTAGE. ENGINE OPERATION SHALL BE TERMINATED IMMEDIATELY AFTER THE UTILITY DISTRIBUTION COMPANY ADVISES THAT A ROTATING OUTAGE IS NO LONGER IMMINENT OR IN EFFECT.
[RULE 1304 (a) (1)- BACT, 1470]

6. AN ENGINE OPERATING LOG SHALL BE KEPT AND SHALL DOCUMENT THE TOTAL TIME THE ENGINE IS OPERATED EACH MONTH AND SPECIFIC REASON FOR OPERATION AS:
 - A. EMERGENCY USE.
 - B. MAINTENANCE AND TESTING.
 - C. OTHER (DESCRIBE THE REASON FOR OPERATING).

IN ADDITION, EACH TIME THE ENGINE IS MANUALLY STARTED, THE LOG SHALL INCLUDE THE DATE OF OPERATION, THE SPECIFIC REASON FOR OPERATION, AND THE TIME METER READING (IN HOURS AND TENTHS OF HOURS) AT THE BEGINNING AND END OF OPERATION.
[RULE 1303(b) (2)-OFFSET, 1110.2, 1470, 40CFR60 SUBPART III]

7. ON OR BEFORE JANUARY 15 TH OF EACH YEAR, THE OPERATOR SHALL RECORD IN THE ENGINE OPERATING LOG THE FOLLOWING:
 - A. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR, AND
 - B. THE TOTAL HOURS OF ENGINE OPERATION FOR MAINTENANCE AND TESTING FOR THE PREVIOUS CALENDAR YEAR.

ENGINE OPERATING LOG SHALL BE RETAINED ON SITE FOR A MINIMUM OF FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER OR REPRESENTATIVE UPON REQUEST.
[RULE 1303(b) (2)-OFFSET, 1110.2, 1470, 40CFR60 SUBPART III]

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8. THE OPERATOR SHALL NOT USE ANY DIESEL FUEL UNLESS THE FUEL IS LOW SULFUR DIESEL FOR WHICH THE SULFUR CONTENT SHALL NOT EXCEED 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.
[RULE 431.2, 40CFR60 SUBPART III]

9. THIS ENGINE SHALL NOT BE USED AS PART OF A DEMAND RESPONSE PROGRAM USING INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ITS ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO SO BY THE UTILITY OR THE GRID OPERATOR.
[RULE 1470, 40CFR63 SUBPART ZZZZ]

Emissions And Requirements:

10. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
 - NO_x + VOC: 3.0 GRAMS/BHP-HR, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART III
 - CO: 2.6 GRAMS/BHP-HR, RULE 1303(a)(1)-BACT, 40CFR60 SUBPART III
 - PM: 0.15 GRAMS/BHP-HR, RULE 1303(a)(1)-BACT, 1470
40CFR60 SUBPART III
 - PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - HAPS: 40CFR63 SUBPART ZZZZ, SEE SECTION J FOR REQUIREMENTS