

FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

PERMIT TO CONSTRUCT

GRANTED AS OF: TBD
A/N 522637

Equipment Description:

INTERNAL COMBUSTION ENGINE, MTU ONSITE ENERGY/MTU DETROIT DIESEL, MODEL 16V2000G85 TB/TD (R1638A37), FOUR-STROKE CYCLE, 16 CYLINDER, 1495 BHP, DIESEL FIRED, TURBOCHARGED, WITH DIESEL PARTICULATE FILTER, RYPOS, INC., MODEL HDPF/C, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED, UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
[RULE 204]
3. THIS ENGINE SHALL NOT BE OPERATED UNLESS ITS EXHAUST IS VENTED TO THE DIESEL PARTICULATE FILTER SYSTEM WHICH IS IN FULL OPERATION AND WHICH IS IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 1303-LAER/BACT]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN A TOTAL OF 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND PERFORMANCE TESTING, AND NO MORE THAN 4.2 HOURS IN ANY ONE MONTH FOR MAINTENANCE AND TESTING.
[RULE 1110.2, RULE 1303-BACT, RULE 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS, RULE 1470]
5. OPERATION BEYOND THE 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 UTILITY DISTRIBUTION COMPANY 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 1303- BACT, RULE 1470]
6. THIS ENGINE SHALL NOT BE USED AS PART OF AN INTERRUPTIBLE SERVICE CONTRACT IN WHICH A FACILITY RECEIVES A PAYMENT OR REDUCED RATES IN RETURN FOR REDUCING ELECTRIC LOAD ON THE GRID WHEN REQUESTED TO DO SO BY THE UTILITY OR THE GRID OPERATOR.

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[RULE 1303-BACT, RULE 1470]

7. AN OPERATIONAL NON-RESETTABLE ELAPSED TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2; RULE 1303-BACT, 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS, RULE 1470, 40CFR60 Subpart III]
8. AFTER EVERY 1,000 HOURS OF ENGINE OPERATION, THE OPERATOR SHALL INSPECT THE INTEGRITY OF THE FILTER AND, IF NECESSARY, CLEAN IT.
[RULE 204]
9. AN ENGINE OPERATING LOG SHALL BE MAINTAINED WHICH ON A MONTHLY BASIS SHALL LIST ALL ENGINE OPERATIONS IN EACH OF THE FOLLOWING AREAS:
 - A. EMERGENCY USE HOURS OF OPERATION.
 - B. MAINTENANCE AND TESTING HOURS.
 - C. HOURS OF OPERATION FOR DEMONSTRATING COMPLIANCE.
 - D. INITIAL START-UP HOURS.
 - E. OTHER OPERATING HOURS (DESCRIBE THE REASON FOR OPERATION)

IN ADDITION, EACH TIME THE ENGINE IS STARTED MANUALLY, THE LOG SHALL INCLUDE THE DATE OF OPERATION AND THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION. THE LOG SHALL BE KEPT FOR A MINIMUM OF FIVE CALENDAR YEARS AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION FOR THE PREVIOUS CALENDAR YEAR SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.

[RULE 1110.2, RULE 1303-BACT, 1304(a) (4)-MODELING AND OFFSET EXEMPTIONS, RULE 1470, 40CFR60 Subpart III]

10. THE SULFUR CONTENT OF DIESEL FUEL SUPPLIED TO THIS ENGINE SHALL NOT EXCEED 15 PPM (0.0015%) BY WEIGHT.
[RULE 431.2, RULE 1470, 40CFR60 Subpart III]
11. THE OWNER/OPERATOR SHALL DEMONSTRATE COMPLIANCE TO THE EXECUTIVE OFFICER'S SATISFACTION BY AT LEAST ONE OF THE FOLLOWING:
 - A. THIS ENGINE SHALL BE EQUIPPED WITH A CARB LEVEL 3 VERIFIED DIESEL PARTICULATE FILTER FOR THE MAKE AND MODEL OF THIS ENGINE AND THE OWNER OR OPERATOR SHALL RETAIN THE CARB ISSUED EXECUTIVE ORDER ON SITE AND MAKE IT AVAILABLE TO SCAQMD PERSONNEL UPON REQUEST AND FOLLOW THE CARB ISSUED EXECUTIVE ORDER.
 - B. CONDUCT A SOURCE TEST OF THIS EQUIPMENT NO LATER THAN 180 DAYS AFTER INSTALLATION TO DEMONSTRATE COMPLIANCE WITH 85% PM CONTROL EFFICIENCY AND TO MEET THE FOLLOWING REQUIREMENTS:
 1. A TEST PROTOCOL SHALL BE SUBMITTED TO THE AQMD, REFINERY AND WASTE MANAGEMENT TEAM, NOT LATER THAN 30 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY AQMD BEFORE THE TEST COMMENCES.

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2. THE TEST SHALL BE PERFORMED BY A TESTING LABORATORY CERTIFIED TO MEET THE CRITERIA IN AQMD RULE 304 (NO CONFLICT OF INTEREST).
 3. THE AQMD ENGINEER SHALL BE NOTIFIED OF THE DATE AND TIME OF THE TEST AT LEAST 10 DAYS PRIOR TO THE TEST, OR WITHIN A TIME PERIOD AGREED UPON BY THE AQMD ENGINEER.
 4. SAMPLING FACILITIES SHALL COMPLY WITH AQMD "GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES" PURSUANT TO RULE 217.
- C. THIS ENGINE SHALL BE EQUIPPED WITH A LEVEL 3 VERIFIED DIESEL EMISSION CONTROL STRATEGY IN COMBINATION WITH A CERTIFIED CI ENGINE THAT MEETS A 0.15 G/BHP-HR OR LESS PM EMISSION STANDARD, OR,
- AN ALTERNATIVE DIESEL PM CONTROL METHOD THAT IS EQUAL TO OR MORE EFFECTIVE THAN A LEVEL 3 VERIFIED DIESEL EMISSION CONTROL STRATEGY IN COMBINATION WITH A CERTIFIED CI ENGINE THAT MEETS A 0.15 G/BHP-HR OR LESS PM EMISSION STANDARD, AND IS APPROVED FOR USE BY THE EXECUTIVE OFFICER.
[RULE 204]
12. A BACK PRESSURE MONITOR SHALL BE INSTALLED AND MAINTAINED ON THE DIESEL PARTICULATE FILTER (DPF) TO INDICATE THE BACKPRESSURE OF THE DPF.
[RULE 204]
 13. OWNER OR OPERATOR SHALL KEEP RECORDS OF ANY CORRECTIVE ACTION TAKEN AFTER THE BACKPRESSURE MONITOR HAS NOTIFIED THE OWNER OR OPERATOR THAT THE HIGH BACKPRESSURE LIMIT OF THE ENGINE IS APPROACHED.
[RULE 204, 40CFR60 Subpart III]
 14. THE ENGINE EMISSIONS SHALL NOT EXCEED THE FOLLOWING INTERIM TIER-4 EMISSION STANDARDS AS DEFINED IN TITLE 13 CALIFORNIA CODE OF REGULATIONS SECTION 2423:

CARBON MONOXIDE: 2.61 G/BHP-HR
OXIDES OF NITROGEN: 0.50 G/BHP-HR
PARTICULATE MATTER: 0.075 G/BHP-HR.
VOLATILE ORGANIC COMPOUNDS: 0.30 G/BHP-HR
[RULE 1470]
 15. THIS ENGINE SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULE 431.2, RULE 1470, 40CFR60 SUBPART III, AND 40CFR63 SUBPART ZZZZ.
[RULE 431.2, RULE 1470, 40CFR60 Subpart III, 40CFR63SUBPART ZZZZ]

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Emissions and Requirements:

16. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM:	RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM:	0.15 gm/bhp-hr, RULE 1303-BACT, 40CFR60 Subpart III
NOx +NMHC:	4.8 g/bhp-hr, RULE 1303-BACT, 40CFR60 Subpart III
CO:	2.6 g/bhp-hr, RULE 1303-BACT, 40CFR60 Subpart III