



FACILITY PERMIT TO OPERATE

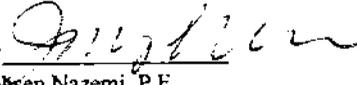
**EASTERN MUNICIPAL WATER DISTRICT
17140 KITCHING ST
MORENO VALLEY, CA 92551**

NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By 
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Engineering & Compliance



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

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**FACILITY PERMIT TO OPERATE
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**Facility Equipment and Requirements
(Section D)**

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, copies of all individual Permits to Operate issued at the facility, and Rule 219-exempt equipment subject to source-specific requirements. Each permit and Rule 219-exempt equipment will list operating conditions, including periodic monitoring requirements and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.



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PERMITTED EQUIPMENT LIST

The following is a list of all permits to operate at this facility:

Application number	Permit number	Equipment description	Page #
335117	N8740	SERV STAT STORAGE & DISPENSING GASOLINE	4
357664	F36089	I C E (>500 HP) EMERGENCY ELEC. GENERATOR-NAT GAS	7
357665	F36095	I C E (>500 HP) EMERGENCY ELEC. GENERATOR-NAT GAS	8
414452	F63608	I C E (>500 HP) NON- EMERGENCY STATIONARY NAT GAS ONLY	9
446530	G4189	FLARE, ENCLOSED LANDFILL/DIGESTER GAS	12
451325	F83244	ODOR CONTROL UNIT VENTING CENTRIFUGE OR BELT PRESSES	15
455648	G4190	SEWAGE TREATMENT (>5 MG/D) ANAEROBIC	17
473542	G2337	DIGESTER GAS TREATMENT SYSTEM W/ FUEL CELL	20
485923	G4191	I C E (50-500 HP) NON- EMERGENCY STATIONARY NAT-GAS	23
485924	G4192	I C E (>500 HP) NON- EMERGENCY STATIONARY NAT-GAS ONLY	26
500148	G9638	ODOR CONTROL UNIT VENTING HEADWORKS	29

NOTE: APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.



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FACILITY WIDE CONDITION(S)

1. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:
 - A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGELMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
 - B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.
[RULE 401]
2. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT. AFTER JUNE 1, 2004, THE OPERATOR SHALL NOT PURCHASE 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]
3. THE FACILITY SHALL NOT EMIT MORE THAN 5 LBS/DAY OF TOTAL SULFUR COMPOUNDS, CALCULATED AS H₂S, FROM BURNING OF GASEOUS FUELS OTHER THAN NATURAL GAS.
[RULE 431.1]
4. THE OWNER/OPERATOR SHALL NOT DISCHARGE FROM ANY SINGLE SOURCE SULFUR COMPOUNDS IN ANY STATE OR COMBINATION IN EXCESS OF 0.05 PERCENT BY VOLUME AS SO₂.
[RULE 53. 407]
5. ACCIDENTAL RELEASE PREVENTION REQUIREMENTS OF SECTION 112(R)(7):
THE OPERATOR SHALL COMPLY WITH THE ACCIDENTAL RELEASE PREVENTION REQUIREMENTS PURSUANT TO 40 CFR PART 68 AND SHALL SUBMIT TO THE EXECUTIVE OFFICER, AS PART OF ANNUAL COMPLIANCE CERTIFICATION, A STATEMENT THAT CERTIFIES COMPLIANCE WITH ALL THE REQUIREMENTS OF 40 CFR PART 68, INCLUDING THE REGISTRATION AND SUBMISSION OF A RISK MANAGEMENT PLAN (RMP).

THE OPERATOR SHALL SUBMIT ANY ADDITIONAL RELEVANT INFORMATION REQUESTED BY THE EXECUTIVE OFFICER OR DESIGNATED AGENCY.
[40 CFR68-ACCIDENTAL RELEASE PREVENTION]
6. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE MITIGATION MEASURES STIPULATED IN THE "FINAL MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY AND MITIGATION MONITORING PROGRAM" DOCUMENT DATED MAY 2007 FOR THIS FACILITY.



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

PERMIT TO OPERATE

Permit No. N8740
A/N 335117

Equipment Description:

FUEL STORAGE AND DISPENSING FACILITY CONSISTING OF:

1. 1 - DUAL COMPARTMENT ABOVE GROUND GASOLINE/DIESEL STORAGE TANK, CONVAULT TYPE (G-70-116-F), 11'-3" L. x 8'-0" W. x 5'-6" H., 2,000 GALLON CAPACITY, CONCRETE INSULATION, EQUIPPED WITH A PRESSURE/VACUUM RELIEF VALVE, AND A SUBMERGED FILL TUBE, CONSISTING OF:
 - A) ONE 1,000 GALLON GASOLINE COMPARTMENT TANK, EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.
 - B) ONE 1,000 GALLON DIESEL COMPARTMENT TANK, NOT EQUIPPED WITH PHASE I VAPOR RECOVERY SYSTEM.
2. 1 - GASOLINE DISPENSING NOZZLE ON A TANK TOP MOUNTED DISPENSER, EQUIPPED WITH PHASE II VAPOR RECOVERY SYSTEM. BALANCE RETRACTOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT WAS ISSUED. UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. EXCEPT FOR DIESEL TRANSFERS, PHASE I VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO STORAGE TANKS.
[RULE 461]
4. EXCEPT FOR DIESEL TRANSFERS, PHASE II VAPOR RECOVERY SYSTEMS SHALL BE IN FULL OPERATION WHENEVER FUEL IS BEING TRANSFERRED INTO MOTOR VEHICLES. AS DEFINED IN RULE 461.
[RULE 461]
5. ALL PHASE I AND PHASE II VAPOR RECOVERY EQUIPMENT AT THIS FACILITY SHALL BE INSTALLED, OPERATED AND MAINTAINED TO MEET ALL CALIFORNIA AIR RESOURCES BOARD CERTIFICATION REQUIREMENTS.
[RULE 461]



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6. PHASE II VAPOR RECOVERY SYSTEMS SHALL BE INSTALLED, OPERATED, AND MAINTAINED SUCH THAT THE MAXIMUM ALLOWABLE PRESSURE THROUGH THE SYSTEM INCLUDING NOZZLE, VAPOR HOSE, SWIVELS, AND UNDERGROUND PIPING DOES NOT EXCEED THE DYNAMIC BACK PRESSURES DESCRIBED BY THE CALIFORNIA AIR RESOURCES BOARD EXECUTIVE ORDER BY WHICH THE SYSTEM WAS CERTIFIED:

NITROGEN FLOWRATES (CFH)	DYNAMIC BACK PRESSURE (INCHES OF WATER)
20	0.15
40	0.16
60	0.35
80	0.62
100	0.95

DYNAMIC BACK PRESSURE TESTS SHALL BE CONDUCTED TO DETERMINE THE PHASE II SYSTEM VAPOR RECOVERY BACK PRESSURES. THE TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.4. RESULTS SHALL BE SUBMITTED TO THE DISTRICT, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TESTS.

THE AQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE DYNAMIC BACK PRESSURE TEST.
[RULE 461]

7. A STATIC PRESSURE LEAK DECAY TEST SHALL BE CONDUCTED TO DEMONSTRATE THAT THE STORAGE TANKS, THE REMOTE AND/OR NOZZLE VAPOR RECOVERY CHECK VALVES, ASSOCIATED VAPOR RETURN PIPING AND FITTINGS ARE FREE FROM VAPOR LEAKS. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.3. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TEST.

THE AQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE STATIC PRESSURE LEAK DECAY TEST.
[RULE 461]

8. IF THE CARB EXECUTIVE ORDER REQUIRES THE INSTALLATION OF A LIQUID REMOVAL DEVICE, A LIQUID REMOVAL RATE TEST SHALL BE CONDUCTED TO DEMONSTRATE THE REMOVAL OF GASOLINE FROM THE VAPOR PASSAGE OF THE COAXIAL HOSE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH CARB TEST PROCEDURE METHOD TP-201.6. RESULTS SHALL BE SUBMITTED TO THE AQMD, OFFICE OF ENGINEERING AND COMPLIANCE, WITHIN FORTY-EIGHT (48) HOURS OF TEST.



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THE SCAQMD SHALL BE NOTIFIED BY E-MAIL AT R461TESTING@AQMD.GOV OR AT TELEPHONE NUMBER (909) 396-3886 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO TESTING. SUCH NOTIFICATION SHALL INCLUDE THE NAME OF THE OWNER OR OPERATOR; THE NAME OF THE CONTRACTORS; THE LOCATION OF THE FACILITY; AND THE SCHEDULED START AND COMPLETION DATES OF THE LIQUID REMOVAL RATE TEST.

[RULE 461]

9. THE TESTING FREQUENCY FOR THE ABOVE MENTIONED TESTS SHALL BE CONDUCTED IN ACCORDANCE WITH THE MOST RECENT RULE 461 AMENDMENT OR CARB EXECUTIVE ORDER REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
[RULE 461]
10. ALL RECORDS AND TEST RESULTS THAT ARE REQUIRED TO BE MAINTAINED BY RULE 461 SHALL BE KEPT ON SITE AND MADE AVAILABLE TO DISTRICT REPRESENTATIVES UPON REQUEST.
[RULE 461]
11. THE MAXIMUM QUANTITY OF GASOLINE DISPENSED FROM THE STORAGE TANKS AT THIS FACILITY SHALL NOT EXCEED 5000 GALLONS IN ANY ONE CALENDAR MONTH NOR 60000 GALLONS IN ANY ONE CALENDAR YEAR.
[RULE 461]

Periodic Monitoring:

12. THE OPERATOR SHALL HAVE A PERSON THAT HAS BEEN TRAINED IN ACCORDANCE WITH RULE (461)(d)(5) CONDUCT AN ANNUAL INSPECTION IN ACCORDANCE WITH RULE 461(d)(1)(B) OF THE GASOLINE TRANSFER AND DISPENSING EQUIPMENT. THE INSPECTION SHALL BE IN ACCORDANCE WITH RULE 461, ATTACHMENT C. THE OPERATOR SHALL KEEP RECORDS OF THE INSPECTION AND THE REPAIRS IN ACCORDANCE WITH RULE 461 AND SECTION K OF THIS PERMIT.
[RULE 3004(a)(4)]



**FACILITY PERMIT TO OPERATE
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PERMIT TO OPERATE

**Permit No. F36089
A/N 357664**

Equipment Description:

INTERNAL COMBUSTION ENGINE, ENGINE NO. 2, WAUKESHA, MODEL NO. P9390GL, SERIAL NO. 401936, SIXTEEN CYLINDERS, TURBOCHARGED, INTERCOOLED, 2200 BHP, LEAN BURN, NATURAL GAS AND LIQUID PROPANE GAS FIRED, WITH AN ENGELHARD OXIDATION CATALYST, MODEL C-41092, DRIVING A 1,540 KW EMERGENCY 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 CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE INSTALLED AND MAINTAINED SO AS TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2]
4. THIS ENGINE SHALL NOT OPERATE MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)]
5. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED AND CERTIFIED AT A MINIMUM ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS AND CERTIFICATIONS SHALL BE PERFORMED BY A QUALIFIED MECHANIC AND ACCORDING TO THE ENGINE MANUFACTURER'S PROCEDURES.
[RULE 1110.2]
6. THE OPERATOR SHALL ONLY USE LIQUID PROPANE GAS AS AN EMERGENCY BACKUP FUEL FOR THIS EQUIPMENT.
[RULE 1110.2]

Emissions and Requirements:

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

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Permit No. F36095
A/N 357665

Equipment Description:

INTERNAL COMBUSTION ENGINE, ENGINE NO. 1, WAUKESHA, MODEL NO. P9390GL, SERIAL NO. 401935, SIXTEEN CYLINDERS, TURBOCHARGED, INTERCOOLED, 2200 BHP, LEAN BURN, NATURAL GAS AND LIQUID PROPANE GAS FIRED, WITH AN ENGELHARD OXIDATION CATALYST, MODEL C-41092, DRIVING A 1,540 KW EMERGENCY 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 CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE INSTALLED AND MAINTAINED SO AS TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2]
4. THIS ENGINE SHALL NOT OPERATE MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)]
5. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED AND CERTIFIED AT A MINIMUM ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS AND CERTIFICATIONS SHALL BE PERFORMED BY A QUALIFIED MECHANIC AND ACCORDING TO THE ENGINE MANUFACTURER'S PROCEDURES.
[RULE 1110.2]
6. THE OPERATOR SHALL ONLY USE LIQUID PROPANE GAS AS AN EMERGENCY BACKUP FUEL FOR THIS EQUIPMENT.
[RULE 1110.2]

Emissions and Requirements:

7. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



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**Permit No. F63608
A/N 414452**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CATERPILLAR, NATURAL GAS AND LIQUID PROPANE GAS FIRED, MODEL NO. G399-SI-TA, SERIAL NO. 49C01555, EIGHT CYLINDERS, TURBOCHARGED, AFTERCOOLED, RICH BURN, 930 BHP, WITH A JOHNSON MATTHEY CATALYST, MODEL NO. MX-80, AND AN AIR/FUEL RATIO CONTROLLER, DRIVING AN 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 CONDITION AT ALL TIMES.
[RULE 204]
3. THE CATALYTIC CONVERTER SHALL BE MAINTAINED IN GOOD WORKING CONDITION. THE OPERATOR SHALL MAINTAIN RECORDS OF CATALYST CLEANING PERIODS AND REPLACEMENT FREQUENCY.
[RULE 1110.2, 1303]
4. A MANOMETER SHALL BE INSTALLED TO MEASURE THE PRESSURE DROP ACROSS THE CATALYST. THE PRESSURE DROP SHALL NOT EXCEED 5 INCHES OF WATER COLUMN (W.C.).
[RULE 1110.2, 1303]
5. AN AIR TO FUEL RATIO CONTROLLER SHALL BE INSTALLED ON THIS ENGINE AND SET TO MAINTAIN THE AIR TO FUEL RATIO WITHIN TOLERANCE LIMITS AS SPECIFIED BY THE CATALYTIC CONVERTER SUPPLIER OR AS DEMONSTRATED BY A SOURCE TEST TO MAINTAIN THE SUPPLIER GUARANTEED EMISSION REDUCTION EFFICIENCIES OR LIMITS.
6. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULE 1110.2.
[RULE 1110.2]
7. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2]
8. THIS ENGINE SHALL BE FIRED ON LIQUID PROPANE GAS ONLY DURING NATURAL GAS CURTAILMENT OR DURING PERIODS OF TESTING NOT TO EXCEED A TOTAL OF 24 HOURS PER YEAR.
[RULE 1303]



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Periodic Monitoring

8. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
9. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
10. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE VOC EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
11. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 3004 (a)(4)]
12. THE OXYGEN CONCENTRATION AT THE OUTLET OF THE ENGINE SHALL NOT EXCEED 0.5 PERCENT OXYGEN.
[RULE 3004 (a)(4)]
13. THIS ENGINE SHALL BE EQUIPPED WITH AN OXYGEN SENSOR AT THE EXHAUST OF THE ENGINE. A RECORDING SYSTEM SHALL BE INSTALLED TO VERIFY COMPLIANCE WITH CONDITION 12. PARAMETRIC OPERATING DATA MAY BE USED IN LIEU OF DIRECT OXYGEN MEASUREMENTS, BUT RECORDS OF HOW THE PARAMETRIC DATA RELATES TO OXYGEN CONTENT MUST BE RETAINED AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 3004 (a)(4)]
14. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE INLET OF THE CATALYST.
[RULE 3004 (a)(4)]



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15. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE OUTLET OF THE CATALYST.
[RULE 3004 (a)(4)]
16. THE TEMPERATURE AT THE OUTLET OF THE CATALYST SHALL NOT EXCEED 1350 DEGREES FAHRENHEIT.
[RULE 3004 (a)(4)]
17. THE MINIMUM TEMPERATURE AT THE INLET OF THE CATALYST SHALL BE ABOVE 750 DEGREES FAHRENHEIT, EXCEPT DURING AN ENGINE COLD START NOT TO EXCEED 30 MINUTES.
[RULE 3004 (a)(4)]

Emissions and Requirements:

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

NOX: 36 PPM AT 15% O₂, RULE 1110.2
NOX: 1.5 G/BHP-HR, RULE 1303
VOC: 250 PPM AT 15% O₂, RULE 1110.2
VOC: 1.5 G/BHP-HR, RULE 1303
CO: 2000 PPM AT 15% O₂, RULE 1110.2
CO: 2.0 G/BHP-HR, RULE 1303



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Permit No. G4189
A/N 446530

Equipment Description:

DIGESTER GAS FLARING SYSTEM CONSISTING OF:

1. ONE (1) ENCLOSED FLARE, JOHN ZINK, MODEL ZTOF, 18,000,000 BTU/HR, 5'-0" DIA. X 50'-0" H.
2. NATURAL GAS PILOT SYSTEM WITH ELECTRIC IGNITION.
3. ULTRA-VIOLET FLAME DETECTOR.
4. KNOCKOUT VESSEL.
5. ONE (1) COMBUSTION AIR BLOWER, ¼ H.P.

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 CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THE FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND A RECORDING DEVICE WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK. WHENEVER THE FLARE IS IN OPERATION, THE TEMPERATURE SHALL BE MEASURED AT A LOCATION ABOVE THE FLAME ZONE, AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER AND NOT LESS THAN FIVE (5) FEET FROM THE TOP OF THE STACK.
[RULE 1303]
5. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F. EXCEPT DURING START-UP NOT EXCEEDING 20 MINUTES, AS MEASURED BY AN APPROVED TEMPERATURE INDICATOR, SHALL BE MAINTAINED IN THE FLARE STACK. THE THERMOCOUPLE SHALL BE ABOVE THE FLAME ZONE AND AT LEAST 3 FEET BELOW THE TOP OF THE FLARE SHROUD AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER.
[RULE 1303]

6. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE FLARE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BEING BURNED IN THE FLARE. [RULE 1303]
7. THE TOTAL VOLUME OF DIGESTER GAS BURNED IN THE FLARE SHALL NOT EXCEED 480 STANDARD CUBIC FEET PER MINUTE. [RULE 1303]
8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY. [RULE 1303]
9. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY RAW DIGESTER GAS INTO THE ATMOSPHERE. ANY BREAKDOWN OR MALFUNCTION WHICH RESULTS IN EMISSIONS OF RAW DIGESTER GAS SHALL BE REPORTED TO THE SCAQMD MANAGER OF PUBLIC FACILITIES BRANCH WITHIN ONE HOUR AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE. [RULE 1303]
10. THE FLARE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-DOWN SYSTEM WITH A FAILURE ALARM, WHICH HAS BEEN APPROVED BY THE SCAQMD. TO AUTOMATICALLY ISOLATE THE FLARE FROM THE DIGESTER GAS SUPPLY LINE, SHUT OFF THE BLOWER AND IMMEDIATELY NOTIFY A RESPONSIBLY PARTY OF THE SHUT-DOWN. [RULE 1303]
11. THE AUTOMATIC SHUT-DOWN SAFETY SYSTEM SHALL BE TESTED MONTHLY FOR PROPER OPERATION AND THE RESULTS RECORDED. [RULE 1303]
12. A SAMPLING PORT SHALL BE INSTALLED AT THE INLET GAS LINE TO THE FLARE TO ALLOW THE COLLECTION OF A DIGESTER GAS SAMPLE. [RULE 1303]
13. THE HEAT INPUT THROUGH THE FLARE SHALL NOT EXCEED 18 MILLION BTUS PER HOUR. [RULE 1303]
14. WEEKLY READINGS OF BTU CONTENT OF THE GAS AT THE INLET TO THE FLARE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED. [RULE 1303]
15. ALL DIGESTER GAS COLLECTED SHALL BE DIRECTED EITHER TO THE FLARE FOR COMBUSTION OR TO A TREATMENT FACILITY WHICH HAS A VALID PERMIT TO CONSTRUCT OR OPERATE, AS APPLICABLE, FROM THE SCAQMD. [RULE 1303]

**FACILITY PERMIT TO OPERATE
EASTERN MUNICIPAL WATER DIST.**

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765



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FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

16. THE FLARE SHALL BE EQUIPPED WITH A SUFFICIENT NUMBER OF VIEW PORTS TO ALLOW THE VISUAL INSPECTION OF THE FLAME HEIGHT WITHIN THE FLARE AT ALL TIMES. THE VIEW PORTS SHALL BE LOCATED AT THE ELEVATION OF THE TEMPERATURE SENSOR LOCATIONS. SAFE AND ADEQUATE ACCESS SHALL BE PROVIDED FOR ALL VIEW PORTS UPON REQUEST BY SCAQMD PERSONNEL.
[RULE 1303]
17. THE FLARE SHALL BE DESIGNED AND OPERATED SO THAT THE FLAME IN THE FLARE REMAINS BELOW THE HEIGHT OF THE FLARE'S OPERATING THERMOCOUPLE AT ALL TIMES.
[RULE 1303]
18. THE MAXIMUM FLARE SKIN TEMPERATURE AT ANY LOCATION SHALL NOT EXCEED 250 DEGREES F.
[RULE 1303]

Emissions and Requirements:

THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS FOR THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: 0.1 GR/SCF, RULE 1303
PM10: 0.52 LB/HR, RULE 1303
NOX: 1.08 LB/HR, RULE 1303
CO: 3.6 LB/HR, RULE 1303
VOC: 0.65 LB/HR, RULE 1303
SOX: 0.31 LB/HR, RULE 1303



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

PERMIT TO OPERATE

Permit No. F83244
A/N 451325

Equipment Description:

AIR POLLUTION CONTROL SYSTEM CONSISTING OF:

1. SCRUBBER, ODOR CONTROL, VERTICAL, PACKED BED, 18'-0" H. X 8'-0" DIA., WITH A 330 GPM CIRCULATION PUMP.
2. STORAGE TANK, SODIUM HYDROXIDE, 175 GALLONS, WITH ASSOCIATED PUMPS.
3. EXHAUST SYSTEM WITH A 30 H.P. BLOWER VENTING A CENTRIFUGE OR TWO BELT PRESSES.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT TO CONSTRUCT IS ISSUED, UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED WHENEVER THE CENTRIFUGE OR THE BELT PRESSES ARE IN OPERATION. HOWEVER, THIS EQUIPMENT MAY BE SHUT DOWN FOR A PERIOD NOT EXCEEDING 72 HOURS FOR MAINTENANCE AND NOT EXCEEDING 60 MINUTES DURING ELECTRICAL POWER SOURCE CHANGEOVER DUE TO HIGH POWER DEMAND. SHUTDOWNS DUE TO ELECTRICAL POWER SOURCE CHANGEOVERS SHALL NOT OCCUR MORE THAN ONCE DURING ANY CALENDAR MONTH. EACH SHUTDOWN MUST BE RECORDED WITH DATE, TIME DURATION AND PURPOSE OF THE SHUTDOWN.
[RULE 1303]
4. HYDROGEN SULFIDE FROM THE OUTLET OF THIS AIR POLLUTION CONTROL SYSTEM SHALL NOT EXCEED 1.0 PARTS PER MILLION.
[RULE 402]
5. A FLOWMETER INDICATING GALLONS PER MINUTE (G.P.M.) SHALL BE INSTALLED IN THE SCRUBBER SOLUTION RECIRCULATION LINE. NOT LESS THAN 330 GALLONS PER MINUTE OF SOLUTION SHALL BE RECIRCULATED THROUGH THE SCRUBBER WHEN THE SCRUBBER IS IN OPERATION.
[RULE 1303]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

6. A PH METER SHALL BE INSTALLED TO MONITOR THE SCRUBBER SOLUTION. THE PH OF THE SCRUBBER SOLUTION SHALL NOT BE LESS THAN 10.0 OR GREATER THAN 13.5 PH WHEN THE SCRUBBER IS IN OPERATION.
[RULE 1303]
7. COMPLIANCE WITH CONDITION NO. 4 SHALL BE DETERMINED WEEKLY, USING DRAEGER TEST TUBES OR ANOTHER TEST METHOD APPROVED BY THE SCAQMD.
[RULE 402]
8. STORAGE TANK FILLING LOGS OR PURCHASE ORDERS FOR THE TANK SOLUTIONS MUST BE MAINTAINED TO SHOW USAGE OF THE SOLUTIONS.
[RULE 1303]

Periodic Monitoring:

9. OPERATOR SHALL RECORD THE SCRUBBER SOLUTION FLOWRATE AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]
10. OPERATOR SHALL RECORD THE PH OF THE SCRUBBER SOLUTION AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]
11. A DIFFERENTIAL PRESSURE GAUGE SHALL BE INSTALLED TO MONITOR THE SCRUBBER PRESSURE DROP. THE PRESSURE DROP SHALL NOT EXCEED 9.0 INCHES OF WATER WHEN THE SCRUBBER IS IN OPERATION.
[RULE 3004(a)(4)]
12. OPERATOR SHALL RECORD THE PRESSURE DROP OF THE SCRUBBER AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

PERMIT TO OPERATE

Permit No. G4190
A/N 455648

Equipment Description:

SEWAGE TREATMENT PLANT, 17.1 MGD CAPACITY. CONSISTING OF:

I. PRELIMINARY TREATMENT PROCESS COMPRISED OF:

1. ONE 22-MGD INFLUENT PUMP STATION VENTED TO ODOR CONTROL EQUIPMENT CONSISTING OF:
 - A. FOUR BAR SCREENS
 - B. ONE GRIT CHAMBER, 18' DIA. X 18' H.

II. CONVENTIONAL ACTIVATED SLUDGE (ANAEROBIC) PLANT NO. 1, 10 MGD CAPACITY CONSISTING OF:

1. SIX GRIT CHAMBERS, EACH 12' L. X 9' W. X 10' D.
2. EIGHT PRIMARY CLARIFIERS, EACH 65' L. X 15' W. X 10' D.
3. SIX AERATION BASINS, EACH 150' L. X 30' W. X 15' D.
4. SIX SECONDARY CLARIFIERS, EACH 88' L. X 16' W. X 10' D.
5. EIGHT SECONDARY CLARIFIERS, EACH 84' L. X 12' W. X 10' D.
6. TWO DISSOLVED AIR FLOATATION TANKS, EACH 30' DIA. X 6' D.
7. ONE INFLUENT EQUALIZATION BASIN, 150' L. X 150' W. X 15' D.

III. AEROBIC SEWAGE TREATMENT, PLANT NO. 2 CONSISTING OF:

1. ANOXIC ZONE 1, 0.3 MG CAPACITY.
2. AEROBIC ZONE 1, 0.49 MG CAPACITY.
3. ANOXIC ZONE 2, 0.22 MG CAPACITY.
4. AEROBIC ZONE 2, 0.77 MG CAPACITY.
5. ANOXIC ZONE 3, 0.4 MG CAPACITY.
6. AEROBIC ZONE 3, 0.54 MG CAPACITY.
7. TWO SECONDARY CLARIFIERS, 125'-0" DIA. X 14'-0" H.

IV. TERTIARY SEWAGE TREATMENT PLANT CONSISTING OF:

1. TWO FLOW EQUALIZATION BASINS, 2.4 MILLION GALLON TOTAL CAPACITY.
2. ONE FLOCCULATION BASIN, 43,758 GALLONS CAPACITY.
3. TWELVE TERTIARY FILTERS, SAND BED TYPE, EACH WITH 200 SQ. FT. FILTER AREA.
4. ONE CHLORINE INJECTION/SPLITTER BOX.
5. TWO CHLORINE CONTACT BASINS, FIVE PASS, EACH 110'-0" L. X 64'-0" W. X 11'-0" D. WITH TOTAL OF 16 MILLION GALLONS CAPACITY.
6. ONE TERTIARY EFFLUENT PUMP STATION.
7. TWO 30-TON CHLORINE COMPRESSED LIQUID/GAS STORAGE VESSELS VENTED TO AN EMERGENCY VENTILATION AND CONTROL SYSTEM (RULE 219 (d)(9) EXEMPT).



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

V. SEWAGE SLUDGE HANDLING AND STORAGE FACILITY CONSISTING OF:

1. FOUR FIXED ROOF ANAEROBIC DIGESTERS, EACH 48'-0" DIA. X 22'-0" D.
2. ONE FIXED ROOF ANAEROBIC DIGESTER, 75'-0" X 29'-0" H.
3. ONE ENCLOSED, BELOW GRADE, SLUDGE HOLDING TANK, 35'-0" DIA. X 15'-0" D., VENTED TO DIGESTER GAS COLLECTION SYSTEM.
4. ONE DIGESTER GAS STORAGE SPHERE, 35'-0" DIA. AND 22,449 CUBIC FEET CAPACITY.
5. TWO FILTER BELT PRESSES, ENCLOSED AND ASSOCIATED POLYMER SYSTEM, VENTED TO ODOR CONTROL EQUIPMENT.
6. ONE SLUDGE OFFLOADING STATION WITH ASSOCIATED CONVEYOR SYSTEM.
7. EIGHTEEN SEWAGE SLUDGE DRYING BEDS, EACH 100' L. X 40' W. X 1' D.
8. BOILER, NATURAL GAS-FIRED, RALPH B. CARTER CO., MODEL NO. H1500C41-GX, 1.5 MMBTU/HR (RULE 219 EXEMPT).
9. THREE ROTARY DRUM THICKENERS, 240 GALLON PER MINUTE CAPACITY.
10. ONE CENTRIFUGE.

VI. TREATED SEWAGE EFFLUENT EVAPORATION/PERCOLATION STORAGE PONDS CONSISTING OF:

1. TWO EVAPORATION/PERCOLATION EFFLUENT STORAGE PONDS, EACH 31.0 MG CAPACITY, 670'-0" L. X 326' W. X 375'-0" W. X 21'-0" D.
2. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 30 MG CAPACITY, 662'-0" L. X 353'-0" W. X 22'-0" D.
3. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 31 MG CAPACITY, 662'-0" L. X 353'-0" W. X 22'-0" D.
4. TWO EVAPORATION/PERCOLATION EFFLUENT STORAGE PONDS, EACH 12.65 MG CAPACITY, 370'-0" L. X 331'-0" W. X 22'-0" D. (EXISTING- NO CHANGE).
5. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.23 MG CAPACITY, 362'-0" L. X 329'-0" W. X 22'-0" D.
6. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.01 MG CAPACITY, 359'-0" L. X 327'-0" W. X 22'-0" D.
7. ONE L-SHAPED EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 44.20 MG CAPACITY, 1,080'-0" L. X 250'-0" W. X 745'-0" L. X 413'-0" W. X 335'-0" L. X 663'-0" W. X 22'-0" D.
8. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.30 MG CAPACITY, 357'-0" L. X 335'-0" W. X 22'-0" D.
9. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 11.99 MG CAPACITY, 363'-0" L. X 323'-0" W. X 22'-0" D.
10. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 11.62 MG CAPACITY, 356'-0" L. X 321'-0" W. X 22'-0" D.
11. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 15.16 MG CAPACITY, 391'-0" L. X 363'-0" W. X 22'-0" D.
12. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 15.00 MG CAPACITY, 393'-0" L. X 358'-0" W. X 22'-0" D.

VII. STORM WATER POND

1. ONE STORM WATER COLLECTION POND, 358'-0" X 344'-0" L. X 20'-0" D.



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE 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 CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION
[RULE 204]
4. THE DIGESTERS SHALL ONLY BE VENTED TO THE PERMITTED EQUIPMENT SUCH AS, I.C. ENGINES, DIGESTER GAS STORAGE FACILITY, DIGESTER GAS FLARE, AND/OR EQUIPMENT EXEMPTED BY RULE 219.
[RULE 1303]
5. HEADWORKS AND BELT PRESSES, SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL OPERATION AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE SCAQMD.
[RULE 1303]
6. THE MAXIMUM QUANTITY OF WASTEWATER TREATED BY THIS PLANT SHALL NOT EXCEED 17.1 MILLION GALLONS PER DAY (MGD).
[RULE 1303]
7. AT LEAST ONE SAMPLE OF THE TREATED DIGESTER GAS DOWNSTREAM OF THE GAS PURIFIER SHALL BE ANALYZED DAILY FOR H₂S AND RECORDED. ANALYTICAL METHOD SHALL BE APPROVED BY THE EXECUTIVE OFFICER.
[RULE 431.1]
8. COVERS APPROVED BY THE EXECUTIVE OFFICER SHALL BE INSTALLED ON ALL NEW PRIMARY SEDIMENTATION TANKS AND HEADWORKS. THIS EQUIPMENT SHALL BE VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN FULL USE AND HAS BEEN ISSUED A PERMIT TO CONSTRUCT OR OPERATE BY THE SCAQMD.
[RULE 1303]
9. ALL SLUDGE SHALL BE PIPED AND STORED IN AN ENCLOSED MANNER TO PREVENT THE RELEASE OF AIR CONTAMINANTS UNTIL AFTER IT IS DEWATERED.
[RULE 1303]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

PERMIT TO OPERATE

Permit No. G2337
A/N 473542

Equipment Description:

DIGESTER GAS TREATMENT SYSTEM AND FUEL CELL POWER PLANT CONSISTING OF:

1. KNOCKOUT TANK.
2. TWO HYDROGEN SULFIDE REMOVAL VESSELS, APPLIED FILTER TECHNOLOGY, MODEL SULFRPACK, 8'-0" DIA. X 8'-0" H., EACH WITH 24,960 POUNDS MEDIA.
3. PARTICULATE FILTER.
4. PRE-COOLER WITH DEMISTER.
5. TWO COMPRESSORS, EACH 300 SCFM, ELECTRICALLY DRIVEN.
6. GAS PRE-COOLER AND GAS RE-HEATER.
7. GAS COOLER AND DEMISTER.
8. TWO SILOXANE REMOVAL VESSELS, APPLIED FILTER TECHNOLOGY, MODEL SAGPACK, 3'-6" DIA. X 8'-0" H. BED DEPTH, EACH CONTAINING 2300 POUNDS MEDIA.
9. PARTICULATE FILTER.
10. THREE FUEL CELLS, FUEL-CELL ENERGY, MODEL DFC300MA, 900 KW TOTAL MAXIMUM POWER OUTPUT.
11. THREE HEAT RECOVERY UNITS, EACH WITH AN ELECTRIC HEATER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE 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 CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE USED ONLY FOR THE TREATMENT/CONTROL OF DIGESTER GAS, AND THE GENERATION OF ELECTRICITY AND HOT WATER, EXCEPT WHEN NATURAL GAS IS REQUIRED AS FUEL TO MAINTAIN FUEL CELL OPERATION.
[RULE 204]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

4. THE OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF RAW DIGESTER GAS INTO THE ATMOSPHERE. ANY BREAKDOWN OR MALFUNCTION WHICH RESULTS IN EMISSION OF DIGESTER GAS SHALL BE REPORTED TO THE SCAQMD WITHIN ONE HOUR AFTER OCCURRENCE OR WITHIN ONE HOUR OF THE TIME THE OPERATING PERSONNEL KNEW OR REASONABLY SHOULD HAVE KNOWN OF THE OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 402] [RULE 431.1]
5. A NON-RESETTABLE TOTALIZING FLOW METER SHALL BE INSTALLED AND MAINTAINED TO MEASURE AND RECORD THE TOTAL QUANTITY OF GAS TREATED.
[RULE 1303 (a)(1)] [RULE 1303 (a)(4)]
6. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET GAS LINE TO THE DIGESTER GAS TREATMENT SYSTEM AND TO THE FUEL-CELL PRE-CONVERTER TO ALLOW THE COLLECTION OF DIGESTER GAS SAMPLES.
[RULE 218]
7. TWO SAMPLING PORTS SHALL BE PROVIDED IN THE FUEL-CELL EXHAUST DUCT, 8-10 DUCT DIAMETERS DOWNSTREAM, AND TWO DUCT DIAMETERS UPSTREAM. THE SAMPLING PORT SHALL CONSIST OF TWO 4 INCH WELDED NIPPLES WITH PLUGS, SET 90 DEGREES APART. AN ALTERNATE SAMPLING LOCATION OR EQUIVALENT METHOD FOR EMISSION SAMPLING MAY BE USED UPON WRITTEN APPROVAL OF THE SCAQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE SUPPLIED BY THE APPLICANT.
[RULE 218]
8. THE OPERATOR SHALL MEASURE THE CONCENTRATION OF TOTAL SULFUR AT THE INLET AND OUTLET TO THE DIGESTER GAS TREATMENT SYSTEM ONCE EACH QUARTER, USING METHODS APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED AND REPORTED IN PPMV AS H₂S.
[RULE 431.1]
9. THE CONCENTRATION OF SULFUR COMPOUNDS MEASURED AS HYDROGEN SULFIDE (H₂S) AT THE INLET TO THE FUEL CELL PRE-CONVERTER SHALL NOT EXCEED 6.1 PPMV.
[RULE 1303]
10. THE SPENT MEDIA WHICH IS REMOVED FROM THE SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM THE FACILITY.
[RULE 402]
11. THE SULFUR AND SILOXANE TREATMENT MEDIA SHALL BE REPLACED AT A FREQUENCY NECESSARY TO MAINTAIN COMPLIANCE WITH THE EMISSION LIMITS IN THIS PERMIT AND TO OPERATE THE FUEL CELL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 431.1] [RULE 1303]
12. THE TOTAL NOX EMISSIONS FROM THE FUEL CELLS SHALL NOT EXCEED 0.02 LB/HR (0.48 LB/DAY).
[RULE 1303 - OFFSET]



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13. THE TOTAL VOC EMISSIONS FROM THE FUEL CELLS SHALL NOT EXCEED 0.02 LB/HR (0.48 LB/DAY).
[RULE 1303 – OFFSET]
14. ONCE EVERY FIVE YEARS, THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH SCAQMD APPROVED TEST PROCEDURES AND FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN THIRTY (30) DAYS AFTER TESTING. WRITTEN NOTICE OF THE SOURCE TEST SHALL BE PROVIDED TO THE SCAQMD AT LEAST 7 DAYS PRIOR TO TESTING SO THAT AN OBSERVER MAY BE PRESENT. A PROPOSAL OF SOURCE TEST PROCEDURES AND ANALYTICAL METHODS TO BE USED SHALL BE SUBMITTED TO THE SCAQMD FOR APPROVAL AT LEAST 60 DAYS PRIOR TO THE START OF THE TEST. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE OUTLET EXHAUST OF EACH FUEL CELL, AND THE TREATED DIGESTER GAS, UNLESS OTHERWISE INDICATED BELOW. THE TEST SHALL INCLUDE THE FOLLOWING RESULTS AND PROCESS DATA:
- A. METHANE CONTENT OF THE TREATED DIGESTER GAS,
 - B. TOTAL NON-METHANE ORGANIC COMPOUNDS AT EACH FUEL CELL EXHAUST OUTLET,
 - C. OXIDES OF NITROGEN AT EACH FUEL CELL EXHAUST OUTLET, IN PPM, AND LB/HR,
 - D. CARBON MONOXIDE, AT EACH FUEL CELL EXHAUST OUTLET, IN PPM, AND LB/HR,
 - E. OXYGEN CONTENT,
 - F. MOISTURE CONTENT,
 - G. TEMPERATURE OF THE FUEL CELL,
 - H. TEMPERATURE AT THE INLET AND OUTLET OF THE PRE-CONVERTER,
 - I. FLOW RATE OF EACH FUEL CELL EXHAUST OUTLET,
 - J. POWER OUTPUT OF THE FUEL CELL,
 - K. BTU CONTENT OF THE TREATED DIGESTER GAS,
 - L. FUEL UTILIZATION OF THE FUEL CELL,
 - M. TREATED DIGESTER GAS FEED RATE TO THE PRE-CONVERTER.
- [RULE 1303 OFFSET] [RULE 3004(a)(4)]
15. IF THE OPERATION OF THIS EQUIPMENT RESULTS IN ODOR COMPLAINTS, THE WORK SHALL CEASE AND MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL THE EMISSIONS CAUSING THE COMPLIANCE IS MITIGATED AND THE APPROVAL TO RESUME WORK IS RECEIVED FROM THE AQMD.
[RULE 402]
16. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL KEEP RECORDS OF OPERATING AND MONITORING DATA, AND TREATMENT MEDIA REPLACEMENT DATES. THESE RECORDS SHALL BE MAINTAINED FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO SCAQMD PERSONNEL UPON REQUEST.
[RULE 3004(a)(4)]

Emissions and Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
EASTERN MUNICIPAL WATER DIST.**

PERMIT TO OPERATE

**Permit No. G4191
A/N 485923**

Equipment Description:

INTERNAL COMBUSTION ENGINE, ENGINE NO. 3, CATERPILLAR, MODEL NO. G398-TA-HCR, SERIAL NO. 73B02095, TWELVE CYLINDERS, TURBOCHARGED, AFTERCOOLED, 700 BHP, RICH-BURN, NATURAL GAS FIRED, WITH A JOHNSON MATTHEY CATALYST, MODEL NO. MX80, AND AN AIR/FUEL RATIO CONTROLLER, WITH AN EXHAUST HEAT RECOVERY SYSTEM AND DRIVING AN AERATION BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE 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 CONDITION AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS AND CERTIFICATIONS SHALL BE PERFORMED BY A QUALIFIED MECHANIC AND ACCORDING TO THE ENGINE MANUFACTURER'S PROCEDURES.
[RULE 1110.2]
4. THE OPERATOR SHALL SERVICE AND/OR REPLACE THE CATALYST AS NEEDED PER MANUFACTURER'S RECOMMENDATIONS.
[RULE 1303]
5. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE TOTALIZING FUEL METER TO ACCURATELY INDICATE THE FUEL USAGE IN THE FUEL SUPPLY LINE TO THE ENGINE.
[RULE 1110.2]
6. THE ENGINE SHALL OPERATE BETWEEN 1044 AND 1276 RPM, EXCEPT DURING START-UP OR SHUT DOWN OPERATION WHICH DOES NOT EXCEED 30 MINUTES PER EVENT.
[RULE 1110.2]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

Periodic Monitoring

7. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
8. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
9. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE VOC EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
10. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 3004 (a)(4)]
11. THE OXYGEN CONCENTRATION AT THE OUTLET OF THE ENGINE SHALL NOT EXCEED 0.5 PERCENT OXYGEN.
[RULE 3004 (a)(4)]
12. THIS ENGINE SHALL BE EQUIPPED WITH AN OXYGEN SENSOR AT THE EXHAUST OF THE ENGINE. A RECORDING SYSTEM SHALL BE INSTALLED TO VERIFY COMPLIANCE WITH CONDITION 12. PARAMETRIC OPERATING DATA MAY BE USED IN LIEU OF DIRECT OXYGEN MEASUREMENTS, BUT RECORDS OF HOW THE PARAMETRIC DATA RELATES TO OXYGEN CONTENT MUST BE RETAINED AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 3004 (a)(4)]
13. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE INLET OF THE CATALYST.
[RULE 3004 (a)(4)]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

14. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE OUTLET OF THE CATALYST.
[RULE 3004 (a)(4)]
15. THE TEMPERATURE AT THE OUTLET OF THE CATALYST SHALL NOT EXCEED 1350 DEGREES FAHRENHEIT.
[RULE 3004 (a)(4)]
16. THE MINIMUM TEMPERATURE AT THE INLET OF THE CATALYST SHALL BE ABOVE 750 DEGREES FAHRENHEIT, EXCEPT DURING AN ENGINE COLD START NOT TO EXCEED 30 MINUTES.
[RULE 3004 (a)(4)]

Emissions and Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
NOX: 11 PPM AT 15% O₂, RULE 1110.2
NOX: 0.15 G/BHP-HR, RULE 1303
VOC: 30 PPM AT 15% O₂, RULE 1110.2
VOC: 0.15 G/BHP-HR, RULE 1303
CO: 70 PPM AT 15% O₂, RULE 1110.2
CO: 0.6 G/BHP-HR, RULE 1303



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

PERMIT TO OPERATE

Permit No. G4192
A/N 485924

Equipment Description:

INTERNAL COMBUSTION ENGINE, CATERPILLAR, MODEL NO. G398-TA-HCR, SERIAL NO. 73B02093, TWELVE CYLINDERS, TURBOCHARGED, AFTERCOOLED, 700 BHP, RICH-BURN, NATURAL GAS FIRED, WITH A JOHNSON MATTHEY CATALYST, MODEL NO. MX80, AND AN ALTRONIC EPC-100 AIR/FUEL RATIO CONTROLLER, DRIVING AN AERATION BLOWER.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE 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 CONDITION AT ALL TIMES.
[RULE 204]
3. THE IGNITION TIMING OF THIS ENGINE SHALL BE INSPECTED, ADJUSTED AND CERTIFIED AT A MINIMUM OF ONCE EVERY THREE YEARS OF OPERATION. INSPECTIONS, ADJUSTMENTS AND CERTIFICATIONS SHALL BE PERFORMED BY A QUALIFIED MECHANIC AND ACCORDING TO THE ENGINE MANUFACTURER'S PROCEDURES.
[RULE 1110.2]
4. THIS ENGINE SHALL NOT BE OPERATED WITHOUT THE USE OF AN AUTOMATIC AIR TO FUEL RATIO CONTROLLER WHICH SHALL BE MAINTAINED AND KEPT IN PROPER OPERATING CONDITIONS AT ALL TIMES AS SPECIFIED BY THE MANUFACTURER.
[RULE 1110.2]
5. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE INLET OF THE CATALYST.
[RULE 1110.2]
6. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE OUTLET OF THE CATALYST.
[RULE 1110.2]
7. THE TEMPERATURE AT THE OUTLET OF THE CATALYST SHALL NOT EXCEED 1350 DEGREES FAHRENHEIT.
5. THE OPERATOR SHALL INSTALL AND MAINTAIN A TEMPERATURE GAUGE AND RECORDING SYSTEM TO ACCURATELY INDICATE THE TEMPERATURE AT THE INLET OF THE CATALYST.
[RULE 1110.2]



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8. THE MINIMUM TEMPERATURE AT THE INLET OF THE CATALYST SHALL BE ABOVE 750 DEGREES FAHRENHEIT, EXCEPT DURING START-UP OR SHUT-DOWN OPERATION WHICH DOES NOT EXCEED 30 MINUTES PER EVENT.
[RULE 1110.2]
9. THE OPERATOR SHALL USE THIS EQUIPMENT IN SUCH A MANNER THAT THE OXYGEN CONCENTRATION BEING MONITORED, AS INDICATED BELOW, DOES NOT EXCEED 0.5% EXCEPT DURING START-UP OR SHUT-DOWN OPERATION WHICH DOES NOT EXCEED 30 MINUTES PER EVENT. TO COMPLY WITH THIS CONDITION, THE OPERATOR SHALL INSTALL AND MAINTAIN A SENSOR TO ACCURATELY INDICATE THE OXYGEN CONCENTRATION OF THE EXHAUST GAS ENTERING THE CATALYST. THE OPERATOR SHALL ALSO INSTALL AND MAINTAIN A DEVICE TO CONTINUOUSLY RECORD THE PARAMETER BEING MEASURED.
[RULE 1110.2]
10. THE OPERATOR SHALL SERVICE AND/OR REPLACE THE CATALYST AS NEEDED PER MANUFACTURER'S RECOMMENDATIONS.
[RULE 1303]
11. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE TOTALIZING FUEL METER TO ACCURATELY INDICATE THE FUEL USAGE IN THE FUEL SUPPLY LINE TO THE ENGINE.
[RULE 1110.2]
12. THE ENGINE SHALL OPERATE BETWEEN 1044 AND 1276 RPM, EXCEPT DURING START-UP OR SHUT-DOWN OPERATION WHICH DOES NOT EXCEED 30 MINUTES PER EVENT.
[RULE 1110.2]

Periodic Monitoring

13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]
14. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NOX EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a)(4)]



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15. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE VOC EMISSION LIMIT(S) BY CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY 3 YEARS USING THE TEST METHOD AS STATED IN RULE 1110.2. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1110.2 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT. [RULE 3004 (a)(4)]

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
NOX: 12 PPM AT 15% O₂, RULE 1303
NOX: 36 PPM AT 15% O₂, RULE 1110.2
VOC: 34 PPM AT 15% O₂, RULE 1303
VOC: 250 PPM AT 15% O₂, RULE 1110.2
CO: 77 PPM AT 15% O₂, RULE 1303
CO: 2000 PPM AT 15% O₂, RULE 1110.2



**FACILITY PERMIT TO OPERATE
EASTERN MUNICIPAL WATER DIST.**

PERMIT TO CONSTRUCT/OPERATE

**Permit No. G9638
A/N 500148**

Equipment Description:

MODIFICATION OF AN AIR POLLUTION CONTROL (APC) SYSTEM CONSISTING OF:

1. SCRUBBER, CUSTOM, VERTICAL FLOW WET PACKED TYPE, 10'-0" DIA. X 27'-0" H., PACKED, WITH A 500 GPM CIRCULATION PUMP.
2. STORAGE TANK, SODIUM HYDROXIDE, 2,500 GALLONS, WITH ASSOCIATED PUMPS.
3. STORAGE TANK, SODIUM HYPOCHLORITE, 2,500 GALLONS, WITH ASSOCIATED PUMPS.
4. EXHAUST SYSTEM WITH A 100 H.P. BLOWER VENTING THE HEADWORKS.

BY REPLACING ITEM 1 WITH:

1. SCRUBBER, CUSTOM, VERTICAL FLOW WET PACKED TYPE, 11'-0" DIA. X 27'-0" H., WITH A MINIMUM DEPTH OF 10 FEET OF LANTEC PRODUCTS-Q-PAC PACKING MEDIA OR EQUIVALENT AND MIST ELIMINATOR, WITH A 500 GPM CIRCULATION PUMP.

BY REPLACING ITEM 2 WITH:

2. STORAGE TANK, SODIUM HYDROXIDE, 1,000 GALLONS, WITH ASSOCIATED PUMPS.

BY REPLACING ITEM 3 WITH:

3. STORAGE TANK, SODIUM HYPOCHLORITE, 2,300 GALLONS, WITH ASSOCIATED PUMPS.

INCLUDING CAPACITY AND PLANT NO. 2 CONNECTION OF ITEM 4 TO READ AS:

4. EXHAUST SYSTEM WITH A 100 H.P. BLOWER, 30,000 CFM CAPACITY, VENTING THE HEADWORKS AND PLANT NO. 2 GRIT CHAMBERS.

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 CONDITION AT ALL TIMES.
[RULE 204]



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3. THIS EQUIPMENT SHALL BE OPERATED WHENEVER THE HEADWORKS OR PLANT 2 GRIT CHAMBERS ARE IN OPERATION, HOWEVER, THIS EQUIPMENT MAY BE SHUT DOWN FOR A PERIOD NOT EXCEEDING 72 HOURS FOR MAINTENANCE AND NOT EXCEEDING 60 MINUTES DURING ELECTRICAL POWER SOURCE CHANGEOVER DUE TO HIGH POWER DEMAND OR MONTHLY EMERGENCY SYSTEM TESTING. SHUTDOWNS DUE TO ELECTRICAL POWER SOURCE CHANGEOVERS DUE TO EDISON POWER INTERRUPTIONS FOR HIGH DEMAND OR EMERGENCY SYSTEM TESTING SHALL NOT OCCUR MORE THAN ONCE DURING ANY CALENDAR MONTH FOR EITHER EVENT. EACH SHUTDOWN MUST BE RECORDED WITH DATE, TIME, DURATION AND PURPOSE OF THE SHUTDOWN.
[RULE 204]
4. WHEN THE EQUIPMENT IS SHUT DOWN FOR MAINTENANCE, PERIMETER MONITORING SHALL BE PERFORMED DOWN WIND OF THE SCRUBBER AND IN THE DIRECTION OF THE RESIDENTIAL AREAS AT LEAST ONCE EVERY 4 HOURS FROM 6:30 A.M. TO 4 PM (OTHERWISE ON CALL) UNTIL THE SCRUBBER IS IN OPERATION.
[RULE 204]
5. THE CONCENTRATION OF SULFUR COMPOUNDS MEASURED AS HYDROGEN SULFIDE (H₂S) AT THE OUTLET OF THIS AIR POLLUTION CONTROL SYSTEM SHALL NOT EXCEED 1.0 PARTS PER MILLION.
[RULE 402]
6. A FLOWMETER INDICATING GALLONS PER MINUTE (GPM) SHALL BE INSTALLED IN THE SCRUBBER SOLUTION RECIRCULATION LINE. NOT LESS THAN 350 GALLONS PER MINUTE OF SOLUTION SHALL BE RECIRCULATED THROUGH THE SCRUBBER WHEN THE SCRUBBER IS IN OPERATION.
[RULE 1303]
7. SODIUM HYDROXIDE AND SODIUM HYPOCHLORITE USAGE SHALL BE MAINTAINED. STORAGE TANK FILLING LOGS OR PURCHASE ORDERS FOR THE TANK SOLUTIONS MAY BE USED TO ESTIMATE THE HOURLY USAGE.
[RULE 1303]
8. A PH METER SHALL BE INSTALLED TO MONITOR THE SCRUBBER SOLUTION. THE PH OF THE SCRUBBER SOLUTION SHALL NOT BE LESS THAN 10.5 OR GREATER THAN 13.5 PH WHEN THE SCRUBBER IS IN OPERATION.
[RULE 1303]
9. THE CONCENTRATION OF HYDROGEN SULFIDE (H₂S) AT THE OUTLET OF THE AIR POLLUTION CONTROL SYSTEM SHALL BE MEASURED AND RECORDED WEEKLY, USING DRAEGER TEST TUBES OR ANOTHER TEST METHOD APPROVED BY THE SCAQMD.
[RULE 402]
10. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETE WITHIN ONE YEAR FROM AUGUST 20, 2010 UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 205]



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Periodic Monitoring

11. OPERATOR SHALL RECORD THE SCRUBBER SOLUTION FLOWRATE AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]
12. OPERATOR SHALL RECORD THE PH OF THE SCRUBBER SOLUTION AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]
13. A DIFFERENTIAL PRESSURE GAUGE SHALL BE INSTALLED TO MONITOR THE SCRUBBER PRESSURE DROP. THE PRESSURE DROP SHALL NOT EXCEED 9.0 INCHES OF WATER WHEN THE SCRUBBER IS IN OPERATION.
[RULE 3004(a)(4)]
14. OPERATOR SHALL RECORD THE PRESSURE DROP OF THE SCRUBBER AT LEAST ONCE PER DAY.
[RULE 3004(a)(4)]



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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, BOILER, > 400,000 BTU/HR BUT < 2 MMBTU/HR.

Emissions and Requirements:

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

PM: 0.1 gr/scf, RULE 409
NOx: 30 PPMV, RULE 1146.2
CO: 400 PPMV, RULE 1146.2
CO: 2000 PPMV, RULE 407



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DIST.

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

Periodic Monitoring:

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF:
 - A. COATING TYPE,
 - B. VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS'
 - C. VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.
FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF:
 - A. COATING TYPE,
 - B. VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS'
 - C. VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.
[RULE 3004 (a) (4)]

Emissions And Requirements:

2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS
VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



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RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

Emissions And Requirements:

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATION:

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
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**Permit to Construct and Temporary Permit to Operate
(Section H)**

This section consists of a table listing all individual Permits to Construct issued to various equipment at the facility. Each permit will list operating conditions, including periodic monitoring requirements and applicable emission limits and requirements. Also included are the rule origin and authority of each emission limit and permit condition.



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

PERMITTED EQUIPMENT LIST

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AT THIS FACILITY:

Application number	Equipment Description	Page Number
474814	SEWAGE TREATMENT (> 5 MG/D) ANAEROBIC	3
R-499768	FLARE, ENCLOSED LANDFILL/DIGETER GAS	7
499769	I C E (>500 HP) EMERGENCY ELEC. DIESEL	11

NOTE: EQUIPMENT LISTED ABOVE ARE ISSUED PERMITS TO CONSTRUCT. THE ISSUANCE OR DENIAL OF THEIR PERMITS TO OPERATE IS SUBJECT TO ENGINEERING FINAL REVIEW. ANY OTHER APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT WILL NOT BE FOUND IN THIS TITLE V PERMIT.



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PERMIT TO CONSTRUCT

GRANTED AS OF: August 28, 2009
A/N 474814

Equipment Description:

ALTERATION OF PERMIT TO OPERATE G1450 (APPL.NO.455648):

SEWAGE TREATMENT FACILITY, 17.1 MGD CAPACITY, CONSISTING OF:

I. PRELIMINARY TREATMENT PROCESS COMPRISED OF:

1. ONE 22-MGD INFLUENT PUMP STATION VENTED TO ODOR CONTROL EQUIPMENT CONSISTING OF:
 - A. FOUR BAR SCREENS
 - B. ONE GRIT CHAMBER, 18' DIA. X 18' H.

II. CONVENTIONAL ACTIVATED SLUDGE (ANAEROBIC) PLANT NO. 1, 10 MGD CAPACITY CONSISTING OF:

1. SIX GRIT CHAMBERS, EACH 12' L. X 9' W. X 10' D.
2. EIGHT PRIMARY CLARIFIERS, EACH 65' L. X 15' W. X 10' D.
3. SIX AERATION BASINS, EACH 150' L. X 30' W. X 15' D.
4. SIX SECONDARY CLARIFIERS, EACH 88' L. X 16' W. X 10' D.
5. EIGHT SECONDARY CLARIFIERS, EACH 84' L. X 12' W. X 10' D.
6. TWO DISSOLVED AIR FLOATATION TANKS, EACH 30' DIA. X 6' D.
7. ONE INFLUENT EQUALIZATION BASIN, 150' L. X 150' W. X 15' D.

III. AEROBIC SEWAGE TREATMENT PLANT NO. 2 CONSISTING OF:

1. ANOXIC ZONE 1, 0.3 MG CAPACITY.
2. AEROBIC ZONE 1, 0.49 MG CAPACITY.
3. ANOXIC ZONE 2, 0.22 MG CAPACITY.
4. AEROBIC ZONE 2, 0.77 MG CAPACITY.
5. ANOXIC ZONE 3, 0.4 MG CAPACITY.
6. AEROBIC ZONE 3.1, 0.54 MG CAPACITY.
8. TWO SECONDARY CLARIFIERS, 125'-0" DIA. X 14'-0" H.

IV. TERTIARY SEWAGE TREATMENT PLANT CONSISTING OF:

1. TWO FLOW EQUALIZATION BASINS, 2.4 MILLION GALLON TOTAL CAPACITY.
2. ONE FLOCCULATION BASIN, 43,758 GALLONS CAPACITY.
3. TWELVE TERTIARY FILTERS, SAND BED TYPE, EACH WITH 200 SQ. FT. FILTER AREA.
4. ONE CHLORINE INJECTION/SPLITTER BOX.
5. TWO CHLORINE CONTACT BASINS, FIVE PASS, EACH 110'-0" L. X 64'-0" W. X 11'-0" D. WITH TOTAL OF 16 MILLION GALLONS CAPACITY.



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6. ONE TERTIARY EFFLUENT PUMP STATION.
7. TWO 30-TON CHLORINE COMPRESSED LIQUID/GAS STORAGE VESSELS VENTED TO AN EMERGENCY VENTILATION AND CONTROL SYSTEM (RULE 219 (d)(9) EXEMPT).

V. SEWAGE SLUDGE HANDLING AND STORAGE FACILITY CONSISTING OF:

1. FOUR FIXED ROOF ANAEROBIC DIGESTERS, 48'-0" DIA. X 22'-0" D.
2. ONE FIXED ROOF ANAEROBIC DIGESTER, 75'-0" X 29'-0" H.
3. ONE ENCLOSED, BELOW GRADE, SLUDGE HOLDING TANK, 35'-0" DIA. X 15'-0" D., VENTED TO DIGESTER GAS COLLECTION SYSTEM.
4. ONE DIGESTER GAS STORAGE SPHERE, 35'-0" DIA. OR 22,449 CUBIC FEET CAPACITY.
5. TWO FILTER BELT PRESSES, ENCLOSED AND ASSOCIATED POLYMER SYSTEM, VENTED TO ODOR CONTROL EQUIPMENT.
6. ONE SLUDGE OFFLOADING STATION WITH ASSOCIATED CONVEYOR SYSTEM.
7. EIGHTEEN SEWAGE SLUDGE DRYING BEDS, EACH 100' L. X 40' W. X 1' D.
8. BOILER, NATURAL GAS-FIRED, RALPH B. CARTER CO., MODEL NO. H1500C41-GX. 1.5 MMBTU/HR (RULE 219 EXEMPT).
9. THREE ROTARY DRUM THICKENERS, 240 GALLON PER MINUTE CAPACITY.
10. ONE CENTRIFUGE.

VI. TREATED SEWAGE EFFLUENT EVAPORATION/PERCOLATION STORAGE PONDS CONSISTING OF:

1. TWO EVAPORATION/PERCOLATION EFFLUENT STORAGE PONDS, EACH 31.0 MG CAPACITY, 670'-0" L. X 326' W. X 375'-0" W. X 21'-0" D.
2. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 30 MG CAPACITY, 662'-0" L. X 353'-0" W. X 22'-0" D.
3. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 31 MG CAPACITY, 662'-0" L. X 353'-0" W. X 22'-0" D.
4. TWO EVAPORATION/PERCOLATION EFFLUENT STORAGE PONDS, EACH 12.65 MG CAPACITY, 370'-0" L. X 331'-0" W. X 22'-0" D. (EXISTING- NO CHANGE).
5. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.23 MG CAPACITY, 362'-0" L. X 329'-0" W. X 22'-0" D.
6. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.01 MG CAPACITY, 359'-0" L. X 327'-0" W. X 22'-0" D.
7. ONE L-SHAPED EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 44.20 MG CAPACITY, 1,080'-0" L. X 250'-0" W. X 745'-0" L. X 413'-0" W. X 335'-0" L. X 663'-0" W. X 22'-0" D.
8. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 12.30 MG CAPACITY, 357'-0" L. X 335'-0" W. X 22'-0" D.
9. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 11.99 MG CAPACITY, 363'-0" L. X 323'-0" W. X 22'-0" D.
10. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 11.62 MG CAPACITY, 356'-0" L. X 321'-0" W. X 22'-0" D.
11. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 15.16 MG CAPACITY, 391'-0" L. X 363'-0" W. X 22'-0" D.
12. ONE EVAPORATION/PERCOLATION EFFLUENT STORAGE POND, 15.00 MG CAPACITY, 393'-0" L. X 358'-0" W. X 22'-0" D.



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VII. STORM WATER POND:

1. ONE STORM WATER COLLECTION POND, 358'-0" X 344'-0" L. X 20'-0" D.

BY THE ADDITION OF:

1. ONE GRIT CHAMBER, VORTEX, 18'-0" DIA. (Preliminary Treatment)
2. TWO SECONDARY CLARIFIERS, EACH 125'-0" DIA. X 14'-0" D. (Plant 2)
3. ONE DIGESTER, ACID PHASE, 4 CHAMBERS, EACH 20'-0" W. X 20'-0" L. X 21'-0" H. (Sludge Handling and Storage)
4. ONE DIGESTER, METHANE-PHASE, 70'-0" DIA. X 29'-0" H. (Sludge Handling and Storage)
5. TWO DIGESTED SLUDGE STORAGE TANKS, 48'-0" DIA. X 18'-0" H. (Sludge Handling and Storage)
6. ONE LOW PRESSURE DIGESTER GAS STORAGE TANK, 7,500 CUBIC FEET CAPACITY. (Sludge Handling and Storage)
7. ONE FERRIC ACID STORAGE TANK, 2,600 GALLON CAPACITY.
8. FOUR TERTIARY FILTERS, ROTARY DISC CLOTH, EACH 636 SQ. FT. (Tertiary Sewage Treatment)
9. SLUDGE OVERFLOW STORAGE TANK (CONVERTED FROM SLUDGE HOLDING TANKS (VI)(3)).
10. ONE CHLORINE CONTACT BASIN, FIVE PASS, EACH 110'-0" L. X 64'-0" W. X 11'-0" D. WITH TOTAL CAPACITY OF 8 MG.

BY THE REMOVAL OF:

1. TWO DIGESTERS, METHANE-PHASE, 48'-0" DIA. X 21'-0" H.
2. ONE DIGESTED SLUDGE STORAGE TANKS, 30'-0" DIA. X 14'-6" H.

AND BY THE INCREASE OF INFLUENT FLOW CAPACITY TO 17.4 MGD (EXCEPT DURING WET WEATHER CONDITIONS)

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 CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]



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4. THE MAXIMUM DAILY INFLUENT WASTEWATER TREATED BY THIS EQUIPMENT, ON AN ANNUAL BASIS, SHALL NOT EXCEED 17.4 MILLION GALLONS PER DAY (MGD), EXCEPT DURING WET WEATHER CONDITIONS.
[RULE 1303]
5. HEADWORKS AND DIGESTER GAS SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL OPERATION AND WHICH HAS BEEN ISSUED AN OPERATING PERMIT BY THE SCAQMD.
[RULE 1303]
6. ALL SLUDGE SHALL BE PIPED AND STORED IN AN ENCLOSED MANNER TO PREVENT THE RELEASE OF AIR CONTAMINANTS UNTIL AFTER IT IS DEWATERED.
[RULE 1303]
7. AT LEAST ONE SAMPLE OF THE TREATED DIGESTER GAS DOWNSTREAM OF THE GAS PURIFIER SHALL BE ANALYZED DAILY FOR H₂S AND RECORDED. ANALYTICAL METHOD SHALL BE APPROVED BY THE EXECUTIVE OFFICER.
[RULE 431.1]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

PERMIT TO CONSTRUCT

GRANTED AS OF: August 20, 2010
A/N R-499768

Equipment Description:

DIGESTER GAS FLARING SYSTEM CONSISTING OF:

1. HYDROGEN SULFIDE REMOVAL VESSEL.
2. SEDIMENT TRAP.
3. FLAME ARRESTER.
4. ENCLOSED FLARE, BEKAERT, MODEL CEB 50, 1,700,000 BTU/HR, 1'-5" DIA. X 14'-0" H.

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 CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THE FLARE SHALL BE EQUIPPED WITH A TEMPERATURE INDICATOR AND RECORDER WHICH MEASURES AND RECORDS THE GAS TEMPERATURE IN THE FLARE STACK WHENEVER THE FLARE IS IN OPERATION.
[RULE 1303]
5. AT LEAST TWO (2) SAMPLING PORTS SHALL BE PROVIDED IN THE FLARE STACK AT LEAST ONE-HALF DUCT DIAMETER UPSTREAM OF THE FLARE OUTLET, 90 DEGREES APART. EACH SAMPLING PORT SHALL CONSIST OF A FOUR-INCH COUPLING WITH PLUG. ALL PORTS SHALL BE PROPERLY CENTERED. AN EQUIVALENT METHOD OF EMISSION SAMPLING MAY BE USED UPON APPROVAL BY THE EXECUTIVE OFFICER. ADEQUATE AND SAFE ACCESS TO ALL SOURCE TEST PORTS SHALL BE PROVIDED WITHIN 48 HOURS NOTICE BY SCAQMD.
[RULE 217]
6. A SAMPLING PORT SHALL BE INSTALLED AT THE INLET GAS LINE TO THE FLARE TO ALLOW THE COLLECTION OF A DIGESTER GAS SAMPLE.
[RULE 217]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

7. WHENEVER THE FLARE IS IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F, AS MEASURED BY AN APPROVED TEMPERATURE INDICATOR, SHALL BE MAINTAINED WITHIN 28 INCHES OF THE MESH BURNER.
[RULE 1303]
8. THE FLARE SHALL BE EQUIPPED WITH AN AUTOMATIC SHUT-DOWN SYSTEM WITH A FAILURE ALARM, WHICH HAS BEEN APPROVED BY THE SCAQMD, TO AUTOMATICALLY ISOLATE THE FLARE FROM THE DIGESTER GAS SUPPLY LINE, SHUT OFF THE BLOWER AND IMMEDIATELY NOTIFY A RESPONSIBLE PARTY OF THE SHUT-DOWN.
[RULE 1303]
9. THE AUTOMATIC SHUT-DOWN SAFETY SYSTEM SHALL BE TESTED MONTHLY FOR PROPER OPERATION AND THE RESULTS RECORDED.
[RULE 1303]
10. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE FLARE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BEING BURNED IN THE FLARE.
[RULE 1303]
11. THE TOTAL VOLUME OF DIGESTER GAS BURNED IN THE FLARE SHALL NOT EXCEED 95 STANDARD CUBIC FEET PER MINUTE.
[RULE 1303]
12. THE HEAT INPUT THROUGH THE FLARE SHALL NOT EXCEED 1.7 MILLION BTU'S PER HOUR.
[RULE 1303]
13. WEEKLY READINGS OF BTU CONTENT OF THE GAS AT THE INLET TO THE FLARE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 1303]
14. ALL DIGESTER GAS COLLECTED SHALL BE DIRECTED EITHER TO THE FLARE FOR COMBUSTION OR TO A TREATMENT FACILITY WHICH HAS A VALID PERMIT TO CONSTRUCT OR OPERATE, AS APPLICABLE, FROM THE SCAQMD.
[RULE 1303]
15. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY.
[RULE 1303]
16. THE MAXIMUM FLARE SKIN TEMPERATURE AT ANY LOCATION SHALL NOT EXCEED 250 DEGREES F.
[RULE 1303]
17. OPERATION OF THIS EQUIPMENT SHALL NOT RESULT IN THE RELEASE OF ANY RAW DIGESTER GAS INTO THE ATMOSPHERE. ANY BREAKDOWN OR MALFUNCTION WHICH RESULTS IN EMISSIONS OF RAW DIGESTER GAS SHALL BE REPORTED TO THE SCAQMD WITHIN ONE HOUR AFTER OCCURRENCE AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 217]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

18. WITHIN 180 DAYS OF INITIAL START-UP, UNLESS OTHERWISE APPROVED BY THE EXECUTIVE OFFICER, THE APPLICANT SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH SCAQMD APPROVED TEST PROCEDURES AND FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN THIRTY (30) DAYS AFTER TESTING. WRITTEN NOTICE OF THE TEST SHALL BE PROVIDED TO THE SCAQMD TEN (10) DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE SCAQMD FOR APPROVAL AT LEAST SIXTY (60) DAYS PRIOR TO THE START OF TESTS.

THE TEST SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE INLET GAS TO THE FLARE AND THE FLARE EXHAUST FOR:

- A. METHANE
- B. TOTAL NON-METHANE ORGANICS
- C. OXIDES OF NITROGEN (EXHAUST ONLY)
- D. CARBON MONOXIDE (EXHAUST ONLY)
- E. TOTAL (PM10) PARTICULATES (EXHAUST ONLY)
- F. HYDROGEN SULFIDE (INLET ONLY)
- G. C1 THROUGH C3 SULFUR COMPOUNDS (SPECIATED)(INLET ONLY)
- H. CARBON DIOXIDE
- I. TOXIC AIR CONTAMINANTS INCLUDING, BUT NOT LIMITED TO, ACETYLENE, ACROLEIN, BENZENE, CHLOROBENZENE, CHLOROFORM, DICHLOROBENZENE, 1,2-DICHLOROETHANE, FORMALDEHYDE, TETRACHLOROETHYLENE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, VINYL CHLORIDE, AND XYLENE ISOMERS (EXHAUST ONLY)
- J. OXYGEN
- K. NITROGEN
- L. MOISTURE CONTENT
- M. TEMPERATURE
- N. FLOW RATE
- O. BTU VALUE

[RULE 1303]

19. APPLICANT SHALL PERFORM A FULL RISK ASSESSMENT ON THE EMISSIONS FROM THE FLARE WITHIN NINETY (90) DAYS AFTER REQUEST FROM THE SCAQMD IF THE SOURCE TEST RESULTS SHOW THE EMISSIONS ARE GREATER THAN THAT CALCULATED UNDER THE PERMIT TO CONSTRUCT EVALUATION.

[RULE 1401]



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

20. APPLICANT SHALL SUBMIT FINAL DESIGN SPECIFICATIONS AND DIMENSIONS IN SUFFICIENT DETAIL TO DEMONSTRATE COMPLIANCE WITH FOLLOWING REQUIREMENTS. FOLLOWING SUBMITTAL, WRITTEN APPROVAL OF SUCH SPECIFICATIONS AND PLANS SHALL BE OBTAINED FROM SCAQMD PRIOR TO STARTING CONSTRUCTION.
- A. CONDENSATE KNOCKOUT MAKE, MODEL NO., AND EFFICIENCY.
 - B. BLOWER MAKE AND MODEL NO.
 - C. FLAME ARRESTOR MAKE AND MODEL NO.
 - D. FLARE MAKE, MODEL NO., DIAMETER, HEIGHT, FLOW RATE, VELOCITY, COMBUSTION
 - E. AIR AND TEMPERATURE CONTROL SYSTEM, AUTOMATIC NOTIFICATION SYSTEM
 - F. GUARANTEED EMISSION RATES OF NOX AND CO, AND GUARANTEED DESTRUCTION RATES OF NMHC AND TOXICS.
 - G. DISTANCE FROM MESH BURNER TO TEMPERATURE MEASURING DEVICE.
- [RULE 1401]
21. THE CONCENTRATION OF H₂S IN THE TREATED DIGESTER GAS VENTED TO THE FLARE SHALL NOT EXCEED 40 PPM.
[RULE 431.1]

THIS PERMIT TO CONSTRUCT R-499768 SUPERSEDES PERMIT TO CONSTRUCT 499768 ISSUED ON JANUARY 1, 2010.

Emissions and Requirements:

22. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
- PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
 - PM: 0.1 GR/SCF, RULE 409
 - PM10: 26 LBS/MMCF, RULE 1303
 - NOX: 0.025 LB/MMBTU, RULE 1303
 - VOC: 0.005 LBS/MMBTU, RULE 1303
 - CO: 0.06 LBS/MMBTU, RULE 1303
 - CO: 2000 PPMV, RULE 407



FACILITY PERMIT TO OPERATE EASTERN MUNICIPAL WATER DISTRICT

PERMIT TO CONSTRUCT

GRANTED AS OF: January 1, 2010
A/N 499769

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, MODEL T1238A36, 2328 BHP, DIESEL FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR, OR AN EQUIVALENT SCAQMD CERTIFIED EQUIPMENT.

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 CONDITION AT ALL TIMES.
[RULE 204]
3. A NON-RESETTABLE TOTALIZING TIMER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 40CFR Subpart III]
4. AN ENGINE OPERATING LOG SHALL BE KEPT AND MAINTAINED ON FILE TO RECORD WHEN THIS ENGINE IS STARTED MANUALLY. THE LOG SHALL LIST THE DATE OF OPERATION, THE TIMER READING IN HOURS AT THE BEGINNING AND END OF OPERATION, AND THE REASON FOR OPERATION FOR A MINIMUM OF THREE YEARS FROM THE DATE OF ENTRY AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST. THE TOTAL HOURS OF OPERATION (INCLUDING HOURS FOR MANUAL AND AUTOMATIC OPERATION) SHALL BE RECORDED SOMETIME DURING THE FIRST 15 DAYS OF JANUARY OF EACH YEAR.
[RULE 1110.2, RULE 1470]
5. THIS ENGINE SHALL NOT OPERATE MORE THAN 200 HOURS IN ANY ONE YEAR, WHICH INCLUDES NO MORE THAN 4.2 HOURS IN ANY ONE MONTH AND 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING.
[RULE 1470]



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6. OPERATION BEYOND THE 50 HOURS PER YEAR ALLOCATED 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 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 1470]
7. THE OPERATOR SHALL USE ONLY DIESEL FUEL WITH A SULFUR CONTENT THAT DOES NOT EXCEED 15 PPM BY WEIGHT.
[RULE 431.2, RULE 1470]
8. THE OPERATOR SHALL PROVIDE THE FINAL EQUIPMENT SPECIFICATIONS, AND EMISSION CERTIFICATIONS, MORE THAN 30 DAYS PRIOR TO INSTALLATION.
[RULE 204]

Emissions and Requirements:

9. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM10: 0.12 G/BHP-HR, RULE 1303
PM10: 0.15 G/BHP-HR, 40CFR Subpart IIII
NOX: 4.0 G/BHP-HR, RULE 1303, 40CFR Subpart IIII
VOC: 0.19 G/BHP-HR, RULE 1303, 40CFR Subpart IIII
CO: 0.82 G/BHP-HR, RULE 1303
CO: 2.61 G/BHP-HR, 40CFR Subpart IIII