FACILITY PERMIT TO OPERATE

ORANGE COUNTY SANITATION DISTRICT
22212 BROOKHURST ST
HUNTINGTON BEACH, CA 92646

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_____
Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

TABLE OF CONTENTS

Section	Description	Revision #	Date Issued
A	Facility Information	DRAFT	02/27/2014
B	RECLAIM Annual Emission Allocation	DRAFT	02/27/2014
C	Facility Plot Plan	TO BE DEVELOPED	
D	Facility Description and Equipment Specific Conditions	DRAFT	02/27/2014
E	Administrative Conditions	DRAFT	02/27/2014
F	RECLAIM Monitoring and Source Testing Requirements	DRAFT	02/27/2014
G	Recordkeeping and Reporting Requirements for RECLAIM Sources	DRAFT	02/27/2014
H	Permit To Construct and Temporary Permit to Operate	DRAFT	02/27/2014
I	Compliance Plans & Schedules	DRAFT	02/27/2014
J	Air Toxics	DRAFT	02/27/2014
K	Title V Administration	DRAFT	02/27/2014
Appendix			
A	NOx and SOx Emitting Equipment Exempt From Written Permit Pursuant to Rule 219	DRAFT	02/27/2014
B	Rule Emission Limits	DRAFT	02/27/2014

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION A: FACILITY INFORMATION

LEGAL OWNER &/OR OPERATOR:	ORANGE COUNTY SANITATION DISTRICT
LEGAL OPERATOR (if different than owner):	
EQUIPMENT LOCATION:	22212 BROOKHURST ST HUNTINGTON BEACH, CA 92646-8457
MAILING ADDRESS:	P O BOX 8127 FOUNTAIN VALLEY, CA 92728-8127
RESPONSIBLE OFFICIAL:	JAMES HERBERG
TITLE:	GENERAL MANAGER
TELEPHONE NUMBER:	(714) 593-7300
CONTACT PERSON:	LISA ROTHBART
TITLE:	ASSOCIATE ENGINEER III
TELEPHONE NUMBER:	(714) 593-7405
INITIAL TITLE V PERMIT ISSUED:	January 12, 2009
TITLE V PERMIT EXPIRATION DATE:	January 11, 2014

TITLE V	**RECLAIM**	
YES	**NOx:**	**NO**
	SOx:	**NO**
	CYCLE:	**0**
	ZONE:	**COASTAL**

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION

NOT APPLICABLE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION C: FACILITY PLOT PLAN

(TO BE DEVELOPED)

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

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 Construct and Permits to Operate issued to various equipment 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.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMITTED EQUIPMENT LIST

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

Application Number	Permit Number	Equipment Description	Page Number
06045A	R-M29144	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	6
06046A	R-M29146	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	8
06047A	R-M29147	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	10
06048A	R-M29148	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	12
291030	R-D94235	BOILER (5-20 MMBTU/HR) NATURAL & DIGESTER GAS	14
291031	R-D94232	BOILER (5-20 MMBTU/HR) NATURAL & DIGESTER GAS	16
331911	F11229	SCRUBBER, ODOR	18
394231	G12232	ODOR CONTROL SYSTEM, BIOFILTER	20
424369	F65823	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	22
429663	F71055	FLARE, ENCLOSED LANDFILL/DIGESTER GAS	24
444111	F99405	SCRUBBER, ODOR	28
444112	F99406	SCRUBBER, ODOR	30
444113	F99408	SCRUBBER, ODOR	32
453240	G25942	SEWAGE TREATMENT (>5 MGD) ANAEROBIC	34
453244	G27920	APC SYSTEM, ACTIVATED CARBON ADSORBER	37
455670	R-F81554	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	39
455671	R-F81555	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	41
455673	R-F81556	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	43
457410	G24634	ACTIVATED CARBON ADSORBER, DRUM VENT SINGLE SOURCE	45
474766	F95584	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	47
474767	F95585	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	49
474768	F95586	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	51
474769	F95587	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	53
474770	F95588	ICE (>500 HP) EMERGENCY ELECTRICAL GENERATOR DIESEL	55
512604	G12233	STORAGE TANK, FIXED ROOF, HCl, W/SPARGER	57
512832	G12234	STORAGE TANK, FIXED ROOF, HCl, W/CONTROL	58
512833	G12235	STORAGE TANK, FIXED ROOF, HCl, W/CONTROL	59

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMITTED EQUIPMENT LIST (CONT'D)

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

Application Number	Permit Number	Equipment Description	Page Number
540708	G27394	ICE (>500 HP) NATURAL & DIGESTER GAS	60
540709	G27395	ICE (>500 HP) NATURAL & DIGESTER GAS	63
540710	G27396	ICE (>500 HP) NATURAL & DIGESTER GAS	66
540711	G27397	ICE (>500 HP) NATURAL & DIGESTER GAS	69
540712	G27398	ICE (>500 HP) NATURAL & DIGESTER GAS	72

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.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

FACILITY WIDE CONDITION (S)

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 RINGLEMANN 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 COMBUST DIGESTER GAS CONTAINING SULFUR COMPOUNDS IN EXCESS OF 40 PPMV CALCULATED AS HYDROGEN SULFIDE AVERAGED DAILY. [RULE 431.1]

3. THE OPERATOR SHALL NOT USE FUEL OIL CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT. ON OR AFTER JUNE 1, 2004, A PERSON SHALL NOT PURCHASE ANY DIESEL FUEL FOR STATIONARY SOURCE APPLICATION IN THE DISTRICT, 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]

4. THE OWNER/OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF 40 CFR 63 SUBPART VVV - NON-INDUSTRIAL POTW PLANT NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) AND ALL APPLICABLE REQUIREMENTS OF 40 CFR 63 SUBPART ZZZZ – STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES NESHAP. [40 CFR 63 SUBPART VVV, AND 40 CFR 63 SUBPART ZZZZ]

5. THE OPERATOR SHALL MEASURE THE SULFUR CONTENT OF THE DIGESTER GAS ACCORDING TO THE FOLLOWING:

   A. FOR READINGS UP TO 36 PPM AS H2S, DAILY ANALYSIS OF THE DIGESTER GAS FOR H2S, USING COLORIMETRIC TUBES, AND WEEKLY ANALYSIS OF THE DIGESTER GAS BY AQMD METHOD 307 – TOTAL SULFUR COMPOUNDS IN FUEL GAS BY GAS CHROMATOGRAPHY AND SULFUR CHEMILUMINESCENCE DETECTOR.

   B. FOR READINGS ABOVE 36 PPM AS H2S, DAILY ANALYSIS OF THE DIGESTER GAS FOR H2S BY AQMD METHOD 307 – TOTAL SULFUR COMPOUNDS IN FUEL GAS BY GAS CHROMATOGRAPHY AND SULFUR CHEMILUMINESCENCE DETECTOR. A MINIMUM OF THREE CONSECUTIVE DAILY SAMPLES ARE REQUIRED TO DEMONSTRATE THE TOTAL SULFUR CONTENT IS BELOW 36 PPM. [RULE 431.1]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

6. A COMPLETE APPLICATION FOR COMPLIANCE ASSURANCE MONITORING (CAM, 40 CFR PART 64) SHALL BE SUBMITTED WHENEVER ANNUAL MASS OF VOC OF THE DIGESTER GAS EXCEEDS 19,999 LBS/YR. THE VOC CONTENT OF THE DIGESTER GAS SHALL BE ANALYZED IN CONJUNCTION WITH THE ANNUAL SOURCE TESTING OF THE CGS ENGINES USING THE APPROVED METHODS. FOR EACH CALENDAR YEAR, THE VOC EMISSIONS SHALL BE CALCULATED BY MARCH 31ST OF THE SUBSEQUENT CALENDAR YEAR BASED ON THE DIGESTER GAS CONCENTRATION DATA FROM ANNUAL RULE 1110.2 SOURCE TESTING OF THE ENGINES. IF THE VOC EMISSIONS EXCEED 19,999 LBS/YR, THE CAM APPLICATION SHALL BE SUBMITTED BY MARCH 31ST (WITHIN 60 DAYS AFTER THE CALCULATION DUE DATE). [40 CFR PART 64, CAM]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-M29144
A/N 06045A

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 1, DETROIT DIESEL, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 9163-7305, DIESEL-FUELED, 16 CYLINDERS, TURBOCHARGED, 1515 BHP.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST 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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
   [RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
   [RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 20 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

THIS PERMIT TO OPERATE R-M29144 SUPERSEDES PERMIT TO OPERATE M29144 ISSUED 01/20/1983.

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.
   PM: RULE 1470

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-M29146
A/N 06046A

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 2, DETROIT DIESEL, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 9163-7305, DIESEL-FUELED, 16 CYLINDERS, TURBOCHARGED, 1515 BHP.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST 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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
   [RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
   [RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 20 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

THIS PERMIT TO OPERATE R-M29146 SUPERSEDES PERMIT TO OPERATE M29146 ISSUED 01/20/1983.

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.
   PM: RULE 1470

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-M29147
A/N 06047A

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 3, DETROIT DIESEL, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 9163-7305, DIESEL-FUELED, 16 CYLINDERS, TURBOCHARGED, 1515 BHP.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST 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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 20 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

THIS PERMIT TO OPERATE R-M29147 SUPERSEDES PERMIT TO OPERATE M29147 ISSUED 01/20/1983.

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.
   PM: RULE 1470

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-M29148
A/N 06048A

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 4, DETROIT DIESEL, EMERGENCY ELECTRICAL GENERATION, MODEL NO. 9163-7305. DIESEL-FUELED, 16 CYLINDERS, TURBOCHARGED, 1,515-H.P.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST 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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 20 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

THIS PERMIT TO OPERATE R-M29148 SUPERSEDES PERMIT TO OPERATE M29148 ISSUED 01/20/1983.

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.
   PM: RULE 1470

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-D94235
A/N 291030

Equipment Description:

BOILER, CLEAVER BROOKS, FIRE TUBE TYPE, MODEL CB700-250, SERIAL NO. L-092869, 10.46 MMBTU PER HOUR, DIGESTER GAS AND NATURAL GAS FIRED WITH LO-NOx BURNERS AND FLUE GAS RECIRCULATION (FGR) SYSTEM.

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 BOILER SHALL BE FIRED ON DIGESTER GAS AND OR NATURAL GAS ONLY.
   [RULE 204]

4. CSDOC SHALL PROPERLY MAINTAIN AND OPERATE A DRY GAS METER TO MEASURE THE QUANTITY (IN CFM) OF DIGESTER GAS USED IN THIS EQUIPMENT.
   [RULE 1146, RULE 1303(b) (1), (b) (2)-MODELING AND OFFSETS]

5. RECORDS OF THE DAILY FUEL USAGE OF THIS EQUIPMENT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
   [RULE 204]

6. EMISSIONS OF NOx SHALL NOT EXCEED 40 PPM REFERENCED AT 3% 02 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
   [RULE 1146]

7. EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% 02 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
   [RULE 1146]

8. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION.
   [RULE 1303(A) (1)-BACT]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions And Requirements:

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

CO:	2000 PPMV, RULE 407
CO:	400 PPMV, RULE 1146
NOx	30 PPMV, RULE 1146
PM:	RULE 404, SEE APPENDIX B.
PM:	0.1 gr/scf, RULE 409
SO2:	500 PPMV AS SO2, ORANGE COUNTY, RULE 53

10. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO AND NOx EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1 (METHOD 7.1 FOR NOx); OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD.. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATIONS LIMITS. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a) (4)]

THIS PERMIT TO OPERATE R-D94235 SUPERSEDES PERMIT TO OPERATE D94235 ISSUED 11/06/1995.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-D94232
A/N 291031

Equipment Description:

BOILER, CLEAVER BROOKS, FIRE TUBE TYPE, MODEL CB700-250, SERIAL NO. L-092868, 10.46 MMBTU PER HOUR, DIGESTER GAS AND NATURAL GAS FIRED WITH LO-NOx BURNERS AND FLUE GAS RECIRCULATION (FGR) SYSTEM.

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 BOILER SHALL BE FIRED ON DIGESTER GAS AND OR NATURAL GAS ONLY.
[RULE 204]

4. CSDOC SHALL PROPERLY MAINTAIN AND OPERATE A DRY GAS METER TO MEASURE THE QUANTITY (IN CFM) OF DIGESTER GAS USED IN THIS EQUIPMENT.
[RULE 1146; RULE 1303(b) (1), (b) (2)-MODELING AND OFFSETS]

5. RECORDS OF THE DAILY FUEL USAGE OF THIS EQUIPMENT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

6. EMISSIONS OF NOx SHALL NOT EXCEED 40 PPM REFERENCED AT 3% 02 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
[RULE 1146]

7. EMISSIONS OF CO SHALL NOT EXCEED 400 PPM REFERENCED AT 3% 02 ON A DRY BASIS, AVERAGED OVER A PERIOD OF 15 CONSECUTIVE MINUTES.
[RULE 1146]

8. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1303(A) (1)-BACT]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions And Requirements:

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

CO:	2000 PPMV, RULE 407
CO:	400 PPMV, RULE 1146
NOx	30 PPMV, RULE 1146
PM:	RULE 404, SEE APPENDIX B.
PM:	0.1 gr/scf, RULE 409
SO2:	500 PPMV AS SO2, ORANGE COUNTY, RULE 53

10. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO AND NOx EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1 (METHOD 7.1 FOR NOx); OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD.. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATIONS LIMITS. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 3004 (a) (4)]

THIS PERMIT TO OPERATE R-D94232 SUPERSEDES PERMIT TO OPERATE D94232 ISSUED 11/06/1995.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F11229
A/N 331911

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (SOUTH COMPLEX, P2-33) CONSISTING OF:

1. FOUR SCRUBBERS NOS. U THROUGH X, EACH VERTICAL TYPE, PACKED TOWER, 10'-0" DIA. X 33'-0" H., WITH ASSOCIATED PUMPS.

2. ACID AND CAUSTIC FEED SYSTEM.

3. AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H2S) MONITORING SYSTEM.

4. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING PRIMARY TREATMENT CLARIFIERS.

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]

4. A SUFFICIENT NUMBER OF SCRUBBERS, FROM U THROUGH X, SHALL BE IN OPERATION WHEN THE BASIC EQUIPMENT ARE IN OPERATION TO MAINTAIN THE SCRUBBER OUTLET H2S CONCENTRATIONS, AS MEASURED BY THE AUTOMATIC CHEMICAL FEED AND H2S MONITORING SYSTEM, LESS THAN THE MAXIMUM OUTLET H2S LIMITS AS SPECIFIED IN CONDITION NO. 7 EXCEPT DURING UNFORESEEN AND ROUTINE MAINTENANCE WORK OR POWER OUTAGE IN THE PLANT THAT REQUIRES THE SCRUBBERS TO BE SHUTDOWN FOR A PERIOD NOT TO EXCEED 10 HOURS PER INCIDENT PER EQUIPMENT AND 50 HOURS PER YEAR PER EQUIPMENT.
[RULE 402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

5. WHEN THE SCRUBBERS ARE IN OPERATION, AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H2S) MONITORING SYSTEM SHALL BE IN OPERATION AND MAINTAINED TO RECORD THE SCRUBBER OUTLET H2S CONCENTRATION, IN PPMV, EXCEPT DURING SHUTDOWN FOR MAINTENANCE. THE H2S MONITORING SYSTEM SHALL BE CALIBRATED PURSUANT TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
[RULE 402]

6. WHEN THE AUTOMATIC CHEMICAL FEED AND H2S MONITORING SYSTEM IS SHUTDOWN FOR MAINTENANCE, PH OF THE SCRUBBING LIQUID AND THE SCRUBBER OUTLET H2S CONCENTRATION SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
[RULE 402]

7. WHEN THE SCRUBBERS ARE IN OPERATION, THE DAILY AVERAGE CONCENTRATION OF SULFUR COMPOUNDS, CALCULATED AS H2S MEASURED AT THE OUTLET OF EACH SCRUBBER SHALL NOT EXCEED 1.33 PPMV AND 2 PPMV, WHEN THE EXHAUST BLOWER IS OPERATING AT LOW AND HIGH SPEED, RESPECTIVELY.
[RULE 402]

8. RECORDS SHALL BE KEPT AND MAINTAINED FOR EACH SCRUBBER'S OUTLET H2S CONCENTRATION, AND THE DAILY AVERAGE H2S CONCENTRATION, IN PPMV, AT THE OUTLET OF EACH SCRUBBER.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G12232
A/N 394231

Equipment Description:

ODOR CONTROL SYSTEM CONSISTING OF (LOCATED AT PLANT NO. 2, JUNCTION BOX NO. 1):

1. HUMIDIFICATION CHAMBER, FOUL AIR, 2' DIA. X 4' H., WITH PACKING AND A SPIRAL JET NOZZLE.

2. BIOFILTER, BIOREM, MODEL BAYSIS 330, SINGLE MODULE, 7' DIA. X 7' H., WITH APPROXIMATELY 200 CUBIC FEET BIOFILTER MEDIA, IRRIGATION NOZZLES AND ASSOCIATED PIPING AND PUMPS.

3. EXHAUST STACK, WITH TWO (2) EXHAUST BLOWERS (ONE STAND-BY), 300 CFM CAPACITY, EACH.

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 CONSTRUCTED, OPERATED AND MAINTAINED BY PROPERLY TRAINED PERSONNEL.
[RULE 204]

4. THE CONCENTRATION OF H_2S FOR THE INLET AND OUTLET AIR OF THE BIOFILTER SHALL BE MEASURED USING CALIBRATED AND DISTRICT APPROVED INSTRUMENT. THE H_2S CONCENTRATION IN BIOFILTER EXHAUST SHALL NOT EXCEED 2 PPMV, AVERAGED OVER NUMBER OF DATA POINTS COLLECTED OVER THE WEEK.
[RULE 204, 402]

5. THE BED DEPTH AND BED PACKING SHALL BE DESIGNED TO ACHIEVE A MINIMUM EMPTY BED RESIDENCE TIME (EBRT) OF 40 SECONDS.
[RULE 402, 1303 (a) (1) - BACT]

6. THIS EQUIPMENT SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDED SCHEDULED MAINTENANCE. THIS MAY INCLUDE SAMPLING OF MEDIA FOR PROPER MICROBIAL COUNT AND NUTRIENT ANALYSIS, HUMIDIFICATION AND IRRIGATION NOZZELS, AIR FLOW RATE, DIFFERENTIAL PRESSURE, TEMPERATURE, ETC.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. RECORDS TO DEMONSTRATE COMPLIANCE WITH THE CONDITIONS OF THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO THE SCAQMD PERSONNEL UPON REQUEST.
[RULE 3004 (a) (4)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F65823
A/N 424369

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 16 CYLINDER, "TURBOCHARGED, AFTERCOOLED," MODEL T1 637 M36 (2936 BHP), 2936 BHP, DIESEL FUEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT MUST 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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 20 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 20 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 1303 (a) (1)-BACT, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F71055
A/N 429663

Equipment Description:

DIGESTER GAS FLARING SYSTEM (PLANT NO. 2) CONSISTING OF:

1. THREE FLARES NOS. A, B AND C, EACH SUR-LITE CORP., VERTICAL TYPE, 6'-6" W. X 6'-6- L. X 24'-3" H., 27,000,000 BTU PER HOUR MAXIMUM HEAT INPUT, WITH A DIGESTER GAS PILOT BURNER, A NATURAL GAS PILOT BURNER, AN AUTOMATIC COMBUSTION AIR DAMPER AND A RESTART IGNITION SYSTEM.

2. THREE GAS FILTERS, DOLLINGER, MODEL GP-188.

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 HOURLY AVERAGE VOLUME OF DIGESTER GAS BURNED IN EACH FLARE SHALL NOT EXCEED 750 SCFM.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING & OFFSETS]

5. THE HOURLY AVERAGE OF TOTAL VOLUME OF DIGESTER GAS BURNED IN THE FLARING SYSTEM (3-FLARES) SHALL NOT EXCEED 2250 SCFM.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING & OFFSETS]

6. FLOW INDICATORS, AND RECORDERS SHALL BE MAINTAINED TO MEASURE THE INDIVIDUAL FLOW RATE TO EACH FLARE AND TOTAL FLOW RATE TO THE FLARING SYSTEM.
[RULE 1303(b) (2)-OFFSETS]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. WHEN THE FLARES ARE IN OPERATION, A TEMPERATURE OF NOT LESS THAN 1400 DEGREES F, AVERAGED OVER ONE HOUR, AS MEASURED BY THE TEMPERATURE INDICATOR SHALL BE MAINTAINED IN THE FLARE STACK, EXCEPT FOR A MAXIMUM OF THIRTY- MINUTES DURING START-UP AND FIFTEEN- MINUTES DURING SHUT-DOWN, AND THREE MINUTES WHEN THERMOCOUPLES SWITCH OCCURS. THE THERMOCOUPLE USED TO MEASURE THE TEMPERATURE SHALL BE ABOVE THE FLAME ZONE AND AT LEAST 0.6 SECONDS DOWNSTREAM OF THE BURNER.
[RULE 1303(a) (1) - BACT]

8. A TEMPERATURE INDICATOR AND RECORDER SHALL BE MAINTAINED TO MEASURE THE EXHAUST GAS TEMPERATURE IN EACH OF THE FLARE STACKS.
[RULE 1303(a) (1)-BACT]

9. AUTOMATIC DAMPERS TO REGULATE THE FLOW OF COMBUSTION AIR SHALL BE MAINTAINED ON EACH FLARE.
[RULE 1303(a) (1)-BACT]

10. THE OPERATOR SHALL KEEP THE RECORDS OF DIGESTER GAS FLOW RATES AND OPERATING TEMPERATURE. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE UPON REQUEST TO AQMD PERSONNEL.
[RULE 204]

11. A FLARE FAILURE ALARM SYSTEM CONSISTING OF A FLAME-OUT WARNING LIGHT BY THE FLARE STATION AND AN AUDIBLE ALARM IN THE CONTROL ROOM SHALL BE MAINTAINED. THIS SAFETY SYSTEM SHALL BE TESTED MONTHLY FOR PROPER OPERATION AND THE RESULTS RECORDED AND MAINTAINED FOR FIVE YEARS.
[RULE 204, RULE 1303(a) (1)-BACT]

12. THE ORANGE COUNTY SANITATION DISTRICT SHALL, AT LEAST ONCE EVERY FIVE YEARS, CONDUCT TEST ON ONE OF THE THREE FLARES IN ACCORDANCE WITH SCAQMD TEST PROCEDURES AND FURNISH THE AQMD WITH WRITTEN RESULTS OF SUCH PERFORMANCE TEST WITHIN 45 DAYS AFTER THE TESTING. SUBSEQUENT TESTS SHALL BE PERFORMED ON ALTERNATE FLARES AT THE MAXIMUM FIRING RATE. WRITTEN NOTICE OF THE PERFORMANCE TESTS SHALL BE PROVIDED TO THE AQMD 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT.THE PERFORMANCE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, A TEST OF THE DIGESTER GAS INLET TO THE FLARE AND THE FLARE EXHAUST FOR THE FOLLOWING:

I. METHANE (LBS/HR)
II. TOTAL NON-METHANE HYDROCARBONS (LB/HR)
III. OXIDES OF NITROGEN (AS NO_2, EXHAUST ONLY, PPMV @ 3% 02, DRY, LBS/HR)
IV. CARBON MONOXIDE (EXHAUST ONLY, PPMV @3% 02, DRY, LBS/HR).
V. TOTAL PARTICULATES (EXHAUST ONLY, GR/DSCF, LBS/HR).
VI. CHEMICAL COMPOUNDS CONCENTRATION IN UG/M3,-INCLUDING BUT NOT LIMITED TO:

a. ACETALDEHYDE
b. ACROLEIN
c. BENZENE
d. CARBON TETRACHLORIDE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

e. CHLOROBENZENE
f. CHLOROFORM
g. 1, 4 (p)-DICHLOROBENZENE
h. 1, 2 - DICHLOROETHANE
i. FORMALDEHYDE
j. METHYLENE CHLORIDE
k. STYRENE
l. TETRACHLOROETHYLENE
m. TOLUENE
n. TRICHLOROETHYLENE
o. 1, 1, 1 – TRICHLOROETHANE
p. VINYL CHLORIDE
q. XYLENES
[RULE 1303(a) (1)-BACT, RULE 1303(b) (2) - OFFSETS, RULE 1401]

13. SAMPLING PORTS SHALL BE MAINTAINED IN EACH FLARE STACK AT LEAST 3 FEET UPSTREAM OF FLARE OUTLET AND SHALL CONSIST OF 4-INCH COUPLINGS WITH PLUGS. AN EQUIVALENT METHOD OF EMISSION SAMPLING MAY BE USED UPON APPROVAL BY THE AQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE PROVIDED BY THE COUNTY SANITATION DISTRICTS OF ORANGE COUNTY.
[RULE 217]

14. EMISSIONS RESULTING FROM EACH FLARE OPERATION SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
NOX, AS N02	1.75
SOX, AS S02	0.30
CO	8.33
PM	1.13
ROG	0.50

[RULE 1303(b) (2) – OFFSETS, RULE 431.1]

15. EMISSIONS RESULTING FROM THE FLARING OPERATION (3-FLARES) SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/DAY
NOX, AS N02	126
SOX, AS S02	22
CO	600
PM	81
ROG	36

[RULE 1303(b) (2) – OFFSETS]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

16. THESE FLARES SHALL NOT OPERATE SIMULTANEOUSLY WITH THE CENTRAL POWER GENERATION ENGINES, AT PLANT NO. 2, EXCEPT DURING ROUTINE AND UNFORESEEN MAINTENANCE PERIODS, ENGINE START-UP, SOURCE TESTING PERIODS, AND WHEN THERE IS EXCESS DIGESTER GAS THAT CANNOT BE USED BY THE ENGINES DUE TO MAINTENANCE. [RULE 1303(b) (2) - OFFSETS]

17. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF DAY. [RULE 204]

18. A SAMPLING PORT SHALL BE MAINTAINED AT THE INLET GAS LINE TO THE FLARING SYSTEM TO ALLOW THE COLLECTION OF A DIGESTER GAS SAMPLE. [RULE 217]

19. ALL RECORDS AS REQUIRED BY THIS PERMIT SHALL BE MAINTAINED ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST. [RULE 204]

20. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULE 431.1.

Emissions and Requirements:

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

CO:	2000 PPMV, RULE 407
PM:	RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM:	0.1 gr/scf, RULE 409
NO_X	0.06 lb/MMBTU, RULE 1303 (a) (1)- BACT.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F99405
A/N 444111

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (NORTH SCRUBBER COMPLEX, P2-33) CONSISTING OF:

1. SCRUBBER 'H', VERTICAL TYPE, PACKED TOWER, 6'- 0" DIA. X 27'- 0" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.

2. BIOTRICKLING FILTER 'I', WITH POLYURETHANE FOAM PACKING, 6'-0" DIA. X 27'- 0" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.

3. SEVEN (7) SCRUBBERS 'M' THROUGH 'P' AND 'R' THROUGH T', VERTICAL TYPE, PACKED TOWER, 10'- 0" DIA. X 27'- 0" H., WITH ASSOCIATED PUMPS AND INLET BLOWERS.

4. BIOTRICKLING FILTER 'Q', WITH POLYURETHANE FOAM PACKING, 10'-0" DIA. X 27'- 0" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.

5. AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H2S) MONITORING SYSTEMS.

6. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING THE INFLUENT TRUNKLINES, HEADWORKS AND PRIMARY TREATMENT FACILITIES.

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. SCRUBBER 'H' AND BIOTRICKLING FILTER 'I' SHALL ONLY EXHAUST INTO THE SCRUBBERS 'M' THROUGH 'P' AND 'R' THROUGH 'T' AND BIOTRICKLING FILTER 'Q'.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

5. AT LEAST THREE APC EQUIPMENT (SCRUBBERS OR BIOTRICKLING FILTERS) SHALL BE IN OPERATION WHEN THE BASIC EQUIPMENT ARE IN OPERATION EXCEPT DURING THE FOLLOWING EVENTS:

   UNFORESEEN AND ROUTINE MAINTENANCE WORK OR POWER OUTAGE IN THE PLANT THAT REQUIRES THE SCRUBBERS OR BIOTRICKLING FILTERS TO BE SHUTDOWN FOR A PERIOD NOT TO EXCEED 10 HOURS PER INCIDENT PER EQUIPMENT AND 50 HOURS PER YEAR PER EQUIPMENT, OR LONGER IF CHEMICAL TREATMENT OF THE BASIC EQUIPMENT REDUCES THE OUTLET H2S CONCENTRATION OF THE AIR POLLUTION CONTROL SYSTEM TO LESS THAN THE LIMIT AS SPECIFIED IN CONDITION NO. 8. A LOG OF SHUTDOWN DATE, DURATION, AND REASON FOR THE SHUTDOWN SHALL BE MAINTAINED.
   [RULE 204, 402]

6. WHEN ANY OF THE SCRUBBERS, 'M' THROUGH 'P' AND 'R' THROUGH 'T' OR SCRUBBER 'H' OR BIOTRICKLING FILTERS ARE IN OPERATION, AUTOMATIC HYDROGEN SULFIDE (H2S) MONITORING SYSTEM SHALL BE IN OPERATION AND MAINTAINED TO RECORD THE AIR POLLUTION CONTROL SYSTEM OUTLET H2S CONCENTRATION, IN PPMV. THE H2S MONITORING SYSTEM SHALL BE CALIBRATED PURSUANT TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
   [RULE 204]

7. WHEN THE AUTOMATIC CHEMICAL FEED AND H2S MONITORING SYSTEM IS NOT OPERATING, THE PH OF THE SCRUBBING OR RECYCLING LIQUID, MAKEUP WATER FLOW RATE (GPM), DIFFERENTIAL PRESSURE DROP (IN INCHES OF WATER COLUMN), FOR SCRUBBERS 'M' THROUGH 'P', 'R' THROUGH 'T' OR SCRUBBER 'H' OR BIOTRICKLING FILTERS SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDATIONS. THE OPERATING PARAMETERS SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
   [RULE 204]

8. THE DAILY AVERAGE CONCENTRATION OF SULFUR COMPOUNDS, MEASURED, AND CALCULATED AS H2S, AT THE OUTLET OF THE AIR POLLUTION CONTROL SYSTEM SHALL NOT EXCEED 1.33 PPMV AND 2 PPMV, WHEN THE EXHAUST BLOWER IS OPERATING AT LOW AND HIGH SPEED, RESPECTIVELY. EMISSION AT THE EXHAUST STACK SHALL BE MONITORED AND RECORDED AT LEAST ONCE PER SHIFT.
   [RULE 402, 1401]

9. RECORDS SHALL BE KEPT AND MAINTAINED FOR DAILY AVERAGE OPERATING PARAMETERS AND H2S CONCENTRATION, IN PPMV, AT THE OUTLET OF EACH SCRUBBER OR BIOFILETER IN OPERATION. ALL RECORDS AS REQUIRED BY THIS PERMIT SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
   [RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F99406
A/N 444112

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (DEWATERING, P2-28-1) CONSISTING OF:

1. TWO (2) SCRUBBERS, 'C', AND 'D' (STAND-BY MODE), EACH VERTICAL TYPE, PACKED TOWER, 10'- 0" DIA. X 35'- 9" H., WITH ASSOCIATED PUMPS AND INLET BLOWERS.

2. BIOTRICKLING FILTERS 'J' AND 'K', EACH 10'- 0" DIA. X 35'- 9" H., 23,000 CFM AIR FLOW, WITH 10' POLYURETHANE FOAM PACKING HEIGHT, SPRAY NOZZLES, MIST ELIMINATOR PAD, ASSOCIATED PUMPS AND INLET BLOWER.

3. CHEMICAL FEED SYSTEM FOR SCRUBBERS.

4. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING THE BELT FILTER PRESSES AND THE DEWATERING BUILDING.

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. WHEN ANY OF THE SCRUBBERS OR BIOTRICKLING FILTERS ARE IN OPERATION, THE PH OF THE SCRUBBING OR RECYCLING LIQUID, MAKEUP WATER FLOW RATE (GPM), DIFFERENTIAL PRESSURE DROP (IN INCHES OF WATER COLUMN), SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDATIONS. THE OPERATING PARAMETERS AS DESCRIBED SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
[RULE 204]

5. WHEN ANY OF THE SCRUBBERS OR BIOTRICKLING FILTER ARE IN OPERATION, THE H2S EMISSION AT THE EXHAUST STACK SHALL BE MONITORED AND RECORDED AT LEAST ONCE PER SHIFT. THE DAILY AVERAGE CONCENTRATION OF SULFUR COMPOUNDS MEASURED, AND CALCULATED AS H2S, AT THE OUTLET OF SCRUBBERS OR THE BIOTRICKLING FILTER SHALL NOT EXCEED 2.5 PPMV.
[RULE 402, 1401]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

6. RECORDS SHALL BE KEPT AND MAINTAINED FOR DAILY AVERAGE OPERATING PARAMETERS, AND H2S CONCENTRATION, IN PPMV, AT THE OUTLET OF EACH SCRUBBER IN OPERATION. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F99408
A/N 444113

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (DISSOLVED AIR FLOATATION FACILITY) CONSISTING OF:

1. SCRUBBER 'F' (STAND-BY MODE), VERTICAL TYPE, PACKED TOWER, 9'- 6" DIA. X 21'- 4" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.

2. BIOTRICKLING FILTER 'G', WITH POLYURETHANE FOAM PACKING, 9'- 6" DIA. X 21'- 4" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.

3. CHEMICAL FEED SYSTEM FOR SCRUBBERS.

4. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING DISSOLVED AIR FLOATATION THICKENERS.

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. WHEN SCRUBBER 'F' OR BIOTRICKLING FILTER 'G' IS IN OPERATION, THE PH OF THE SCRUBBING OR RECYCLING LIQUID, MAKEUP WATER FLOW RATE (GPM), DIFFERENTIAL PRESSURE DROP (IN INCHES OF WATER COLUMN), SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDATIONS. THE OPERATING PARAMETERS AS DESCRIBED SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
[RULE 204]

5. WHEN SCRUBBER 'F' OR BIOTRICKLING FILTER 'G' IS IN OPERATION, THE H2S EMISSION AT THE EXHAUST STACK SHALL BE MONITORED AND RECORDED AT LEAST ONCE PER SHIFT. THE DAILY AVERAGE CONCENTRATION OF SULFUR COMPOUNDS, MEASURED, AND CALCULATED AS H2S, AT THE OUTLET OF SCRUBBER OR THE BIOTRICKLING FILTER SHALL NOT EXCEED 3.5 PPMV.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

6. RECORDS SHALL BE KEPT AND MAINTAINED FOR DAILY AVERAGE OPERATING PARAMETERS, AND H2S CONCENTRATION, IN PPMV, AT THE OUTLET OF THE SCRUBBER IN OPERATION. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 3004 (a) (4)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G25942
A/N 453240

Equipment Description:

SEWAGE TREATMENT PLANT, 250 MGD CAPACITY, CONSISTING OF:

1. INFLUENT STATION (HEADWORKS "D") CONSISTING OF INFLUENT TRUNKLINES, INFLUENT DIVERSION AND METERING, SIX (5 DUTY + 1 STANDBY) BARSCREENS, SCREENING HANDLING, INFLUENT PUMPS, GRIT REMOVAL AND HANDLING, PRIMARY INFLUENT SPLITTER AND METERING, AND FERRIC CHLORIDE FACILITY.

2. WETWELL (WASTE SIDE STREAM PUMP STATION) WITH ASSOCIATED PUMPS.

3. SEVENTEEN PRIMARY BASINS, THREE 41'-0" W. X 179'-0" L. X 8'-0" D., WITH ALUMINUM COVERS, FOURTEEN 140'-0" DIA. X 9'-0" D., WITH ALUMINUM GEODESIC DOME COVERS, AND ASSOCIATED SLUDGE AND SCUM COLLECTORS AND PUMPS.

4. EIGHT ACTIVATED SLUDGE OXYGEN REACTORS, 139,656 CUBIC FEET CAPACITY, 46'-0" W. X 184'-0" L. X 16'-6" D., WITH ASSOCIATED MIXERS.

5. TWO PURE OXYGEN GENERATION UNITS, 40,000 GALLON CAPACITY EACH, WITH TWO STORAGE TANKS AND ASSOCIATED COMPRESSORS.

6. TWELVE SECONDARY CLARIFIERS, 61'-0" W. X 171'-0" L. X 14'-0" D., WITH ASSOCIATED SLUDGE COLLECTORS.

7. EAST SECONDARY SLUDGE PUMP STATION WITH ASSOCIATED PUMPS.

8. WEST SECONDARY SLUDGE PUMP STATION WITH ASSOCIATED PUMPS.

9. FOUR DISSOLVED AIR FLOATATION THICKENERS, EACH 55'-0" DIA. X 8'-6" D., WITH ASSOCIATED COLLECTOR DRIVES AND PUMPS.

10. TWENTY DIGESTER TANKS, TWO 90'-0" DIA. X 30'-0" D., EACH 190,800 CUBIC FEET CAPACITY, SIX 80'-0" DIA. X 33'-0" D., EACH 164,120 CUBIC FEET CAPACITY, THREE 80'-0" DIA. X 33'-0" D., EACH 166,630 CUBIC FEET CAPACITY, FOUR 105'-0" DIA. X 30'-0" D., EACH 293,680 CUBIC FEET CAPACITY, FIVE 80'-0" DIA. X 18'-0" H., WITH ASSOCIATED PUMPS AND GRINDERS. EQUIPPED WITH OPTIONAL PASSIVE CARBON ADSORBERS.

11. LOW PRESSURE DIGESTER GAS STORAGE TANK, 25,000 CUBIC FEET CAPACITY, 42'-0" DIA. X 30'-0" H., WITH ASSOCIATED COMPRESSORS.

12. FERROUS AND/OR FERRIC CHLORIDE INJECTION STATION WITH TWO STORAGE TANKS, EACH 12'-0" DIA. X 18'-0" H., AND ASSOCIATED PUMPS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

13. SLUDGE PROCESSING STATION WITH ASSOCIATED GRINDERS, BELT FILTER PRESSES, DEWATERED STORAGE HOPPERS, AND TRUCK LOADING HOPPER.

14. TWO POLYMER STORAGE TANKS, EACH 20,000 GALLON CAPACITY, WITH ASSOCIATED PUMPS.

15. FOUR POLYMER MIX TANKS, EACH 8,500 GALLON CAPACITY, WITH ASSOCIATED MIXERS AND PUMPS.

16. PRIMARY EFFLUENT DIVERSION STRUCTURE.

17. THREE TRICKLING FILTERS, COVERED, PRIMARY EFFLUENT TREATMENT (TOTAL 60 MGD AVERAGE CAPACITY AND 182 MGD PEAK FLOW), EACH 150' DIA. X 28' H., OVERALL, WITH MODULAR PLASTIC CROSS - FLOW FILTER MEDIA, SPRAY NOZZLES, AND ASSOCIATED PUMPS.

18. FOUR SOLIDS CONTACT (SC) REACTORS, FOUR SLUDGE RE-AERATION (SR) REACTORS, UNCOVERED, TWO MIXED LIQUOR CHANNELS (TOTAL 1.68 MG VOLUME), AND WITH ASSOCIATED AIR BLOWERS.

19. SIX TRICKLING FILTER CLARIFIERS, UNCOVERED, EACH 135' DIA. X 19' SIDEWATER DEPTH, WITH FLOCCULATING CENTER WELLS, HYDRAULIC SLUDGE COLLECTORS, AND INBOARD LAUNDERS.

20. SLUDGE BLENDING FACILITY WITH TWO SLUDGE BLENDING TANKS (SBTs), EACH 26,000 GALLON CAPACITY, WITH ASSOCIATED PIPING AND PUMPS.

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]

4. HEADWORKS FACILITY, PRIMARY BASINS, SLUDGE BLENDING FACILITY, DISSOLVED AIR FLOATATION THICKENERS, TRICKLING FILTER FACILITY AND SLUDGE PROCESSING STATION SHALL BE VENTED TO THEIR DESIGNATED AIR POLLUTION CONTROL SYSTEMS WHICH ARE IN OPERATION PER ITS' VALID PERMITS TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD. IN THE EVENT AN AIR POLLUTION CONTROL SYSTEM IS REMOVED FROM OPERATION DURING CONSTRUCTION OR MAINTENANCE WORK, THE H2S CONCENTRATION IN EXHAUST AIR SHALL BE BELOW THE LIMITS SPECIFIED IN THE REMOVED AIR POLLUTION CONTROL SYSTEM'S PERMIT. EACH SUCH CONSTRUCTION OR MAINTENANCE EVENT SHALL BE RECORDED IN A DAILY LOG.
[RULE 402, 1303(a) (1)-BACT, 1401]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

5. THE FERROUS AND/OR FERRIC CHLORIDE INJECTION STATION SHALL BE IN USE TO THE EXTENT NECESSARY TO MAINTAIN THE H2S CONCENTRATION IN THE DIGESTER GAS TO THE PERMITTED LIMIT.
[RULE 431.1]

6. RAW DIGESTER GAS PRODUCED AT THIS FACILITY SHALL NOT BE RELEASED INTO THE ATMOSPHERE, EXCEPT DURING MOMENTARY AUTOMATIC ACTIVATION OF PRESSURE RELIEF SAFETY DEVICES. ALL COLLECTED DIGESTER GAS SHALL BE EITHER COMBUSTED IN DIGESTER GAS FLARES, INTERNAL COMBUSTION ENGINES, OR BOILERS WITH VALID AQMD PERMIT, OR SHALL BE TREATED THROUGH OPTIONAL PASSIVE CARBON ADSORBERS. EACH SUCH PRESSURE RELIEF ACTIVATION SHALL BE MAINTAINED IN A DAILY LOG.
[RULE 402, RULE 1401]

7. RAW DIGESTER GAS RELEASES DUE TO EQUIPMENT FAILURE SHALL BE REPORTED IN ACCORDANCE WITH RULE 430. UPON DISCOVERY OF SUCH EMISSIONS, IMMEDIATE REMEDIAL MEASURES SHALL BE PUT INTO ACTION TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 402, RULE 430]

8. THE CALENDAR MONTHLY AVERAGE DAILY PRIMARY EFFLUENT FLOW RATE, TO THE SECONDARY TREATMENT PROCESS, SHALL NOT EXCEED 150 MILLIONS GALLONS PER DAY, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH SAFETY. THE RECORDS FOR THE PRIMARY EFFLUENT AVERAGE DAILY FLOW RATE (MGD), TREATED BY THE SECONDARY PROCESS, SHALL BE KEPT ON FILE.
[RULE 1303(b) (2) –OFFSETS, 402, 1401]

9. THE CALENDAR MONTHLY AVERAGE DAILY FLOW RATE OF WASTEWATER TREATED AT THIS FACILITY SHALL NOT EXCEED 250 MILLION GALLONS PER DAY (MGD) EXCEPT DURING WET WEATHER PERIODS. THE RECORDS FOR THE WASTEWATER FLOW RATE (MGD) MEASURED SHALL BE RECORDED AND KEPT ON FILE.
[RULE 1303(b) (2) –OFFSETS, 402, 1401]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27920
A/N 453244

Equipment Description:

AIR POLLUTION CONTROL SYSTEM, CONSISTING OF;

1. FOUL AIR EXHAUST DUCTS FROM THREE (3) TRICKLING FILTERS, TRICKLING FILTER FACILITY'S (JOB NO. P2-90), IN PARALLEL.

2. THREE (3) EXHAUST BLOWERS, IN PARALLEL, EACH 11,000 SCFM, 25 H.P.

3. THREE (3) CAUSTIC IMPREGNATED ACTIVATED CARBON UNITS, IN PARALLEL, EACH CONTAINING MINIMUM OF 10,600 LBS OF ACTIVATED CARBON BY NORIT AMERICAS OR WESTATES OR EQUIVALENT, EACH VENTING A SINGLE TRICKLING FILTER.

4. THREE (3) EXHAUST STACKS, EACH 2.0'- 3" DIA. X 28' HIGH.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATIONS UNDER WHICH THIS PERMIT IS ISSUED.
[RULE 204]

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
[RULE 204]

3. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO EACH OF THE CARBON UNIT TO INDICATE THE TOTAL FOUL AIR EXHAUST FROM THE TRICKLING FILTER TREATED, IN STANDARD CUBIC FEET PER MINUTE (SCFM). IN CASE A PRESSURE SENSOR DEVICE IS USED TO DETERMINE FLOW RATE, IN PLACE OF THE FLOW METER, A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDENT FLOW RATE, IN SCFM, TO THE PRESSURE READING.
[RULE 204]

4. MAXIMUM FOUL AIR EXHAUST FLOW RATE FROM EACH TRICKLING FILTER TO BE TREATED BY EACH CARBON UNIT SHALL NOT EXCEED 11,000 SCFM, AVERAGED OVER CALENDAR MONTH.
[RULE 204]

5. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE PRESSURE ACROSS THE CARBON BED IS LESS THAN 6.0 INCHES WATER COLUMN. TO COMPLY WITH THIS CONDITION THE OPERATOR SHALL INSTALL AND MAINTAIN A DIFFERENTIAL PRESSURE GAUGE TO ACCURATELY INDICATE THE DIFFERENTIAL PRESSURE ACROSS THE CARBON BED. THE OPERATOR SHALL DETERMINE AND RECORD THE PARAMETER BEING MONITORED ONCE EVERY WEEK.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

6. WHENEVER THE CARBON UNIT IS IN OPERATION THE HYDROGEN SULFIDE (H2S) CONCENTRATION IN THE EXHAUST SHALL BE MONITORED USING AN AUTOMATIC H2S MONITORING DEVICE OR MEASURED MANUALLY AT LEAST ONCE A WEEK USING AN APPROVED AND CALIBRATED INSTRUMENT. H2S MEASUREMENT READINGS SHALL BE RECORDED AND MAINTAINED ON FILE.
[RULE 402, 1401]

7. CONCENTRATIONS MEASURED AT THE OUTLET OF THE CARBON ADSORBER SHALL NOT EXCEED THE FOLLOWING:

CONSTITUENT	CONCENTRATION, IN PPMV (DAILY AVG.)
H2S	1.0

[RULE 402, 1401]

8. WHENEVER THE DAILY AVERAGE HYDROGEN SULFIDE (H2S) CONCENTRATION IS 0.9 PPMV OR HIGHER, THEN OPERATOR SHALL INVESTIGATE THE CAUSE AND TAKE IMMEDIATE CORRECTIVE MEASURES THAT MAY INCLUDE FRESH ACTIVATED CARBON REPLACEMENT AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. THE OPERATOR SHALL RECORD THE DATE AND QUANTITY OF CARBON AT EACH REPLACEMENT EVENT, THE RESULTS OF THE INVESTIGATION AND CORRECTIVE MEASURES TAKEN.
[RULE 204]

9. SPENT CARBON REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 402]

10. RECORDS SHALL BE MAINTAINED AS REQUIRED BY THIS PERMIT FOR COMPLIANCE. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-F81554
A/N 455670

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T1637M36 (2936 BHP), SERIAL NO. 527200-2104, 2936 BHP, DIESEL FUEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

4. THE OPERATION OF ENGINE 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 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, RULE 1470]

5. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1304(a), RULE 1110.2, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

THIS PERMIT TO OPERATE R-F81554 SUPERSEDES PERMIT TO OPERATE F81554 ISSUED 6/14/2007.

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-F81555
A/N 455671

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T1637M36 (2936 BHP), SERIAL NO. 527200-2105, 2936 BHP, DIESEL FUEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

4. THE OPERATION OF ENGINE 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 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, RULE 1470]

5. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1304(a), RULE 1110.2, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

THIS PERMIT TO OPERATE R-F81555 SUPERSEDES PERMIT TO OPERATE F81555 ISSUED 4/12/2006.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. R-F81556
A/N 455673

Equipment Description:

INTERNAL COMBUSTION ENGINE, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T1637M36 (2936 BHP), SERIAL NO. 527200-2106, 2936 BHP, DIESEL FUEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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 MUST BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
   [RULE 204]

3. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
   [RULE 1304(a), RULE 1110.2, RULE 1470]

4. THE OPERATION OF ENGINE 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 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, RULE 1470]

5. AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER SHALL BE INSTALLED AND MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
   [RULE 1304(a), RULE 1110.2, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

THIS PERMIT TO OPERATE R-F81556 SUPERSEDES PERMIT TO OPERATE F81556 ISSUED 04/12/2006.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G24634
A/N 457410

Equipment Description:

AIR POLLUTION CONTROL SYSTEM CONSISTING OF;

1. FOUL AIR EXHAUST DUCTS FROM TWO (2) SLUDGE BLENDING TANKS (ONE STAND-BY), IN PARALLEL.

2. TWO (2) EXHAUST BLOWERS (ONE STAND-BY), IN PARALLEL, EACH 400 CFM, 1.5 H.P.

3. TWO (2) ADSORBERS (ONE STAND-BY), IN PARALLEL, CARBTROL CORPORATION, MODEL GC-21 SP, EACH CONTAINING MINIMUM OF 200 LBS OF GRANULAR ACTIVATED CARBON.

4. TWO (2) EXHAUST STACKS (ONE STAND-BY), EACH 0'- 6" DIA. X 8' HIGH.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATIONS UNDER WHICH THIS PERMIT IS ISSUED.
[RULE 204]

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
[RULE 204]

3. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE GAUGES TO ACCURATELY INDICATE THE DIFFERENTIAL PRESSURE ACROSS EACH CARBON BED AND EACH EXHAUST BLOWER.
[RULE 402]

4. ONCE A MONTH, DIFFERENTIAL PRESSURE DROP ACROSS THE BLOWER AND THE ADSORBER SHALL ME MEASURED, IN INCHES OF WATER COLUMN, AND SHALL BE MAINTAINED AS FOLLOWS;

	DIFFERENTIAL PRESSURE DROP (INCHES OF WATER COLUMN)
BLOWER	8.0 – 11.0
ADSORBER	6.5 – 8.5

[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

5. HYDROGEN SULFIDE (H2S) CONCENTRATION (PPMV) IN THE EXHAUST SHALL BE CONTINUOUSLY MONITORED OR MEASURED MANUALLY AND RECORDED AT LEAST ONCE A DAY USING A DISTRICT APPROVED DEVICE.
[RULE 204]

6. THE HYDROGEN SULFIDE (H2S) CONCENTRATION IN THE EXHAUST SHALL NOT EXCEED 1 PPMV.
[RULE 402, 1401]

7. IF THE AVERAGE HYDROGEN SULFIDE (H2S) CONCENTRATION IS DETECTED 0.9 PPMV OR HIGHER, THE CARBON SHALL BE REPLACED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
[RULE 402]

8. SPENT CARBON REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 402]

9. RECORDS SHALL BE MAINTAINED AS REQUIRED BY THIS PERMIT INCLUDING CARBON CHANGE OVER DATE(S) FOR COMPLIANCE. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F95584
A/N 474766

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 2, AT PB-C, CATERPILLAR, COMPRESSION-IGNITION, FOUR STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SERIAL NUMBER 24Z01547, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRICAL GENERATOR.

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 ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 30 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F95585
A/N 474767

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1, AT PB-C, CATERPILLAR, COMPRESSION-IGNITION, FOUR STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SERIAL NUMBER 24Z01541, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRICAL GENERATOR.

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 ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 30 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F95586
A/N 474768

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1, AT PB-D, CATERPILLAR, COMPRESSION-IGNITION, FOUR STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SERIAL NUMBER 24Z01544, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRICAL GENERATOR.

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 ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 30 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
   [RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE BEYOND THE 30 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F95587
A/N 474769

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 2, AT PB-B, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T163-7K16, 2935 BHP, SERIAL NUMBER DD5272000531, DIESEL - FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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 ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE 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 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F95588
A/N 474770

Equipment Description:

INTERNAL COMBUSTION ENGINE, NO. 1, AT PB-B, DETROIT DIESEL, 16 CYLINDER, TURBOCHARGED, AFTERCOOLED, MODEL T163-7K16, 2935 BHP, SERIAL NUMBER DD5272000532, DIESEL - FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

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 ENGINE SHALL NOT BE OPERATED MORE THAN 200 HOURS IN ANY ONE YEAR WHICH INCLUDES NOT MORE THAN 50 HOURS IN ANY ONE YEAR FOR MAINTENANCE AND TESTING PURPOSES.
[RULE 1304(a), RULE 1110.2, RULE 1470]

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

5. THE OPERATION OF ENGINE 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 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, RULE 1470]

6. 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 1303 (a) (1)-BACT, RULE 1470]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. 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. 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 THREE CALENDAR YEARS PRIOR TO THE CURRENT YEAR AND 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 1304(A), RULE 1110.2, RULE 1470]

8. THE OPERATOR SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF RULES 431.2 AND 1470.
   [RULE 431.2, RULE 1470]

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.
   PM: RULE 1470.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT/OPERATE

Permit No. G12233
A/N 512604

Equipment Description:

STORAGE TANK, VERTICAL FIXED ROOF, ID NO. 20GTNK500, HYDROCHLORIC ACID, 10' - 0" DIA. X 17' - 0" H., 10,000- GALLON CAPACITY, AND VENTING THROUGH A SPARGER TANK, 370 GALLON CAPACITY, CONTAINING WATER.

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 PERMIT SHALL EXPIRE IF CONSTRUCTION OF THIS EQUIPMENT IS NOT COMPLETED WITHIN ONE YEAR FROM MARCH 3, 2011 UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 205]

4. THIS EQUIPMENT SHALL STORE HYDROCHLORIC ACID WITH CONCENTRATION OF 38 WEIGHT PERCENT OR LESS ONLY.
[RULE 204]

5. THE MAXIMUM AMOUNT OF HYDROCHLORIC ACID FILLED INTO THIS STORAGE TANK SHALL NOT EXCEED 10,000 GALLONS PER MONTH.
[RULE 1303 (b) (1) - OFFSET]

6. THE OPERATOR SHALL NOT OPERATE THIS TANK UNLESS VENT GASES ARE SPARGED AT LEAST 10 INCHES BELOW THE LIQUID SURFACE OF A TRAP CONTAINING AT LEAST 190 GALLONS OF WATER.
[RULE 1303 (a) (1)-BACT]

7. THE SPARGER TANK SHALL BE FILLED WITH FRESH WATER PRIOR TO EACH ACID TANK FILLING EVENT.
[RULE 204]

8. RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

PERMIT TO OPERATE

Permit No. G12234
A/N 512832

Equipment Description:

STORAGE TANK, FIXED ROOF, ID NO. 211TNK076 (P2 NSC), HYDROCHLORIC ACID, 8' - 0" DIA. X 13' - 0" H., 4,000- GALLON CAPACITY AND VENTING PASSIVELY THROUGH A 55-GALLON DRUM CONTAINING (50% SULPHASORB XL AND 50% SAFETYSORB BLEND OR EQUAL) ACTIVATED CARBON.

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 STORE HYDROCHLORIC ACID WITH CONCENTRATION OF 38 WEIGHT PERCENT OR LESS ONLY.
[RULE 204]

4. THE MAXIMUM AMOUNT OF HYDROCHLORIC ACID FILLED INTO THIS STORAGE TANK SHALL NOT EXCEED 2,000 GALLONS PER MONTH.
[RULE 1303 (b) (1) - OFFSET]

5. THIS EQUIPMENT SHALL NOT BE FILLED UNLESS THE VENT GASES PASS THROUGH A 55-GALLON DRUM CONTAINING ACTIVATED CARBON.
[RULE 1303 (a) (1)-BACT]

6. THE OPERATOR SHALL REPLACE THE CARBON PER MANUFACTURER'S RECOMMENDATION.
[RULE 204]

7. RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G12235
A/N 512833

Equipment Description:

STORAGE TANK, FIXED ROOF, ID NO. 201TNK450 (P2 SSC), HYDROCHLORIC ACID, 7' - 0" DIA. X 10' - 0" H., 2,000- GALLON CAPACITY AND VENTING PASSIVELY THROUGH A 55-GALLON DRUM CONTAINING (50% SULPHASORB XL AND 50% SAFETYSORB BLEND OR EQUAL) ACTIVATED CARBON.

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 STORE HYDROCHLORIC ACID WITH CONCENTRATION OF 38 WEIGHT PERCENT OR LESS ONLY.
[RULE 204]

4. THE MAXIMUM AMOUNT OF HYDROCHLORIC ACID FILLED INTO THIS STORAGE TANK SHALL NOT EXCEED 2000 GALLONS PER MONTH.
[RULE 1303 (b) (1) - OFFSET]

5. THIS EQUIPMENT SHALL NOT BE FILLED UNLESS THE VENT GASES PASS THROUGH A 55-GALLON DRUM CONTAINING ACTIVATED CARBON.
[RULE 1303 (a) (1)-BACT]

6. THE OPERATOR SHALL REPLACE THE CARBON PER MANUFACTURER'S RECOMMENDATION.
[RULE 204]

7. RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27394
A/N 540708

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG1-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

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]

4. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME FOR EACH FUEL BLEND BURNED.
[RULE 1110.2]

5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE FUEL GAS, OR FUEL BLEND, SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF EACH FUEL GAS (IN SCFM) BURNED.
[RULE 204]

6. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS OR FUEL BLEND SAMPLES.
[RULE 204]

7. MONTHLY READINGS OF THE BTU CONTENT OF FUEL GAS (BTU/SCF) AT THE COMBINED INLET TO THE CGS ENGINES SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS, OR FUEL BLEND, BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

10. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 218, 431.1 AND 1110.2.
[RULE 218, 431.1 AND 1110.2]

11. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

12. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

13. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 218, RULE 1110.2]

14. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS ANNUALLY. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD AT LEAST 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A COMPLETE FINAL REPORT OF THE TEST (LBS/HR, PPMVD AT 15% O2, LBS/MMBTU, ETC.) SHALL BE PROVIDED TO THE AQMD WITHIN 45 DAYS AFTER TESTING. ALL TEST RUNS REQUIRED BY AQMD SHALL BE REPORTED. THE TESTS SHALL INCLUDE BUT NOT BE LIMITED TO, A TEST OF THE FUELS BURNED AND ENGINE EXHAUST FOR:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY)
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

E. OXYGEN
F. FLOW RATE
G. MOISTURE
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (FUEL ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (FUEL ONLY)
M. POWER OUTPUT

[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

15 RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 1110.2
NOx: 45.4 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
ROG: 315 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27395
A/N 540709

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG2-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

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]

4. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME FOR EACH FUEL BLEND BURNED.
   [RULE 1110.2]

5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE FUEL GAS, OR FUEL BLEND, SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF EACH FUEL GAS (IN SCFM) BURNED.
   [RULE 204]

6. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS OR FUEL BLEND SAMPLES.
   [RULE 204]

7. MONTHLY READINGS OF THE BTU CONTENT OF FUEL GAS (BTU/SCF) AT THE COMBINED INLET TO THE CGS ENGINES SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
   [RULE 204]

8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
   [RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS, OR FUEL BLEND, BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

10. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 218, 431.1 AND 1110.2.
[RULE 218, 431.1 AND 1110.2]

11. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

12. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

13. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 218, RULE 1110.2]

14. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS ANNUALLY. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD AT LEAST 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A COMPLETE FINAL REPORT OF THE TEST (LBS/HR, PPMVD AT 15% O2, LBS/MMBTU, ETC.) SHALL BE PROVIDED TO THE AQMD WITHIN 45 DAYS AFTER TESTING. ALL TEST RUNS REQUIRED BY AQMD SHALL BE REPORTED. THE TESTS SHALL INCLUDE BUT NOT BE LIMITED TO, A TEST OF THE FUELS BURNED AND ENGINE EXHAUST FOR:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY)
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

E. OXYGEN
F. FLOW RATE
G. MOISTURE
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (FUEL ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (FUEL ONLY)
M. POWER OUTPUT

[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

15 RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 1110.2
NOx: 45.4 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
ROG: 315 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26).
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27396
A/N 540710

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 3 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG3-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

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]

4. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME FOR EACH FUEL BLEND BURNED.
[RULE 1110.2]

5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE FUEL GAS, OR FUEL BLEND, SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF EACH FUEL GAS (IN SCFM) BURNED.
[RULE 204]

6. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS OR FUEL BLEND SAMPLES.
[RULE 204]

7. MONTHLY READINGS OF THE BTU CONTENT OF FUEL GAS (BTU/SCF) AT THE COMBINED INLET TO THE CGS ENGINES SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS, OR FUEL BLEND, BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

10. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 218, 431.1 AND 1110.2.
[RULE 218, 431.1 AND 1110.2]

11. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

12. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

13. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 218, RULE 1110.2]

14. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS ANNUALLY. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD AT LEAST 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A COMPLETE FINAL REPORT OF THE TEST (LBS/HR, PPMVD AT 15% O2, LBS/MMBTU, ETC.) SHALL BE PROVIDED TO THE AQMD WITHIN 45 DAYS AFTER TESTING. ALL TEST RUNS REQUIRED BY AQMD SHALL BE REPORTED. THE TESTS SHALL INCLUDE BUT NOT BE LIMITED TO, A TEST OF THE FUELS BURNED AND ENGINE EXHAUST FOR:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY)
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

E. OXYGEN
F. FLOW RATE
G. MOISTURE
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (FUEL ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (FUEL ONLY)
M. POWER OUTPUT

[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

15 RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 1110.2
NOx: 45.4 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
ROG: 315 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27397
A/N 540711

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 4 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG4-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

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]

4. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME FOR EACH FUEL BLEND BURNED.
   [RULE 1110.2]

5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE FUEL GAS, OR FUEL BLEND, SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF EACH FUEL GAS (IN SCFM) BURNED.
   [RULE 204]

6. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS OR FUEL BLEND SAMPLES.
   [RULE 204]

7. MONTHLY READINGS OF THE BTU CONTENT OF FUEL GAS (BTU/SCF) AT THE COMBINED INLET TO THE CGS ENGINES SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
   [RULE 204]

8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
   [RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS, OR FUEL BLEND, BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

10. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 218, 431.1 AND 1110.2.
[RULE 218, 431.1 AND 1110.2]

11. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

12. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

13. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 218, RULE 1110.2]

14. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS ANNUALLY. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD AT LEAST 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A COMPLETE FINAL REPORT OF THE TEST (LBS/HR, PPMVD AT 15% O2, LBS/MMBTU, ETC.) SHALL BE PROVIDED TO THE AQMD WITHIN 45 DAYS AFTER TESTING. ALL TEST RUNS REQUIRED BY AQMD SHALL BE REPORTED. THE TESTS SHALL INCLUDE BUT NOT BE LIMITED TO, A TEST OF THE FUELS BURNED AND ENGINE EXHAUST FOR:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY)
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

E. OXYGEN
F. FLOW RATE
G. MOISTURE
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (FUEL ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (FUEL ONLY)
M. POWER OUTPUT

[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

15 RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 1110.2
NOx: 45.4 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
ROG: 315 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G27398
A/N 540712

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 5 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG5-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

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]

4. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME FOR EACH FUEL BLEND BURNED.
[RULE 1110.2]

5. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE FUEL GAS, OR FUEL BLEND, SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF EACH FUEL GAS (IN SCFM) BURNED.
[RULE 204]

6. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS OR FUEL BLEND SAMPLES.
[RULE 204]

7. MONTHLY READINGS OF THE BTU CONTENT OF FUEL GAS (BTU/SCF) AT THE COMBINED INLET TO THE CGS ENGINES SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

8. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS, OR FUEL BLEND, BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

10. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULES 218, 431.1 AND 1110.2.
[RULE 218, 431.1 AND 1110.2]

11. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

12. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

13. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 218, RULE 1110.2]

14. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS ANNUALLY. WRITTEN NOTICE OF THE PERFORMANCE TEST SHALL BE PROVIDED TO THE AQMD AT LEAST 7 DAYS PRIOR TO THE TEST SO THAT AN OBSERVER MAY BE PRESENT. A COMPLETE FINAL REPORT OF THE TEST (LBS/HR, PPMVD AT 15% O2, LBS/MMBTU, ETC.) SHALL BE PROVIDED TO THE AQMD WITHIN 45 DAYS AFTER TESTING. ALL TEST RUNS REQUIRED BY AQMD SHALL BE REPORTED. THE TESTS SHALL INCLUDE BUT NOT BE LIMITED TO, A TEST OF THE FUELS BURNED AND ENGINE EXHAUST FOR:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY)
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

E. OXYGEN
F. FLOW RATE
G. MOISTURE
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (FUEL ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (FUEL ONLY)
M. POWER OUTPUT

[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

15 RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 1110.2
NOx: 45.4 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
ROG: 315 PPMV, RULE 1110.2 (WITH ECF ADJUSTMENT FACTOR = 1.26)
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, < 53 FT^3, WITH DUST FILTER.

Periodic Monitoring:

1. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
   A. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
   B. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
   C. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.
   [RULE 3004 (a)(4)]

2. THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.
   [RULE 3004 (a)(4)]

3. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON AN ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE ANNUAL PERIOD. THE ROUTINE ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.

   THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

   A. STACK OR EMISSION POINT IDENTIFICATION;
   B. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND
   C. DATE AND TIME VISIBLE EMISSION WAS ABATED.

   [RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL UNHEATED, NON-CONVEYORIZED

Emissions And Requirements:

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

   VOC: RULE 1122
   VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, BOILER, WITH RATED HEAT INPUT STARTING AT 75, 000 BTU/HR UP TO AND INCLUDING 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
   CO: 2000 PPMV, RULE 407
   NOx; 30 PPMV @3% O2, DRY-TYPE 2 UNIT, > 400,000 BTU/HR AND ≤2 MM BTU/HR, RULE 1146.2
   NOx; 55 PPMV @3% O2, DRY-TYPE 1 UNIT, ≥ 400,000 BTU/HR AND ≤400,000 BTU/HR, RULE 1146.2

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, ABRASIVE BLASTING EQUIPMENT, GLOVE-BOX, < 53 FT^3, WITH DUST FILTER.

Periodic Monitoring:

4. THE OPERATOR SHALL PERFORM AN ANNUAL INSPECTION OF THE EQUIPMENT AND FILTER MEDIA FOR LEAKS, BROKEN OR TORN FILTER MEDIA AND IMPROPERLY INSTALLED FILTER MEDIA. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):
   D. THE NAME OF THE PERSON PERFORMING THE INSPECTION AND/OR MAINTENANCE OF THE FILTER MEDIA;
   E. THE DATE, TIME AND RESULTS OF THE INSPECTION; AND
   F. THE DATE, TIME AND DESCRIPTION OF ANY MAINTENANCE OR REPAIRS RESULTING FROM THE INSPECTION.
   [RULE 3004 (a)(4)]

5. THE OPERATOR SHALL DISCHARGE DUST COLLECTED IN THIS EQUIPMENT ONLY INTO CLOSED CONTAINERS.
   [RULE 3004 (a)(4)]

6. THE OPERATOR SHALL CONDUCT AN INSPECTION FOR VISIBLE EMISSIONS FROM ALL STACKS AND OTHER EMISSION POINTS OF THIS EQUIPMENT WHENEVER THERE IS A PUBLIC COMPLAINT OF VISIBLE EMISSIONS, WHENEVER VISIBLE EMISSIONS ARE OBSERVED, AND ON AN ANNUAL BASIS, AT LEAST, UNLESS THE EQUIPMENT DID NOT OPERATE DURING THE ENTIRE ANNUAL PERIOD. THE ROUTINE ANNUAL INSPECTION SHALL BE CONDUCTED WHILE THE EQUIPMENT IS IN OPERATION AND DURING DAYLIGHT HOURS. IF ANY VISIBLE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

EMISSIONS (NOT INCLUDING CONDENSED WATER VAPOR) ARE DETECTED, THE OPERATOR SHALL TAKE CORRECTIVE ACTION(S) THAT ELIMINATES THE VISIBLE EMISSIONS WITHIN 24 HOURS AND REPORT THE VISIBLE EMISSIONS AS A POTENTIAL DEVIATION IN ACCORDANCE WITH THE REPORTING REQUIREMENTS IN SECTION K OF THIS PERMIT.

THE OPERATOR SHALL KEEP THE RECORDS IN ACCORDANCE WITH THE RECORDKEEPING REQUIREMENTS IN SECTION K OF THIS PERMIT AND THE FOLLOWING RECORDS:

D. STACK OR EMISSION POINT IDENTIFICATION;

E. DESCRIPTION OF ANY CORRECTIVE ACTIONS TAKEN TO ABATE VISIBLE EMISSIONS; AND

F. DATE AND TIME VISIBLE EMISSION WAS ABATED.

[RULE 3004 (a)(4)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, CLEANING EQUIPMENT, SMALL UNHEATED, NON-CONVEYORIZED

Emissions And Requirements:

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

   VOC: RULE 1122
   VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, BOILER, WITH RATED HEAT INPUT STARTING AT 75, 000 BTU/HR UP TO AND INCLUDING 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
   CO: 2000 PPMV, RULE 407
   NOx; 30 PPMV @3% O2, DRY-TYPE 2 UNIT, > 400,000 BTU/HR AND ≤2 MM BTU/HR, RULE 1146.2
   NOx; 55 PPMV @3% O2, DRY-TYPE 1 UNIT, ≥ 400,000 BTU/HR AND ≤400,000 BTU/HR, RULE 1146.2

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

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 CONATINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISITING 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 CONATINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSITING 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

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, AIR CONDITIONING UNITS.

Emissions And Requirements:

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

   VOC: RULE 1415
   VOC: 40CFR 82 SUBPART F

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, FIRE EXTINGUISHING EQUIPMENT

Emissions And Requirements:

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

   HALON: RULE 1418

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]
   a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
   b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
   c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]
2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]
3. This permit does not authorize the emissions 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 and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other governmental agencies. [204]
4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION E: ADMINISTRATIVE CONDITIONS

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation. [204]

6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least five years. [204]

7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]

   a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134]

   b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.1, 204]

   c. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes; [204]

   d. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compounds which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO2) and be averaged over 15 consecutive minutes; [407]

   e. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent of carbon dioxide (CO2) at standard conditions and averaged over a minimum of 15 consecutive minutes. [409]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION E: ADMINISTRATIVE CONDITIONS

f. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O2) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]

8. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]

a. Brief description of the equipment tested.

b. Brief process description, including maximum and normal operating temperatures, pressures, throughput, etc.

c. Operating conditions under which the test will be performed.

d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).

e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.

f. Description of calibration and quality assurance procedures.

g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (conflict of interest).

9. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD rules or equipment-specific conditions. The report shall contain the following information: [204]

a. The results of the source test.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION E: ADMINISTRATIVE CONDITIONS

b. Brief description of the equipment tested.

c. Operating conditions under which the test was performed.

d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).

e. Field and laboratory data forms, strip charts and analyses.

f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.

10. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]

11. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS

NOT APPLICABLE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR RECLAIM SOURCES

NOT APPLICABLE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

This section consists of a table listing all equipment with Permits to Construct and copies of 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 that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMITTED EQUIPMENT LIST

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

Application Number	Permit to Construct Granted On	Equipment Description	Page Number
428804	9/22/2004	ODOR CONTROL UNIT	3
519422	6/07/2012	ODOR CONTROL SYSTEM, GRANULAR ACTIVATED CARBON	7
518276	6/07/2012	ODOR CONTROL UNIT, BIOFILTER	9
545004	TBD, will supersede R-D94235	BOILER (5-20 MMBTU/HR) DIGESTER GAS AND NATURAL GAS	12
545005	TBD, will supersede R-D94232	BOILER (5-20 MMBTU/HR) DIGESTER GAS AND NATURAL GAS	15
546364	TBD	ICE CG-1 (4166 HP) NG/DG WITH DG FUEL PRETREATMENT	18
546365	TBD	ICE CG-2 (4166 HP) NG/DG WITH DG FUEL PRETREATMENT	22
546366	TBD	ICE CG-3 (4166 HP) NG/DG WITH DG FUEL PRETREATMENT	26
546367	TBD	ICE CG-4 (4166 HP) NG/DG WITH DG FUEL PRETREATMENT	30
546368	TBD	ICE CG-5 (4166 HP) NG/DG WITH DG FUEL PRETREATMENT	34
557229	TBD	STORAGE TANK, AQUEOUS UREA SOLUTION	38
557230	TBD	STORAGE TANK, AQUEOUS UREA SOLUTION	39
559228	TBD	APC SYSTEM 1, SCR/CO CATALYST	40
559229	TBD	APC SYSTEM 2, SCR/CO CATALYST	43
559230	TBD	APC SYSTEM 3, SCR/CO CATALYST	46
559231	TBD	APC SYSTEM 4, SCR/CO CATALYST	49
559232	TBD	APC SYSTEM 4, SCR/CO CATALYST	52

NOTE: EQUIPMENT LISTED ABOVE THAT HAVE NO CORRESPONDING PERMITS TO OPERATE NUMBER 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 OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 428804
Granted as of 9/22/2004

Equipment Description:

ODOR CONTROL FACILITY (P2-66) CONSISTING OF:

A. TRUNKLINES ODOR CONTROL SYSTEM:

1. THREE (3) SINGLE STAGE BIOTRICKLING FILTERS (BIOTOWERS), IDENTICAL, (ONE STAND-BY), VERTICAL TYPE, EACH 10'- 0" DIA. X 46'- 9" H., OVERALL DIMENSIONS, WITH 8' - 6" H. POLYURETHANE FOAM PACKING, A MIST ELIMINATOR, ASSOCIATED RECIRCULATING PUMPS, AND AN EXHAUST SYSTEM WITH THREE 75 HP BLOWERS (40,000 SCFM TOTAL), TREATING FOUL AIR EXHAUST FROM THE DIVERSION STRUCTURE AND INFLUENT TRUNKLINES, VENTING TO THE 1ST STAGE BIOTRICKLING FILTERS AT THE HEADWORKS ODOR CONTROL FACILITY.

B. HEADWORKS ODOR CONTROL SYSTEM:

1. 1ST STAGE, THIRTEEN (13) BIOTRICKLING FILTERS (BIOTOWERS), IDENTICAL, (THREE ON STAND-BY), VERTICAL TYPE, EACH 10'- 0" DIA. X 46'- 9" H., OVERALL DIMENSIONS, WITH 8' - 6" H. POLYURETHANE FOAM PACKING, A MIST ELIMINATOR, ASSOCIATED PUMPS, AND AN EXHAUST SYSTEM WITH THIRTEEN 75 HP BLOWERS (188,300 SCFM TOTAL), TREATING FOUL AIR FROM HEADWORKS FACILITY AND PRETREATED EXHAUST AIR FROM TRUNKLINE ODOR CONTROL FACILITY VENTING TO THE 2ND STAGE CHEMICAL SCRUBBERS AT THE HEADWORKS ODOR CONTROL FACILITY.

2. 2ND STAGE, EIGHT (8) CHEMICAL SCRUBBERS, IDENTICAL, (TWO ON STAND-BY), VERTICAL TYPE, EACH 10'- 0" DIA. X 48'- 0" H., OVERALL DIMENSIONS, WITH Q-PAC OR TRIPACK TYPE, 10' - 0" H. POLYURETHANE PACKING, A MIST ELIMINATOR, AUTOMATIC CHEMICAL FEED, ASSOCIATED RECIRCULATION PUMPS, AND AN EXHAUST SYSTEM WITH EIGHT 60 HP BLOWERS (188,300 SCFM TOTAL), TREATING EXHAUST AIR FROM 1ST STAGE BIOTRICKLING FILTERS, AND VENTING TO THE ATMOSPHERE.

C. SODIUM HYPOCHLORITE, SODIUM HYDROXIDE AND HYDROCHLORIC ACID STORAGE TANKS.

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]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

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

4. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THE EQUIPMENT IS NOT COMPLETED WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 205]

5. THIS FACILITY (P2-66) SHALL ONLY TREAT FOUL AIR GENERATED FROM THE DIVERSION STRUCTURE AND TRUNKLINES, GRIT HANDLING BUILDING, BAR SCREEN BUILDING AND CHANNELS, PUMP STATION WET WELL, SCREENINGS WASHING AND LOADING BUILDINGS, GRIT BASINS, PRIMARY SPLITTER BOX, AND INFLUENT PUMP STATION DISCHARGE CHANNEL.
[RULE 402]

6. ALL THE EXHAUST FROM THE BIOTRICKLING FILTERS (TRUNKLINE AND HEADWORKS BIOTRICKLING FILTERS) SHALL BE VENTED TO AND TREATED BY THE FINAL CHEMICAL SCRUBBERS PRIOR TO RELEASE TO THE ATMOSPHERE.
[RULE 402]

7. A SUFFICIENT NUMBER OF BIOTRICKLING (BIOTOWERS) AND CHEMICAL SCRUBBERS SHALL BE IN OPERATION WHEN THE BASIC EQUIPMENT ARE IN OPERATION TO MAINTAIN THE CHEMICAL SCRUBBERS OUTLET H2S CONCENTRATIONS, AS MEASURED BY THE AUTOMATIC CHEMICAL FEED AND H2S MONITORING SYSTEM, LESS THAN THE MAXIMUM OUTLET H2S LIMITS AS SPECIFIED IN CONDITION NO. 14 EXCEPT DURING UNFORESEEN AND ROUTINE MAINTENANCE WORK OR POWER OUTAGE IN THE PLANT THAT REQUIRES THE SCRUBBERS TO BE SHUTDOWN FOR A PERIOD NOT TO EXCEED 10 HOURS PER INCIDENT PER EQUIPMENT AND 50 HOURS PER YEAR PER EQUIPMENT.
[RULE 402]

8. ALL BIOTRICKLING FILTERS AND CHEMICAL SCRUBBERS SHALL BE EQUIPPED WITH INLET AND OUTLET CONTINUOUS HYDROGEN SULFIDE MONITORING SYSTEM (VAPAX UNIT OR EQUIVALENT).
[RULE 204]

9. WHEN THE CHEMICAL SCRUBBERS ARE IN OPERATION, AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H_2S) MONITORING SYSTEM SHALL BE IN OPERATION AND MAINTAINED TO RECORD THE SCRUBBER INLET AND OUTLET H2S CONCENTRATIONS, IN PPMV, EXCEPT DURING SHUTDOWN FOR MAINTENANCE. THE H_2S MONITORING SYSTEM SHALL BE CALIBRATED PERIODICALLY PURSUANT TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
[RULE 204]

10. A FLOW METER, INDICATING GALLONS PER MINUTE (GPM) SHALL BE INSTALLED AND MAINTAINED IN THE CHEMICAL SCRUBBING SOLUTION [SODIUM HYDROXIDE (NaOH) AND SODIUM HYPOCHLORITE (NaOCl)] RECIRCULATION LINE FOR EACH OF THE CHEMICAL SCRUBBER. AT LEAST 785 GPM OF CHEMICAL SCRUBBING SOLUTION SHALL BE SUPPLIED TO EACH CHEMICAL SCRUBBER WHEN IT IS IN OPERATION.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

11. FOR THE CHEMICAL SCRUBBER(S), A DIFFERENTIAL PRESSURE GAUGE OR OTHER DEVICE SHALL BE INSTALLED AND MAINTAINED TO INDICATE, IN INCHES OF WATER COLUMN, THE DIFFERENTIAL PRESSURE DROP ACROSS THE PACKING MEDIA. DURING NORMAL OPERATION, THE PRESSURE DROP MEASURED ACROSS THE PACKING MEDIA SHALL BE MAINTAINED BETWEEN 1 AND 2 INCHES OF WATER COLUMN, UNLESS OTHERWISE APPROVED BY AQMD. [RULE 204]

12. THE PH OF THE CHEMICAL SCRUBBING SOLUTION SHALL BE MAINTAINED BETWEEN 9 TO 10.5. [RULE 204]

13. WHEN THE AUTOMATIC CHEMICAL FEED AND H_2S MONITORING SYSTEM IS NOT OPERATING, PH OF THE SCRUBBING LIQUID, SCRUBBER SOLUTION RECIRCULATION RATE (GPM), THE SCRUBBER INLET AND OUTLET H_2S CONCENTRATION (PPMV) AND DIFFERENTIAL PRESSURE (INCHES OF WATER COLUMN) ACROSS THE PACKING MEDIA SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
[RULE 204]

14. WHEN THE CHEMICAL SCRUBBERS ARE IN OPERATION, THE DAILY AVERAGE CONCENTRATION OF SULFUR COMPOUNDS, CALCULATED AS H2S MEASURED AT THE OUTLET OF THE SCRUBBER SHALL NOT EXCEED 1 PPMV.
[RULE 402]

15. WITHIN 60 DAYS AFTER ACHIEVING THE MAXIMUM FOUL AIR FLOW RATE FOR THE ODOR CONTROL (P2-66) FACILITY, BUT NOT LATER THAN 180 DAYS AFTER INITIAL START-UP, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL CONDUCT SOURCE TESTS IN ACCORDANCE WITH THE AQMD OR OTHER APPROVED TEST PROCEDURES. A TEST PROTOCOL INCLUDING ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE AQMD, TOXICS AND WASTE MANAGEMENT TEAM, FOR APPROVAL AT LEAST 30 DAYS PRIOR TO START OF THE TESTS. NOTICE SHALL BE PROVIDED TO THE AQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. THE TESTS SHALL DETERMINE CONTROL EFFICIENCY OF THE AIR POLLUTION CONTROL EQUIPMENT (CHEMICAL SCRUBBERS) AND SHALL INCLUDE, BUT MAY NOT BE LIMITED TO, THE EMISSIONS TO ATMOSPHERE FOR

A. TOTAL NON-METHANE HYDROCARBONS (NMHC), INLET AND OUTLET (LBS/HR AND PPMV).
B. TOXIC AIR CONTAMINANTS INCLUDING, BUT NOT LIMITED TO, AMMONIA, BENZENE, CHLOROFORM, 1,4 (p)-DICHLOROBENZENE, ETHYL BENZENE, HYDROGEN SULFIDE, METHYLENE CHLORIDE, PERCHLOROETHYLENE, STYRENE, TOLUENE, 1,1,1-TRICHLOROETHANE, TRICHLOROETHYLENE, XYLENES, ETC., INLET AND OUTLET, (LBS/HR AND PPMV).
C. CARBON DIOXIDE, OXYGEN AND NITROGEN
D. MOISTURE CONTENT, TEMPERATURE AND FLOW RATE
E. AMMONIA, NMHC, AND HYDROGEN SULFIDE (H2S) CONTROL EFFICIENCY (WT%).
F. METALLIC COMPOUNDS, SUCH AS ARSENIC, BERYLLIUM, CADMIUM, HEXAVALENT CHROMIUM, NICKEL, ETC.

[RULE 204, 402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

16. SAMPLING PORTS SHALL BE PROVIDED IN THE SCRUBBER EXHAUST STACK, 8-10 DUCT DIAMETERS DOWNSTREAM AND 2 DUCT DIAMETERS UPSTREAM OF ANY FLOW DISTURBANCE. AT EACH LOCATION, TWO SAMPLING PORTS 90 DEGREES APART SHALL BE PROVIDED AND SHALL CONSIST OF 4-INCH WELDED NIPPLES WITH CAPS. SAFETY ACCESS TO THE SAMPLING PORTS SHALL BE PROVIDED BY THE APPLICANT.
[RULE 217]

17. ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL CALCULATE THE MAXIMUM INDIVIDUAL CANCER RISK (MICR), ACUTE HAZARD INDEX (HIA) AND CHRONIC HAZARD INDEX (HIC), BASED ON THE SOURCE TESTS RESULTS, USING AQMD PUBLISHED "RISK ASSESSMENT PROCEDURES FOR RULES 1401 (RULE VERSION AMENDED MAY 2, 2003) AND 212", VERSION 6.0, AUGUST 18, 2000, TO DETERMINE THE COMPLIANCE WITH RULE 1401. RESULTS SHALL BE SUBMITTED TO AQMD.
[RULE 1401]

18. ALL RECORDS SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 519422
Granted as of 6/07/2012

Equipment Description:

ODOR CONTROL SYSTEM FOR THE BIOSOLIDS TRUCK LOADING STATION, CONSISTING OF;

1. EXHAUST BLOWER, MAXIMUM 3000 CFM, 15 H. P., VENTING TWO (2) BIOSOLIDS STORAGE SILOS (PART OF THE SLUDGE PROCESSING STATION, PC 453240).

2. ADSORBER, BAY PRODUCTS, SPARROW 3000, 8' DIA. X 7'- 3" H. OVERALL, CONTAINING MINIMUM OF 3800 LBS OF ACTIVATED CARBON (BOTTOM LAYER) AND 1500 LBS OF POTASSIUM PERMANGANATE (KMNO4) IMPREGNATED MEDIA (TOP LAYER). EQUIPPED WITH DIFFERENTIAL PRESSURE GAUGE AND A DEMISTER.

3. EXHAUST STACK, 1' - 6" DIA. X 13' – 6" HIGH ABOVE GROUND.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATIONS UNDER WHICH THIS PERMIT IS ISSUED.
[RULE 204]

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITIONS AT ALL TIMES.
[RULE 204]

3. THE OPERATOR MAY USE ALTERNATE MEDIA AND AMOUNTS IN ORDER TO OPTIMIZE THE ODOR CONTROL SYSTEM, PROVIDED SUCH ALTERNATE MEDIA AND AMOUNTS ARE GUARANTEED BY THE VENDOR TO MEET THE EMISSION LIMITS IN THIS PERMIT.
[RULE 204]

4. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THE EQUIPMENT IS NOT COMPLETED WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER.
[RULE 205]

5. SAMPLING PORTS SHALL BE PROVIDED AT THE INLET AND OUTLET OF THE ODOR CONTROL SYSTEM TO ALLOW COLLECTION/ANALYSIS OF THE INLET FOUL AIR AND TREATED EXHAUST STREAM.
[RULE 204]

6. THE OPERATOR SHALL INSTALL AND MAINTAIN A DIFFERENTIAL PRESSURE GAUGE TO ACCURATELY INDICATE THE DIFFERENTIAL PRESSURE, IN INCHES OF WATER COLUMN, ACROSS THE MEDIA BED.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

7. THE OPERATOR SHALL, ON A WEEKLY BASIS, MEASURE AND RECORD THE DIFFERENTIAL PRESSURE DROP, IN INCHES OF WATER COLUMN, ACROSS THE MEDIA BED.
[RULE 204]

8. IN OPERATION, THE PRESSURE DROP MEASURED ACROSS THE MEDIA BED SHALL BE MAINTAINED BETWEEN 4.8 AND 8.4 INCHES OF WATER COLUMN, OR ANOTHER RANGE SPECIFIED BY THE MANUFACTURER. MANUFACTURER'S PRESSURE DROP RANGE SPECIFICATIONS FOR THIS EQUIPMENT SHALL BE KEPT ON FILE AND SHALL BE MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 204]

9. THE HYDROGEN SULFIDE (H2S) CONCENTRATION (PPMV) AT THE INLET TO ODOR CONTROL SYSTEM SHALL BE MONITORED AND RECORDED ON A WEEKLY BASIS FOR THE FIRST MONTH OF OPERATION, AND MONTHLY THEREAFTER USING COLORIMETRIC H2S TUBES OR ANY OTHER DISTRICT APPROVED METHOD.
[RULE 204]

10. THE HYDROGEN SULFIDE (H2S) CONCENTRATION (PPMV) IN THE EXHAUST OF THE ODOR CONTROL SYSTEM SHALL BE MEASURED AND RECORDED AT LEAST ONCE A WEEK USING COLORIMETRIC H2S TUBES, HANDHELD H2S ANALYZER, OR ANY OTHER DISTRICT APPROVED METHOD.
[RULE 204]

11. IN OPERATION, THE HYDROGEN SULFIDE (H2S) CONCENTRATION IN THE EXHAUST OF THE ODOR CONTROL SYSTEM SHALL NOT EXCEED 1.0 PPMV.
[RULE 402, 1401]

12. THE MEDIA IN THE ADSORBER SHALL BE REPLACED WITH MINIMUM AMOUNT (LBS) OF FRESH CARBON MEDIA, AS DESCRIBED UNDER EQUIPMENT DESCRIPTION OR CONDITION NO. 3, WHENEVER NECESSARY TO COMPLY WITH THE CONDITIONS OF THIS PERMIT.
[RULE 204]

13. SPENT MEDIA REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 402]

14. RECORDS SHALL BE MAINTAINED AS REQUIRED BY THIS PERMIT INCLUDING MEDIA CHANGE OVER DATE(S), QUANTITY, AND VENDOR GUARANTEES FOR COMPLIANCE. THE RECORDS SHALL BE KEPT FOR AT LEAST FIVE YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 518276
Granted as of 6/07/2012

Equipment Description:

ODOR CONTROL SYSTEM, TREATING EXHAUST FROM DISSOLVED AIR FLOATATION THICKENERS (DAFTS), CONSISTING OF:

1. EXHAUST HEADER FROM FOUR (4) DISSOLVED AIR FLOATATION THICKENERS (DAFTS) AND TWO (2) POLYMER MIX TANKS.

2. THREE (3) FOUL-AIR EXHAUST FANS (ONE STANDBY), EACH 100 H.P., MAXIMUM 35,000 CFM CAPACITY.

3. HUMIDIFICATION, IN-DUCT, WITH TWELVE (12) SPRAY NOZZLES, AND EQUIPPED WITH HYDROGEN SULFIDE (H2S) ANALYZER.

4. THREE (3) BIOFILTER CELLS, CONCRETE WALLED, CUSTOM DESIGNED, EACH BIOFILTER CELL 20' W. X 33' L. X 9' D., CONTAINING PROPRIETARY INORGANIC MINERAL BASED MEDIA, EQUIPPED WITH INLET FOUL-AIR FLOW METERS, SAMPLING PORTS AND SURFACE IRRIGATION SYSTEM.

Conditions:

1. CONSTRUCTION AND 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 BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION. [RULE 204]

4. THIS PERMIT SHALL EXPIRE IF CONSTRUCTION OF THE EQUIPMENT IS NOT COMPLETED WITHIN ONE YEAR FROM THE DATE OF ISSUANCE OF THIS PERMIT UNLESS AN EXTENSION IS GRANTED BY THE EXECUTIVE OFFICER. [RULE 205]

5. A TEMPERATURE INDICATOR SHALL BE INSTALLED AND MAINTAINED IN THE MAIN FOUL-AIR HEADER PRIOR TO FOUL-AIR DISTRIBUTION TO THE BIOFILTERS. THE INLET FOUL AIR TEMPERATURE READINGS, TAKEN ON A MONTHLY BASIS, SHALL BE MAINTAINED IN THE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

RANGE OF EQUIPMENT DESIGN SPECIFICATIONS OR AS PER MANUFACTURER'S RECOMMENDATION, AND WRITTEN SPECIFICATIONS SHALL BE KEPT ON FILE.
[RULE 204]

6. A HYDROGEN SULFIDE (H2S) ANALYZER SHALL BE INSTALLED AND MAINTAINED IN THE MAIN FOUL-AIR HEADER PRIOR TO FOUL-AIR DISTRIBUTION TO THE BIOFILTERS. FOUL-AIR H2S CONCENTRATION (PPMV) SHALL BE MONITORED ON A MONTHLY BASIS AND RESULTS RECORDED. WHEN H2S ANALYZER IS NOT OPERATING, COLORIMETRIC H2S TUBES, HAND HELD H2S ANALYZERS OR ANY OTHER DISTRICT APPROVED METHODS SHALL BE USED FOR H2S MONITORING.
[RULE 204]

7. FOUL-AIR FLOW RATE (SCFM) MONITORING AND INDICATING DEVICE OR SYSTEM SHALL BE INSTALLED AND MAINTAINED IN THE FOUL AIR INLET DUCT TO EACH BIOFILTER.
[RULE 204]

8. FOUL-AIR FLOW RATE SHALL BE MONITORED AND RECORDED ON A DAILY BASIS. TOTAL FLOW RATE READING FOR INLET FOUL-AIR TO THREE (3) BIOFILTER CELLS SHALL NOT EXCEED 35, 000 SCFM.
[RULE 402, 1401]

9. THE INCOMING FOUL AIR HUMIDIFICATION AND SURFACE IRRIGATION SYSTEMS SHALL BE MAINTAINED IN GOOD OPERATING CONDITION, AT ALL TIMES, AND SHALL BE UTILIZED TO MAINTAIN THE DESIRED MOISTURE CONTENT FOR THE BIOFILTER MEDIA.
[RULE 204]

10. HYDROGEN SULFIDE (H2S) AND AMMONIA (NH_3) EMISSIONS FROM EACH BIOFILTER SURFACE (MULTI-POINT) SHALL BE MONITORED AT LEAST ONCE A MONTH USING PORTABLE ANALYZERS. THE MULTI-POINT SURFACE READINGS (PPMV) SHALL BE AVERAGED AND RECORDED.
[RULE 204]

11. EMISSIONS OF H2S FROM THE BIOFILTER SHALL NOT EXCEED 0.0175 LB/HR (93 PPBV AT THE SURFACE AT 35,000 CFM).
[RULE 204]

12. THE OWNER OR OPERATOR OF THE EQUIPMENT SHALL CONDUCT SOURCE PERFORMANCE TESTS UNDER THE FOLLOWING CONDITIONS:

    I. A TEST PROTOCOL SHALL BE SUBMITTED TO AQMD NO LATER THAN 45 DAYS BEFORE THE PROPOSED TEST DATE AND SHALL BE APPROVED BY THE EXECUTIVE OFFICER BEFORE THE TEST COMMENCES. AT A MINIMUM, THE TEST PROTOCOL SHOULD INCLUDE THE FOLLOWING:

        a. A DESCRIPTION OF THE EQUIPMENT TESTED. INCLUDE A PROCESS SCHEMATIC INDICATING SAMPLING LOCATIONS/PORTS; SAMPLING DUCT/STACK DIMENSIONS ALONG WITH UPSTREAM AND DOWNSTREAM FLOW DISTURBANCES (E.G. ELBOWS, TEES AND FANS).

        b. A BRIEF PROCESS DESCRIPTION.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

c. OPERATING CONDITIONS UNDER WHICH THE TEST WILL BE PERFORMED, INCLUDING INLET AIR FLOW RATE (SCFM), TEMPERATURE, AND % MOISTURE.

d. A DESCRIPTION OF THE SAMPLING AND ANALYTICAL METHODS FOR EACH CONSTITUENT MEASURED.

e. COMPLETE CALCULATIONS FOR FLOW RATES, CONCENTRATIONS (PPMV), EMISSION RATES AND CONTROL EFFICIENCIES.

f. A DESCRIPTION OF THE CALIBRATION AND QUALITY ASSURANCE PROCEDURES.

g. SAMPLING FACILITIES SHALL COMPLY WITH THE DISTRICT GUIDELINES FOR CONSTRUCTION OF SAMPLING AND TESTING FACILITIES, PURSUANT TO RULE 217.

h. A STATEMENT DETERMINING THAT THE TESTING LABORATORY QUALIFIES AS AN "INDEPENDENT TESTING LABORATORY" UNDER RULE 304 (NO CONFLICT OF INTEREST) AND SIGNED BY THE RESPONSIBLE AUTHORITY.

II. THE TESTS SHALL DETERMINE BIOFILTER'S INLET AND OUTLET EMISSIONS FOR TOTAL NON-METHANE ORGANIC COMPOUNDS (TNMOC), H2S AND AMMONIA TO DETERMINE BIOFILTER'S CONTROL EFFICIENCY, IN WEIGHT PERCENT. TEST RESULTS SHOULD INCLUDE INLET AND OUTLET TNMOC AND AMMONIA CONCENTRATIONS (PPMV), AND EMISSIONS (LBS/HR), AND SPECIATED ANALYSIS FOR TNMOCS,

III. THE TESTS SHALL BE CONDUCTED AND A WRITTEN REPORT SUBMITTED TO THE SCAQMD WITHIN 60 DAYS AT MAXIMUM FOUL-AIR INLET FLOW RATE AT WHICH THE EQUIPMENT WILL BE OPERATED, BUT NOT LATER THAN 180 DAYS AFTER INITIAL START-UP.

[RULE 204, 217, 402, 1401]

13. SMOKE BOMB TESTS SHALL BE CONDUCTED INITIALLY AND, THEREAFTER, EVERY THREE (3) YEARS TO DEMONSTRATE UNIFORM DISTRIBUTION OF AIR FLOWS, AREA OF COMPACTION AND/OR CHANNELING THAT NEEDS REPAIR.
[RULE 204]

14. ANY BREAKDOWN OR MALFUNCTION OF THIS EQUIPMENT RESULTING IN EXCESSIVE ODOR EMISSIONS INTO THE ATMOSPHERE SHALL BE REPORTED TO THE SCAQMD WITHIN TWENTY FOUR HOURS AFTER OCCURRENCE, AND IMMEDIATE REMEDIAL MEASURES SHALL BE UNDERTAKEN TO CORRECT THE PROBLEM AND PREVENT FURTHER EMISSIONS INTO THE ATMOSPHERE.
[RULE 430, 402]

15. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS, AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 545004
Granted as of TBD

Equipment Description:
BOILER, NO. 1, CLEAVER BROOKS, FIRE TUBE TYPE, MODEL CB700-250, SERIAL NO. L-092869, 10,205,800 BTU PER HOUR, DIGESTER GAS AND NATURAL GAS (AS SECONDARY FUEL) FIRED WITH LO-NOx BURNER, AMERICAN COMBUSTION TECHNOLOGY OR EQUAL, MODEL SLE-05-250 OR EQUAL, FLUE GAS RECIRCULATION (FGR) SYSTEM AND OXYGEN TRIM.

EXHAUST STACK, 19.75" DIAM. X 18'H., ABOVE GROUND, ~~941 ACFM~~, WITH A RAIN CAP.

Conditions: (A/N 545004, 545005)

1. CONSTRUCTION AND 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 BOILER SHALL BE FIRED ON DIGESTER GAS AND OR NATURAL GAS ONLY.
[RULE 204]

4. A FUEL METER SHALL BE INSTALLED AND MAINTAINED IN THE FUEL SUPPLY LINE(S) TO MEASURE, INDICATE AND RECORD THE AMOUNT OF FUEL(S) (SCFM) BURNED IN THIS EQUIPMENT.
[RULE 1303 (b) (1) & 1303 (b) (2) – MODELING & OFFSET]

5. WHEN IN OPERATION, TOTAL HEAT INPUT FOR THIS EQUIPMENT SHALL NOT EXCEED 10, 205, 800 BTU/HR. A DAILY LOG SHALL BE KEPT, INDICATING THE TOTAL HEATING VALUE (BTU/SCF) OF FUEL BURNED IN THIS EQUIPMENT, BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) & 1303 (b) (2) – MODELING & OFFSET]

6. THIS EQUIPMENT SHALL BE EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR AND FUEL RATE AS THE BOILER LOAD VARIES. THIS AUTOMATIC CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED PERIODICALLY, ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO ASSURE ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME BURNER FIRING RATE.
[RULE 1146]

7. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION.
[RULE 1303(a) (1)-BACT]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

8. EMISSIONS FOR OXIDES OF NITROGEN (NOx) AND CARBON MONOXIDE (CO) SHALL NOT EXCEED THE FOLLOWING LIMITS AND SHALL BE MEASURED BY VOLUME, ON A DRY BASIS, AT 3% O2.

FUEL USED	NOx AS NO2	CO
DIGESTER GAS	15 PPMV*	≤100 PPMV
NATURAL GAS	9 PPMV	≤50 PPMV

* ON AND AFTER JANUARY 1, 2015.
[RULE 1146, RULE 1303 (a) (1) – BACT/LAER]

9. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT AN INITIAL PERFORMANCE SOURCE TESTS, FOR EACH FUEL, UNDER THE FOLLOWING CONDITIONS:

A. A TESTING LABORATORY CERTIFIED BY THE CALIFORNIA AIR RESOURCES BOARD AND IN COMPLIANCE WITH DISTRICT RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THIS TEST.

B. A SOURCE TEST PROTOCOL SHALL BE SUBMITTED TO AQMD WITHIN 30 DAYS OF INITIAL START UP AND SHALL BE APPROVED BY AQMD BEFORE THE TEST COMMENCES. THE PROTOCOL SHALL INCLUDE PROPOSED OPERATING CONDITIONS OF THE EQUIPMENT DURING THE TEST, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES TO BE USED.

C. SOURCE TESTING SHALL BE CONDUCTED WITHIN 60 CALENDAR DAYS AFTER NORMAL OPERATION OF THE EQUIPMENT HAS BEEN ESTABLISHED, BUT NO LATER THAN 180 DAYS AFTER INITIAL START UP.

D. THE INITIAL PERFORMANCE SOURCE TESTS SHALL BE PERFORMED WHEN THE BOILER IS OPERATING AT MAXIMUM, MINIMUM AND AVERAGE LOAD FOR EACH FUEL (DIGESTER GAS AND NATURAL GAS) TO BE BURNED. THE SAMPLING TIME AT EACH LOAD SHALL BE FOR A MINIMUM OF 15 CONSECUTIVE MINUTES.

E. TWO COPIES OF THE SOURCE TEST RESULTS SHALL BE SUBMITTED TO AQMD, ATTN. GAURANG RAWAL, WITHIN 60 DAYS OF THE TESTS COMPLETION. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

FUEL FLOW RATE (EACH FUEL)
FLUE GAS FLOW RATE (EACH FUEL)
TOTAL HEAT INPUT RATE, BTU/HR
TOTAL NON-METHANE ORGANICS (EXHAUST)
SPECIATED TRACE ORGANICS (EXHAUST, DIGESTER GAS)
TOTAL PARTICULATES (EXHAUST)
OXIDES OF NITROGEN (EXHAUST)
CARBON MONOXIDE (EXHAUST)
OXYGEN
DIGESTER GAS BTU (HHV), AND TOTAL SULFUR CONTENT (AS H2S, PPMV)

THE REPORT SHALL PRESENT THE EMISSIONS DATA IN PARTS PER MILLION (PPMV) ON A DRY BASIS, POUNDS PER HOUR, AND LBS/MMBTU.
[RULE 217, RULE 404, RULE 1146, RULE 1303(A) (1), 1303 (B) (1), 1303(B) (2) - BACT, MODELING AND OFFSET, 1401]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

10. THE SOURCE TEST PROTOCOL AND REPORT, PER CONDITION NO. 9, SHALL BE SUBMITTED TO,
SCAQMD – ATTN. GAURANG RAWAL
ENERGY/ PUBLIC SERVICES/WASTE MGMT. / TERMINALS - PERMITTING
ENGINEERING AND COMPLIANCE DIVISION
21865 COPLEY DRIVE
DIAMOND BAR, CA 91765

11. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH, AS APPLICABLE, REQUIREMENTS LISTED UNDER NEW EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) - 40 CFR PART 63 SUBPART DDDDD.
[40 CFR PART 63 SUBPART DDDDD]

12. EMISSIONS RESULTING FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	POUNDS PER HOUR
CO	22.6 (10.5 WITH NATURAL GAS)
NOx	5.52 (3.1 WITH NATURAL GAS)
PM10	6.2
ROG	2.6
SOx	1.4

[RULE 404, RULE 1146, RULE 1303(a) (1), 1303 (b) (1), 1303(b) (2) - BACT, MODELING AND OFFSET]

Periodic Monitoring:

13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO AND NOx EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1 (METHOD 7.1 FOR NOx); OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATIONS LIMITS. 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:

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

CO: 2000 PPMV, RULE 407
CO: 400 PPMV, @ 3% O2, DRY BASIS, RULE 1146
CO: ≤100 PPMV, @ 3% O2, DRY BASIS, DIGESTER GAS, RULE 1303-BACT
AND ≤50 PPMV, @ 3% O2, DRY BASIS, NATURAL GAS, RULE 1303-BACT
NOx: 15 PPMV, @ 3% O2, DRY BASIS, ON AND AFTER JANUARY 1, 2015, DIGESTER GAS FUEL, AND RULE 1146
NOx: 9 PPMV, @ 3% O2, DRY BASIS, WITH NATURAL GAS-RULE 1146
PM: RULE 404, SEE APPENDIX B.
PM: 0.1 gr/scf, RULE 409
SO2: 500 PPMV AS SO2, ORANGE COUNTY, RULE 53

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 545005
Granted as of TBD

Equipment Description:
BOILER, NO. 2 CLEAVER BROOKS, FIRE TUBE TYPE, MODEL CB700-250, SERIAL NO. L-092868, 10,205,800 BTU PER HOUR, DIGESTER GAS AND NATURAL GAS (AS SECONDARY FUEL) FIRED WITH LO-NOx BURNER, AMERICAN COMBUSTION TECHNOLOGY OR EQUAL, MODEL SLE-05-250 OR EQUAL, FLUE GAS RECIRCULATION (FGR) SYSTEM AND OXYGEN TRIM.

EXHAUST STACK, 19.75" DIAM. X 18'H., ABOVE GROUND, ~~941 ACFM~~, WITH A RAIN CAP.

Conditions: (A/N 545004, 545005)

1. CONSTRUCTION AND 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 BOILER SHALL BE FIRED ON DIGESTER GAS AND OR NATURAL GAS ONLY.
   [RULE 204]

4. A FUEL METER SHALL BE INSTALLED AND MAINTAINED IN THE FUEL SUPPLY LINE(S) TO MEASURE, INDICATE AND RECORD THE AMOUNT OF FUEL(S) (SCFM) BURNED IN THIS EQUIPMENT.
   [RULE 1303 (b) (1) & 1303 (b) (2) – MODELING & OFFSET]

5. WHEN IN OPERATION, TOTAL HEAT INPUT FOR THIS EQUIPMENT SHALL NOT EXCEED 10, 205, 800 BTU/HR. A DAILY LOG SHALL BE KEPT, INDICATING THE TOTAL HEATING VALUE (BTU/SCF) OF FUEL BURNED IN THIS EQUIPMENT, BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
   [RULE 1303 (b) (1) & 1303 (b) (2) – MODELING & OFFSET]

6. THIS EQUIPMENT SHALL BE EQUIPPED WITH A CONTROL SYSTEM TO AUTOMATICALLY REGULATE THE COMBUSTION AIR AND FUEL RATE AS THE BOILER LOAD VARIES. THIS AUTOMATIC CONTROL SYSTEM SHALL BE ADJUSTED AND TUNED PERIODICALLY, ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS TO ASSURE ITS ABILITY TO REPEAT THE SAME PERFORMANCE AT THE SAME BURNER FIRING RATE.
   [RULE 1146]

7. THE FLUE GAS RECIRCULATION SYSTEM SHALL BE IN FULL USE WHENEVER THE BOILER IS IN OPERATION.
   [RULE 1303(a) (1)-BACT]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

8. EMISSIONS FOR OXIDES OF NITROGEN (NOx) AND CARBON MONOXIDE (CO) SHALL NOT EXCEED THE FOLLOWING LIMITS AND SHALL BE MEASURED BY VOLUME, ON A DRY BASIS, AT 3% O2.

FUEL USED	NOx AS NO2	CO
DIGESTER GAS	15 PPMV*	≤100 PPMV
NATURAL GAS	9 PPMV	≤50 PPMV

* ON AND AFTER JANUARY 1, 2015.
[RULE 1146, RULE 1303 (a) (1) – BACT/LAER]

9. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT AN INITIAL PERFORMANCE SOURCE TESTS, FOR EACH FUEL, UNDER THE FOLLOWING CONDITIONS:

A. A TESTING LABORATORY CERTIFIED BY THE CALIFORNIA AIR RESOURCES BOARD AND IN COMPLIANCE WITH DISTRICT RULE 304 (NO CONFLICT OF INTEREST) SHALL CONDUCT THIS TEST.

B. A SOURCE TEST PROTOCOL SHALL BE SUBMITTED TO AQMD WITHIN 30 DAYS OF INITIAL START UP AND SHALL BE APPROVED BY AQMD BEFORE THE TEST COMMENCES. THE PROTOCOL SHALL INCLUDE PROPOSED OPERATING CONDITIONS OF THE EQUIPMENT DURING THE TEST, AND A DESCRIPTION OF ALL SAMPLING AND ANALYTICAL PROCEDURES TO BE USED.

C. SOURCE TESTING SHALL BE CONDUCTED WITHIN 60 CALENDAR DAYS AFTER NORMAL OPERATION OF THE EQUIPMENT HAS BEEN ESTABLISHED, BUT NO LATER THAN 180 DAYS AFTER INITIAL START UP.

D. THE INITIAL PERFORMANCE SOURCE TESTS SHALL BE PERFORMED WHEN THE BOILER IS OPERATING AT MAXIMUM, MINIMUM AND AVERAGE LOAD FOR EACH FUEL (DIGESTER GAS AND NATURAL GAS) TO BE BURNED. THE SAMPLING TIME AT EACH LOAD SHALL BE FOR A MINIMUM OF 15 CONSECUTIVE MINUTES.

E. TWO COPIES OF THE SOURCE TEST RESULTS SHALL BE SUBMITTED TO AQMD, ATTN. GAURANG RAWAL, WITHIN 60 DAYS OF THE TESTS COMPLETION. THE REPORT SHALL INCLUDE, BUT NOT BE LIMITED TO, THE FOLLOWING:

FUEL FLOW RATE (EACH FUEL)
FLUE GAS FLOW RATE (EACH FUEL)
TOTAL HEAT INPUT RATE, BTU/HR
TOTAL NON-METHANE ORGANICS (EXHAUST)
SPECIATED TRACE ORGANICS (EXHAUST, DIGESTER GAS)
TOTAL PARTICULATES (EXHAUST)
OXIDES OF NITROGEN (EXHAUST)
CARBON MONOXIDE (EXHAUST)
OXYGEN
DIGESTER GAS BTU (HHV), AND TOTAL SULFUR CONTENT (AS H2S, PPMV)

THE REPORT SHALL PRESENT THE EMISSIONS DATA IN PARTS PER MILLION (PPMV) ON A DRY BASIS, POUNDS PER HOUR, AND LBS/MMBTU.
[RULE 217, RULE 404, RULE 1146, RULE 1303(A) (1), 1303 (B) (1), 1303(B) (2) - BACT, MODELING AND OFFSET, 1401]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

10. THE SOURCE TEST PROTOCOL AND REPORT, PER CONDITION NO. 9, SHALL BE SUBMITTED TO,
SCAQMD – ATTN. GAURANG RAWAL
ENERGY/ PUBLIC SERVICES/WASTE MGMT. / TERMINALS - PERMITTING
ENGINEERING AND COMPLIANCE DIVISION
21865 COPLEY DRIVE
DIAMOND BAR, CA 91765

11. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH, AS APPLICABLE, REQUIREMENTS LISTED UNDER NEW EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) - 40 CFR PART 63 SUBPART DDDDD.
[40 CFR PART 63 SUBPART DDDDD]

12. EMISSIONS RESULTING FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	POUNDS PER HOUR
CO	22.6 (10.5 WITH NATURAL GAS)
NOx	5.52 (3.1 WITH NATURAL GAS)
PM10	6.2
ROG	2.6
SOx	1.4

[RULE 404, RULE 1146, RULE 1303(a) (1), 1303 (b) (1), 1303(b) (2) - BACT, MODELING AND OFFSET]

Periodic Monitoring:

13. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE CO AND NOx EMISSION LIMIT(S) EITHER BY: (a) CONDUCTING A SOURCE TEST AT LEAST ONCE EVERY FIVE YEARS USING AQMD METHOD 100.1 OR 10.1 (METHOD 7.1 FOR NOx); OR (b) CONDUCTING A TEST AT LEAST ANNUALLY USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATIONS LIMITS. 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:

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

CO: 2000 PPMV, RULE 407
CO: 400 PPMV, @ 3% O2, DRY BASIS, RULE 1146
CO: ≤100 PPMV, @ 3% O2, DRY BASIS, DIGESTER GAS, RULE 1303-BACT AND ≤50 PPMV, @ 3% O2, DRY BASIS, NATURAL GAS, RULE 1303-BACT
NOx: 15 PPMV, @ 3% O2, DRY BASIS, ON AND AFTER JANUARY 1, 2015, DIGESTER GAS FUEL, AND RULE 1146
NOx: 9 PPMV, @ 3% O2, DRY BASIS, WITH NATURAL GAS-RULE 1146
PM: RULE 404, SEE APPENDIX B.
PM: 0.1 gr/scf, RULE 409
SO2: 500 PPMV AS SO2, ORANGE COUNTY, RULE 53

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 546364
Granted as of TBD

Equipment Description:

MODIFICATIONS TO THE RESOURCE RECOVERY SYSTEM NO. 1 (G27394) CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE (CG1-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

BY THE ADDITION OF;

2. DIGESTER GAS CLEANING SYSTEM (DGCS), THREE VESSELS, EACH CONTAINING MINIMUM OF 9,900 LBS OF MEDIA, TOTAL 2100 CFM CAPACITY, WITH ASSOCIATED PIPING AND VALVES.

   COMMON TO FIVE ENGINES (CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB)

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]

4. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
   [RULE 204]

5. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS A VALID PERMIT TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
   [RULE 1110.2]

6. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
   [RULE 1110.2]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BURNED.
[RULE 204]

8. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS SAMPLE.
[RULE 204]

9. MONTHLY READINGS OF THE BTU CONTENT OF DIGESTER GAS (BTU/SCF) SUPPLIED TO THE ENGINE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

11. THE TOTAL HEAT INPUT OF GASEOUS FUEL BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

13. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL MEET THE EMISSIONS LIMITS (EXHAUST) OF TABLE III-B IN RULE 1110.2 (d) (1) (C), UNLESS THE OPERATOR DEMONSTRATES COMPLIANCE WITH THE LIMITS AND SCHEDULE IN RULE 1110.2 (d) (1) (H).
[RULE 1110.2]

14. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING (UNTIL JANUARY 1, 2016) :

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

15. POST-COMBUSTION CONTROLLED EMISSIONS, INTO THE ATMOSPHERE, FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	497.6
NITROGEN OXIDES (AS NO2)	36.0
PARTICULATES (PM10)	18.0
ROG OR TNMHC (AS CH4)	25.60
SULFUR DIOXIDE	21.0

[RULE 204]

16. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR CO, NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL CO AND NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 203, 218, RULE 1110.2]

17. WITHIN 180 DAYS AFTER INITIAL START-UP, (POST- MODIFICATION OF FIVE ENGINES; CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB), THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS, AT MAXIMUM ACHIEVABLE LOAD, IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED FOR APPROVAL, AT LEAST 30 DAYS PRIOR TO START OF THE TESTS TO THE SCAQMD, ENERGY/PUBLIC SERVICES/WASTE MANAGEMENT/TERMINAL PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. NOTICE SHALL BE PROVIDED TO THE SCAQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY).
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).
E. OXYGEN (EXHAUST ONLY)
F. FLOW RATE
G. MOISTURE (EXHAUST ONLY)
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (DIGESTER GAS ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (DIGESTER GAS ONLY)
M. POWER OUTPUT

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

THE ROUTINE COMPLIANCE SOURCE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RULE 1110.2 REQUIREMENTS AND ABOVE REQUIREMENTS. APPROPRIATE SCAQMD STAFF SHALL BE NOTIFIED A MINIMUM OF 45 DAYS IN ADVANCE OF COMPLIANCE SOURCE TESTING TO DETERMINE IF PREVIOUSLY APPROVED SOURCE TEST PROTOCOL MAY BE USED IF NO EQUIPMENT AND PROCESS CHANGES HAVE BEEN MADE.
[RULE 404], [RULE 1110.2], [RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET]

18. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions and Requirements:

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

CO: RULE 1110.2 LIMIT
NOx: RULE 1110.2 LIMIT
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.
VOC (TNMHC): RULE 1110.2 LIMIT
H2S: RULE 431.1

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 546365
Granted as of TBD

Equipment Description:

MODIFICATIONS TO THE RESOURCE RECOVERY SYSTEM NO. 2 (G27395) CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE (CG2-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKES, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

BY THE ADDITION OF;

3. DIGESTER GAS CLEANING SYSTEM (DGCS), THREE VESSELS, EACH CONTAINING MINIMUM OF 9,900 LBS OF MEDIA, TOTAL 2100 CFM CAPACITY, WITH ASSOCIATED PIPING AND VALVES.

   COMMON TO FIVE ENGINES (CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB)

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]

4. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
   [RULE 204]

5. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS A VALID PERMIT TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
   [RULE 1110.2]

6. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 1110.2]

7. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BURNED.
[RULE 204]

8. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS SAMPLE.
[RULE 204]

9. MONTHLY READINGS OF THE BTU CONTENT OF DIGESTER GAS (BTU/SCF) SUPPLIED TO THE ENGINE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

11. THE TOTAL HEAT INPUT OF GASEOUS FUEL BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

13. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL MEET THE EMISSIONS LIMITS (EXHAUST) OF TABLE III-B IN RULE 1110.2 (d) (1) (C), UNLESS THE OPERATOR DEMONSTRATES COMPLIANCE WITH THE LIMITS AND SCHEDULE IN RULE 1110.2 (d) (1) (H).
[RULE 1110.2]

14. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING (UNTIL JANUARY 1, 2016) :

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

15. POST-COMBUSTION CONTROLLED EMISSIONS, INTO THE ATMOSPHERE, FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	497.6
NITROGEN OXIDES (AS NO2)	36.0
PARTICULATES (PM10)	18.0
ROG OR TNMHC (AS CH4)	25.60
SULFUR DIOXIDE	21.0

[RULE 204]

16. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR CO, NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL CO AND NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 203, 218, RULE 1110.2]

17. WITHIN 180 DAYS AFTER INITIAL START-UP, (POST- MODIFICATION OF FIVE ENGINES; CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB), THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS, AT MAXIMUM ACHIEVABLE LOAD, IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED FOR APPROVAL, AT LEAST 30 DAYS PRIOR TO START OF THE TESTS TO THE SCAQMD, ENERGY/PUBLIC SERVICES/WASTE MANAGEMENT/TERMINAL PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. NOTICE SHALL BE PROVIDED TO THE SCAQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY).
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).
E. OXYGEN (EXHAUST ONLY)
F. FLOW RATE
G. MOISTURE (EXHAUST ONLY)
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (DIGESTER GAS ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (DIGESTER GAS ONLY)
M. POWER OUTPUT

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

THE ROUTINE COMPLIANCE SOURCE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RULE 1110.2 REQUIREMENTS AND ABOVE REQUIREMENTS. APPROPRIATE SCAQMD STAFF SHALL BE NOTIFIED A MINIMUM OF 45 DAYS IN ADVANCE OF COMPLIANCE SOURCE TESTING TO DETERMINE IF PREVIOUSLY APPROVED SOURCE TEST PROTOCOL MAY BE USED IF NO EQUIPMENT AND PROCESS CHANGES HAVE BEEN MADE.
[RULE 404], [RULE 1110.2], [RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET]

18. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions and Requirements:

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

CO: RULE 1110.2 LIMIT
NOx: RULE 1110.2 LIMIT
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.
VOC (TNMHC): RULE 1110.2 LIMIT
H2S: RULE 431.1

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 546366
Granted as of TBD

Equipment Description:

MODIFICATIONS TO THE RESOURCE RECOVERY SYSTEM NO. 3 (G27396) CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE (CG3-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKES, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

BY THE ADDITION OF;

4. DIGESTER GAS CLEANING SYSTEM (DGCS), THREE VESSELS, EACH CONTAINING MINIMUM OF 9,900 LBS OF MEDIA, TOTAL 2100 CFM CAPACITY, WITH ASSOCIATED PIPING AND VALVES.

   COMMON TO FIVE ENGINES (CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB)

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]

4. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
   [RULE 204]

5. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS A VALID PERMIT TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
   [RULE 1110.2]

6. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
   [RULE 1110.2]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BURNED.
[RULE 204]

8. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS SAMPLE.
[RULE 204]

9. MONTHLY READINGS OF THE BTU CONTENT OF DIGESTER GAS (BTU/SCF) SUPPLIED TO THE ENGINE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

11. THE TOTAL HEAT INPUT OF GASEOUS FUEL BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

13. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL MEET THE EMISSIONS LIMITS (EXHAUST) OF TABLE III-B IN RULE 1110.2 (d) (1) (C), UNLESS THE OPERATOR DEMONSTRATES COMPLIANCE WITH THE LIMITS AND SCHEDULE IN RULE 1110.2 (d) (1) (H).
[RULE 1110.2]

14. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING (UNTIL JANUARY 1, 2016) :

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

15. POST-COMBUSTION CONTROLLED EMISSIONS, INTO THE ATMOSPHERE, FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	497.6
NITROGEN OXIDES (AS NO2)	36.0
PARTICULATES (PM10)	18.0
ROG OR TNMHC (AS CH4)	25.60
SULFUR DIOXIDE	21.0

[RULE 204]

16. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR CO, NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL CO AND NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 203, 218, RULE 1110.2]

17. WITHIN 180 DAYS AFTER INITIAL START-UP, (POST- MODIFICATION OF FIVE ENGINES; CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB), THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS, AT MAXIMUM ACHIEVABLE LOAD, IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED FOR APPROVAL, AT LEAST 30 DAYS PRIOR TO START OF THE TESTS TO THE SCAQMD, ENERGY/PUBLIC SERVICES/WASTE MANAGEMENT/TERMINAL PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. NOTICE SHALL BE PROVIDED TO THE SCAQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY).
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).
E. OXYGEN (EXHAUST ONLY)
F. FLOW RATE
G. MOISTURE (EXHAUST ONLY)
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (DIGESTER GAS ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (DIGESTER GAS ONLY)
M. POWER OUTPUT

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

THE ROUTINE COMPLIANCE SOURCE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RULE 1110.2 REQUIREMENTS AND ABOVE REQUIREMENTS. APPROPRIATE SCAQMD STAFF SHALL BE NOTIFIED A MINIMUM OF 45 DAYS IN ADVANCE OF COMPLIANCE SOURCE TESTING TO DETERMINE IF PREVIOUSLY APPROVED SOURCE TEST PROTOCOL MAY BE USED IF NO EQUIPMENT AND PROCESS CHANGES HAVE BEEN MADE.
[RULE 404], [RULE 1110.2], [RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET]

18. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions and Requirements:

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

CO: RULE 1110.2 LIMIT
NOx: RULE 1110.2 LIMIT
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.
VOC (TNMHC): RULE 1110.2 LIMIT
H2S: RULE 431.1

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 546367
Granted as of TBD

Equipment Description:

MODIFICATIONS TO THE RESOURCE RECOVERY SYSTEM NO. 4 (G27397) CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE (CG4-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKES, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

BY THE ADDITION OF;

5. DIGESTER GAS CLEANING SYSTEM (DGCS), THREE VESSELS, EACH CONTAINING MINIMUM OF 9,900 LBS OF MEDIA, TOTAL 2100 CFM CAPACITY, WITH ASSOCIATED PIPING AND VALVES.

   COMMON TO FIVE ENGINES (CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB)

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]

4. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
   [RULE 204]

5. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS A VALID PERMIT TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
   [RULE 1110.2]

6. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
   [RULE 1110.2]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BURNED.
[RULE 204]

8. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS SAMPLE.
[RULE 204]

9. MONTHLY READINGS OF THE BTU CONTENT OF DIGESTER GAS (BTU/SCF) SUPPLIED TO THE ENGINE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

11. THE TOTAL HEAT INPUT OF GASEOUS FUEL BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

13. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL MEET THE EMISSIONS LIMITS (EXHAUST) OF TABLE III-B IN RULE 1110.2 (d) (1) (C), UNLESS THE OPERATOR DEMONSTRATES COMPLIANCE WITH THE LIMITS AND SCHEDULE IN RULE 1110.2 (d) (1) (H).
[RULE 1110.2]

14. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING (UNTIL JANUARY 1, 2016) :

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

15. POST-COMBUSTION CONTROLLED EMISSIONS, INTO THE ATMOSPHERE, FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	497.6
NITROGEN OXIDES (AS NO2)	36.0
PARTICULATES (PM10)	18.0
ROG OR TNMHC (AS CH4)	25.60
SULFUR DIOXIDE	21.0

[RULE 204]

16. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR CO, NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL CO AND NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 203, 218, RULE 1110.2]

17. WITHIN 180 DAYS AFTER INITIAL START-UP, (POST- MODIFICATION OF FIVE ENGINES; CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB), THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS, AT MAXIMUM ACHIEVABLE LOAD, IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED FOR APPROVAL, AT LEAST 30 DAYS PRIOR TO START OF THE TESTS TO THE SCAQMD, ENERGY/PUBLIC SERVICES/WASTE MANAGEMENT/TERMINAL PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. NOTICE SHALL BE PROVIDED TO THE SCAQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY).
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).
E. OXYGEN (EXHAUST ONLY)
F. FLOW RATE
G. MOISTURE (EXHAUST ONLY)
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (DIGESTER GAS ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (DIGESTER GAS ONLY)
M. POWER OUTPUT

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

THE ROUTINE COMPLIANCE SOURCE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RULE 1110.2 REQUIREMENTS AND ABOVE REQUIREMENTS. APPROPRIATE SCAQMD STAFF SHALL BE NOTIFIED A MINIMUM OF 45 DAYS IN ADVANCE OF COMPLIANCE SOURCE TESTING TO DETERMINE IF PREVIOUSLY APPROVED SOURCE TEST PROTOCOL MAY BE USED IF NO EQUIPMENT AND PROCESS CHANGES HAVE BEEN MADE.
[RULE 404], [RULE 1110.2], [RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET]

18. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions and Requirements:

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

CO: RULE 1110.2 LIMIT
NOx: RULE 1110.2 LIMIT
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.
VOC (TNMHC): RULE 1110.2 LIMIT
H2S: RULE 431.1

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 546368
Granted as of TBD

Equipment Description:

MODIFICATIONS TO THE RESOURCE RECOVERY SYSTEM NO. 5 (G27397) CONSISTING OF:

1. INTERNAL COMBUSTION ENGINE (CG5-HB), COOPER BESSMER, SPARK IGNITION, FOUR STROKES, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-16 TYPE, MODEL NO. LSVB-16-SGC, 4166 HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 3000 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 6,010,200 BTU/HR CAPACITY, UNFIRED.

BY THE ADDITION OF;

6. DIGESTER GAS CLEANING SYSTEM (DGCS), THREE VESSELS, EACH CONTAINING MINIMUM OF 9,900 LBS OF MEDIA, TOTAL 2100 CFM CAPACITY, WITH ASSOCIATED PIPING AND VALVES.

   COMMON TO FIVE ENGINES (CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB)

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]

4. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
   [RULE 204]

5. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL ONLY BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND HAS A VALID PERMIT TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
   [RULE 1110.2]

6. THIS ENGINE SHALL HAVE AN OPERATIONAL NON-RESETTABLE TOTALIZING TIME METER TO DETERMINE THE ENGINE ELAPSED OPERATING TIME.
   [RULE 1110.2]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

7. A FLOW INDICATING AND RECORDING DEVICE SHALL BE INSTALLED IN THE DIGESTER GAS SUPPLY LINE TO THE ENGINE TO MEASURE AND RECORD THE QUANTITY OF DIGESTER GAS (IN SCFM) BURNED.
[RULE 204]

8. SAMPLING PORT SHALL BE INSTALLED FOR THE INLET GAS LINE TO THE ENGINE TO ALLOW THE COLLECTION OF A FUEL GAS SAMPLE.
[RULE 204]

9. MONTHLY READINGS OF THE BTU CONTENT OF DIGESTER GAS (BTU/SCF) SUPPLIED TO THE ENGINE SHALL BE TAKEN USING AN INSTRUMENT APPROVED BY THE SCAQMD. ALL RESULTS SHALL BE RECORDED.
[RULE 204]

10. ALL RECORDING DEVICES SHALL BE SYNCHRONIZED WITH RESPECT TO THE TIME OF THE DAY.
[RULE 204]

11. THE TOTAL HEAT INPUT OF GASEOUS FUEL BURNED IN THIS ENGINE SHALL NOT EXCEED 33 MM BTU PER HOUR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE OF FUEL GAS BURNED IN THIS ENGINE BASED ON THE RECORDED FLOW RATE (SCFM) AND THE LATEST MONTHLY BTU CONTENT READING.
[RULE 1303 (b) (1) AND 1303 (b) (2)-MODELING AND EMISSIONS OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN SUCH A MANNER THAT THE FOLLOWING EMISSION RATES ARE NOT EXCEEDED.

AIR CONTAMINANT	
CARBON MONOXIDE	600 PPMV AT 15% O2
PARTICULATES (PM10)	0.0058 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	115 PPMV AT 15% O2

[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]

13. EFFECTIVE JANUARY 1, 2016, THIS EQUIPMENT SHALL MEET THE EMISSIONS LIMITS (EXHAUST) OF TABLE III-B IN RULE 1110.2 (d) (1) (C), UNLESS THE OPERATOR DEMONSTRATES COMPLIANCE WITH THE LIMITS AND SCHEDULE IN RULE 1110.2 (d) (1) (H).
[RULE 1110.2]

14. THE COMBINED EMISSIONS FROM THE FOUR (4) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING (UNTIL JANUARY 1, 2016) :

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	2,644
NITROGEN OXIDES (AS NO2)	828
PARTICULATES (PM10)	72
ROG OR TNMHC (AS CH4)	372
SULFUR DIOXIDE	84

[RULE 1303 (b) (2)-EMISSIONS OFFSET]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

15. POST-COMBUSTION CONTROLLED EMISSIONS, INTO THE ATMOSPHERE, FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	497.6
NITROGEN OXIDES (AS NO2)	36.0
PARTICULATES (PM10)	18.0
ROG OR TNMHC (AS CH4)	25.60
SULFUR DIOXIDE	21.0

[RULE 204]

16. THE OPERATOR SHALL INSTALL AND MAINTAIN A CONTINUOUS EMISSION MONITORING SYSTEM (CEMS), OR AN ALTERNATIVE SYSTEM, AS APPROVED BY THE EXECUTIVE OFFICER, TO MEASURE THE ENGINE EXHAUST FOR CO, NOx AND O2 CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL CO AND NOx TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NOx CONCENTRATION AT 15% O2 AND MASS EMISSION RATES ON AN HOURLY AND DAILY BASIS.
[RULE 203, 218, RULE 1110.2]

17. WITHIN 180 DAYS AFTER INITIAL START-UP, (POST- MODIFICATION OF FIVE ENGINES; CG1-HB, CG2-HB, CG3-HB, CG4-HB AND CG5-HB), THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS, AT MAXIMUM ACHIEVABLE LOAD, IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING. ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED FOR APPROVAL, AT LEAST 30 DAYS PRIOR TO START OF THE TESTS TO THE SCAQMD, ENERGY/PUBLIC SERVICES/WASTE MANAGEMENT/TERMINAL PERMITTING, 21865 COPLEY DRIVE, DIAMOND BAR, CA 91765. THE SUBMITTAL SHALL INCLUDE A COPY OF THE ACTIVE PERMIT. WRITTEN RESULTS OF SUCH PERFORMANCE TESTS SHALL BE SUBMITTED WITHIN 60 DAYS AFTER TESTING. NOTICE SHALL BE PROVIDED TO THE SCAQMD 10 DAYS PRIOR TO THE TESTING SO THAT AN OBSERVER MAY BE PRESENT. THE TESTS SHALL INCLUDE, BUT MAY NOT BE LIMITED TO:

A. TOTAL NON-METHANE HYDROCARBONS (EXHAUST ONLY).
B. CARBON MONOXIDE (EXHAUST ONLY)
C. TOTAL PARTICULATE MATTER (EXHAUST ONLY).
D. OXIDES OF NITROGEN (EXHAUST ONLY).
E. OXYGEN (EXHAUST ONLY)
F. FLOW RATE
G. MOISTURE (EXHAUST ONLY)
H. TOXIC AIR CONTAMINANTS (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
I. ALDEHYDES (EXHAUST ONLY), FOR ONE ENGINE PER YEAR
J. TOTAL REDUCED SULFUR COMPOUNDS (DIGESTER GAS ONLY)
K. NITROGEN AND CARBON DIOXIDE
L. BTU CONTENTS (DIGESTER GAS ONLY)
M. POWER OUTPUT

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

THE ROUTINE COMPLIANCE SOURCE TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH RULE 1110.2 REQUIREMENTS AND ABOVE REQUIREMENTS. APPROPRIATE SCAQMD STAFF SHALL BE NOTIFIED A MINIMUM OF 45 DAYS IN ADVANCE OF COMPLIANCE SOURCE TESTING TO DETERMINE IF PREVIOUSLY APPROVED SOURCE TEST PROTOCOL MAY BE USED IF NO EQUIPMENT AND PROCESS CHANGES HAVE BEEN MADE.
[RULE 404], [RULE 1110.2], [RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET]

18. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

Emissions and Requirements:

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

CO: RULE 1110.2 LIMIT
NOx: RULE 1110.2 LIMIT
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS.
VOC (TNMHC): RULE 1110.2 LIMIT
H2S: RULE 431.1

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

Permit No. TBD
A/N 557229

Equipment Description:

STORAGE TANK, NO. 26KTNK001, AQUEOUS UREA SOLUTION (32.5% v), ABOVE GROUND, 2,000 GALLON CAPACITY, VENTING TO ATMOSPHERE.

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.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL ONLY BE USED FOR STORAGE OF AQUEOUS UREA SOLUTION.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

Permit No. TBD
A/N 557230

Equipment Description:

STORAGE TANK, NO. 26KTNK005, AQUEOUS UREA SOLUTION (32.5% v), ABOVE GROUND, 2,000 GALLON CAPACITY, VENTING TO ATMOSPHERE.

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.

2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

3. THIS EQUIPMENT SHALL ONLY BE USED FOR STORAGE OF AQUEOUS UREA SOLUTION.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 559228
Granted as of TBD

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 1 CONSISTING OF:

1. CATALYTIC OXIDIZER, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 91449 OR EQUAL, ALUMINUM OXIDE OR PLATINUM CATALYST ACTIVE MATERIAL, WITH 200 CPSI OXIDATION CATALYST OR EQUAL, 18.67 CUBIC FEET TOTAL VOLUME, WITH ASSOCIATED AUTOMATIC TEMPERATURE AND PRESSURE MONITORING DEVICES AND CONTROLS, AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

2. SELECTIVE CATALYTIC REDUCTION, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 79449 OR EQUAL, METALLIC SUBSTRATE, 37.33 CUBIC FOOT TOTAL VOLUME AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

3 AQUEOUS UREA SOLUTION DOSING UNIT, INJECTORS, AND WITH ASSOCIATED AUTOMATIC TEMPERATURE, PRESSURE MONITORING AND CONTROL DEVICES.

4. EXHAUST STACK, 2'-6" DIA. X 59' H., ABOVE GROUND.

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. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
[RULE 204]

4. THE OPERATOR SHALL INSTALL AND MAINTAIN TEMPERATURE MEASURING AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET TEMPERATURES OF THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. THE TEMPERATURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED. THE TEMPERATURE GAUGES SHALL BE ACCURATE TO PLUS OR MINUS 5 PERCENT, AND BE CALIBRATED ONCE EVERY TWELVE MONTHS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

5. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET PRESSURES ACROSS THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. HE DIFFERENTIAL PRESSURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 204]

6. BASED ON THE OPERATING PARAMETERS' MEASURED AND MONITORED RESULTS OVER THE TWO-YEAR PERIOD (PER CONDITION #4 AND #5), OPERATING PARAMETERS' RANGE SHALL BE ESTABLISHED FOR THE PERMIT TO OPERATE.
[RULE 204]

7. EXCEPT DURING STARTUP AND SHUTDOWN OF THE SCR SYSTEM, THE UREA FEED CONTROL SYSTEM SHALL BE IN OPERATION.
[RULE 204]

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A UREA FLOW RATE MEASURING AND RECORDING SYSTEM TO ACCURATELY INDICATE AND RECORD THE UREA INJECTION RATE TO THE SELECTIVE CATALYTIC REDUCTION SYSTEM.
[RULE 204]

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NOx ANALYZER TO MEASURE SCR INLET NOx CONCENTRATION AND CALIBRATED ANNUALLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 204]

10. WHEN SCR IS IN OPERATION, THE OPERATOR SHALL ANALYZE THE UREA INJECTION RATE, AND THE SCR INLET AND OUTLET NOX EMISSION RATE TO ESTIMATE THE AMMONIA CONCENTRATION IN THE SCR OUTLET, BASED ON ONE HOUR AVERAGE.
[RULE 204]

11. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE AIR POLLUTION CONTROL SYSTEM.
[RULE 204]

12. THE AMMONIA SLIP SHALL BE TESTED WITHIN 180 DAYS AFTER INITIAL START-UP (POST MODIFICATION), AND ANNUALLY THEREAFTER. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING.
[RULE 1303(b) (1)], [RULE 1401]

13. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions and Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NH3 (AMMONIA SLIP): 5 PPMV AT 15% O2, 60 MINUTE AVERAGE, AFTER SCR START UP.
[RULE 1303(b) (1)], [RULE 1402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 559229
Granted as of TBD

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 2 CONSISTING OF:

1. CATALYTIC OXIDIZER, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 91449 OR EQUAL, ALUMINUM OXIDE OR PLATINUM CATALYST ACTIVE MATERIAL, WITH 200 CPSI OXIDATION CATALYST OR EQUAL, 18.67 CUBIC FEET TOTAL VOLUME, WITH ASSOCIATED AUTOMATIC TEMPERATURE AND PRESSURE MONITORING DEVICES AND CONTROLS, AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

2. SELECTIVE CATALYTIC REDUCTION, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 79449 OR EQUAL, METALLIC SUBSTRATE, 37.33 CUBIC FOOT TOTAL VOLUME AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

3 AQUEOUS UREA SOLUTION DOSING UNIT, INJECTORS, AND WITH ASSOCIATED AUTOMATIC TEMPERATURE, PRESSURE MONITORING AND CONTROL DEVICES.

4. EXHAUST STACK, 2'-6" DIA. X 59' H., ABOVE GROUND.

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. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
[RULE 204]

4. THE OPERATOR SHALL INSTALL AND MAINTAIN TEMPERATURE MEASURING AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET TEMPERATURES OF THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. THE TEMPERATURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED. THE TEMPERATURE GAUGES SHALL BE ACCURATE TO PLUS OR MINUS 5 PERCENT, AND BE CALIBRATED ONCE EVERY TWELVE MONTHS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

5. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET PRESSURES ACROSS THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. HE DIFFERENTIAL PRESSURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 204]

6. BASED ON THE OPERATING PARAMETERS' MEASURED AND MONITORED RESULTS OVER THE TWO-YEAR PERIOD (PER CONDITION #4 AND #5), OPERATING PARAMETERS' RANGE SHALL BE ESTABLISHED FOR THE PERMIT TO OPERATE.
[RULE 204]

7. EXCEPT DURING STARTUP AND SHUTDOWN OF THE SCR SYSTEM, THE UREA FEED CONTROL SYSTEM SHALL BE IN OPERATION.
[RULE 204]

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A UREA FLOW RATE MEASURING AND RECORDING SYSTEM TO ACCURATELY INDICATE AND RECORD THE UREA INJECTION RATE TO THE SELECTIVE CATALYTIC REDUCTION SYSTEM.
[RULE 204]

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NOx ANALYZER TO MEASURE SCR INLET NOx CONCENTRATION AND CALIBRATED ANNUALLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 204]

10. WHEN SCR IS IN OPERATION, THE OPERATOR SHALL ANALYZE THE UREA INJECTION RATE, AND THE SCR INLET AND OUTLET NOX EMISSION RATE TO ESTIMATE THE AMMONIA CONCENTRATION IN THE SCR OUTLET, BASED ON ONE HOUR AVERAGE.
[RULE 204]

11. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE AIR POLLUTION CONTROL SYSTEM.
[RULE 204]

12. THE AMMONIA SLIP SHALL BE TESTED WITHIN 180 DAYS AFTER INITIAL START-UP (POST MODIFICATION), AND ANNUALLY THEREAFTER. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING.
[RULE 1303(b) (1)], [RULE 1401]

13. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions and Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NH3 (AMMONIA SLIP): 5 PPMV AT 15% O2, 60 MINUTE AVERAGE, AFTER SCR START UP. [RULE 1303(b) (1)], [RULE 1402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 559230
Granted as of TBD

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 3 CONSISTING OF:

1. CATALYTIC OXIDIZER, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 91449 OR EQUAL, ALUMINUM OXIDE OR PLATINUM CATALYST ACTIVE MATERIAL, WITH 200 CPSI OXIDATION CATALYST OR EQUAL, 18.67 CUBIC FEET TOTAL VOLUME, WITH ASSOCIATED AUTOMATIC TEMPERATURE AND PRESSURE MONITORING DEVICES AND CONTROLS, AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

2. SELECTIVE CATALYTIC REDUCTION, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 79449 OR EQUAL, METALLIC SUBSTRATE, 37.33 CUBIC FOOT TOTAL VOLUME AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

3 AQUEOUS UREA SOLUTION DOSING UNIT, INJECTORS, AND WITH ASSOCIATED AUTOMATIC TEMPERATURE, PRESSURE MONITORING AND CONTROL DEVICES.

4. EXHAUST STACK, 2'-6" DIA. X 59' H., ABOVE GROUND.

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. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
[RULE 204]

4. THE OPERATOR SHALL INSTALL AND MAINTAIN TEMPERATURE MEASURING AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET TEMPERATURES OF THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. THE TEMPERATURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED. THE TEMPERATURE GAUGES SHALL BE ACCURATE TO PLUS OR MINUS 5 PERCENT, AND BE CALIBRATED ONCE EVERY TWELVE MONTHS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

5. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET PRESSURES ACROSS THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. HE DIFFERENTIAL PRESSURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 204]

6. BASED ON THE OPERATING PARAMETERS' MEASURED AND MONITORED RESULTS OVER THE TWO-YEAR PERIOD (PER CONDITION #4 AND #5), OPERATING PARAMETERS' RANGE SHALL BE ESTABLISHED FOR THE PERMIT TO OPERATE.
[RULE 204]

7. EXCEPT DURING STARTUP AND SHUTDOWN OF THE SCR SYSTEM, THE UREA FEED CONTROL SYSTEM SHALL BE IN OPERATION.
[RULE 204]

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A UREA FLOW RATE MEASURING AND RECORDING SYSTEM TO ACCURATELY INDICATE AND RECORD THE UREA INJECTION RATE TO THE SELECTIVE CATALYTIC REDUCTION SYSTEM.
[RULE 204]

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NOx ANALYZER TO MEASURE SCR INLET NOx CONCENTRATION AND CALIBRATED ANNUALLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 204]

10. WHEN SCR IS IN OPERATION, THE OPERATOR SHALL ANALYZE THE UREA INJECTION RATE, AND THE SCR INLET AND OUTLET NOX EMISSION RATE TO ESTIMATE THE AMMONIA CONCENTRATION IN THE SCR OUTLET, BASED ON ONE HOUR AVERAGE.
[RULE 204]

11. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE AIR POLLUTION CONTROL SYSTEM.
[RULE 204]

12. THE AMMONIA SLIP SHALL BE TESTED WITHIN 180 DAYS AFTER INITIAL START-UP (POST MODIFICATION), AND ANNUALLY THEREAFTER. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING.
[RULE 1303(b) (1)], [RULE 1401]

13. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions and Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NH3 (AMMONIA SLIP): 5 PPMV AT 15% O2, 60 MINUTE AVERAGE, AFTER SCR START UP.
[RULE 1303(b) (1)], [RULE 1402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 559231
Granted as of TBD

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 4 CONSISTING OF:

1. CATALYTIC OXIDIZER, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 91449 OR EQUAL, ALUMINUM OXIDE OR PLATINUM CATALYST ACTIVE MATERIAL, WITH 200 CPSI OXIDATION CATALYST OR EQUAL, 18.67 CUBIC FEET TOTAL VOLUME, WITH ASSOCIATED AUTOMATIC TEMPERATURE AND PRESSURE MONITORING DEVICES AND CONTROLS, AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

2. SELECTIVE CATALYTIC REDUCTION, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 79449 OR EQUAL, METALLIC SUBSTRATE, 37.33 CUBIC FOOT TOTAL VOLUME AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

3 AQUEOUS UREA SOLUTION DOSING UNIT, INJECTORS, AND WITH ASSOCIATED AUTOMATIC TEMPERATURE, PRESSURE MONITORING AND CONTROL DEVICES.

4. EXHAUST STACK, 2'-6" DIA. X 59' H., ABOVE GROUND.

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. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
[RULE 204]

4. THE OPERATOR SHALL INSTALL AND MAINTAIN TEMPERATURE MEASURING AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET TEMPERATURES OF THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. THE TEMPERATURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED. THE TEMPERATURE GAUGES SHALL BE ACCURATE TO PLUS OR MINUS 5 PERCENT, AND BE CALIBRATED ONCE EVERY TWELVE MONTHS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

5. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET PRESSURES ACROSS THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. HE DIFFERENTIAL PRESSURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 204]

6. BASED ON THE OPERATING PARAMETERS' MEASURED AND MONITORED RESULTS OVER THE TWO-YEAR PERIOD (PER CONDITION #4 AND #5), OPERATING PARAMETERS' RANGE SHALL BE ESTABLISHED FOR THE PERMIT TO OPERATE.
[RULE 204]

7. EXCEPT DURING STARTUP AND SHUTDOWN OF THE SCR SYSTEM, THE UREA FEED CONTROL SYSTEM SHALL BE IN OPERATION.
[RULE 204]

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A UREA FLOW RATE MEASURING AND RECORDING SYSTEM TO ACCURATELY INDICATE AND RECORD THE UREA INJECTION RATE TO THE SELECTIVE CATALYTIC REDUCTION SYSTEM.
[RULE 204]

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NOx ANALYZER TO MEASURE SCR INLET NOx CONCENTRATION AND CALIBRATED ANNUALLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 204]

10. WHEN SCR IS IN OPERATION, THE OPERATOR SHALL ANALYZE THE UREA INJECTION RATE, AND THE SCR INLET AND OUTLET NOX EMISSION RATE TO ESTIMATE THE AMMONIA CONCENTRATION IN THE SCR OUTLET, BASED ON ONE HOUR AVERAGE.
[RULE 204]

11. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE AIR POLLUTION CONTROL SYSTEM.
[RULE 204]

12. THE AMMONIA SLIP SHALL BE TESTED WITHIN 180 DAYS AFTER INITIAL START-UP (POST MODIFICATION), AND ANNUALLY THEREAFTER. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING.
[RULE 1303(b) (1)], [RULE 1401]

13. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions and Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NH3 (AMMONIA SLIP): 5 PPMV AT 15% O2, 60 MINUTE AVERAGE, AFTER SCR START UP.
[RULE 1303(b) (1)], [RULE 1402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 559232
Granted as of TBD

Equipment Description:

AIR POLLUTION CONTROL SYSTEM NO. 5 CONSISTING OF:

1. CATALYTIC OXIDIZER, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 91449 OR EQUAL, ALUMINUM OXIDE OR PLATINUM CATALYST ACTIVE MATERIAL, WITH 200 CPSI OXIDATION CATALYST OR EQUAL, 18.67 CUBIC FEET TOTAL VOLUME, WITH ASSOCIATED AUTOMATIC TEMPERATURE AND PRESSURE MONITORING DEVICES AND CONTROLS, AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

2. SELECTIVE CATALYTIC REDUCTION, JOHNSON MATTHEY INC. OR EQUAL, MODEL NO. 79449 OR EQUAL, METALLIC SUBSTRATE, 37.33 CUBIC FOOT TOTAL VOLUME AND WITH PROVISIONS FOR ADDING TWO LAYERS OF CATALYST.

3 AQUEOUS UREA SOLUTION DOSING UNIT, INJECTORS, AND WITH ASSOCIATED AUTOMATIC TEMPERATURE, PRESSURE MONITORING AND CONTROL DEVICES.

4. EXHAUST STACK, 2'-6" DIA. X 59' H., ABOVE GROUND.

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. AT LEAST 30 DAYS PRIOR TO INSTALLATION OF THE EQUIPMENT, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY).
[RULE 204]

4. THE OPERATOR SHALL INSTALL AND MAINTAIN TEMPERATURE MEASURING AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET TEMPERATURES OF THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. THE TEMPERATURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED. THE TEMPERATURE GAUGES SHALL BE ACCURATE TO PLUS OR MINUS 5 PERCENT, AND BE CALIBRATED ONCE EVERY TWELVE MONTHS.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

[RULE 204]

5. THE OPERATOR SHALL INSTALL AND MAINTAIN DIFFERENTIAL PRESSURE AND RECORDING SYSTEMS TO MEASURE AND RECORD THE INLET AND OUTLET PRESSURES ACROSS THE OXIDATION CATALYST AND THE SELECTIVE REDUCTION CATALYST. HE DIFFERENTIAL PRESSURES SHALL BE CONTINUOUSLY MEASURED AND RECORDED.
[RULE 204]

6. BASED ON THE OPERATING PARAMETERS' MEASURED AND MONITORED RESULTS OVER THE TWO-YEAR PERIOD (PER CONDITION #4 AND #5), OPERATING PARAMETERS' RANGE SHALL BE ESTABLISHED FOR THE PERMIT TO OPERATE.
[RULE 204]

7. EXCEPT DURING STARTUP AND SHUTDOWN OF THE SCR SYSTEM, THE UREA FEED CONTROL SYSTEM SHALL BE IN OPERATION.
[RULE 204]

8. THE OPERATOR SHALL INSTALL AND MAINTAIN A UREA FLOW RATE MEASURING AND RECORDING SYSTEM TO ACCURATELY INDICATE AND RECORD THE UREA INJECTION RATE TO THE SELECTIVE CATALYTIC REDUCTION SYSTEM.
[RULE 204]

9. THE OPERATOR SHALL INSTALL AND MAINTAIN A NOx ANALYZER TO MEASURE SCR INLET NOx CONCENTRATION AND CALIBRATED ANNUALLY IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.
[RULE 204]

10. WHEN SCR IS IN OPERATION, THE OPERATOR SHALL ANALYZE THE UREA INJECTION RATE, AND THE SCR INLET AND OUTLET NOX EMISSION RATE TO ESTIMATE THE AMMONIA CONCENTRATION IN THE SCR OUTLET, BASED ON ONE HOUR AVERAGE.
[RULE 204]

11. SAMPLING PORTS SHALL BE INSTALLED AT THE INLET AND OUTLET OF THE AIR POLLUTION CONTROL SYSTEM.
[RULE 204]

12. THE AMMONIA SLIP SHALL BE TESTED WITHIN 180 DAYS AFTER INITIAL START-UP (POST MODIFICATION), AND ANNUALLY THEREAFTER. THE OPERATOR SHALL CONDUCT PERFORMANCE TESTS IN ACCORDANCE WITH THE APPROVED TEST PROCEDURES AND, FURNISH THE SCAQMD WRITTEN RESULTS OF SUCH PERFORMANCE TESTS WITHIN 45 DAYS AFTER TESTING.
[RULE 1303(b) (1)], [RULE 1401]

13. RECORDS SHALL BE KEPT AND MAINTAINED TO PROVE COMPLIANCE WITH ALL CONDITIONS FOR THIS PERMIT. THE RECORDS SHALL BE KEPT ON FILE FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

Emissions and Requirements:

14. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
NH3 (AMMONIA SLIP): 5 PPMV AT 15% O2, 60 MINUTE AVERAGE, AFTER SCR START UP.
[RULE 1303(b) (1)], [RULE 1402]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION I: PLANS AND SCHEDULES

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules specified below. The operator shall comply with all conditions specified in the approval of these plans.

Documents pertaining to the plan applications listed below are available for public review at AQMD Headquarters. Any changes to plan applications will require permit modification in accordance with Title V permit revision procedures.

List of approved plans:

Application	Rule
267656	431.1

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION J: AIR TOXICS
[40CFR 63 Subpart VVV 03-23-2001]

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: PUBLICLY OWNED TREATMENT WORKS (NON-INDUSTRIAL PLANT)

(1) The owner/operator of a Publicly Owned Treatment Works (POTW) shall comply with all applicable requirements of 40 CFR Subpart VVV and general requirements applicable to Non-Industrial POTW Plant (emission points and control point requirements) as listed under § 63.1586 including covers on all emission points up to the secondary influent pumping station or secondary treatment unit. Covers shall be tightly fitted and designed and operated to minimize exposure of wastewater to the atmosphere. Each opening in a treatment unit shall be maintained in a closed, sealed position unless wastewater is not present or except when plant personnel are present and conducting wastewater or sludge sampling, or equipment inspection, maintenance or repair.

(2) The owner/operator of a Publicly Owned Treatment Works (POTW) shall comply with all applicable requirements of inspections listed under 40 CFR Subpart VVV, § 63.1588 including a visual inspection of all covers and their closure devices for defects that could results in air emissions. Inspections shall be conducted initially follow-up inspections at least once per year. Defects that are found on treatment units in use shall be repaired within 45 days. The owner/operator shall follow the notification and reporting requirements in § 63.1588 for repairs that cannot be completed in 45 days. Defects that are found on treatment units that are not in use shall be repaired prior to putting the treatment unit back in service.

(3) The owner/operator of a Publicly Owned Treatment Works (POTW) shall comply with all applicable requirements to prepare and maintain the records for each treatment unit inspection, each defect detected during inspection, date of detection, corrective actions taken to repair the defect, the date the repair is completed, and all other requirements listed under 40 CFR Subpart VVV, § 63.1589

(4) The owner/operator of a Publicly Owned Treatment Works (POTW) shall comply with all applicable requirements and notification of compliance status, as applicable, and other reports submittal as listed under 40 CFR Subpart VVV, § 63.1590

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION J: AIR TOXICS
[40CFR 63 Subpart ZZZZ 01-18-2008]

NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS: STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

The owner/operator of stationary Reciprocating Internal Combustion Engines (RICE) located at major or area sources of hazardous air pollutant (HAP) emissions shall comply with the applicable requirements of 40 CFR 63 Subpart ZZZZ including but not limited to the following:

1. The owner/operator of existing, new or reconstructed stationary RICE shall comply with emission and operating limitation requirements as specified in §63.6600 and i§63.6601 at all times except during periods of startups, shutdowns, and malfunctions. The owner/operator shall also comply with requirements of the General Provisions (40 CFR 63 Subpart A) as specified in §63.6665.

2. The owner/operator shall operate and maintain a stationary RICE, including air pollution control and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times, including during startup, shutdown and malfunction pursuant to §63.6605.

3. The owner/operator shall demonstrate initial compliance as specified in §63.6610 and §63.6611, and subsequent performance tests and other procedures as specified in §63.6615 and §63.6620.

4. The owner/operator shall comply with monitoring, installation, operation, and maintenance requirements as specified in §63.6625 and §63.660.

5. The owner/operator shall monitor and collect data to demonstrate continuous compliance with emission and operating limitations as specified in §63.6635 and §63.6640.

6. The owner/operator shall sent notifications and reports as specified in §63.6645 and §63.6650. Also, the owner/operator shall keep records as specified in §63.6655.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]

2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]

   (B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]

4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:

   (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.

   (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

   (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:

   (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or

   (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

   Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:

   (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;

   (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

   (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

   (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]

10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]

11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]

12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]

13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]

15. Nothing in this permit or in any permit shield can alter or affect:

    (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;

    (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;

    (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;

    (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;

    (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and

    (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]

16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

EMERGENCY PROVISIONS

17. An emergency[1] constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:

    (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:

        (1) An emergency occurred and the operator can identify the cause(s) of the emergency;

        (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;

        (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,

        (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and

    (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]

18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

---

1 "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:

    (A) The date, place as defined in the Title V permit, and time of sampling or measurements;

    (B) The date(s) analyses were performed;

    (C) The company or entity that performed the analyses;

    (D) The analytical techniques or methods used;

    (E) The results of such analyses; and

    (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]

20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]

21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:

    (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

(B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.

(C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.

(D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]

23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]

24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:

(A) Identification of each permit term or condition that is the basis of the certification;

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

(B) The compliance status during the reporting period;

(C) Whether compliance was continuous or intermittent;

(D) The method(s) used to determine compliance over the reporting period and currently, and

(E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn: Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

FACILITY RULES

This facility is subject to the following rules and regulations

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 104	1-9-1976	Federally enforceable
RULE 109	5-2-2003	Federally enforceable
RULE 1107	1-6-2006	Federally enforceable
RULE 1110.1	10-4-1985	Non federally enforceable
RULE 1110.2	11-14-1997	Non federally enforceable
RULE 1110.2	9-7-2012	Non federally enforceable
RULE 1113	7-13-2007	Federally enforceable
RULE 1113	9-6-2013	Non federally enforceable
RULE 1122	7-11-1997	Federally enforceable
RULE 1140	2-1-1980	Federally enforceable
RULE 1140	8-2-1985	Non federally enforceable
RULE 1146	11-17-2000	Federally enforceable
RULE 1146	5-13-1994	Federally enforceable
RULE 1168	1-7-2005	Federally enforceable
RULE 1171	2-1-2008	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 1303(a)(1)-BACT	12-6-2002	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(1)	10-20-2000	Non federally enforceable
RULE 1303(b)(1)-Modeling	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	12-6-2002	Non federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 1304(a)-Modeling and Offset Exemption	6-14-1996	Federally enforceable
RULE 1309.1	5-3-2002	Federally enforceable
RULE 1309.1	8-3-2007	Non federally enforceable
RULE 1401	9-10-2010	Non federally enforceable
RULE 1402	3-4-2005	Non federally enforceable
RULE 1415	12-3-2010	Non federally enforceable
RULE 1418	9-10-1999	Non federally enforceable
RULE 1470	6-1-2007	Non federally enforceable
RULE 1472	3-7-2008	Non federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 218	5-14-1999	Federally enforceable
RULE 218.1	5-14-1999	Federally enforceable
RULE 219	5-3-2013	Non federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3002	11-5-2010	Non federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	11-5-2010	Non federally enforceable
RULE 3004	12-12-1997	Federally enforceable
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	11-5-2010	Non federally enforceable
RULE 3006	11-14-1997	Federally enforceable
RULE 3006	11-5-2010	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 301	6-1-2012	Non federally enforceable
RULE 304	6-1-2012	Non federally enforceable
RULE 306	6-1-2012	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

SECTION K: TITLE V Administration

RULE SOURCE	Adopted/Amended Date	FEDERAL Enforceability
RULE 403.1	1-15-1993	Federally enforceable
RULE 403.1	6-16-2000	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 407	4-2-1982	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 409	8-7-1981	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 431.1	6-12-1998	Federally enforceable
RULE 431.2	5-4-1990	Federally enforceable
RULE 431.2	9-15-2000	Non federally enforceable
RULE 461	4-21-2000	Federally enforceable
RULE 461	6-15-2001	Non federally enforceable
RULE 701	6-13-1997	Federally enforceable
40CFR 63 Subpart VVV	3-23-2001	Federally enforceable
40CFR 63 Subpart ZZZZ	1-18-2008	Federally enforceable
40CFR 82 Subpart B	7-14-1992	Federally enforceable
40CFR 82 Subpart F	5-14-1993	Federally enforceable

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN PERMIT PURSUANT TO RULE 219

1. NONE

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]

Except as otherwise provided in Rule 1107

(1) VOC Content of Coatings

A person shall not apply to metal parts and products subject to the provisions of this rule any coatings, including any VOC-containing materials added to the original coating supplied by the manufacturer, which contain VOC in excess of the limits specified below:

VOC LIMITS
Less Water and Less Exempt Compounds
Effective Dates

Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
General One-Component	275	275	2.3	2.3	275	275	2.3	2.3
General Multi-Component	340	340	2.8	2.8	275	275	2.3	2.3
Military Specification	340	340	2.8	2.8	275	275	2.3	2.3
Etching Filler	420	420	3.5	3.5	420	420	3.5	3.5
Solar-Absorbent	420	420	3.5	3.5	360	360	3.0	3.0
Heat-Resistant	420	420	3.5	3.5	360	360	3.0	3.0
Extreme High-Gloss	420	340	3.5	2.8	360	360	3.0	3.0
Metallic	420	420	3.5	3.5	420	420	3.5	3.5

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]

VOC LIMITS
Less Water and Less Exempt Compounds
Effective Dates, cont.

Coating	Air-Dried				Baked			
	gm/l		lb/gal		gm/l		lb/gal	
	Current	7/1/07	Current	7/1/07	Current	7/1/07	Current	7/1/07
Extreme Performance	420	420	3.5	3.5	360	360	3.0	3.0
Prefabricated Architectural One-Component	420	275	3.5	2.3	275	275	2.3	2.3
Prefabricated Architectural Multi-Component	420	340	3.5	2.8	275	275	2.3	2.3
Touch Up	420	420	3.5	3.5	360	360	3.0	3.0
Repair	420	420	3.5	3.5	360	360	3.0	3.0
Silicone Release	420	420	3.5	3.5	420	420	3.5	3.5
High-Performance Architectural	420	420	3.5	3.5	420	420	3.5	3.5
Camouflage	420	420	3.5	3.5	420	420	3.5	3.5
Vacuum-Metalizing	420	420	3.5	3.5	420	420	3.5	3.5
Mold-Seal	420	420	3.5	3.5	420	420	3.5	3.5
High-Temperature	420	420	3.5	3.5	420	420	3.5	3.5
Electric-Insulating Varnish	420	420	3.5	3.5	420	420	3.5	3.5
Pan Backing	420	420	3.5	3.5	420	420	3.5	3.5
Pretreatment Coatings	420	420	3.5	3.5	420	420	3.5	3.5

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1107 01-06-2006]

(2) A person shall not use VOC-containing materials which have a VOC content of more than 200 grams per liter of material for stripping any coating governed by this rule.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 07-13-2007]

(1) Except as provided in paragraphs (c)(2), (c)(3), (c)(4), and specified coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage any architectural coating for use in the District which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, and no person shall apply or solicit the application of any architectural coating within the District that exceeds 250 grams of VOC per liter of coating as calculated in this paragraph.

(2) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6), no person shall supply, sell, offer for sale, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified, and no person shall apply or solicit the application of any architectural coating within the District that exceeds the VOC limit as specified in this paragraph. No person shall apply or solicit the application within the District of any industrial maintenance coatings, except anti-graffiti coatings, for residential use or for use in areas such as office space and meeting rooms of industrial, commercial or institutional facilities not exposed to such extreme environmental conditions described in the definition of industrial maintenance coatings; or of any rust-preventative coating for industrial use, unless such a rust preventative coating complies with the Industrial Maintenance Coating VOC limit specified in the Table of Standards.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 07-13-2007]
TABLE OF STANDARDS
VOC LIMITS

Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	Ceiling Limit*	Current Limit	Effective Date					
			1/1/03	1/1/04	1/1/05	7/1/06	7/1/07	7/1/08
Bond Breakers	350							
Clear Wood Finishes	350					275		
Varnish	350					275		
Sanding Sealers	350					275		
Lacquer	680	550			275			
Clear Brushing Lacquer	680				275			
Concrete-Curing Compounds	350						100	
Concrete-Curing Compounds For Roadways and Bridges**	350							
Dry-Fog Coatings	400						150	
Fire-Proofing Exterior Coatings	450	350						
Fire-Retardant Coatings***								
Clear	650							
Pigmented	350							
Flats	250	100						50
Floor Coatings	420		100			50		
Graphic Arts (Sign) Coatings	500							
Industrial Maintenance (IM) Coatings	420			250		100		
High Temperature IM Coatings			420					
Zinc-Rich IM Primers	420		340			100		
Japans/Faux Finishing Coatings	700	350						
Magnesite Cement Coatings	600	450						
Mastic Coatings	300							
Metallic Pigmented Coatings	500							
Multi-Color Coatings	420	250						
Nonflat Coatings	250		150			50		

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 07-13-2007]

COATING CATEGORY	Ceiling Limit*	Current Limit	Effective Date					
			1/1/03	1/1/04	1/1/05	7/1/06	7/1/07	7/1/08
Nonflat High Gloss	250		150				50	
Pigmented Lacquer	680	550			275			
Pre-Treatment Wash Primers	780		420					
Primers, Sealers, and Undercoaters	350		200			100		
Quick-Dry Enamels	400		250			150	50	
Quick-Dry Primers, Sealers, and Undercoaters	350		200			100		
Recycled Coatings			250					
Roof Coatings Roof Coatings, Aluminum	300 500		250		50 100			
Roof Primers, Bituminous	350		350					
Rust Preventative Coatings	420		400			100		
Shellac Clear Pigmented	 730 550							
Specialty Primers	350					250	100	
Stains Stains, Interior	350 250		250				100	
Swimming Pool Coatings Repair Other	 650 340		340					
Traffic Coatings	250	150					100	
Waterproofing Sealers	400		250			100		
Waterproofing Concrete/Masonry Sealers	400					100		
Wood Preservatives Below-Ground Other	 350 350							

* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.

** Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

*** The Fire-Retardant Coating category will be eliminated on January 1, 2007 and subsumed by the coating category for which they are formulated.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 07-13-2007]
TABLE OF STANDARDS (cont.)
VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 09-06-2013]

(1) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6), no person shall supply, sell, offer for sale, market, manufacture, blend, repackage, apply, store at a worksite, or solid the application of any architectural coating within in the District:

(A) That is listed in the Table of Standards 1 and contains VOC (exclusing any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified; or

(B) That is not listed in the Table of Standards 1, and contains VOC (excluding any colorant added to tint bases) in excess of 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, until January 1, 2014, at which time the limit drops to 50 grams of VOC per liter of coating, less water, less exempt compounds (0.42 pounds per gallon).

(2) No person within the District shall add colorant at the point of sale that is listed in the Table of Standards 2 and contains VOC in excess of the corresponding VOC limit specified in the Table of Standards 2, after the effective date specified.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 09-06-2013]
TABLE OF STANDARDS 1
VOC LIMITS

Grams of VOC Per Liter of Coating, Less Water and Less Exempt Compounds

COATING CATEGORY	Ceiling Limit[1]	Current Limit[2]	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges[3]		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	100
Decorative Coatings		350			
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-SacrificialAnti-Graffiti Coatings		100			
Zinc-Rich IM Primers		100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters		100			
Reactive Penetrating Sealers		350			

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 09-06-2013]

Recycled Coatings		250			
Roof Coatings Roof Coatings, Aluminum		50 100			
Roof Primers, Bituminous		350			
Rust Preventative Coatings	400	100			
Sacrificial Anti-Graffiti Coatings		100		50	
Shellac Clear		730			

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1113 09-06-2013]

COATING CATEGORY	Ceiling Limit[1]	Current Limit[2]	Effective Date		
			7/1/08	1/1/12	1/1/14
Pigmented		550			
Specialty Primers		100			
Stains Stains, Interior	350 250	100 250			
Stone Consolidant		450			
Swimming Pool Coatings Repair Other		 340 340			
Traffic Coatings		100			
Waterproofing Sealers		100			
Waterproofing Concrete/Masonry Sealers		100			
Wood Preservatives		350			

1 The specified ceiling limits are applicable to products sold under the Averaging Compliance Option.

2 The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.

3. Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

TABLE OF STANDARDS 1 (cont.)
VOC LIMITS

Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

TABLE OF STANDARDS 2
VOC LIMITS FOR COLORANTS

Grams of VOC Per Liter of Colorant
Less Water and Less Exempt Compounds

COLORANT ADDED TO	Limit[4]
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1168 01-07-2005]

(1) Unless otherwise specified in paragraph (c)(2), a person shall not apply any adhesives, adhesive bonding primers, adhesive primers, or any other primer which have a VOC content in excess of 250 g/L less water and less exempt compounds.

(2) A person shall not apply adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers, or any other primer which have a VOC content in excess of the limits specified below:

VOC Limit*, Less Water and Less Exempt Compounds in Grams per Liter

Architectural Applications	Current VOC Limit*
Indoor Carpet Adhesives	50
Carpet Pad Adhesives	50
Outdoor Carpet Adhesives	150
Wood Flooring Adhesive	100
Rubber Floor Adhesives	60
Subfloor Adhesives	50
Ceramic Tile Adhesives	65
VCT and Asphalt Tile Adhesives	50
Dry Wall and Panel Adhesives	50
Cove Base Adhesives	50
Multipurpose Construction Adhesives	70
Structural Glazing Adhesives	100
Single Ply Roof Membrane Adhesives	250

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1168 01-07-2005]

Specialty Applications	VOC Limits and Effective Dates**			
	Current VOC Limit*	1-1-05	7-1-05	1-1-07
PVC Welding	510			
CPVC Welding	490			
ABS Welding	400		325	
Plastic Cement Welding	350	250		
Adhesive Primer for Plastic	650		550	
Computer Diskette Manufacturing	350			
Contact Adhesive	80			
Special Purpose Contact Adhesive	250			
Tire Retread	100			
Adhesive Primer for Traffic Marking Tape	150			
Structural Wood Member Adhesive	140			
Sheet Applied Rubber Lining Operations	850			
Top and Trim Adhesive	540			250

** The specified limits remain in effect unless revised limits are listed in subsequent columns.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1168 01-07-2005]

For adhesives, adhesive bonding primers, or any other primer not regulated by the above two tables and applied to the following substrates, the following limits shall apply:

Substrate Specific Applications	Current VOC Limit*
Metal to Metal	30
Plastic Foams	50
Porous Material (except wood)	50
Wood	30
Fiberglass	80

If an adhesive is used to bond dissimilar substrates together the adhesive with the highest VOC content shall be allowed.

Sealants	Current VOC Limit*
Architectural	250
Marine Deck	760
Nonmembrane Roof	300
Roadway	250
Single-Ply Roof Membrane	450
Other	420

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1168 01-07-2005]

Sealant Primers	Current VOC Limit*
Architectural	
Non Porous	250
Porous	775
Modified Bituminous	500
Marine Deck	760
Other	750

* For low-solid adhesives or sealants the VOC limit is expressed in grams per liter of material as determined in paragraph (b)(32); for all other adhesives and sealants, VOC limits are expressed as grams of VOC per liter of adhesive or sealant less water and less exempt compounds as determined in paragraph (b)(31).

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 02-01-2008]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	CURRENT LIMITS*	EFFECTIVE 1/1/2008*	EFFECTIVE 1/1/2009
SOLVENT CLEANING ACTIVITY	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application			
(i) General	25 (0.21)		
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)		
(iii) Medical Devices & Pharmaceuticals	800 (6.7)		
(B) Repair and Maintenance Cleaning			
(i) General	25 (0.21)		
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)		

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 02-01-2008]

	CURRENT LIMITS*	EFFECTIVE 1/1/2008*	EFFECTIVE 1/1/2009
SOLVENT CLEANING ACTIVITY (cont.)	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(iii) Medical Devices & Pharmaceuticals			
(A) Tools, Equipment, & Machinery	800 (6.7)		
(B) General Work Surfaces	600 (5.0)		
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)		
(D) Cleaning of Ink Application Equipment			
(i) General	25 (0.21)		
(ii) Flexographic Printing	25 (0.21)		
(iii) Gravure Printing			
(A) Publication	100 (0.83)		
(B) Packaging	25 (0.21)		
(iv) Lithographic (Offset) or Letter Press Printing			
(A) Roller Wash, Blanket Wash, & On-Press Components			
(I) Newsprint	100 (0.83)		

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 02-01-2008]

	CURRENT LIMITS*	EFFECTIVE 1/1/2008*	EFFECTIVE 1/1/2009
SOLVENT CLEANING ACTIVITY (cont.)	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(II) Other Substrates	500 (4.2)	100 (0.83)	
(B) Removable Press Components	25 (0.21)		
(v) Screen Printing	500 (4.2)	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)		
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)		

* The specified limits remain in effect unless revised limits are listed in subsequent columns.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 1171 05-01-2009]

	CURRENT LIMITS*	EFFECTIVE 1/1/2010
SOLVENT CLEANING ACTIVITY (cont.)	**VOC g/l (lb/gal)**	**VOC g/l (lb/gal)**
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

* The specified limits remain in effect unless revised limits are listed in subsequent columns.

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

TABLE 404(a)

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter"Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter"Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148

FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT

APPENDIX B: RULE EMISSION LIMITS
[RULE 404 02-07-1986]

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter"Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100