



FACILITY PERMIT TO OPERATE

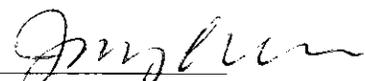
**ORANGE COUNTY SANITATION DISTRICT
10844 ELLIS AVE
FOUNTAIN VALLEY, CA 92708**

NOTICE

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

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

Barry R. Wallerstein, D. Env.
EXECUTIVE OFFICER

By 
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Deputy Executive Officer
Engineering & Compliance



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

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

This section consists of a table listing all permitted equipment at the facility, facility wide requirements, 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.

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PERMITTED EQUIPMENT LIST

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

Application Number	Permit to Operate Number	Equipment Description	Page Number
299283	G9737	SCRUBBER, ODOR CONTROL FOR PRIMARY BASINS	4
06049A	M30530	GAS TURBINE, EMERGENCY, >= 0.3 MW	6
06050A	M30531	GAS TURBINE, EMERGENCY, >= 0.3 MW	7
133994	R-D11231	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	8
133995	R-D11232	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	9
134619	R-D11233	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	10
135464	R-D11234	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	11
13973X	743973	SPRAY BOOTH PAINT AND SOLVENT	12
223413	F00876	BOILER (5-20 MMBTU/HR) DIGESTER GAS	13
356878	F66565	SEWAGE TREATMENT (>5 MG/D) ANEROBIC	15
386679	F40906	SCRUBBER, ODOR CONTROL FOR DEWATERING	18
408166	F55982	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	19
428945	F68430	I C E (>500 HP) EMERGENCY ELEC GEN DIESEL	20
429662	F71054	FLARE, ENCLOSED LANDFILL/DIGESTER GAS	21
444109	F99404	SCRUBBER, ODOR CONTROL FOR HEADWORKS	26
459958	F94280	ODOR CONTROL UNIT FOR ELLIS PUMP STATION	28
486760	G2955	I C E (>500 HP) NAT & DIGESTER GAS	30
486792	G2956	I C E (>500 HP) NAT & DIGESTER GAS	33
486793	G2957	I C E (>500 HP) NAT & DIGESTER GAS	36
512830	G19907	STORAGE TANK, HCl, 8000 GALLON CAPACITY, HCl	39
512831	G19908	STORAGE TANK, HCl, 2000 GALLON CAPACITY, HCl	40

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



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FACILITY WIDE CONDITION (S)

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 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER. [RULE 431.2, 1470]
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]



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**Permit No. G9737
A/N 299283**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (PRIMARY BASINS) CONSISTING OF:

1. FOUR SCRUBBERS, NOS. 5 THROUGH 8, EACH VERTICAL TYPE, PACKED TOWER, 10'-0" DIA. X 33'-0" H., WITH ASSOCIATED PUMPS.
2. CHEMICAL FEED WHICH MAY INCLUDE CAUSTIC, HYDROGEN PEROXIDE OR BLEACH..
3. AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H₂S) MONITORING SYSTEM.
4. EXHAUST SYSTEM WITH ASSOCIATED TWO-SPEED BLOWERS, 116, 200 CFM MAXIMUM FOUL-AIR VENTILATION RATE, VENTING PRIMARY SEDIMENTATION BASINS NOS. 1 THROUGH 31.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]



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4. THIS EQUIPMENT SHALL BE IN OPERATION, WHEN THE BASIC EQUIPMENT DESCRIBED UNDER PC 453210 ARE IN OPERATION, TO MAINTAIN THE SCRUBBER OUTLET H₂S CONCENTRATIONS SPECIFIED UNDER CONDITION NO. 8, AS MEASURED BY THE AUTOMATIC CHEMICAL FEED AND H₂S MONITORING SYSTEM 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]
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 NOT OPERATING, 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, 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 2 PPMV AND 3 PPMV WHEN THE EXHAUST BLOWER IS OPERATING AT LOW AND HIGH SPEED, RESPECTIVELY.
[RULE 402]
8. RECORDS SHALL BE KEPT AND MAINTAINED FOR DAILY AVERAGE 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]



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**Permit No. M30530
A/N 06049A**

Equipment Description:

GAS TURBINE #1, SOLAR, MODEL NO. GSE 1000, 14,000,000 BTU PER HOUR, OIL FIRED, DRIVING A 900 KW EMERGENCY ELECTRIC GENERATOR.

Conditions:

1. THIS EMERGENCY STAND BY EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE EQUIPMENT, DURING MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 CENTRAL POWER GENERATION SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]
2. THIS EQUIPMENT SHALL BE OPERATED LESS THAN 199 HOURS PER CALENDAR YEAR.
[RULE 1304(a) (4)-MODELING & OFFSET EXEMPTION]

Periodic Monitoring:

3. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETTABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE EQUIPMENT.
[RULE 3004 (a)(4)]
4. RECORDS OF DAILY HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER UPON REQUEST.
[RULE 3004(a) (4)]

Emissions And Requirements:

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

SULFUR COMPOUNDS: 500 PPMV, CALCULATED AS SO₂
[RULE 53]



**FACILITY PERMIT TO OPERATE
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**Permit No. M30531
A/N 06050A**

Equipment Description:

GAS TURBINE #2, SOLAR, MODEL NO. GSE 1000, 14,000,000 BTU PER HOUR, OIL FIRED, DRIVING A 900 KW EMERGENCY ELECTRIC GENERATOR.

Conditions:

1. THIS EMERGENCY STAND BY EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE EQUIPMENT, DURING MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 CENTRAL POWER GENERATION SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a) (4)-MODELING & OFFSET EXEMPTION]
2. THIS EQUIPMENT SHALL BE OPERATED LESS THAN 199 HOURS PER CALENDAR YEAR.
[RULE 1304(a) (4)-MODELING & OFFSET EXEMPTION]

Periodic Monitoring:

3. THE OPERATOR SHALL INSTALL AND MAINTAIN A NON-RESETABLE ELAPSED TIME METER TO ACCURATELY INDICATE THE ELAPSED OPERATING TIME OF THE EQUIPMENT.
[RULE 3004 (a)(4)]
4. RECORDS OF DAILY HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO THE EXECUTIVE OFFICER UPON REQUEST.
[RULE 3004(a) (4)]

Emissions And Requirements:

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

SULFUR COMPOUNDS: 500 PPMV, CALCULATED AS SO₂
[RULE 53]

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**Permit No. R-D11231
A/N 133994**

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 2, CATERPILLAR, COMPRESSION-IGNITION, FOUR-STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SER. NO. 24Z01551, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRIC 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 EQUIPMENT SHALL ONLY BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. A NON RESETTABLE TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a) (4)-MODELING & OFFSET EXEMPTION]
6. RECORDS OF HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]
7. THIS EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE ENGINE, MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 POWER SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]

This Permit to Operate No. R-D11231 supersedes Permit to Operate No. R-D11231 reissued on 10/15/96.

Emissions And Requirements:

8. 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.



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Permit No. R-D11232
A/N 133995

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 1, CATERPILLAR, COMPRESSION-IGNITION, FOUR-STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SER. NO. 24Z01548, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRIC 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 EQUIPMENT SHALL ONLY BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. A NON RESETTABLE TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. RECORDS OF HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]
7. THIS EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE ENGINE, MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 POWER SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]

This Permit to Operate No. R-D11232 supersedes Permit to Operate No. R-D11232 reissued on 10/15/96.

Emissions And Requirements:

8. 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.



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**Permit No. R-D11233
A/N 134619**

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 3, CATERPILLAR, COMPRESSION-IGNITION, FOUR-STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SER. NO. 24Z01552, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRIC 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 EQUIPMENT SHALL ONLY BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 199 HOURS IN ANY ONE-YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. A NON RESETTABLE TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. RECORDS OF HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]
7. THIS EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE ENGINE, MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 POWER SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]

This Permit to Operate No. R-D11233 supersedes Permit to Operate No. R-D11233 reissued on 10/15/96.

Emissions And Requirements:

8. 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.



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Permit No. R-D11234
A/N 135464

Equipment Description:

INTERNAL COMBUSTION ENGINE NO. 4, CATERPILLAR, COMPRESSION-IGNITION, FOUR-STROKE, TURBOCHARGED-AFTERCOOLED, V-12 TYPE, MODEL NO. 3512, SER. NO. 24Z01540, 1482 HP, DIESEL OIL-FIRED, DRIVING A 1000 KW EMERGENCY ELECTRIC 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 EQUIPMENT SHALL ONLY BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. THIS ENGINE SHALL NOT BE OPERATED MORE THAN 199 HOURS IN ANY ONE YEAR.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. A NON RESETTABLE TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a)(4)-MODELING & OFFSET EXEMPTION]
6. RECORDS OF HOURS OF ENGINE OPERATION SHALL BE MAINTAINED AND KEPT FOR AT LEAST FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]
7. THIS EQUIPMENT MAY ONLY OPERATE FOR MAINTENANCE TESTING OF THE ENGINE, MAINTENANCE AND RELIABILITY TESTING OF PLANT NO. 1 OR PLANT NO. 2 POWER SYSTEMS, DURING EXCESS POWER DEMANDS, OR DURING A UTILITY POWER OUTAGE.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]

This Permit to Operate No. R-D11234 supersedes Permit to Operate No. R-D11234 reissued on 10/15/96.

Emissions And Requirements:

8. 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.



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**Permit No. 743973
A/N 13973X**

Equipment Description:

PAINT SPRAY BOOTH, WITH EXHAUST FILTERS AND ONE 7.5 HP EXHAUST FAN

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]

Emissions And Requirements:

3. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
VOC: RULE 109
VOC: RULE 442
VOC: RULE 1107, SEE APPENDIX B FOR EMISSION LIMITS
VOC: RULE 1136, SEE APPENDIX B FOR EMISSION LIMITS
VOC: RULE 1151, SEE APPENDIX B FOR EMISSION LIMITS
VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 481



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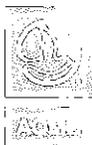
**Permit No. F00876
A/N 223413**

Equipment Description:

BOILER, NO. 1, CLEAVER BROOKS, MODEL NO. NCB-700-150, SERIAL NO. L-26853, 150 HP, 6.28 MMBTU/HR, DIGESTER GAS FIRED WITH A NATURAL GAS FIRED PILOT.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE MAXIMUM QUANTITY OF DIGESTER GAS FUEL FIRED IN THIS BOILER SHALL NOT EXCEED 16,363,000 CUBIC FEET PER YEAR NOR A HEAT INPUT OF 9,000,000,000 BTU'S PER YEAR.
[RULE 1146 (c) (6)]
4. THIS BOILER SHALL ONLY BURN DIGESTER GAS.
[RULE 204]
5. THE COUNTY SANITATION DISTRICTS OF ORANGE COUNTY (CSDOC) SHALL INSTALL AND MAINTAIN A NON-RESETTABLE, TOTALIZING GAS METER TO MEASURE THE QUANTITY (IN CFM) OF DIGESTER GAS USED IN THIS EQUIPMENT.
[RULE 1146],[RULE 1303(b)(1) AND 1303(b)(2)-MODELING & OFFSET]
6. RECORDS OF THE DAILY FUEL USAGE OF THIS EQUIPMENT AND THE TOTAL HOURS PER DAY OF STEAMING OF THE PLANT SLUDGE LINES SHALL BE KEPT AND MAINTAINED FOR AT LEAST FIVE YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1304(a)(4)-MODELING & OFFSET EXEMPTION]



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Periodic Monitoring:

7. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE NO_x AND CO EMISSION LIMIT(S) BY CONDUCTING A TEST AT LEAST ONCE EVERY FIVE YEARS USING A PORTABLE ANALYZER AND AQMD-APPROVED TEST METHOD OR, IF NOT AVAILABLE, A NON-AQMD APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS TO DEMONSTRATE COMPLIANCE WITH RULE 1146 CONCENTRATION LIMIT. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT.
[RULE 1146, 3004 (a) (4)]

Emissions And Requirements:

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

CO: 2000 PPMV, RULE 407
CO: 400 PPMV, RULE 1146
NO_x: 30 PPMV, RULE 1146
PM: 0.1 gr/scf, RULE 409



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. F66565
A/N 356878

Equipment Description:

SEWAGE TREATMENT PLANT, 216 MGD CAPACITY, CONSISTING OF:

1. HEADWORKS STATION NO. 1 WITH TWO GRIT CHAMBERS, 28'-0" L. X 20'-0" W. X 14'-0" D., TWO SPLITTER BOXES, 15'-0" L. X 4'-0" W. X 7'-6" D., TWO GRIT CLASSIFIERS, AND ASSOCIATED PUMPS AND BLOWER.
2. HEADWORKS STATION NO. 2 WITH FIVE GRIT CHAMBERS, 38'-0" L. X 20'-0" W. X 14'-0" D., THREE SPLITTER BOXES, 15'-0" L. X 8'-0" W. X 15'-0" D., FOUR BAR SCREENS WITH A RAKE ASSEMBLY, EIGHT GATE OPERATORS, FIVE SPLITTER BOX WEIR GATE OPERATORS, AND ASSOCIATED PUMPS, BLOWERS AND COMPRESSOR.
3. FIFTEEN PRIMARY BASINS CONSISTING OF TWO 188'-0" L. X 40'-0" W. X 9'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS, THREE 140'-0" DIA. X 9'-0" D. CIRCULAR BASINS WITH ALUMINUM GEODESIC DOME COVERS, TEN 10'-0" L. X 195'-0" W. X 10'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS AND ASSOCIATED PUMPS AND BLOWERS.
4. FOUR TRICKLING FILTERS, EACH 180' DIA. X 6'-0" D., WITH TWO GATE OPERATORS AND ASSOCIATED PUMPS.
5. FIFTEEN SECONDARY CLARIFIERS CONSISTING OF ONE 140'-0" DIA. X 9'-0" D. AND TWENTY-FOUR 150'-0" L. X 40'-0" W. X 10'-0" D. WITH ASSOCIATED PUMPS.
6. ACTIVATED SLUDGE PLANT PRIMARY EFFLUENT PUMP STATION WITH ASSOCIATED PUMPS.
7. TEN AERATION BASINS, EACH 275'-0" L. X 45'-0" W. X 15'-0" D. WITH ASSOCIATED BLOWERS.
8. SIX SLUDGE THICKENERS, EACH 40'-0" DIA. X 8'-0" D., WITH ASSOCIATED SWEEP DRIVER AND CONVEYORS.
9. TWELVE DIGESTER TANKS CONSISTING OF FOUR 90'-0" DIA. X 30'-0" D, EACH 208,780 CUBIC FEET CAPACITY, EIGHT 110'-0" DIA. X 30'-0" D, EACH APPROXIMATELY 330,430 CUBIC FEET CAPACITY WITH ASSOCIATED PUMPS AND COMMUNUTERS.
10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'-0" L. X 56'-0" W. X 3'-2" D.
11. DIGESTER GAS STORAGE TANK, 25,000 CUBIC FEET CAPACITY, 42'-0" DIA. X 33'-6" H. WITH THREE COMPRESSORS.



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12. SLUDGE PROCESSING STATION WITH TWO GRINDERS, EIGHT DEWATERING FILTER PRESSES, TRANSFER PUMP HOPPERS, AUGERS, STORAGE HOPPERS AND A TRUCK LOAD-OUT HOPPER.

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, PRIMARY TREATMENT AND SOLIDS HANDLING PROCESS SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL SYSTEMS WHICH ARE IN FULL OPERATION AND GOVERNED BY THEIR VALID PERMITS TO CONSTRUCT/OPERATE ISSUED BY THE SCAQMD.
[RULE 402]
5. THE DAILY TOTAL INFLUENT FLOW, IN MILLION GALLONS PER DAY (MGD), TO THE HEADWORKS, PRIMARY TREATMENT PROCESS AND SECONDARY TREATMENT PROCESS SHALL BE RECORDED.
[RULE 1304 (a)(4) – MODELING & OFFSETS EXEMPTION]
6. THE DAILY INFLUENT FLOW TO THE PRIMARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 216 MGD EXCEPT DURING WET WEATHER PERIODS.
[RULE 1303(b)(1)-MODELING, RULE 1303 (b)(2) - OFFSET]
7. ALL OF THE DIGESTER GAS PRODUCED AT THIS FACILITY SHALL BE INCINERATED IN THE FACILITY FLARES, ENGINES OR BOILERS OR OTHER COMBUSTION EQUIPMENT WHICH HAVE VALID PERMITS TO CONSTRUCT OR OPERATE, EXCEPT DURING MAINTENANCE WORK OR CLEANING OF THE DIGESTERS AND RELATED DIGESTER GAS SYSTEM WHICH REQUIRES ISOLATION OF THE DIGESTER GAS LINE.
[RULE 402]

Emissions And Requirements:

8. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:
VOC: RULE 1179



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PERMIT TO OPERATE

**Permit No. F40906
A/N 386679**

Equipment Description:

STAND-BY AIR POLLUTION CONTROL SYSTEM (DEWATERING, P1-21) CONSISTING OF:

1. THREE SCRUBBERS, EACH 10'-0" DIA. X 38'-0" H., PACKED TOWER WITH ASSOCIATED PUMPS.
2. CHEMICAL FEED SYSTEM WHICH MAY CONTAIN CAUSTIC SODA, HYDROGEN PEROXIDE AND BLEACH.
3. AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H₂S) MONITORING SYSTEM.
4. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING DEWATERING BUILDINGS AND SLUDGE TRANSFER, STORAGE AND TRUCK LOADING SUPPLY FANS.

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. WHEN THE SCRUBBERS ARE IN OPERATION, AUTOMATIC CHEMICAL FEED AND 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]
5. WHEN THE AUTOMATIC CHEMICAL FEED AND H₂S MONITORING SYSTEM IS NOT OPERATING, PH OF THE SCRUBBING LIQUID AND THE SCRUBBER OUTLET H₂S CONCENTRATION SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.
[RULE 402]



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6. 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 2 PPMV.
[RULE 402]

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



**FACILITY PERMIT TO OPERATE
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PERMIT TO OPERATE

**Permit No. F55982
A/N 408166**

Equipment Description:

INTERNAL COMBUSTION ENGINE, CATERPILLAR, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, MODEL NO. 3512B DITA (1500 KW), 2155 BHP, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2, 1304(a) (4)-MODELING & OFFSET EXEMPTION]
4. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 199 HOURS IN ANY ONE YEAR.
[1304(a)(4)-MODELING & OFFSET EXEMPTION]
5. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 1110.2]

Emissions And Requirements:

6. 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.



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PERMIT TO OPERATE

Permit No. F68430
A/N 428945

Equipment Description:

INTERNAL COMBUSTION ENGINE, CATERPILLAR, 12 CYLINDERS, TURBOCHARGED, AFTERCOOLED, MODEL NO. 3512B DITA, SERIAL NUMBER 1GZ01277, 2155 BHP, DIESEL-FUELED, DRIVING AN EMERGENCY ELECTRICAL GENERATOR (1500KW).

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. A TIMER SHALL BE MAINTAINED TO INDICATE THE ENGINE ELAPSED OPERATING TIME.
[RULE 1110.2]
4. THE OPERATING TIME OF THIS ENGINE SHALL NOT EXCEED 199 HOURS IN ANY ONE YEAR.
[RULE 1303 (a) (1), 1303(b) (1) AND 1303 (b) (2)-BACT, MODELING AND EMISSIONS OFFSET]
5. AN ENGINE OPERATING LOG LISTING THE DATE OF OPERATION, THE ELAPSED TIME, IN HOURS, AND THE REASON FOR OPERATION SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF TWO YEARS AND MADE AVAILABLE TO DISTRICT PERSONNEL UPON REQUEST.
[RULE 204, 1110.2]
6. THIS EQUIPMENT SHALL BE A US-EPA, NON-ROAD CERTIFIED COMPRESSION IGNITION ENGINE AS EVIDENCED BY THE MANUFACTURER'S ENGINE TAG.
[RULE 1303 (a) (1)- BACT]

Emissions And Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 1470
PM: 0.40 G/BHP-HR, RULE 1303(a) (1) - BACT
VOC: 1.0 G/BHP-HR, RULE 1303(a) (1) - BACT
NOx: 6.9 G/BHP-HR, RULE 1303(a) (1) - BACT
CO: 8.5 G/BHP-HR, RULE 1303(a) (1) - BACT



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PERMIT TO OPERATE

Permit No. F71054
A/N 429662

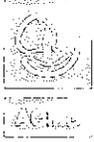
Equipment Description:

DIGESTER GAS FLARING SYSTEM (PLANT NO. 1) CONSISTING OF:

1. FLARE NO. 1, 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. FLARE NO. 2, 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.
3. FLARE NO. 3, 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.
4. 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 1304 (b) (2)-MODELING & OFFSETS]
5. THE HOURLY AVERAGE TOTAL VOLUME OF DIGESTER GAS BURNED IN THE FLARING SYSTEM (3-FLARES) SHALL NOT EXCEED 2250 SCFM.
[RULE 1303 (b) (1) AND 1304 (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 1304(a) (4)-MODELING & OFFSET EXEMPTION]



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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) AND 1303 (a)(4) - 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) AND 1303 (a)(4) - BACT]
9. AUTOMATIC DAMPERS TO REGULATE THE FLOW OF COMBUSTION AIR SHALL BE MAINTAINED FOR EACH FLARE.
[RULE 1303(a)(1) AND 1303 (a)(4) - 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 SCAQMD PERSONNEL.
[RULE 204]
11. A FLARE FAILURE ALARM SYSTEM CONSISTING OF A FLAMEOUT 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 TWO YEARS.
[RULE 1303(a)(1) AND 1303 (a)(4) - 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:
 - A. METHANE (LBS/HR)
 - B. TOTAL NON-METHANE HYDROCARBONS (LB/HR)
 - C. OXIDES OF NITROGEN (AS NO₂, EXHAUST ONLY, PPMV @ 3% O₂, DRY, LBS/HR)
 - D. CARBON MONOXIDE (EXHAUST ONLY, PPMV @ 3% O₂, DRY, LBS/HR).
 - E. TOTAL PARTICULATES (EXHAUST ONLY, GR/DSCF, LBS/HR).
 - F. CHEMICAL COMPOUNDS CONCENTRATION IN UG/M3, -INCLUDING BUT NOT LIMITED TO:
 - a. ACETALDEHYDE
 - b. ACROLEIN
 - c. BENZENE



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- d. CARBON TETRACHLORIDE
- 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. EMISSIONS RESULTING FROM EACH FLARE OPERATION SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/HR
NOX, AS NO2	1.75
SOX, AS SO2	0.3
CO	8.33
PM	1.13
ROG	0.50

[RULE 1303(b) (1) - MODELING, RULE 431.1]

14. TOTAL EMISSIONS FROM THE FLARING OPERATION (3 FLARES) AND PLANT-1 CENTRAL POWER GENERATION ENGINES, WHEN OPERATED SIMULTANEOUSLY, SHALL NOT EXCEED THE FOLLOWING:

POLLUTANT	LBS/DAY
NOX, AS NO2	408
SOX, AS SO2	43
CO	1301
PM	63
ROG	288

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



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15. 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 SCAQMD. ADEQUATE AND SAFE ACCESS TO THE TEST PORTS SHALL BE PROVIDED BY THE COUNTY SANITATION DISTRICTS OF ORANGE COUNTY.
[RULE 217]

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

POLLUTANT	LBS/DAY
NOX, AS NO2	123
SOX, AS SO2	22
CO	600
PM	81
ROG	36

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

17. THESE FLARES SHALL NOT OPERATE SIMULTANEOUSLY WITH THE PLANT CENTRAL POWER GENERATION SYSTEM ENGINES (AS DESCRIBED UNDER THEIR ACTIVE PERMITS) WITH THE FOLLOWING EXCEPTIONS:

- I. DURING ROUTINE AND UNFORESEEN MAINTENANCE TESTING OF THE FLARES.
- II. WHEN THERE IS EXCESS DIGESTER GAS DUE TO MAINTENANCE, START-UP, SHUTDOWN, OR TESTING OF ENGINE(S), WHEN DIGESTER GAS THAT CANNOT BE USED BY THE ENGINES OR OTHER PERMITTED DIGESTER GAS FUELED EQUIPMENT, OR DURING SHUTDOWN OF THE INTERPLANT DIGESTER GAS TRANSPORT LINE DUE TO LEAKS, MAINTENANCE OR CONSTRUCTION WORK.
- III. WHEN THERE IS EXCESS DIGESTER GAS AT PLANT NO. 2 (HUNTINGTON BEACH, FACILITY ID. NO. 29110), DURING UNFORESEEN CIRCUMSTANCES, WHEN DIGESTER GAS CANNOT BE USED BY OTHER PERMITTED DIGESTER GAS FUELED EQUIPMENT AND HAS TO BE TRANSPORTED TO PLANT NO. 1 THROUGH INTERPLANT DIGESTER GAS TRANSPORT LINE.

[RULE 1304 (a) – MODELING \$ OFFSET EXEMPTIONS]

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

19. 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, RULE 431.1]

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



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21. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH RULE 431.1.
[RULE 431.1]

Emissions And Requirements:

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

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS
PM: RULE 409



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

PERMIT TO OPERATE

**Permit No. F99404
A/N 444109**

Equipment Description:

AIR POLLUTION CONTROL SYSTEM (HEADWORKS) CONSISTING OF:

1. FOUR SCRUBBERS, NOS. 1 THROUGH 4, EACH VERTICAL TYPE, PACKED TOWER, 9'-0" DIA. X 36'-9" H., WITH ASSOCIATED PUMPS AND INLET BLOWERS.
2. SCRUBBER NOS. 9, VERTICAL TYPE, PACKED TOWER, 6'-0" DIA. X 34'-0" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.
3. BIOTRICKLING FILTER NO. 10 WITH POLYURETHANE FOAM PACKING, 6'-0" DIA. X 34'-0" H., WITH ASSOCIATED PUMPS AND INLET BLOWER.
4. AUTOMATIC CHEMICAL FEED AND HYDROGEN SULFIDE (H₂S) MONITORING SYSTEM.
5. EXHAUST SYSTEM WITH ASSOCIATED BLOWERS VENTING THE EXISTING METERING AND DIVERSION STRUCTURE, HEADWORKS NO. 1, SUNFLOWER PUMP STATION, BAR SCREEN BUILDING, BIN LOADING AND GRIT WASHER FACILITY AND GRIT CHAMBER/SPLITTER BOX 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. SCRUBBER NO. 9 AND BIOTRICKLING FILTER NO. 10 SHALL ONLY EXHAUST INTO THE SCRUBBER NOS. 1 THROUGH 4.
[RULE 402]



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5. AT LEAST TWO APC EQUIPMENT (SCRUBBERS OR BIOTRICKLING FILTER) 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 FILTER 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 402]

6. WHEN ANY OF THE SCRUBBERS 1 THROUGH 4 OR SCRUBBER 9 OR BIOTRICKLING FILTER 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, PH OF THE SCRUBBING OR RECYCLING LIQUID, MAKEUP WATER FLOW RATE (GPM), DIFFERENTIAL PRESSURE DROP (IN INCHES OF WATER COLUMN), FOR SCRUBBERS 1 THROUGH 4 OR SCRUBBER 9 OR BIOTRICKLING FILTER SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDATIONS. THE OPERATING PARAMETERS AS DESCRIBED SHALL BE MEASURED AND RECORDED AT LEAST ONCE PER SHIFT.

[RULE 402]

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 3.5 PPMV. EMISSIONS 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 BIOTRICKLING FILTER 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 CONSTRUCT/ OPERATE

**Permit No. F94280
A/N 459958**

Equipment Description:

ODOR CONTROL SYSTEM CONSISTING OF;

1. FOUL AIR DUCT FROM WET WELL AND ASSOCIATED TRUNK LINES (ELLIS PUMP STATION, OCSD PLANT NO. 1).
2. TWO BLOWERS, IN PARALLEL, EACH 7500 SCFM FLOW RATE.
3. TWO ADSORBERS, IN PARALLEL, CONTAINING US FILTER/WESTATES MIDAS OCM OR CALGON CARBON MINOTAUR, EACH WITH A MINIMUM OF 8000 LBS OF HIGH H₂S CAPACITY ACTIVATED CARBON.
4. TWO EXHAUST STACKS, EACH 2' - 6" DIA. X 6.5' H., WITH A RAIN CAP.

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. 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]
4. IDENTIFICATION TAG (S) OR NAMEPLATE (S) SHALL BE DISPLAYED ON THE EQUIPMENT TO SHOW MANUFACTURER MODEL NO. AND SERIAL NO. THE TAG (S) OR PLATE (S) SHALL BE ISSUED BY THE MANUFACTURER AND SHALL BE AFFIXED TO THE EQUIPMENT IN A PERMANENT AND CONSPICUOUS POSITION.
[RULE 204]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

5. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO EACH CARBON ADSORBER TO INDICATE THE FOUL AIR TREATED, IN CUBIC FEET PER MINUTE (CFM). IN CASE A PRESSURE SENSOR DEVICE IS USED IN PLACE OF THE FLOW METER, A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDING FLOW RATE, IN CFM, TO THE PRESSURE READING.
[RULE 204]
6. MAXIMUM FOUL AIR FLOW TO BE TREATED BY EACH OF THE CARBON ADSORBER SHALL NOT EXCEED 7500 CFM.
[RULE 402]
7. FOR EACH CARBON ADSORBER, AMMONIA, H₂S, AND TOTAL VOLATILE COMPOUNDS (TOCs) CONCENTRATIONS (PPMV) SHALL BE MONITORED AT EACH EXHAUST STACK AT LEAST ONCE A MONTH, USING AN APPROVED AND CALIBRATED INSTRUMENT OR APPROVED SAMPLING AND ANALYTICAL METHODS. RECORDS SHALL BE MAINTAINED AND KEPT ON FILE.
[RULE 204]
8. AMMONIA CONCENTRATION AT THE EXHAUST FROM EACH CARBON ADSORBER SHALL NOT EXCEED 1 PPMV.
[RULE 402, 1401]
9. THE HYDROGEN SULFIDE (H₂S) CONCENTRATION MEASURED AT THE EXHAUST FROM EACH CARBON SHALL NOT EXCEED 0.4 PPMV.
[RULE 402, 1401]
10. THE TOC CONCENTRATION MEASURED AT THE EXHAUST FROM EACH CARBON SHALL NOT EXCEED 0.2 PPMV.
[RULE 204]
11. IF THE HYDROGEN SULFIDE (H₂S) CONCENTRATION MEASURED AT THE EXHAUST STACK IS DETECTED ABOVE 0.36 PPMV, THEN FOUL AIR INLET DAMPER TO THE RESPECTIVE CARBON ADSORBER SHALL BE CLOSED AND IMMEDIATE CORRECTIVE MEASURES SHALL BE TAKEN INCLUDING ACTIVATED CARBON REPLACEMENT, WITH FRESH CARBON, BEFORE RESUMING OPERATION.
[RULE 402, 1401]
12. SPENT CARBON REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 204]
13. IF THE OPERATION OF THIS EQUIPMENT RESULTS IN CONSIDERABLE NUMBER OF ODOR COMPLAINTS, THE WORK SHALL CEASE AND MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL EMISSIONS CAUSING THE COMPLAINTS IS MITIGATED.
[RULE 402]
14. 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. G2955
A/N 486760**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 3 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG3-FV), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-12 TYPE, MODEL NO. LSVB-12-SGC, 3471HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 2500 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 5,008,500 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]



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9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 28.5 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	590 PPMV AT 15% O2
PARTICULATES (PM10)	0.0087 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	209 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 THREE (3) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	1321
NITROGEN OXIDES (AS NO2)	368
PARTICULATES (PM10)	36
ROG OR TNMHC (AS CH4)	276
SULFUR DIOXIDE	36
[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).



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- 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

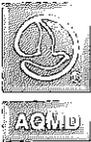
[RULE 1303(b) (1) AND 1303(b) (2) - MODELING AND EMISSION OFFSET], [RULE 1110.2], [RULE 404]

- 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 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
ROG: 313 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO OPERATE

Permit No. G2956
A/N 486792

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 2 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG2-FV), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-12 TYPE, MODEL NO. LSVB-12-SGC, 3471HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 2500 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 5,008,500 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-RESETTING 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 28.5 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	590 PPMV AT 15% O2
PARTICULATES (PM10)	0.0087 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	209 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 THREE (3) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	1321
NITROGEN OXIDES (AS NO2)	368
PARTICULATES (PM10)	36
ROG OR TNMHC (AS CH4)	276
SULFUR DIOXIDE	36
[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 NO_x AND O₂ CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NO_x TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NO_x 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).



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- 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 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
 - ROG: 313 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
 - PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

PERMIT TO OPERATE

**Permit No. G2957
A/N 486793**

Equipment Description:

RESOURCE RECOVERY SYSTEM NO. 1 CONSISTING OF:

INTERNAL COMBUSTION ENGINE (CG1-FV), COOPER BESSMER, SPARK IGNITION, FOUR STROKE, WITH A MODIFIED TURBOCHARGED-INTERCOOLED V-12 TYPE, MODEL NO. LSVB-12-SGC, 3471HP, NATURAL GAS AND/OR DIGESTER GAS FIRED, DRIVING A 2500 KW ELECTRIC GENERATOR, WITH AN EXHAUST HEAT RECOVERY STEAM GENERATOR, 5,008,500 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]



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9. THE TOTAL HEAT INPUT OF GASEOUS FUEL, OR FUEL BLEND, BURNED IN THIS ENGINE SHALL NOT EXCEED 28.5 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	590 PPMV AT 15% O2
PARTICULATES (PM10)	0.0087 GRAINS/ DSCF
ROG OR TNMHC (AS CARBON)	209 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 THREE (3) CGS ENGINES, USING CALENDAR MONTHLY EMISSIONS DIVIDED BY 30, SHALL NOT EXCEED THE FOLLOWING:

AIR CONTAMINANT	LBS/DAY
CARBON MONOXIDE	1321
NITROGEN OXIDES (AS NO2)	368
PARTICULATES (PM10)	36
ROG OR TNMHC (AS CH4)	276
SULFUR DIOXIDE	36
[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 NO_x AND O₂ CONCENTRATIONS ON A DRY BASIS, EXCEPT DURING SHUTDOWN FOR MAINTENANCE OF THE SYSTEM. IN ADDITION, THE CEMS SHALL CONVERT THE ACTUAL NO_x TO MASS EMISSION RATES; AND RECORD THE ACTUAL AND CORRECTED ENGINE NO_x 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).



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- 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 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
ROG: 313 PPMV, RULE 1110.2 (WITH 1.25 ECF ADJUSTMENT FACTOR).
PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

PERMIT TO OPERATE

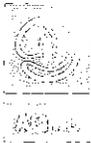
Permit No. G19907
A/N 512830

Equipment Description:

STORAGE TANK, FIXED ROOF, ID NO. 101TNK037 (P1 HEADWORKS), HYDROCHLORIC ACID, 12' - 0" DIA. X 10' - 0" H., 8,000-GALLON CAPACITY AND VENTING 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 6,000 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. G19908
A/N 512831**

Equipment Description:

STORAGE TANK, FIXED ROOF, ID NO. 11ITNK100 (P1 PRIMARY), HYDROCHLORIC ACID, 6' - 0" DIA. X 11' - 0" H., 2,000-GALLON CAPACITY AND VENTING 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 6,000 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

RULE 219 EQUIPMENT

Equipment Description:

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

Periodic Monitoring:

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

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS FOR EACH COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATINGS, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

[RULE 3004 (a) (4)]

Emissions And Requirements:

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

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



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

RULE 219 EQUIPMENT

Equipment Description:

RULE 219 EXEMPT EQUIPMENT, HAND WIPING OPERATIONS.

Emissions And Requirements:

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

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

RULE 219 EQUIPMENT

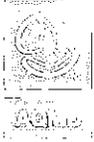
Equipment Description:

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 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, MOTOR VEHICLE AIR CONDITIONERS - REPAIR, SERVICE, MANUFACTURING, MAINTENANCE, OR DISPOSAL.

Emissions And Requirements:

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

VOC: RULE 1411

VOC: 40CFR 82 SUBPART B



**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
394229	4-19-2002	ODOR CONTROL UNIT	3
432418	11-18-2004	SEWAGE TREATMENT (>5 MG/D) ANAEROBIC	4
453210	10-17-2006	SEWAGE TREATMENT (>5 MG/D) ANAEROBIC	7
494460	02-09-2010	BOILER (>10 MMBTU/HR) NAT GAS & DIGESTER GAS	12
504150	05-05-2010	ODOR CONTROL UNIT	16
520793	08-16-2012	ODOR CONTROL UNIT	19
520794	08-16-2012	SEWAGE TREATMENT (>5 MG/D) ANAEROBIC	23

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 394229
Granted as of 4/19/2002

Equipment Description:

ODOR CONTROL SYSTEM CONSISTING OF (LOCATED AT PLANT NO. 1, WASTEHAULER STATION):

1. BIOFILTER, BIOREM, SINGLE MODULE, WITH INCOMING FOUL AIR HUMIDIFICATION CHAMBER, BIOFILTER MEDIA, IRRIGATION SYSTEM AND ASSOCIATED PUMPS.
2. TWO EXHAUST BLOWERS (ONE STAND-BY), 300 CFM CAPACITY.

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. ORANGE COUNTY SANITATION DISTRICT (OCS D) SHALL PROVIDE TO SCAQMD FINAL DESIGN DRAWINGS, PROCESS AND FLOW DIAGRAM, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, SIZE AND MAXIMUM CAPACITY) PRIOR TO INSTALLATION OF THE EQUIPMENT. DEVIATIONS FROM THE ABOVE DESCRIPTION AND PROPOSED DESIGN AFFECTING EQUIPMENT PERFORMANCE OR EMISSIONS SHALL BE APPROVED IN WRITING BY THE AQMD.
[RULE 204]
5. THE CONCENTRATION OF H₂S FOR THE INLET AND OUTLET OF THE BIOFILTER SHALL BE MEASURED AT LEAST ONCE PER WEEK. THE H₂S CONCENTRATION IN BIOFILTER EXHAUST SHALL NOT EXCEED 2 PPMV AVERAGED OVER THE NUMBER OF MEASUREMENTS TAKEN OVER ANY GIVEN WEEK.
[RULE 402]
6. THE BED DEPTH AND BED PACKING SHALL BE DESIGNED TO ACHIEVE A MINIMUM EBRT OF 40 SECONDS.
[RULE 402]
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 204]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 432418
Granted as of 11/18/2004

Equipment Description:

ALTERATION OF THE EXISTING SEWAGE TREATMENT PLANT, COVERED BY PERMIT TO CONSTRUCT APPLICATION NO. 407071 (AND EXISTING P/O F66565), CONSISTING OF:

1. HEADWORKS STATION NO. 1 WITH TWO GRIT CHAMBERS, 28'-0" L. X 20'-0" W. X 14'-0" D., TWO SPLITTER BOXES, 15'-0" L. X 4'-0" W. X 7'-6" D., TWO GRIT CLASSIFIERS, AND ASSOCIATED PUMPS AND BLOWER.
2. HEADWORKS STATION NO. 2 WITH FIVE GRIT CHAMBERS, 38'-0" L. X 20'-0" W. X 14'-0" D., THREE SPLITTER BOXES, 15'-0" L. X 8'-0" W. X 15'-0" D., FOUR BAR SCREENS WITH A RAKE ASSEMBLY, EIGHT GATE OPERATORS, FIVE SPLITTER BOX WEIR GATE OPERATORS, AND ASSOCIATED PUMPS, BLOWERS AND COMPRESSOR.
3. FIFTEEN PRIMARY BASINS CONSISTING OF TWO 188'-0" L. X 40'-0" W. X 9'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS, THREE 140'-0" DIA. X 9'-0" D. CIRCULAR BASINS WITH ALUMINUM GEODESIC DOME COVERS, TEN 10'-0" L. X 195'-0" W. X 10'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS AND ASSOCIATED PUMPS AND BLOWERS.
4. FOUR TRICKLING FILTERS, EACH 180' DIA. X 6'-0" D., WITH TWO GATE OPERATORS AND ASSOCIATED PUMPS.
5. SECONDARY CLARIFIERS CONSISTING OF ONE 140'-0" DIA. X 9'-0" D., AND TWENTY-FOUR 150'-0" L. X 40'-0" W. X 10'-0" D. WITH ASSOCIATED PUMPS.
6. ACTIVATED SLUDGE PLANT PRIMARY EFFLUENT PUMP STATION WITH ASSOCIATED PUMPS.
7. TEN AERATION BASINS, EACH 275'-0" L. X 45'-0" W. X 15'-0" D. WITH ASSOCIATED BLOWERS.
8. SIX SLUDGE THICKENERS, EACH 40'-0" DIA. X 8'-0" D., WITH ASSOCIATED SWEEP DRIVER AND CONVEYORS.
9. TWELVE DIGESTER TANK CONSISTING OF FOUR 90'-0" DIA. X 30'-0" D, EACH 208,780 CUBIC FEET CAPACITY, EIGHT 110'-0" DIA. X 30'-0" D, EACH APPROXIMATELY 330,430 CUBIC FEET CAPACITY WITH ASSOCIATED PUMPS AND COMMINUTERS.
10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'-0" L. X 56'-0" W. X 3'-2" D.
11. DIGESTER GAS STORAGE TANKS, 25,000 CUBIC FEET CAPACITY, 42'-0" DIA. X 33'-6" H. WITH THREE COMPRESSORS.



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

12. SLUDGE PROCESSING STATION WITH TWO GRINDERS, EIGHT DEWATERING FILTER PRESSES, TRANSFER PUMP HOPPERS, AUGERS, STORAGE HOPPERS AND A TRUCK LOAD-OUT HOPPER.

BY THE ADDITION OF:

1. SIXTEEN PRIMARY BASINS, 195'-0" L. X 40'-0" W. X 10'-0" D., EACH WITH CONCRETE COVERS AND 6 MGD AVERAGE CAPACITY AND ASSOCIATED PUMPS AND BLOWERS.
2. FOUR EXISTING TRICKLING FILTERS (ITEM NO. 4 ABOVE) REPLACED WITH TWO NEW TRICKLING FILTERS, EACH 166' DIA. X 20' - 0" MEDIA DEPTH, AND ASSOCIATED PUMPS. EACH NEW TRICKLING FILTER WITH TWO EXHAUST STACKS, EACH STACK 40' HIGH, AND WITH A TOTAL AIR FLOW RATE OF 25,000 CFM PER TRICKLING FILTER.
3. ONE EXISTING SECONDARY CLARIFIER (ITEM NO. 5 ABOVE) REPLACED WITH TWO NEW SECONDARY CLARIFIERS CONSISTING OF 175' - 0" DIA. X 15' - 0" D. WITH ASSOCIATED PUMPS.
4. TWO NEW SECONDARY CLARIFIERS, EACH 150'-0" L. X 40'-0" W. X 10' - 0" D., WITH ASSOCIATED PUMPS (ITEM NO 5).

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 HEADWORKS FACILITIES, PRIMARY TREATMENT BASINS, AND SLUDGE PROCESS STATION SHALL NOT BE OPERATED UNLESS THEY ARE FULLY ENCLOSED AND THEIR EXHAUST AIR VENTED TO AIR POLLUTION CONTROL SYSTEMS, WHICH ARE IN FULL OPERATION AND HAVE VALID PERMITS TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD.
[RULE 402]
5. THE DAILY TOTAL INFLUENT FLOW, IN MILLION GALLONS PER DAY (MGD), TO THE HEADWORKS, PRIMARY TREATMENT PROCESS, AND SECONDARY TREATMENT PROCESS SHALL BE RECORDED.
[RULE 204]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

6. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE PRIMARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 216 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304(a) (4)-MODELING & OFFSETS EXEMPTION]
7. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE SECONDARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 92 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304(a) (4)-MODELING & OFFSETS EXEMPTION]
8. THE HYDROGEN SULFIDE (H₂S) CONCENTRATION (PPMV) IN THE EXHAUST STACKS OF EACH TRICKLING FILTER SHALL BE MEASURED AND RECORDED ON A DAILY BASIS.
[RULE 402]
9. RAW DIGESTER GAS PRODUCED AT THIS FACILITY SHALL NOT BE RELEASED INTO THE ATMOSPHERE. ALL COLLECTED DIGESTER GAS SHALL BE EITHER BE COMBUSTED IN DIGESTER GAS FLARES, INTERNAL COMBUSTION ENGINES, OR BOILERS, WHICH HAVE VALID PERMITS TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD, EXCEPT DURING MAINTENANCE WORK OR CLEANING OF THE DIGESTERS AND RELATED DIGESTER GAS SYSTEM WHICH REQUIRES ISOLATION OF THE DIGESTER GAS LINE, IN WHICH CASE COLLECTED DIGESTER GAS SHALL BE TREATED BY ACTIVATED CARBON.
[RULE 402]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 453210
Granted as of 10/17/2006

Equipment Description:

ALTERATION OF THE EXISTING SEWAGE TREATMENT PLANT (216 MGD), COVERED BY PERMIT TO CONSTRUCT APPLICATION NO.432418 (AND EXISTING P/O F66565), CONSISTING OF:

1. HEADWORKS STATION NO. 1 WITH TWO GRIT CHAMBERS, 28'-0" L. X 20'-0" W. X 14'-0" D., TWO SPLITTER BOXES, 15'-0" L. X 4'-0" W. X 7'-6" D., TWO GRIT CLASSIFIERS, AND ASSOCIATED PUMPS AND BLOWER.
2. HEADWORKS STATION NO. 2 WITH FIVE GRIT CHAMBERS, 38'-0" L. X 20'-0" W. X 14'-0" D., THREE SPLITTER BOXES, 15'-0" L. X 8'-0" W. X 15'-0" D., FOUR BAR SCREENS WITH A RAKE ASSEMBLY, EIGHT GATE OPERATORS, FIVE SPLITTER BOX WEIR GATE OPERATORS, AND ASSOCIATED PUMPS, BLOWERS AND COMPRESSOR.
3. FIFTEEN PRIMARY BASINS CONSISTING OF TWO 188'-0" L. X 40'-0" W. X 9'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS, THREE 140'-0" DIA. X 9'-0" D. CIRCULAR BASINS WITH ALUMINUM GEODESIC DOME COVERS, TEN 10'-0" L. X 195'-0" W. X 10'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS AND ASSOCIATED PUMPS AND BLOWERS.
4. FOUR TRICKLING FILTERS, EACH 180' DIA. X 6'-0" D., WITH TWO GATE OPERATORS AND ASSOCIATED PUMPS.
5. SECONDARY CLARIFIERS CONSISTING OF ONE 140'-0" DIA. X 9'-0" D. AND TWENTY-FOUR 150'-0" L. X 40'-0" W. X 10'-0" D. WITH ASSOCIATED PUMPS.
6. ACTIVATED SLUDGE PLANT PRIMARY EFFLUENT PUMP STATION WITH ASSOCIATED PUMPS.
7. TEN AERATION BASINS, EACH 275'-0" L. X 45'-0" W. X 15'-0" D. WITH ASSOCIATED BLOWERS.
8. SIX SLUDGE THICKENERS, EACH 40'-0" DIA. X 8'-0" D., WITH ASSOCIATED SWEEP DRIVER AND CONVEYORS.
9. TWELVE DIGESTER TANK CONSISTING OF FOUR 90'-0" DIA. X 30'-0" D, EACH 208,780 CUBIC FEET CAPACITY, EIGHT 110'-0" DIA. X 30'-0" D, EACH APPROXIMATELY 330,430 CUBIC FEET CAPACITY WITH ASSOCIATED PUMPS AND COMMUNUTERS.
10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'-0" L. X 56'-0" W. X 3'-2" D.
11. DIGESTER GAS STORAGE TANKS, 25,000 CUBIC FEET CAPACITY, 42'-0" DIA. X 33'-6" H. WITH THREE COMPRESSORS.



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

12. SLUDGE PROCESSING STATION WITH TWO GRINDERS, EIGHT DEWATERING FILTER PRESSES, TRANSFER PUMP HOPPERS, AUGERS, STORAGE HOPPERS AND A TRUCK LOAD-OUT HOPPER.
 - 13.* SIXTEEN PRIMARY BASINS, 195'- 0" L. X 40'- 0" W. X 10' -0" D., EACH WITH CONCRETE COVERS AND 6 MGD AVERAGE CAPACITY AND ASSOCIATED PUMPS AND BLOWERS.
 - 14.* FOUR EXISTING TRICKLING FILTERS (ITEM NO. 4 ABOVE) REPLACED WITH TWO NEW TRICKLING FILTERS, EACH 166' DIA. X 20' - 0" MEDIA DEPTH, AND ASSOCIATED PUMPS. EACH NEW TRICKLING FILTER WITH TWO EXHAUST STACKS, EACH STACK 40' HIGH, AND WITH A TOTAL AIR FLOW RATE OF 25,000 CFM PER TRICKLING FILTER.
 - 15.* ONE EXISTING SECONDARY CLARIFIER (ITEM NO. 5 ABOVE) REPLACED WITH TWO NEW SECONDARY CLARIFIERS CONSISTING OF 175' - 0" DIA. X 15' - 0" D. WITH ASSOCIATED PUMPS.
- * Construction for the above items 13, 14, and 15 has been completed (under A/N 407071).

BY THE ADDITION OF: (OCSD JOB NO. P1-82 ACTIVATED SLUDGE PLANT REHABILITATION) UNDER A/N 432418.

16. TWO NEW SECONDARY CLARIFIERS, EACH 150'- 0" L. X 40'- 0" W. X 10' - 0" D.

BY THE REMOVAL OF:

10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'- 0" L. X 56'- 0" W. X 3' -2" D.

AND BY THE ADDITION OF:

17. NEW SECONDARY ACTIVATED SLUDGE FACILITY 2 (OCSD JOB NO. P1-102), AND NEW SLUDGE DEWATERING BEDS (OCSD JOB NO. P1-106) UNDER A/N 453210,
 - I. SIX AERATION BASINS (NOS. 11 THROUGH 16), COVERED, EACH 227' - 2" L. X 45' - 0" W. X 26' - 0" D., WITH ASSOCIATED AERATION BLOWERS, DIFFUSERS, MIXERS, AND PUMPS, AND VENTING THROUGH SIX STACKS, EACH 7' - 11" H., AND 10,000 SCFM.
 - II. SIX SECONDARY CLARIFIERS (NOS. 27, 29, 31, 32, 33, AND 34), UNCOVERED, EACH 155' DIA. X 16' SIDE WATER D., WITH ASSOCIATED RETURN ACTIVATED SLUDGE (RAS), WASTE ACTIVATED SLUDGE (WAS), AND SECONDARY SCUM PUMPS.
 - III. SODIUM HYPOCHLORITE (NaOCl) SOLUTION SYSTEM ADDITION (TO THE EXISTING BLEACH SYSTEM) FOR CHLORINATION OF THE TREATED EFFLUENT, RETURN ACTIVATED SLUDGE (RAS), WASTE ACTIVATED SLUDGE (WAS), AND SURFACE WASTE.
18. SLUDGE MANAGEMENT SYSTEM CONSISTING OF:
 - I. TRUCK WASH STATION
 - II. SAWDUST STORAGE
 - III. TWO (2) DEWATERING BEDS FOR PLANT CLEANING OPERATIONS, EACH 110' - 0" L. X 56' - 0" W., AND WITH APPROXIMATELY 580 CUBIC YARDS CAPACITY.
 - IV. ONE DEWATERING BED FOR PLANT CLEANING OPERATIONS, 100' - 0" L. X 24' - 0" W., WITH APPROXIMATELY 44 CUBIC YARDS CAPACITY.



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

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. ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL MAKE A WRITTEN REQUEST FOR AND OBTAIN AN EXTENSION OF TIME TO CONSTRUCT THIS EQUIPMENT ON AN ANNUAL BASIS UNTIL SUCH TIME CONSTRUCTION IS COMPLETED AND THE EQUIPMENT IS PUT INTO OPERATION. AT LEAST 30 DAYS PRIOR TO THE EXPIRATION DATE OF THE PERMIT TO CONSTRUCT, OCSD SHALL PROVIDE IN THE WRITTEN REQUEST, VERIFIABLE DATA TO AQMD IN ORDER TO SHOW COMPLIANCE WITH THE CONSTRUCTION SCHEDULE AS PROVIDED IN THE APPLICATION UNDER WHICH THIS PERMIT TO CONSTRUCT IS GRANTED. IF THERE ARE CHANGES TO THE INCREMENTS OF PROGRESS AND/OR CONSTRUCTION SCHEDULE, THEY WILL NOT BECOME EFFECTIVE UNTIL OCSD RECEIVES WRITTEN CONFIRMATION OF SUCH CHANGES FROM AQMD.
[RULE 204]
5. THE HEADWORKS FACILITIES, PRIMARY TREATMENT BASINS, AND SLUDGE PROCESS STATION SHALL NOT BE OPERATED UNLESS THEY ARE FULLY ENCLOSED AND THEIR EXHAUST AIR VENTED TO AIR POLLUTION CONTROL SYSTEMS, WHICH ARE IN FULL OPERATION AND HAVE VALID PERMITS TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD. IN THE EVENT AIR POLLUTION CONTROL SYSTEM(S) ARE SHUTDOWN FOR CONSTRUCTION OR MAINTENANCE WORK, THE H₂S EMISSIONS SHALL NOT EXCEED THE CONCENTRATION LIMITS AS SPECIFIED IN THE SHUT DOWN OF AIR POLLUTION CONTROL EQUIPMENT PERMIT.
[RULE 402]
6. THE DAILY TOTAL INFLUENT FLOW, IN MILLION GALLONS PER DAY (MGD), TO THE HEADWORKS, PRIMARY TREATMENT PROCESS, AND SECONDARY TREATMENT PROCESS SHALL BE RECORDED.
[RULE 204]
7. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE PRIMARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 216 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304 (a) (4) – MODELING & OFFSETS EXEMPTION]



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8. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE SECONDARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 92 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304 (a) (4) – MODELING & OFFSETS EXEMPTION]
9. THE AVERAGE DAILY PRIMARY EFFLUENT FLOW RATE, TREATED BY THE NEW ACTIVATED SLUDGE FACILITY 2 (JOB NO. P1-102 CONSISTING OF SIX AERATION BASINS AND SIX SECONDARY CLARIFIERS), SHALL NOT EXCEED 60 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 204]
10. WITHIN 60 DAYS AFTER ACHIEVING THE MAXIMUM INFLUENT FLOW RATE FOR THE ACTIVATED SLUDGE FACILITY 2 (JOB NO. P1-102), BUT NOT LATER THAN 180 DAYS AFTER INITIAL START-UP, ORANGE COUNTY SANITATION DISTRICT (OCS D) SHALL CONDUCT SOURCE TESTS TO DETERMINE EMISSIONS FROM AT LEAST TWO OF THE SIX NEW AERATION BASINS' EXHAUST STACKS, AND AT LEAST TWO OF THE SIX NEW SECONDARY CLARIFIERS' SURFACE EMISSIONS, 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, REFINERY 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 THE EMISSIONS TO ATMOSPHERE FROM TWO OF THE AERATION BASINS AND TWO OF THE SECONDARY CLARIFIERS FOR:
 - A. TOTAL NON-METHANE HYDROCARBONS (TNMHC) AND TOXIC AIR CONTAMINANTS (TAC) PRESENT, (LBS/HR AND PPMV).
 - B. AMMONIA AND HYDROGEN SULFIDE (H₂S), (LBS/HR AND PPMV).
 - C. CARBON DIOXIDE, OXYGEN AND NITROGEN
 - D. MOISTURE CONTENT, TEMPERATURE AND EXHAUST FLOW RATE.
11. ADEQUATE NUMBER OF SAMPLING PORTS WITH ITS SAFE ACCESS, SHALL BE INSTALLED AND MAINTAINED IN THE AERATION BASINS' EXHAUST STACK (JOB NO. P1-102) IN ACCORDANCE WITH SCAQMD'S RULE 217.
[RULE 217]
12. ORANGE COUNTY SANITATION DISTRICT (OCS D) 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 AND 212" (VERSION 7.0, JULY 1, 2005), TO DETERMINE THE COMPLIANCE WITH RULE 1401. RESULTS SHALL BE SUBMITTED TO AQMD.
[RULE 1401]



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13. IF SOURCE TESTS RESULTS INDICATE THAT THE TOTAL VOLATILE ORGANIC COMPOUNDS (VOC) EMISSIONS FROM THE AERATION BASINS EXCEED 13 LBS PER DAY OR AS DETERMINED BY AQMD, THEN OCSD SHALL CONDUCT IN DETAIL THE TECHNOLOGICAL FEASIBLE STUDY AND COST-EFFECTIVENESS ANALYSIS FOR A SUITABLE AIR POLLUTION CONTROL EQUIPMENT TO DETERMINE LOWEST ACHIEVABLE EMISSION RATE (LAER) FROM SUCH PROCESS.
[RULE 1303 (a) (1) - BACT]
14. THE HYDROGEN SULFIDE (H₂S) CONCENTRATION (PPMV) IN THE EXHAUST STACKS OF EACH TRICKLING FILTER SHALL BE MEASURED AND RECORDED ON A DAILY BASIS.
[RULE 402]
15. RAW DIGESTER GAS PRODUCED AT THIS FACILITY SHALL NOT BE RELEASED INTO THE ATMOSPHERE. 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 A PERMITTED AIR POLLUTION CONTROL DEVICE(S).
[RULE 402]
16. THE SAWDUST USED IN THE SLUDGE MANAGEMENT SYSTEM SHALL BE STORED AND KEPT SUFFICIENTLY MOIST TO PREVENT ANY AIR BORNE PARTICULATE MATTER EMISSIONS.
[RULE 402]
17. OCSD SHALL KEEP THE FOLLOWING DAILY RECORDS WITH REGARDS TO THE SLUDGE MANAGEMENT SYSTEM,
 - I. THE AMOUNT OF SLUDGE DEWATERED IN EACH DRYING BED.
 - II. NUMBER OF TRUCKS WASHED.
 - III. NUMBER OF LEAKY OR OVERFILLED TRUCKS.[RULE 204]
18. 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 204]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 494460
Granted as of 02/09/2010

Equipment Description:

BOILER, HURST BOILER AND WELDING COMPANY, MODEL S5-250-125W OR EQUIVALENT, FIRE-TUBE TYPE, WITH POWER FLAME INC., MODEL NVC8-G-30 LOW NO_x BURNER OR EQUIVALENT, 10,500,000 BTU PER HOUR, WITH DIGESTER GAS AS PRIMARY FUEL, AND NATURAL GAS AS STAND-BY FUEL.

Conditions:

1. OPERATION OF THIS EQUIPMENT SHALL BE CONDUCTED IN COMPLIANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATION UNDER WHICH THIS PERMIT IS ISSUED, UNLESS OTHERWISE NOTED BELOW.
[RULE 204]
2. THIS EQUIPMENT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.
[RULE 204]
3. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL PROVIDE TO SCAQMD FINAL BOILER DESIGN DRAWINGS, P & I DIAGRAMS, CONTROLS, EQUIPMENT SPECIFICATIONS (MAKE, MODEL, DIMENSIONS, SIZE AND MAXIMUM CAPACITY) PRIOR TO INSTALLATION OF THE EQUIPMENT.
[RULE 204]
4. THIS EQUIPMENT SHALL BE PRIMARILY FIRED WITH DIGESTER GAS. NATURAL GAS MAY BE USED AS A STANDBY FUEL, IN THE EVENT DIGESTER GAS IS NOT AVAILABLE.
[RULE 204, 1146]
5. 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]
6. WHEN IN OPERATION, TOTAL HEAT INPUT FOR THIS EQUIPMENT SHALL NOT EXCEED 10.5 MMBTU/HR. A LOG SHALL BE KEPT INDICATING THE TOTAL HEATING VALUE (BTU/SCF) OF FUEL GAS 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]



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7. 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]
8. EMISSIONS FOR OXIDES OF NITROGEN (NO_x) AND CARBON MONOXIDE (CO) SHALL NOT EXCEED THE FOLLOWING LIMITS AND SHALL BE MEASURED BY VOLUME, ON A DRY BASIS, AT 3% O₂.
- | <u>FUEL USED</u> | <u>NO_x AS NO₂</u> | <u>CO</u> |
|------------------|---|-----------|
| DIGESTER GAS | 30 PPMV | ≤100 PPMV |
| NATURAL GAS | 12 PPMV | ≤50 PPMV |
- [RULE 1146, RULE 1303 (a) (1) – BACT/LAER]
9. ON AND AFTER JANUARY 1, 2015, EMISSIONS OF NO_x SHALL NOT EXCEED 15 PPMV (CORRECTED TO 3% O₂, DRY) WHILE FIRING ON DIGESTER GAS
[RULE 1146]
10. THE OWNER OR OPERATOR OF THIS EQUIPMENT SHALL CONDUCT AN INITIAL SOURCE TEST, AND SUBSEQUENT SOURCE TESTS ONCE EVERY THREE YEARS THEREAFTER, 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 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)
 - METHANE (INLET DIGESTER GAS)
 - TOTAL NON-METHANE ORGANICS (EXHAUST & INLET DIGESTER GAS)



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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]

10. MONITORING AND TESTING OF THE BOILER SHALL BE PERFORMED ACCORDING TO RULE 1146. [RULE 1146]

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

<u>POLLUTANT</u>	<u>POUNDS PER HOUR</u>
CO	0.90 (0.43 WITH NATURAL GAS)
NO _x	0.44 (0.17 WITH NATURAL GAS)
PM ₁₀	0.056
ROG	0.083
SO _x	0.13

[RULE 404, 431.1, 1303(a) (1)-BACT, 1303(b) (2) - OFFSET]

12. THIS EQUIPMENT SHALL BE OPERATED IN COMPLIANCE WITH APPLICABLE REQUIREMENTS OF 40 CFR 63 SUBPART DDDDD. [40 CFR 63 SUBPART DDDDD]

13. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT AND MAINTAINED FOR A MINIMUM OF FIVE YEARS AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST. [RULE 3004 (a) (1)]

Periodic Monitoring:

14. THE OPERATOR SHALL DETERMINE COMPLIANCE WITH THE EMISSION LIMIT(S) IN CONDITION NO. 11, AT LEAST ONCE EVERY FIVE YEARS USING AQMD-APPROVED TEST METHOD. THE TEST SHALL BE CONDUCTED WHEN THE EQUIPMENT IS OPERATING UNDER NORMAL CONDITIONS. THE OPERATOR SHALL COMPLY WITH ALL GENERAL TESTING, REPORTING, AND RECORDKEEPING REQUIREMENTS IN SECTIONS E AND K OF THIS PERMIT. [RULE 1303 - OFFSET, 3004 (a) (4)]



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Emissions And Requirements:

15. 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
PM: 0.1 GR/SCF, RULE 409



**FACILITY PERMIT TO OPERATE
ORANGE COUNTY SANITATION DISTRICT**

PERMIT TO CONSTRUCT

**A/N 504150
Granted as of 04/30/2010**

Equipment Description:

MODIFICATION OF THE EXISTING ODOR CONTROL SYSTEM, F94280, CONSISTING OF;

1. FOUL AIR DUCTING FROM WET WELL AND ASSOCIATED TRUNK LINES (ELLIS PUMP STATION, OCS D PLANT NO. 1).
2. TWO BLOWERS, IN PARALLEL, EACH 7500 SCFM FLOW RATE
3. TWO ADSORBERS, IN PARALLEL, CONTAINING US FILTER/WESTATES MIDAS OCM OR CALGON CARBON MINOTAUR, EACH WITH A MINIMUM OF 8000 LBS OF HIGH H₂S CAPACITY ACTIVATED CARBON.
4. TWO EXHAUST STACKS, EACH 2' - 6" DIA. X 6.5' H. WITH RAIN CAP.

BY REPLACEMENT WITH NEW ADSORBENT MEDIA BLEND, EXHAUST STACK, AND REMOVAL OF A RAIN CAP, AS FOLLOWS,

1. FOUL AIR DUCTING FROM WET WELL AND ASSOCIATED TRUNK LINES (STEVE ANDERSON LIFT STATION, OCS D PLANT NO. 1).
2. TWO BLOWERS, IN PARALLEL, EACH 7500 SCFM FLOW RATE
3. TWO ADSORBERS, IN PARALLEL, CONTAINING PUREAIR FILTRATION OR EQUAL ADSORBENT MEDIA, A BLEND OF POTASSIUM PERMANGANATE BASED AND GRANULAR ACTIVATED CARBON MEDIA, EACH ADSORBER WITH A MINIMUM OF 382 CUBIC FEET OF HIGH H₂S CAPACITY MEDIA BLEND.
4. HYDROGEN SULFIDE CONTINUOUS EMISSION MONITORING AND INTEGRATED SAMPLING SYSTEM.
5. TWO EXHAUST STACKS, EACH 2' - 0" DIA. X 25' - 6"H.

PERMIT 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]



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3. 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]
4. IDENTIFICATION TAG (S) OR NAMEPLATE (S) SHALL BE DISPLAYED ON THE EQUIPMENT TO SHOW MANUFACTURER MODEL NO. AND SERIAL NO. THE TAG (S) OR PLATE (S) SHALL BE ISSUED BY THE MANUFACTURER AND SHALL BE AFFIXED TO THE EQUIPMENT IN A PERMANENT AND CONSPICUOUS POSITION.
[RULE 204]
5. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO EACH CARBON ADSORBER TO INDICATE THE FOUL AIR TREATED, IN CUBIC FEET PER MINUTE (CFM). IN CASE A PRESSURE SENSOR DEVICE IS USED IN PLACE OF THE FLOW METER, A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDING FLOW RATE, IN CFM, TO THE PRESSURE READING.
[RULE 204]
6. MAXIMUM FOUL AIR FLOW TO BE TREATED BY EACH OF THE CARBON ADSORBER SHALL NOT EXCEED 7500 CFM.
[RULE 402]
7. FOR EACH CARBON ADSORBER, TOTAL ORGANIC COMPOUNDS (TOCs) CONCENTRATION (PPMV) SHALL BE MONITORED AT EACH EXHAUST STACK, AT LEAST ONCE EVERY 7 DAYS OF OPERATION, FOR THE FIRST SIX-MONTH AND THEN ON A MONTHLY BASIS, USING A PHOTO IONIZATION DETECTOR OR AN ORGANIC VAPOR ANALYZER. RECORDS SHALL BE MAINTAINED AND KEPT ON FILE.
[RULE 204]
8. THE TOC CONCENTRATION MEASURED AT THE EXHAUST FROM EACH CARBON ADSORBER SHALL NOT EXCEED 2.2 PPMV, AS CARBON.
[RULE 204]
9. WHEN IN OPERATION, H₂S CONCENTRATION (PPMV) IN EACH EXHAUST STACK SHALL BE MONITORED AND RECORDED USING A HYDROGEN SULFIDE CONTINUOUS EMISSION MONITORING AND INTEGRATED SAMPLING SYSTEM (CEMS). WHEN THE H₂S MONITORING SYSTEM IS SHUTDOWN FOR REPAIR OR MAINTENANCE, PORTABLE DEVICES SUCH AS JEROME OR COLORIMETRIC TUBES SHALL BE USED TO MEASURE AND RECORD OUTLET H₂S AT LEAST ONCE PER SHIFT.
10. THE HYDROGEN SULFIDE (H₂S) CONCENTRATION MEASURED AT EACH EXHAUST STACK, USING CEMS SHALL NOT EXCEED 2.45PPMV, AVERAGED OVER ONE HOUR
[RULE 402, 1401]
11. IF THE HYDROGEN SULFIDE (H₂S) CONCENTRATION MEASURED AT THE EXHAUST STACK IS DETECTED ABOVE 2.2 PPMV, THEN IMMEDIATE CORRECTIVE MEASURES SHALL BE TAKEN INCLUDING ACTIVATED CARBON REPLACEMENT, WITH FRESH CARBON, BEFORE RESUMING OPERATION.
[RULE 402, 1401]



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- 12. SPENT CARBON REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 204]
- 13. IF THE OPERATION OF THIS EQUIPMENT RESULTS IN CONSIDERABLE NUMBER OF ODOR COMPLAINTS, THE WORK SHALL CEASE AND MITIGATION MEASURES SHALL BE IMPLEMENTED IMMEDIATELY. WORK SHALL NOT RESUME UNTIL EMISSIONS CAUSING THE COMPLAINTS IS MITIGATED.
[RULE 402]
- 14. 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 CONSTRUCT

A/N 520793

Granted as of 08/16/2012

Equipment Description:

ODOR CONTROL SCRUBBER SYSTEM FOR NEW SLUDGE THICKENING AND DEWATERING FACILITY (JOB NO. P1-101), CONSISTING OF:

1. FOUL AIR EXHAUST DUCT FROM NEW SLUDGE THICKENING AND DEWATERING BUILDING, TOTAL 40,000 CFM.
2. THREE (3) EXHAUST BLOWERS, EACH 20,000 CFM.
3. THREE (3) CHEMICAL SCRUBBERS, EACH 3-STAGE, SIEMENS MODEL LP-6500 OR DUALL MODEL PMTD OR EQUIVALENT, VERTICAL, PACKED BED TYPE, FIRST AND FINAL STAGE MIST ELIMINATORS, WITH OPTIONAL OXIDATION REDUCTION POTENTIAL (ORP) PROBES AND CONTROLLERS, THREE (3) SUMPS, SCRUBBER SOLUTION RECIRCULATION PUMPS AND FLOW METERS, AUTOMATIC CHEMICAL FEED METERING PUMP AND MAKEUP WATER SYSTEM, EACH WITH EXHAUST STACK, 3' DIA. X 33' - 9" H., AND WITH NO RAIN CAP.
4. ASSOCIATED SULFURIC ACID, SODIUM HYDROXIDE, AND SODIUM HYPOCHLORITE STORAGE TANKS.
5. OPTIONAL TWO (2) DUAL-BED ADSORBERS, IN PARALLEL, EACH SIEMENS MODEL RJC-1300-D OR DUALL MODEL CA-132DB OR EQUIVALENT, GRANULAR ACTIVATED CARBON, 20,000 SCFM, EACH WITH A EXHAUST STACK, 3' DIA. X 22' - 6" H., AND WITH NO RAIN CAP.

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 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]



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5. 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). DEVIATIONS FROM THE ABOVE DESCRIPTION AND PROPOSED DESIGN AFFECTING EQUIPMENT PERFORMANCE OR EMISSIONS SHALL BE APPROVED IN WRITING BY THE AQMD.
[RULE 204]
6. A SUFFICIENT NUMBER OF SCRUBBERS AND CARBON ADSORBERS (IF CONSTRUCTED) SHALL BE IN OPERATION WHEN THE BASIC EQUIPMENT ARE IN OPERATION TO MAINTAIN EXHAUST OUTLET H₂S AND NH₃ CONCENTRATIONS IN COMPLIANCE WITH THE LIMITS AS SPECIFIED IN THIS PERMIT EXCEPT DURING UNFORSEEN AND ROUTINE MAINTENANCE WORK OR POWER OUTAGE IN THE PLANT THE REQUIRES THE EQUIPMENT TO BE SHUTDOWN FOR A PERIOD NOT TO EXCEED 10 HOURS PER INCIDENT PER EQUIPMENT AND 50 HOURS PER YEAR PER EQUIPMENT. A LOG OF SHUTDOWN DATE, DURATION, AND REASON FOR THE SHUTDOWN SHALL BE MAINTAINED.
[RULE 402]
7. WHEN IN OPERATION, NO MORE THAN TWO (2) MULTI-STAGE CHEMICAL SCRUBBERS SHALL BE IN OPERATION.
[RULE 204]
8. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO EACH OF THE MULTI-STAGE CHEMICAL SCRUBBER TO INDICATE THE TOTAL AIR FLOW RATE IN CUBIC FEET PER MINUTE (CFM). THE MEASURED AIR FLOW RATE FOR EACH SCRUBBER SHALL NOT EXCEED 20,000 CFM. IN CASE A PRESSURE SENSOR DEVICE(S) IS USED IN PLACE OF THE FLOW METER(S), A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDENT FLOW RATE(S), IN CFM, TO THE PRESSURE READING.
[RULE 204]
9. A PRESSURE DIFFERENTIAL GAUGE INDICATING THE PRESSURE DROP ACROSS EACH SCRUBBER PACKING BED SHALL BE INSTALLED AND MAINTAINED. THE PRESSURE DROP ACROSS EACH PACKING BED SHALL BE MAINTAINED WHEN THE SCRUBBER IS IN OPERATION PER MANUFACTURER'S RECOMMENDATION.
[RULE 204]
10. A PH METER SHALL BE INSTALLED AND MAINTAINED, FOR EACH SCRUBBER STAGE (SUMP SOLUTION), TO INDICATE PH OF THE SCRUBBING SOLUTION. THE PH OF THE SCRUBBER SOLUTION FOR EACH SCRUBBER STAGE SHALL BE RECORDED ONCE PER DAY AND SHALL BE PROPERLY MAINTAINED TO ENSURE COMPLIANCE WITH THE EXHAUST LIMITS SPECIFIED IN CONDITION NO. 20.
[RULE 204]
11. IF THE ORP IS CONSTRUCTED AND IS IN OPERATION, THE OXIDATION REDUCTION POTENTIAL (ORP) VALUE FOR EACH STAGE OF THE SCRUBBING SOLUTION SHALL BE MAINTAINED PER MANUFACTURER'S RECOMMENDATION.
[RULE 204]



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12. A FLOW METER SHALL BE INSTALLED TO INDICATE SCRUBBING SOLUTION FLOW RATE FOR EACH SCRUBBER. THE SCRUBBING SOLUTION FLOW RATE (GPM) FOR EACH STAGE SHALL BE MAINTAINED AS PER MANUFACTURER'S RECOMMENDATION.
[RULE 204]
13. WHEN IN OPERATION, FOR EACH SCRUBBER THE FOUL-AIR FLOW RATE, SCRUBBING SOLUTION FLOW RATE, PH, AND PRESSURE DIFFERENTIAL ACROSS THE SCRUBBER PACKING BED SHALL BE MONITORED AND RECORDED AT LEAST ONCE A DAY FOR THE FIRST MONTH OF OPERATION AND WEEKLY THEREAFTER.
[RULE 204]
14. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT THE INLET STREAM TO EACH CARBON ADSORBER TO INDICATE THE EXHAUST AIR (FROM CHEMICAL SCRUBBER UNITS) TREATED, IN CUBIC FEET PER MINUTE (SCFM). IN CASE A PRESSURE SENSOR DEVICE IS USED IN PLACE OF THE FLOW METER, A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDING FLOW RATE, IN CFM, TO THE PRESSURE READING.
[RULE 204]
15. MAXIMUM EXHAUST AIR FLOW TO BE TREATED BY EACH OF THE CARBON ADSORBER SHALL NOT EXCEED 20,000 SCFM.
[RULE 204]
16. WITHIN 180 DAYS AFTER INITIAL START-UP, ORANGE COUNTY SANITATION DISTRICT (OCS D) SHALL CONDUCT SOURCE TESTS TO DETERMINE EMISSIONS FROM THE ODOR CONTROL SYSTEM DESCRIBED IN THIS PERMIT AS INSTALLED; IN ACCORDANCE WITH THE AQMD APPROVED SOURCE TESTS PROTOCOL. A TEST PROTOCOL INCLUDING ALL SOURCE TESTING AND ANALYTICAL METHODS SHALL BE SUBMITTED TO THE AQMD, WASTE MANAGEMENT & BULK TERMINALS PERMITTING TEAM, FOR APPROVAL AT LEAST 60 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 THE EMISSIONS TO ATMOSPHERE FROM THE ODOR CONTROL SYSTEM FOR:
 - A. AMMONIA AND HYDROGEN SULFIDE (H₂S), (LBS/HR AND PPMV) – EXHAUST TO ATMOSPHERE.
 - B. CARBON DIOXIDE, OXYGEN AND NITROGEN
 - C. MOISTURE CONTENT, TEMPERATURE AND EXHAUST FLOW RATE.[RULE 204, 1401]
17. ADEQUATE NUMBER OF SAMPLING PORTS WITH ITS SAFE ACCESS SHALL BE INSTALLED AND MAINTAINED FOR THE ODOR CONTROL UNIT AND EXHAUST STACKS IN ACCORDANCE WITH SCAQMD'S RULE 217.
[RULE 217]



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18. WHEN IN OPERATION, A PRESSURE DIFFERENTIAL GAUGE INDICATING THE PRESSURE DROP (INCHES OF WATER COLUMN) ACROSS EACH CARBON BED SHALL BE INSTALLED AND MAINTAINED. THE PRESSURE DROP ACROSS EACH CARBON BED SHALL BE MAINTAINED AS PER MANUFACTURER'S SPECIFICATION AND RECOMMENDATION. PRESSURE DROP READING SHALL BE RECORDED AT LEAST ONCE A DAY FOR THE FIRST MONTH OF OPERATION AND WEEKLY THEREAFTER.
[RULE 204]
19. AMMONIA (NH₃) AND HYDROGEN SULFIDE (H₂S) CONCENTRATIONS (PPMV), AT THE EXHAUST STACKS, SHALL BE MONITORED USING HANDHELD DEVICES (USING LOW RANGE CONCENTRATION DETECTION LIMIT) OR OTHER APPROVED METHODS AT LEAST ONCE A DAY WHEN EQUIPMENT IS IN OPERATION.
[RULE 204]
20. EMISSIONS FROM THIS EQUIPMENT SHALL NOT EXCEED THE FOLLOWING.
- | | |
|------------------|--------|
| H ₂ S | 1 PPMV |
| NH ₃ | 5 PPMV |
- IF MORE THAN ONE READING IS MADE IN A DAY, THE DAILY AVERAGE CONCENTRATION OF THE READINGS SHALL NOT EXCEED THE LIMITS SPECIFIED ABOVE.
[RULE 402]
21. ACTIVATED CARBON IN THE ADSORBER SHALL BE REPLACED WITH FRESH ONE AS PER MANUFACTURER'S RECOMMENDATION TO MAINTAIN DESIRED CONTROL EFFICIENCY, RECORDS FOR CARBON REPLACEMENT EVENTS, WITH DATE, TYPE AND QUANTITY SHALL BE MAINTAINED ON FILE.
[RULE 204]
22. SPENT CARBON REMOVED FROM THIS SYSTEM SHALL BE MAINTAINED OR STORED IN CLOSED CONTAINERS PRIOR TO REMOVAL FROM SITE.
[RULE 204]
23. 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 204]



FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

PERMIT TO CONSTRUCT

A/N 520794
Granted as of 08/16/2012

Equipment Description:

ALTERATION OF THE EXISTING SEWAGE TREATMENT PLANT (216 MGD), COVERED BY PERMIT TO CONSTRUCT APPLICATION NO. 453210 (AND EXISTING P/O F66565), CONSISTING OF:

1. HEADWORKS STATION NO. 1 WITH TWO GRIT CHAMBERS, 28'-0" L. X 20'-0" W. X 14'-0" D., TWO SPLITTER BOXES, 15'-0" L. X 4'-0" W. X 7'-6" D., TWO GRIT CLASSIFIERS, AND ASSOCIATED PUMPS AND BLOWER.
2. HEADWORKS STATION NO. 2 WITH FIVE GRIT CHAMBERS, 38'-0" L. X 20'-0" W. X 14'-0" D., THREE SPLITTER BOXES, 15'-0" L. X 8'-0" W. X 15'-0" D., FOUR BAR SCREENS WITH A RAKE ASSEMBLY, EIGHT GATE OPERATORS, FIVE SPLITTER BOX WEIR GATE OPERATORS, AND ASSOCIATED PUMPS, BLOWERS AND COMPRESSOR.
3. FIFTEEN PRIMARY BASINS CONSISTING OF TWO 188'-0" L. X 40'-0" W. X 9'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS, THREE 140'-0" DIA. X 9'-0" D. CIRCULAR BASINS WITH ALUMINUM GEODESIC DOME COVERS, TEN 10'-0" L. X 195'-0" W. X 10'-0" D. RECTANGULAR BASINS WITH CONCRETE AND ALUMINUM COVERS AND ASSOCIATED PUMPS AND BLOWERS.
4. FOUR TRICKLING FILTERS, EACH 180' DIA. X 6'-0" D., WITH TWO GATE OPERATORS AND ASSOCIATED PUMPS.
5. SECONDARY CLARIFIERS CONSISTING OF ONE 140'-0" DIA. X 9'-0" D. AND TWENTY-FOUR 150'-0" L. X 40'-0" W. X 10'-0" D. WITH ASSOCIATED PUMPS.
6. ACTIVATED SLUDGE PLANT PRIMARY EFFLUENT PUMP STATION WITH ASSOCIATED PUMPS.
7. TEN AERATION BASINS, EACH 275'-0" L. X 45'-0" W. X 15'-0" D. WITH ASSOCIATED BLOWERS.
8. SIX SLUDGE THICKENERS, EACH 40'-0" DIA. X 8'-0" D., WITH ASSOCIATED SWEEP DRIVER AND CONVEYORS.
9. TWELVE DIGESTER TANK CONSISTING OF FOUR 90'-0" DIA. X 30'-0" D, EACH 208,780 CUBIC FEET CAPACITY, EIGHT 110'-0" DIA. X 30'-0" D, EACH APPROXIMATELY 330,430 CUBIC FEET CAPACITY WITH ASSOCIATED PUMPS AND COMMINUTERS (GRINDERS). EACH DIGESTER IN OPERATION EQUIPPED WITH TWO PASSIVE CARBON ADSORBERS (55 GALLONS OR LESS VOLUME) USING NO MECHANICAL VENTILATION.
10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'-0" L. X 56'-0" W. X 3'-2" D.
11. DIGESTER GAS STORAGE TANKS, 25,000 CUBIC FEET CAPACITY, 42'-0" DIA. X 33'-6" H. WITH THREE COMPRESSORS.



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12. SLUDGE PROCESSING STATION WITH TWO GRINDERS, EIGHT DEWATERING FILTER PRESSES, TRANSFER PUMP HOPPERS, AUGERS, STORAGE HOPPERS AND A TRUCK LOAD-OUT HOPPER.
 - 13.* SIXTEEN PRIMARY BASINS, 195'-0" L. X 40'-0" W. X 10'-0" D., EACH WITH CONCRETE COVERS AND 6 MGD AVERAGE CAPACITY AND ASSOCIATED PUMPS AND BLOWERS.
 - 14.* FOUR EXISTING TRICKLING FILTERS (ITEM NO. 4 ABOVE) REPLACED WITH TWO NEW TRICKLING FILTERS, EACH 166' DIA. X 20' - 0" MEDIA DEPTH, AND ASSOCIATED PUMPS. EACH NEW TRICKLING FILTER WITH TWO EXHAUST STACKS, EACH STACK 40' HIGH, AND WITH A TOTAL AIR FLOW RATE OF 25,000 CFM PER TRICKLING FILTER.
 - 15.* ONE EXISTING SECONDARY CLARIFIER (ITEM NO. 5 ABOVE) REPLACED WITH TWO NEW SECONDARY CLARIFIERS CONSISTING OF 175' - 0" DIA. X 15' - 0" D. WITH ASSOCIATED PUMPS.
- * Construction for the above items 13, 14, and 15 has been completed (under A/N 407071).

BY THE ADDITION OF: (OCSJ JOB NO. P1-82 ACTIVATED SLUDGE PLANT REHABILITATION) UNDER A/N 432418.

16. TWO NEW SECONDARY CLARIFIERS, EACH 150'-0" L. X 40'-0" W. X 10'-0" D.

BY THE REMOVAL OF:

10. THIRTY-TWO DIGESTER CLEANING BEDS, 58'-0" L. X 56'-0" W. X 3'-2" D. (SEE ITEM 10 ABOVE)

AND BY THE ADDITION OF:

17. NEW SECONDARY ACTIVATED SLUDGE FACILITY 2 (OCSJ JOB NO. P1-102), AND NEW SLUDGE DEWATERING BEDS (OCSJ JOB NO. P1-106, CONSTRUCTION COMPLETED AND CURRENTLY IN OPERATION) UNDER A/N 453210,
 - I. SIX AERATION BASINS (NOS. 11 THROUGH 16), COVERED, EACH 227' - 2" L. X 45' - 0" W. X 26' - 0" D., WITH ASSOCIATED AERATION BLOWERS, DIFFUSERS, MIXERS, AND PUMPS, AND VENTING THROUGH SIX STACKS, EACH 7' - 11" H., AND 10,000 SCFM.
 - II. SIX SECONDARY CLARIFIERS (NOS. 27, 29, 31, 32, 33, AND 34), UNCOVERED, EACH 155' DIA. X 16' SIDE WATER D., WITH ASSOCIATED RETURN ACTIVATED SLUDGE (RAS), WASTE ACTIVATED SLUDGE (WAS), AND SECONDARY SCUM PUMPS.
 - III. SODIUM HYPOCHLORITE (NaOCl) SOLUTION SYSTEM ADDITION (TO THE EXISTING BLEACH SYSTEM) FOR CHLORINATION OF THE TREATED EFFLUENT, RETURN ACTIVATED SLUDGE (RAS), WASTE ACTIVATED SLUDGE (WAS), AND SURFACE WASTE.



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AND BY THE REPLACEMENT/UPGRADE OF: (OCSD JOB NO. P1-101- NEW SLUDGE THICKENING AND DEWATERING FACILITY, NEW A/N 520794),

18. REPLACE TWO GRINDERS, EIGHT DEWATERING FILTER PRESSES (LISTED UNDER ITEM NO. 12)
19. UPGRADE, REPLACE OR MODIFY;
 - I. SLUDGE CONVEYANCE AND PUMPING SYSTEM
 - II. BIOSOLIDS STORAGE AND LOAD-OUT SYSTEM
 - III. CHEMICAL FEED SYSTEM
 - IV. VENTILATION SYSTEM AND VARIOUS OTHER ELECTRICAL AND CONTROL SYSTEMS.
 - V. MODIFY EXISTING TRUCKLOADING FACILITY TO IMPROVE ODOR CONTROL AND TO ALLOW STORAGE AND CONVEYANCE OF A DRIER DEWATERED CAKE/BIOSOLIDS.

AND BY THE ADDITION OF: (OCSD JOB NO. P1-101- NEW SLUDGE THICKENING AND DEWATERING FACILITY, NEW A/N 520794),

20. THREE (3) SLUDGE BLENDING TANKS
POLYMER SYSTEM CONSISTING OF POLYMER STORAGE, MIXING AND AGING TANKS.
THREE (3) SLUDGE THICKENING CENTRIFUGES
THREE (3) THICKENED SLUDGE WETWELLS
THREE (3) DEWATERING CENTRIFUGES
DEWATERED CAKE CONVEYANCE SYSTEM CONSISTING OF INCLINED SCREW CONVEYORS, HORIZONTAL/CROSS CONVEYERS, HORIZONTAL COLLECTOR CONVEYORS, CAKE HOPPERS AND TEMPORARY TRUCK LOAD OUT HOPPER.

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. ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL MAKE A WRITTEN REQUEST FOR AND OBTAIN AN EXTENSION OF TIME TO CONSTRUCT THIS EQUIPMENT ON AN ANNUAL BASIS UNTIL SUCH TIME CONSTRUCTION IS COMPLETED AND THE EQUIPMENT IS PUT INTO OPERATION. AT LEAST 30 DAYS PRIOR TO THE EXPIRATION DATE OF THE PERMIT TO CONSTRUCT, OCSD SHALL PROVIDE IN THE WRITTEN REQUEST, VERIFIABLE DATA TO AQMD IN ORDER TO SHOW COMPLIANCE WITH THE CONSTRUCTION SCHEDULE AS PROVIDED IN THE APPLICATION UNDER WHICH THIS PERMIT TO CONSTRUCT IS GRANTED. IF THERE ARE



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CHANGES TO THE INCREMENTS OF PROGRESS AND/OR CONSTRUCTION SCHEDULE, THEY WILL NOT BECOME EFFECTIVE UNTIL OCSD RECEIVES WRITTEN CONFIRMATION OF SUCH CHANGES FROM AQMD.

[RULE 204]

5. THE HEADWORKS FACILITIES, PRIMARY TREATMENT BASINS, AND NEW SLUDGE THICKENING AND DEWATERING AND SOLIDS PROCESSING AND HANDLING FACILITY (JOB P1-101) SHALL NOT BE OPERATED UNLESS THE EXHAUST AIR IS VENTED TO AIR POLLUTION CONTROL SYSTEMS, WHICH ARE IN OPERATION AND HAVE VALID PERMITS TO CONSTRUCT OR OPERATE ISSUED BY THE SCAQMD. IN THE EVENT AIR POLLUTION CONTROL SYSTEM(S) ARE SHUTDOWN FOR CONSTRUCTION OR MAINTENANCE WORK, THE H₂S EMISSIONS SHALL NOT EXCEED THE CONCENTRATION LIMITS AS SPECIFIED IN THEIR RESPECTIVE AIR POLLUTION CONTROL EQUIPMENT PERMIT.
[RULE 402]
6. THE DAILY TOTAL INFLUENT FLOW, IN MILLION GALLONS PER DAY (MGD), TO THE HEADWORKS, PRIMARY TREATMENT PROCESS, AND SECONDARY TREATMENT PROCESS SHALL BE RECORDED.
[RULE 204]
7. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE PRIMARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 216 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304 (a) (4) – MODELING & OFFSETS EXEMPTION]
8. THE TOTAL INFLUENT FLOW OF WASTEWATER TO THE SECONDARY WASTEWATER TREATMENT PROCESS SHALL NOT EXCEED 182 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1304 (a) (4) – MODELING & OFFSETS EXEMPTION]
9. THE AVERAGE DAILY PRIMARY EFFLUENT FLOW RATE, TREATED BY THE NEW ACTIVATED SLUDGE FACILITY 2 (JOB NO. P1-102 CONSISTING OF SIX AERATION BASINS AND SIX SECONDARY CLARIFIERS), SHALL NOT EXCEED 60 MILLION GALLONS PER DAY (MGD), AVERAGED ON A CALENDAR MONTH, EXCEPT DURING WET WEATHER PERIODS AND EMERGENCY PERIODS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 204]
10. WITHIN 60 DAYS AFTER ACHIEVING THE MAXIMUM INFLUENT FLOW RATE FOR THE ACTIVATED SLUDGE FACILITY 2 (JOB NO. P1-102), BUT NOT LATER THAN 180 DAYS AFTER INITIAL START-UP, ORANGE COUNTY SANITATION DISTRICT (OCSD) SHALL CONDUCT SOURCE TESTS TO DETERMINE EMISSIONS FROM AT LEAST TWO OF THE SIX NEW AERATION BASINS' EXHAUST STACKS, AND AT LEAST TWO OF THE SIX NEW SECONDARY CLARIFIERS' SURFACE EMISSIONS, 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, REFINERY AND WASTE MANAGEMENT TEAM, FOR APPROVAL AT LEAST 30 DAYS PRIOR TO START OF THE TESTS. NOTICE SHALL BE PROVIDED TO THE AQMD 10



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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 THE EMISSIONS TO ATMOSPHERE FROM TWO OF THE AERATION BASINS AND TWO OF THE SECONDARY CLARIFIERS FOR:

- A. TOTAL NON-METHANE HYDROCARBONS (TNMHC) AND TOXIC AIR CONTAMINANTS (TAC) PRESENT, (LBS/HR AND PPMV).
 - B. AMMONIA AND HYDROGEN SULFIDE (H₂S), (LBS/HR AND PPMV).
 - C. CARBON DIOXIDE, OXYGEN AND NITROGEN
 - D. MOISTURE CONTENT, TEMPERATURE AND EXHAUST FLOW RATE.
11. ADEQUATE NUMBER OF SAMPLING PORTS WITH ITS SAFE ACCESS, SHALL BE INSTALLED AND MAINTAINED IN THE AERATION BASINS' EXHAUST STACK (JOB NO. P1-102) IN ACCORDANCE WITH SCAQMD'S RULE 217.
[RULE 217]
 12. 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 AND 212" (VERSION 7.0, JULY 1, 2005), TO DETERMINE THE COMPLIANCE WITH RULE 1401. RESULTS SHALL BE SUBMITTED TO AQMD.
[RULE 1401]
 13. IF SOURCE TESTS RESULTS INDICATE THAT THE TOTAL VOLATILE ORGANIC COMPOUNDS (VOC) EMISSIONS FROM THE AERATION BASINS EXCEED 13 LBS PER DAY OR AS DETERMINED BY AQMD, THEN OCSD SHALL CONDUCT IN DETAIL THE TECHNOLOGICAL FEASIBLE STUDY AND COST-EFFECTIVENESS ANALYSIS FOR A SUITABLE AIR POLLUTION CONTROL EQUIPMENT TO DETERMINE LOWEST ACHIEVABLE EMISSION RATE (LAER) FROM SUCH PROCESS.
[RULE 1303 (a) (1) - BACT]
 14. THE HYDROGEN SULFIDE (H₂S) CONCENTRATION (PPMV) IN THE EXHAUST STACKS OF EACH TRICKLING FILTER SHALL BE MEASURED AND RECORDED ON A DAILY BASIS.
[RULE 402]
 15. RAW DIGESTER GAS PRODUCED AT THIS FACILITY SHALL NOT BE RELEASED INTO THE ATMOSPHERE. 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 A PERMITTED AIR POLLUTION CONTROL DEVICE(S).
[RULE 402]
 16. THE SAWDUST USED IN THE SLUDGE MANAGEMENT SYSTEM SHALL BE STORED AND KEPT SUFFICIENTLY MOIST TO PREVENT ANY AIR BORNE PARTICULATE MATTER EMISSIONS.
[RULE 402]
 17. OCSD SHALL KEEP THE FOLLOWING DAILY RECORDS WITH REGARDS TO THE SLUDGE MANAGEMENT SYSTEM,



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- I. THE AMOUNT OF SLUDGE DEWATERED IN EACH DRYING BED.
 - II. NUMBER OF TRUCKS WASHED.
 - III. NUMBER OF LEAKY OR OVERFILLED TRUCKS.
[RULE 204]
18. 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 204]