

FACILITY PERMIT TO OPERATE ORANGE COUNTY SANITATION DISTRICT

SECTION II: 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.

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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 Construct Granted On	Equipment Description	Page Number
428804	9/22/2004	ODOR CONTROL SYSTEM, FOR TRUNKLINES AND HEADWORKS	5
519422	6/07/2012	ODOR CONTROL SYSTEM, FOR BIOSOLIDS TRUCK LOADING STATION	9
518276	6/07/2012	ODOR CONTROL SYSTEM, FOR DAF THICKENING PROCESS	11
545003	6/26/2014	ODOR CONTROL UNIT, BIOFILTER	14
545004	10/17/2013, will supersede R-D94235	BOILER, 10.2 MMBTU/HR, DIGESTER GAS AND NATURAL GAS	17
545005	10/17/2013, will supersede R-D94232	BOILER, 10.2 MMBTU/HR, DIGESTER GAS AND NATURAL GAS	20
546364	4/16/2014	ICE CG-1, 4166 HP, DG/NG WITH DG FUEL PRETREATMENT	23
546365	4/16/2014	ICE CG-2, 4166 HP, DG/NG WITH DG FUEL PRETREATMENT	27
546366	4/16/2014	ICE CG-3, 4166 HP, DG/NG WITH DG FUEL PRETREATMENT	31
546367	4/16/2014	ICE CG-4, 4166 HP, DG/NG WITH DG FUEL PRETREATMENT	35
546368	4/16/2014	ICE CG-5, 4166 HP, DG/NG WITH DG FUEL PRETREATMENT	39
556626	6/26/2014	SEWAGE TREATMENT (>5 MG/D) ANAEROBIC	43
556627	6/26/2014	AIR POLLUTION CONTROL SYSTEM, WET SCRUBBER AND BIOFILTER	47
557229	4/16/2014	STORAGE TANK, AQUEOUS UREA SOLUTION	50
557230	4/16/2014	STORAGE TANK, AQUEOUS UREA SOLUTION	51
559228	4/16/2014	APC SYSTEM 1, SCR/CO CATALYST	52
559229	4/16/2014	APC SYSTEM 2, SCR/CO CATALYST	55
559230	4/16/2014	APC SYSTEM 3, SCR/CO CATALYST	58
559231	4/16/2014	APC SYSTEM 4, SCR/CO CATALYST	61
559232	4/16/2014	APC SYSTEM 4, SCR/CO CATALYST	64
565930	TBD	AIR POLLUTION CONTROL SYSTEM, CHEM. SCRUBBERS FOR TRICKLING FILTERS	68

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

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PERMIT TO CONSTRUCT

A/N 565930
Granted as of TBD

Equipment Description:

MODIFICATIONS TO AIR POLLUTION CONTROL SYSTEM (G27920) CONSISTING OF;

1. FOUL AIR EXHAUST DUCTS FROM THREE (3) TRICKLING FILTERS, TRICKLING FILTER FACILITY'S (JOB NO. P2-90), IN PARALLEL.
2. THREE (3) EXHAUST BLOWERS, IN PARALLEL, EACH 11,000 SCFM, 25 H.P.
3. THREE (3) CAUSTIC IMPREGNATED ACTIVATED CARBON UNITS, IN PARALLEL, EACH CONTAINING MINIMUM OF 10,600 LBS OF ACTIVATED CARBON BY NORIT AMERICAS OR WESTATES OR EQUIVALENT, EACH VENTING A SINGLE TRICKLING FILTER.
4. THREE (3) EXHAUST STACKS, EACH 2.0'- 3" DIA. X 28' HIGH.

BY THE ADDITION OF:

5. THREE (3) CHEMICAL SCRUBBERS (JOB NO. FE13-04), EACH SINGLE STAGE, SIEMENS OR EQUIVALENT, APPROXIMATELY 20' H. X 6' D., JAEGER 7' -10' H. PACKING MATERIAL OR EQUAL, SCRUBBING SOLUTION RECIRCULATION LINE, ASSOCIATED PUMPS, METERS AND AUTOMATIC CONTROLS, MIST ELIMINATOR AND CONTINUOUS H2S MONITORING SYSTEM (OPTIONAL).
6. ASSOCIATED SODIUM HYDROXIDE AND SODIUM HYPOCHLORITE STORAGE TANKS.
7. ITEM NO. 3 ABOVE, USED AS OPTIONAL POLISHING UNIT CONTAINING GRANULAR ACTIVATED CARBON, IF NEEDED, OR EMPTY VESSEL USED AS EXHAUST FOR THE CHEMICAL SCRUBBERS.

PERMIT CONDITIONS:

1. CONSTRUCTION AND 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 TO CONSTRUCT IS VALID FOR ONE YEAR FROM ITS' ISSUANCE DATE. AN EXTENSION MAY BE GRANTED UPON WRITTEN REQUEST. SUCH A REQUEST SHALL INCLUDE THE REASONS THE EXTENSION IS REQUIRED, THE LENGTH OF THE EXTENSION, AND THE STATUS OF THE CONSTRUCTION ACTIVITIES COMPLETED TO DATE.
[RULE 204]

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4. THIS EQUIPMENT SHALL BE OPERATED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
5. A FLOW METER SHALL BE INSTALLED AND MAINTAINED AT EACH OF THE ODOR CONTROL SYSTEM EXHAUST TO INDICATE THE TOTAL FOUL AIR FROM EACH OF THE TRICKLING FILTER TREATED, IN STANDARD CUBIC FEET PER MINUTE (SCFM). IN CASE A PRESSURE SENSOR DEVICE IS USED TO DETERMINE FLOW RATE, IN PLACE OF THE FLOW METER, A CONVERSION CHART SHALL BE MAINTAINED TO INDICATE THE CORRESPONDENT FLOW RATE, IN SCFM, TO THE PRESSURE READING.
[RULE 204]
6. MAXIMUM FOUL AIR FLOW RATE FROM EACH TRICKLING FILTER TO BE TREATED SHALL NOT EXCEED 11,000 SCFM, AVERAGED OVER CALENDAR MONTH.
[RULE 204]
7. SCRUBBER SYSTEM SHALL BE EQUIPPED WITH DIFFERENTIAL PRESSURE GAUGE, PH METER AND FLOW METER TO INDICATE AND MEASURE (GPM) FOR SCRUBBING LIQUID RECIRCULATION RATE.
[RULE 204]
8. WHEN THE SCRUBBERS ARE IN OPERATION, AUTOMATIC HYDROGEN SULFIDE (H₂S) MONITORING SYSTEM SHALL BE IN OPERATION AND MAINTAINED TO RECORD THE OUTLET H₂S CONCENTRATION, IN PPMV. THE H₂S MONITORING SYSTEM SHALL BE CALIBRATED PURSUANT TO MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
[RULE 204]
9. WHEN THE AUTOMATIC H₂S MONITORING SYSTEM IS NOT OPERATING, THE OPERATOR SHALL, ON A DAILY BASIS, MONITOR, RECORD AND MAINTAIN THE FOLLOWING PARAMETERS PER MANUFACTURER'S RECOMMENDATIONS.
- DIFFERENTIAL PRESSURE ACROSS THE SCRUBBER, INCHES OF WATER COLUMN
 - SCRUBBING SOLUTION RECIRCULATION RATE, GPM
 - PH OF THE SCRUBBING SOLUTION
 - HYDROGEN SULFIDE (H₂S) CONCENTRATION, PPMV, IN THE SCRUBBER EXHAUST.
- [RULE 204]
10. THE PH OF THE SCRUBBING SOLUTION SHALL BE MAINTAINED BETWEEN 8 AND 12 ON A DAILY AVERAGE.
[RULE 204]
11. CONCENTRATION MEASURED AT EXHAUST SHALL NOT EXCEED THE FOLLOWING:
- | CONSTITUENT | CONCENTRATION |
|------------------|-------------------------|
| H ₂ S | 1.0 PPMV, DAILY AVERAGE |
- [RULE 402, 1401]

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12. IN CASE, WHEN AN OPTIONAL POLISHING UNIT (CAUSTIC IMPREGNATED ACTIVATED CARBON) IS PUT IN SERVICE, THE UNIT SHALL BE OPERATED AS PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS AND, IN COMPLIANCE WITH ABOVE CONDITION NO. 11.
[RULE 204]

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