

FACILITY PERMIT TO OPERATE LA CITY, SANITATION BUREAU (HTP)

PERMIT TO CONSTRUCT/OPERATE

Permit No. TBD
A/N 554605

Equipment Description:

MODIFICATION OF A WASTEWATER TREATMENT PLANT CONSISTING OF:

A. PRIMARY WASTEWATER TREATMENT SYSTEM CONSISTING OF:

1. PRIMARY BATTERY A WITH:
 - A. FOUR PRIMARY CLARIFIERS, 56'-6" W X 300'-0" L X 15'-1" D.
 - B. TWELVE STRAIGHT LINE (CHAIN AND FLIGHT) SLUDGE COLLECTORS.
 - C. FOUR CROSS COLLECTORS.
 - D. EIGHT SLUDGE PUMPS (FOUR STANDBY), 550 GPM EACH.
2. PRIMARY BATTERY B WITH:
 - A. FOUR PRIMARY CLARIFIERS, 56'-6" W X 300'-0" L X 15'-1" D.
 - B. TWELVE STRAIGHT LINE (CHAIN AND FLIGHT) SLUDGE COLLECTORS.
 - C. FOUR CROSS COLLECTORS.
 - D. SIX SLUDGE PUMPS (TWO STANDBY), 660 GPM EACH.
3. PRIMARY BATTERY C WITH:
 - A. FOUR PRIMARY CLARIFIERS, 56'-6" W X 300'-0" L X 15'-1" D.
 - B. TWELVE STRAIGHT LINE (CHAIN AND FLIGHT) SLUDGE COLLECTORS.
 - C. FOUR CROSS COLLECTORS.
 - D. SIX SLUDGE PUMPS (TWO STANDBY), 660 GPM EACH.
4. PRIMARY BATTERY D WITH:
 - A. TWELVE PRIMARY CLARIFIERS, 1'-6" W X 300'-0" L X 14'-0" D.
5. HEADWORKS FACILITY WITH:

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1. TEN BAR SCREENS, CLIMBER TYPE, TWENTY SLUICE GATES, WITH TWO BY-PASS CHANNELS, 11'-8" W X 12'-0" H, EACH AND TWO WATER PUMPS.
2. THREE GRIT GRINDERS, WITH THREE SCREENING PUMPS, FOUR DEWATERING SCREENS, AND FOUR COMPACTORS.
3. SIX AERATED GRIT BASISNS, 22'-6" W X 150'-0" L X 15'-0" D., WITH TWELVE ISOLATION GATES, FOUR BLOERS, EIGHTEEN GRIT PUMPS, EIGHT DEWATERING SCREW CONVEYORS AND TWO HOLDING HOPPERS.
4. TWO SCREENING STORAGE HOPPERS, 2,380 CU.FT. CAPACITY, WITH EIGHT SCREW CONVEYORS AND TWO HOLDING HOPPERS.
5. THREE SCUM WETWELLS, 2,950 GALLONS EACH, WITH TWO DEWATERING PUMPS, AND THREE SCUM PUMPS.

B. SECONDARY WASTEWATER TREATMENT SYSTEM CONSISTING OF:

6. EIGHT (8) EMERGENCY WASTEWATER STORAGE TANKS.
7. INTERMEDIATE PUMPING STATION WITH TEN (10) ARCHIMEDES SCREW PUMPS (TWO STAND-BY), VENTED.
8. NINE (9) HIGH PURITY OXYGEN REACTOR MODULES, 168'-0" W BY 300'-0" L EACH, VENTED.
9. THIRTY-SIX (36) SECONDARY CLARIFIERS, 150'-0" DIA EACH, WITH SLUDGE COLLECTORS.
10. TEN (10) HORIZONTAL ROTATING MICROSCREENS (THREE STAND-BY) 12'-8" W BY 30'-0" L
11. FOUR (4) HORIZONTAL, DUAL-MEDIA PRESSURE FILTERS.
12. TWO (2) CHLORINE CONTACT BASINS, 22'-0" W BY 130'-0" L.

C. BIOSOLIDS DIGESTION, THICKENING, DEWATERING AND HANDLING SYSTEM CONSISTING OF:

13. MUNICIPAL WASTEWATER SLUDGE DIGESTION SYSTEM WITH:
 1. THIRTY SIX (36) PRIMARY ANAEROBIC DIGESTERS, EACH 2,500,000 GALLON CAPACITY, EACH WITH A MECHANICAL MIXER, VENTED TO DIGESTER GAS TREATMENT FACILITY.
 2. TWO (2) SECONDARY ANAEROBIC DIGESTERS, 2,500,000 GALLON EACH, VENTED TO A DIGESTER GAS TREATMENT FACILITY.
 3. THREE (3) DIGESTED SLUDGE WET WELLS, 11'-6" DIA X 59'-6" H. EACH, VENTED TO A DIGESTER GAS TREATMENT SYSTEM.
 4. PRIMARY SLUDGE PUMP STATION WITH EIGHT (8) SLUDGE PUMPS (THREE STANDBY), AND TWO (2) PRIMARY SLUDGE WET WELLS, 47' W. X 22' L. EACH.

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5. THICKENED WASTE ACTIVATED SLUDGE (TWAS) PUMP STATION, WITH SIX (6) SLUDGE PUMPS AND ONE WET WELL WITH 15' W. X 30' L.
 6. FOUR (4) RESERVOIRS, 52'-6" W. X 18'-6" L. EACH.
 7. PUMP HOUSE WITH THREE (3) FRESH WATER PUMPS (ONE STANDBY), THREE INDUSTRIAL WATER PUMPS (ONE STANDBY), AND THREE HORIZONTAL FIRE PUMPS.
 8. FERROUS CHLORIDE FACILITY WITH TWO (2) FERROUS CHLORIDE STORAGE TANKS, 8,500 GALLONS EACH, TWO (2) METERING PUMPS (ONE STANDBY), AND ONE CHEMICAL TRANSFER PUMP.
14. WASTEWATER ACTIVATED SLUDGE THICKENING FACILITY WITH:
1. THREE (3) DISSOLVED AIR FLOTATION (DAF) TANKS, STANDBY ONLY.
 2. TWENTY-FOUR CENTRIFUGES (FOUR STANDBY), HIGH SPEED, SOLID BOWL, 300 H.P. MAIN DRIVE, 50 H.P. BACKDRIVE, COUNTERCURRENT DESIGN WITH A HELICAL SCREW CONVEYOR.
 3. TWO WASTE ACTIVATED SLUDGE WET WELLS, EACH 160,000 GALLON CAPACITY, 43'-0" L. X 30'-9" W. X 23'-0" D.
 4. FOUR THICKENED WASTE ACTIVATED SLUDGE WET WELLS, EACH 48'-0" L. X 5'-0" W. X 19'-0" D.
 5. ONE CENTRATE WET WELL, 18'-0" L. X 8'-6" W. X 24'-0" D.
 6. TWO SIDESTREAM WET WELLS, EACH 28'-6" L. X 18'-0" W. X 21'-0" D.
 7. TWELVE STORAGE TANKS, POLYMER, EACH 21,800 GALLON CAPACITY, VENTED TO ACTIVATED CARBON CANISTERS.
 8. THREE STORAGE TANKS, SODIUM HYDROXIDE (NAOH), TWO 2,850 GALLON, AND ONE 21,800 GALLON CAPACITY.
 9. THREE STORAGE TANKS, SODIUM HYPOCHLORITE (NAOCL), TWO 7,900 GALLON, AND ONE 21,800 GALLON CAPACITY.
15. BIOSOLIDS DEWATERING FACILITY (DICE 1, DICE 2, AND C7) WITH:
1. NINE (9) HIGH SPEED DEWATERING CENTRIFUGES, 600 – 1000 GPM EACH.
 2. ONE (1) EMULSION POLYMER STORAGE TANK NO. 8, 15,000 GALLONS CAPACITY.
 3. ONE (1) FERRIC/FERROUS CHLORIDE STORAGE TANK NO. 7, 15,000 GALLONS CAPACITY.
 4. FOUR (4) POLYMER STORAGE TANKS, ONE (1) MANNICH POLYMER, 10,000 GALLONS, ONE (1) EMULSION POLYMER, 1,500 GALLONS, AND TWO (2) DILUTED POLYMER, 1,000 GALLONS.

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5. TWO (2) POLYMER STORAGE TANKS, 65,000 GALLONS EACH.
16. FERRIC CHLORIDE INJECTION SYSTEM WITH:
 1. FOUR (4) 15,000 GALLON FERRIC CHLORIDE STORAGE TANKS.
 2. TWO TRANSFER PUMPS AND SIX METERING PUMPS.
17. DIGESTER SCREENING FACILITY WITH:
 1. THREE (3) STATIC SCREENS (HYDRATOWER), EACH 3' W. X 4' L. X 8' H.
 2. SIXTEEN (16) SCREENS, EACH 8' W. X 10' L.
 3. MIXING BASIN, 20,000 GALLONS CAPACITY, WITH A 10 H.P. MIXER.
 4. FOUR (4) BELT CONVEYOR, TWO 18" WIDE., ONE 26" WIDE., AND ONE 14" WIDE.
 5. FOUR (4) BELT PRESSES.
 6. FOUR (4) SNAIL CLARIFIERS.
 7. FOUR (4) GRIT HOPPERS, EACH 570 CUBIC FEET CAPACITY.
 8. THIRTY-NINE (39) SCREW CONVEYORS.
18. SLUDGE STORAGE AND LOAD-OUT SYSTEM WITH EIGHT STORAGE SILOS AND TRUCK LOAD-OUT SYSTEM, AND ASSOCIATED CONVEYOR BELTS AND FEED SCREWS.

BY THE FOLLOWING CHANGES TO THE HEADWORKS FACILITY:

1. REPLACING GRIT GRINDERS WITH SCREENING GRINDERS, REMOVING SCREENING PUMPS AND DEWATERING SCREENS, AND REDUCING NUMBER OF COMPACTORS.
2. REDUCING NUMBER OF GRIT PUMPS AND DEWATERING SCREW CONVEYORS, AND REMOVING HOLDING HOPPERS.
3. REMOVING SCUM WETWELLS, DEWATERING PUMPS, AND SCUM PUMPS.

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]

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3. THIS EQUIPMENT SHALL BE OPERATED AND MAINTAINED BY PERSONNEL PROPERLY TRAINED IN ITS OPERATION.
[RULE 204]
4. A FLOW METER AND RECORDER SHALL BE MAINTAINED TO MONITOR AND RECORD THE TOTAL FLOW RATE OF WASTE WATER INTO THE PRIMARY TREATMENT SYSTEM.
[RULE 1303(b)(1)][RULE 1401]
5. THE TOTAL LOW RATE OF WASTE WATER THROUGH THE PRIMARY TREATMENT SYSTEM SHALL NOT EXCEED 450 MILLION GALLONS PER DAY (MGD) EXCEPT DURING STORM PERIODS OR EMERGENCY SITUATIONS INVOLVING PUBLIC HEALTH AND SAFETY.
[RULE 1303(b)(1)][RULE 1401]
6. ALL PRIMARY CLARIFIERS SHALL BE COVERED AT ALL TIMES EXCEPT DURING MAINTENANCE PERIODS. RECORDS OF THE DURATION OF EACH MAINTENANCE PERIOD SHALL BE KEPT ON FILE.
[RULE 402]
7. PRIMARY WASTEWATER TREATMENT SYSTEM SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AIR POLLUTION CONTROL DEVICE WHICH IS IN OPERATION AND WHICH HAS RECEIVED A VALID PERMIT TO CONSTRUCT OR OPERATE FROM THE DISTRICT.
[RULE 402]
8. THE TOTAL INFLUENT FLOW OF WASTE WATER TO THE HEADWORKS FACILITY SHALL NOT EXCEED 450 MILLION GALLONS PER DAY (MGD) AVERAGED ON A CALENDAR MONTH, EXCEPT DURING STORM PERIODS AND EMERGENCY SITUATIONS INVOLVING PUBLIC HEALTH AND SAFETY. RECORDS OF THE DAILY INFLUENT FLOW RATE SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303(b)(1)][RULE 1401]
9. THE HEADWORKS FACILITY SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL DEVICE WHICH IS IN OPERATION AND WHICH HAS RECEIVED A VALID PERMIT TO CONSTRUCT OR OPERATE FROM THE DISTRICT.
[RULE 402]
10. THE INTERMEDIATE PUMPING STATION, THE OXYGEN REACTOR MODULE INFLUENT CHANNELS, AND THE OXYGEN REACTOR MODULE VENTS OF THE SECONDARY WASTEWATER TREATMENT SYSTEM SHALL BE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE (EXCEPT DURING REPAIR AND MAINTENANCE EVENTS) AND WHICH HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE SCAQMD.
[RULE 402]
11. THE GROUND LEVEL HYDROGEN SULFIDE CONCENTRATION AT THE PROPERTY BOUNDARY LINE SHALL NOT EXCEED 30 PPB OR ANY REVISED STATE AMBIENT AIR QUALITY STANDARDS WHICH MAY BECOME EFFECTIVE DURING THE OPERATION OF WASTEWATER TREATMENT SYSTEM.
[RULE 402]

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12. WASTEWATER SLUDGE DIGESTION SYSTEM SHALL NOT BE OPERATED UNLESS THE PRIMARY SLUDGE PUMP STATION AND THICKENED WASTE ACTIVATED SLUDGE (TWAS) PUMP STATION ARE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.
[RULE 402]
13. FLOW METERS OF THE WASTEWATER SLUDGE DIGESTION SYSTEM SHALL BE INSTALLED AND OPERATED IN ORDER TO MEASURE AND RECORD SLUDGE, FERROUS CHLORIDE, AND DIGESTER GAS FLOW RATES.
[RULE 204]
14. WASTE ACTIVATED SLUDGE THICKENING FACILITY SHALL NOT BE OPERATED UNLESS THE CENTRIFUGES, WAS WET WELLS, TWAS WET WELLS, AND SIDESTREAM WET WELLS ARE VENTED TO AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A PERMIT TO CONSTRUCT OR PERMIT TO OPERATE BY THE AQMD.
[RULE 402]
15. A FLOW INDICATING DEVICE SHALL BE INSTALLED AND MAINTAINED TO MEASURE THE TOTAL DAILY VOLUME OF SLUDGE PROCESSED BY THE WASTE ACTIVATED SLUDGE THICKENING FACILITY.
[RULE 204]
16. ALL SLUDGE IN THE BIOSOLIDS DEWATERING FACILITY SHALL BE ANAEROBICALLY DIGESTED PRIOR TO DEWATERING.
[RULE 402][RULE 1303(b)(1)][RULE 1401]
17. THE BIOSOLIDS DEWATERING FACILITY SHALL NOT BE OPERATED UNLESS IT IS VENTED ONLY TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A VALID PERMIT BY THE EXECUTIVE OFFICER.
[RULE 402]
18. THE TOTAL FACILITY SLUDGE DEWATERING RATE IN THE BIOSOLIDS DEWATERING FACILITY SHALL NOT EXCEED 3,700 GPM ANNUAL AVERAGE AND 4,570 GPM MAXIMUM DAY AVERAGE, EXCEPT DURING EMERGENCY SITUATIONS INVOLVING PUBLIC HEALTH AND SAFETY. RECORDS OF SUCH OCCURRENCES SHALL BE KEPT FOR AT LEAST TWO YEARS AND BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204][RULE 1303(b)(1)][RULE 1401]
19. THE FERRIC CHLORIDE STORAGE TANKS IN THE FERRIC CHLORIDE INJECTION SYSTEM SHALL REMAIN COVERED AT ALL TIMES.
[RULE 204]
20. DAILY RECORDS OF FERRIC CHLORIDE THROUGHPUT IN THE FERRIC CHLORIDE INJECTION SYSTEM SHALL BE KEPT AND MAINTAINED ON FILE FOR A PERIOD OF FIVE YEARS. THE RECORDS SHALL BE MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.
[RULE 204]
21. DIGESTER SCREENING FACILITY SHALL NOT BE OPERATED UNLESS IT IS VENTED TO AN AIR POLLUTION CONTROL EQUIPMENT WHICH IS IN FULL USE AND WHICH HAS BEEN ISSUED A VALID PERMIT TO CONSTRUCT OR OPERATE BY THE AQMD.

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[RULE 402]

22. ONLY TWO TRUCKS IN THE SLUDGE STORAGE AND LOAD-OUT SYSTEM MAY RECEIVE SLUDGE FROM THE LOADING BAYS AT ANY ONE TIME UNLESS OTHERWISE APPROVED IN WRITING BY THE AQMD. THE TWO INNER TRUCK LOADING BAYS SHALL REMAIN TOTALLY ENCLOSED WHILE LOADING OUT SLUDGE.
[RULE 402]
23. THE EIGHT LOAD OUT SILOS AND THE TEN INDOOR STORAGE BINS IN THE SLUDGE STORAGE AND LOAD-OUT SYSTEM SHALL BE VENTED TO AN AIR POLLUTION CONTROL SYSTEM AT ALL TIMES. THE AIR POLLUTION CONTROL SYSTEM SHALL HAVE AN ACTIVE OPERATING PERMIT FROM AQMD.
[RULE 402]
24. IF THE EMISSION OF TOXIC AND POTENTIALLY TOXIC SUBSTANCES IN THE SLUDGE STORAGE AND LOAD-OUT SYSTEM EXCEED THE CORRESPONDING VALUES USED IN THE HEALTH RISK ASSESSMENT, THE CITY OF LOS ANGELES SHALL SUBMIT A REVISED HEALTH RISK ASSESSMENT FOR AQMD APPROVAL WITHIN 90 DAYS AFTER NOTICE IS GIVEN FOR SUCH PREPARATION, UNLESS OTHERWISE APPROVED IN WRITING BY THE AQMD.
[RULE 1401]
25. ALL RECORDS REQUIRED BY THIS PERMIT SHALL BE KEPT FOR AT LEAST FIVE (5) YEARS AND MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 204]
26. 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 204]

Periodic Monitoring:

27. DAILY RECORDS OF THE VOLUME OF WASTEWATER TREATED AT THIS FACILITY SHALL BE KEPT ON FILE AND SHALL BE MADE AVAILABLE TO AQMD PERSONNEL UPON REQUEST.
[RULE 1303(b)(1)][RULE 3004(a)(4)]
28. RECORDS OF DAILY SLUDGE THROUGHPUT IN THE BIOSOLIDS DEWATERING FACILITY SHALL BE KEPT AND MAINTAINED ON FILE FOR A MINIMUM OF FIVE YEARS AND MADE AVAILABLE TO THE AQMD PERSONNEL UPON REQUEST.
[RULE 1303(b)(1)][RULE 3004(a)(4)]

Emissions and Requirements:

NONE