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| <b>SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT</b><br><br><b>ENGINEERING AND COMPLIANCE DIVISION</b><br><br><b>PERMIT APPLICATION EVALUATION AND CALCULATIONS</b> | PAGES<br>5         | PAGE<br>1         |
|   | APPL NO<br>554605  | DATE<br>7/24/14   |
|   | PROCESSED BY<br>AM | CHECKED BY<br>CDT |

**Permit to Construct/Operate**

**APPLICANT'S NAME:** City of Los Angeles Bureau of Sanitation, Hyperion Treatment Plant

**MAILING ADDRESS:** 12000 Vista Del Mar  
Playa Del Rey, CA 90293

**EQUIPMENT ADDRESS:** 12000 Vista Del Mar, Playa Del Rey, CA

**APPLICATION:** 554605

**FACILITY ID:** 800214

**EQUIPMENT DESCRIPTION:**

MODIFICATIONS TO THE EXISTING HEADWORKS FACILITY UNDER P/O # D93840 (A/N 161034) CONSISTING OF:

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 BASINS, 22'-6" W. X 150'-0" L. X 15'-0" D., WITH TWELVE ISOLATION GATES, FOUR BLOWERS, 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.

BY:

1. REPLACING GRIT GRINDERS WITH SCREENING GRINDERS, REMOVING SCREENING PUMPS AND DEWATERING SCREENS, AND REDUCING NUMBER OF COMPACTORS.

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2. REDUCING NUMBER OF GRIT PUMPS AND DEWATERING SCREW CONVEYORS, AND REMOVING HOLDING HOPPERS.

3. REMOVING SCUM WETWELLS, DEWATERING PUMPS, AND SCUM PUMPS.

THE PROPOSED HEADWORKS FACILITY WILL CONSIST OF:

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. TWO SCREENINGS GRINDERS AND TWO COMPACTORS.

3. SIX AERATED GRIT BASINS, 22'-6" W. X 150'-0" L. X 15'-0" D., WITH TWELVE ISOLATION GATES, FOUR BLOWERS, SIX GRIT PUMPS, AND THREE DEWATERING SCREW CONVEYORS.

**BACKGROUND:**

The above application is filed on 6/21/13 for modification of the existing equipment under active P/O # D93840 issued on 10/13/1995. This application will also be used to consolidate the existing permits to one permit for the wastewater treatment system at this facility (please see notes). A Title V revision application (A/N 554606) was also filed on 6/21/13 to incorporate the proposed modifications.

Note:

- 1) Based on the data submitted, the process throughput will remain the same and there will be no emissions increase due to the proposed modifications. There will be no modifications to the foul air collections system.
- 2) Based on the District Compliance database, there are no violations issued against the above facility since 2012.
- 3) Per applicant's request and to be consistent with the other wastewater treatment facilities, the existing permits as part of the wastewater treatment plant for this facility will be consolidated. Therefore, this application will be used to consolidate the following permits;

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| Application No. | Equipment Description                                  |
|-----------------|--|
| 161032          | Primary Wastewater Treatment System                    |
| 161034          | Headworks Facility                                     |
| 254887          | Secondary Wastewater Treatment System                  |
| 274876          | Municipal Wastewater Sludge Digestion System           |
| 281651          | Waste Activated Sludge Thickening Facility             |
| 299232          | Biosolids Dewatering Facility (DiCE-1, DiCE-2, and C7) |
| 264553          | Ferric Chloride Injection System                       |
| 264457          | Digester Screening Facility                            |
| 245834          | Sludge Storage and Load-Out System                     |

**PROCESS DESCRIPTION:**

The Hyperion Treatment Plant (HTP) is the City of Los Angeles' largest wastewater treatment facility. This plant provides primary and secondary treatment of sewage as well as solids handling for sludge.

The modifications to the Headworks Facility consists of equipment to remove grit and screenings from the influent sewage and to process them for disposal. In the grit removal train, gritty material settles in aerated grit basins and is pumped to classifiers that wash away any associated organic material. The washed grit is then dried and stored in a hopper until it is hauled to landfill. In the screenings removal train, rags and other large debris that catch on bar screens, are shredded and are pumped to rotary drum screens that wash away any associated organic material. The washed screenings are then dewatered in a compactor and stored in a hopper until they are hauled to landfill. For detailed process description, please see the applicant's data.

**EMISSIONS:**

Operating Schedule:

24 hrs/day  
7 days/wk  
52 wks/yr

Since the above modifications will not result in emissions increase, the emissions determined in the previous evaluation for P/O # remain the same. The emissions reported in the previous evaluation for AN 161034 are as follows:

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ROG:

R1 = 1.3 lb/hr, based on Table 2-3 (please see attached)

R2 = 0.21 lb/hr (based on 84% reduction efficiency from 2009 tests results)  
= 5.04 lbs/day

ROG emissions based on the Jan. 2009 tests results, Table 2 (please see attached):

R2 =  $\frac{8.2 \text{ ppmv} \times 12,255 \times 16 \times 60}{379 \times 1000,000}$   
= 0.25 lb/hr  
= 6.00 lbs/day

R1 = 1.6 lbs/hr (based on 84% reduction efficiency from tests results)

**HEALTH RISK ASSESSMENT:**

Since the above modifications will not result in emissions increase, cancer risk analysis is not required.

**RULES EVALUATION:**

**Rule 212:** This equipment is not within 1,000 feet of a school boundary. This equipment is not considered to be a significant project. Public notice is not required.

**Rule 401:** The equipment is not expected to emit visible emissions.

**Rule 402:** No nuisance resulting from operation of this equipment is expected.

**Reg. 13:** Not applicable. No emissions increase due to the above modifications.

**Rule 1401:** Since there is no emissions increase due to the above modifications, cancer risk analysis is not required.

**Rule 1401.1:** Not applicable. No schools within 1,000 ft of the facility.

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**REG XXX:**

Compliance with Reg. XXX, Title V permit is expected. The facility Title V permit was renewed on 7/11/2014. There have been no complaints, Notices to Comply and Notices of Violation since then. The modification of Headworks Facility is considered a minor revision and will be subject to EPA's 45-Day Review Period. Upon the EPA 45-Day Review Period, approved permit for this equipment will be included in Section D of the Title V Facility Permit.

**CONCLUSIONS / RECOMMENDATIONS:**

Compliance with applicable AQMD Rules and Regulations is expected. Issuance of a Permit to Construct/Operate subject to the conditions listed below:

**PERMIT CONDITIONS:**

Please see Sample Permit for conditions.