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OFFICE OF THE BOARD OF PUBLIC WORKS

200 NORTH SPRING STREET ROOM 361, CITY HALL LOS ANGELES, CA 90012 (213) 978-0261 (213) 978-0278 Fax

> ARLEEN P. TAYLOR EXECUTIVE OFFICER

http://www.bpw.lacity.org

ERIC GARCETTI MAYOR

September 11, 2013

#1 BOS

City Council Room No. 395 City Hall

N

# Subject: HYPERION TREATMENT PLANT DIGESTER GAS UTILIZATION PROJECT – CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT

As recommended in the accompanying report of the Director of the Bureau of Sanitation, which this Board has adopted, the Board of Public Works recommends that the City Council review and consider the Hyperion Digester Gas Utilization Project Final Environmental Impact Report (EIR), which addresses the environmental impacts of the project and the mitigation measures and reporting requirements; and also:

- a. Certify that the Final EIR has been completed in compliance with the California Environmental Quality Act (CEQA); that the Council has reviewed and considered the information contained in the Final EIR prior to approving the project; and that the documents constituting the record of proceedings in this matter are in the custody of the City Clerk, and in the files of the Bureau of Sanitation;
- b. Adopt all of the mitigation and monitoring measures contained in Transmittal No. 3 (Findings and Statement of Overriding Considerations) as conditions of project approval;
- c. Adopt the Mitigation Monitoring and Reporting Program;
- d. Adopt the Findings and Statement of Overriding Considerations; and
- e. Approve the project; identified as the preferred alternative in the Final EIR.

# FISCAL IMPACT

There is no impact to the General Fund. The project will be funded by the Sewer Construction and Maintenance Fund. Detailed funding information will be provided by the Board report at the time the project is awarded.

Respectfully submitted, Arleen P. Taylor, Executive Officer Board of Public Works

APT:mp



# DEPARTMENT OF PUBLIC WORKS

BUREAU OF SANITATION Board Report No. 1 September 11, 2013 ADOPTED BY THE BOARD PUBLIC WORKS OF THE CITY of Los Angeles California AND REFERRED TO THE CITY COUNCIL SEP 1 1 2013

Executive Officer

CD: All

HYPERION TREATMENT PLANT DIGESTER GAS UTILIZATION PROJECT – CERTIFICATION OF ENVIRONMENTAL IMPACT REPORT AND APPROVAL OF PROJECT BY CITY COUNCIL

# RECOMMENDATIONS

- 1. Review and consider the Hyperion Digester Gas Utilization Project Final Environmental Impact Report (Final EIR), which addresses the environmental impacts of the project and the mitigation measures and reporting requirements.
- 2. Review this report and forward it to the City Council with the recommendation that the Council:
  - a. Certify that the Final EIR has been completed in compliance with California Environmental Quality Act (CEQA); that the Council has reviewed and considered the information contained in the Final EIR prior to approving the project; and that the documents constituting the record of proceedings in this matter are in the custody of the City Clerk, and in the files of the Bureau of Sanitation;
  - Adopt all of the mitigation and monitoring measures contained in Transmittal 3(Findings and Statement of Overriding Considerations) as conditions of project approval;
  - c. Adopt the Mitigation Monitoring and Reporting Program;
  - d. Adopt the Findings and Statement of Overriding Considerations;
  - e. Approve the project, identified as the preferred alternative in the Final EIR.

# FISCAL IMPACT STATEMENT

There is no impact to the General Fund. The project will be funded by the Sewer Construction and Maintenance Fund. Detailed funding information will be provided in the Board report at the time the project is awarded.

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## TRANSMITTALS

- 1. Final EIR dated August30, 2013.
- 2. Mitigation Monitoring and Reporting Program (MMRP), dated August30, 2013.
- 3. Findings and Statement of Overriding Considerations (SOC), dated August30, 2013.
- 4. Notice of Availability for Draft EIR dated June 7, 2013.
- 5. Draft EIR, dated May 2013.
- 6. Initial Study for Hyperion Treatment Plant Digester Gas Utilization Project, dated March 31, 2011.

## DISCUSSION

#### Background

Under an agreement between the City of Los Angeles (City) Bureau of Sanitation (SAN) and Los Angeles Department of Water and Power (LADWP), the Hyperion Treatment Plant (HTP) has been exporting its digester gas to Scattergood Generating Station (SGS) since 1995.LADWP utilizes the digester gas in combination with natural gas to generate electricity for the electrical power grid, and provides HTP with steam for plant use in the thermophyllic digesters. Due to regulatory requirements, the SGS must shut down and re-power Units Nos. 1 and 2, which currently combust the HTP digester gas. The City LADWP/SAN energy exchange agreements currently in place expire January 2015. An interim agreement is in process to maintain the arrangement through December 31, 2016.

The Digester Gas Utilization Project (DGUP) has been in development for several years and is the City's effort to make the plant self-sufficient and sustaining in energy. Through aRequest for Proposal (RFP), the BOS considered a range of options that makes best use of the digester gas to generate electricity which will meet plant demand and future needs for electricity and produce steam to support its operation.

#### Existing Condition and the Proposed Project

The digester gas produced at HTP is currently combusted at SGS in a simple cycle steam turbine. This outdated technology requires a significant amount of supplemental natural gas in order for the digester gas to be utilized. When the digester gas is put to work across the fenceline at HTP and combusted in the new technology the result will be increase in power generating efficiency and a large reduction in the amount of supplemental natural gas utilized resulting in a net decrease in air emissions.

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Project Objectives. The intent of the SAN is to construct, and place in operation implement a project that beneficially utilizes HTP's renewable digester gas that would otherwise be flared onsite. The purpose and need for the proposed project are as follows:

- 1. Prevent flares from operating continuously to dispose of digester gas when it can no longer be sent to SGS;
- 2. Produce renewable energy from HTP's digester gas;
- 3. Provide all of HTP's electricity and process steam needs;
- 4. Allow HTP to operate without using external electrical power and to provide for two independent sources of power as required by HTP's National Pollutant Discharge Elimination System (NPDES) permit;
- 5. Allow the HTP to operate "off the grid", so in the case of an emergency (e.g., earthquake, blackouts), the facility can continue operating and flaring can be avoided;
- 6. Maintain the final output of Class A biosolids, even in the event of external power interruption.

#### Identification of Preferred Alternative

The City received several proposals in response to the RFP. SAN formed a team of engineers, operation staff and consultants to evaluate the proposals. The preferred alternative was selected based on each proposal's ability to meet all project objectives, the availability of infrastructure, operational feasibility, environmental impact and long term economics and technological viability.

In November 2012, after consideration of the Draft EIR, state agency and public comment, the preferred alternative to use a Combined Heat and Power cogeneration system was recommended to the Board of Public Works and approved.

## Description of Proposed Project

The proposed project will consist of installing and operating a digester gas/natural gas-fueled combined cycle cogeneration system at HTP. This Combined Heat and Power cogeneration system *Maximum Build-Out* configuration will utilize the digester gas (digester gas/natural gas mixture) in three combustion turbine generators (CTGs) to generate electricity, the recovery of heat to generate steam in three heat recovery steam generators (HRSGs), the generation of electricity from a steam turbine generator train (two STGs), and the extraction of a portion of the steam to meet the steam demand of the thermophyllic digester operations.

The proposed project will offer efficient utilization of the digester gas and addresses operational needs for SAN. The DGUP will consume all digester gas produced at HTP to address current and future energy needs of the plant. The DGUP will use the existing building and existing stack.

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#### California Environmental Quality Act -Environmental Impact Evaluation

This Final EIR has been prepared by Sanitation to evaluate potential environmental effects that would result from development of the proposed HTP Digester Gas Utilization Project. This EIR has been prepared in conformance with the California Environmental Quality Act of 1970 (CEQA) statutes (Public Resources Code §21000 et seq.) and the State CEQA Guidelines (Title 14, California Code of Regulations, §15000 et seq.). The City is the lead agency under CEQA. The assessment was conducted on the Maximum Build out project and analyzed the air quality impacts as a new source in adherence with CEQA guidelines. This approach provides for the most conservative analysis of any potential impacts or regulatory threshold triggers.

#### **CEQA - Public Participation**

Coordination meetings with City of El Segundo officials and staff, community groups, residents, government agencies, local citizens and utility companies were held during the environmental document preparation and public review period to update interested parties on the status of the proposed project, to obtain public and agency input, and to resolve issues.

The following project outreach meetings were held:

- El Segundo Citizen's Advisory Committee projects coping meeting was initially held on April 20, 2011 and subsequent updates provided on a quarterly basis for a total of six meetings were held in a two-year period. This was followed by a meeting on March 6, 2013 to provide an update on the project status and CEQA activities to solicit public input on the proposed project. Members included representatives of neighborhoods and businesses as well as various city officials.
- *City of Los Angeles Council District 11* briefing was conducted on June 14, 2013 to provide an update on the project and the CEQA Draft EIR and to get further input.
- A *Public Workshop* was held at El Segundo Public Library on June 19, 2013 to present the project and address questions and comments. The workshop was attended by members of the public and El Segundo elected officials.

#### Public Review of Draft EIR

The City sent the Draft EIR to State Clearinghouse for distribution to State agencies and posted the Draft EIR for public review at nine local libraries and community centers for 45 days between June 7 and July 22, 2013. The Notice of Availability (NOA) of the Draft EIR was published in the *Los Angeles Times*, the *El Segundo Herald*, and the *Argonaut*. NOAs in English and Spanish were sent to residences located in the neighboring community of El Segundo, potentially affected organizations, and public agencies. In addition, the NOA identified the option of viewing the documentation online and a web link was provided where the Draft EIR was posted on the project's website for public viewing. The executive summary and a compact disc with the Draft EIR were made available at the public hearings for interested individuals to obtain.

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In addition to verbal comments received during the public hearings, threewritten comments were received during the Draft EIR public review period. The public comments expressed support of a project that would minimize the use of flares. The responses to all comments are included in the Final EIR.

## Final EIR

The Final EIR amends the Draft EIR with minor revisions and corrections includes comments received and responses to comment. No significant new information was added.

#### Mitigation Monitoring and Reporting

CEQA requires public agencies, when approving a project for which an EIR has been prepared, to adopt a reporting or monitoring program for changes to the project that have been adopted to mitigate or avoid significant effects on the environment. The program must be adopted by the public agency at the time findings are made regarding the impacts of the project. The Mitigation Monitoring and Reporting Program (Transmittal No. 2) for the Hyperion DGUPis transmitted herewith for adoption by the City Council. The mitigation measure identified in Section 3 of the Final EIR and is described as follows:

MMGHG-1: Condition(s) will be included in the operating agreement for the DGUP requiring the following:

- Total natural gas usage by DGUP will be up to 10% by volume when possible, but can be up to 40% by volume based on HTP's operational needs;
- Fuel flow meters will be installed for the purpose of monitoring and recording both natural gas and digester gas volumetric gas flow rates.
- The DGUP operator will provide natural gas (non-biogenic) and digester gas (biogenic) volumetric gas flow data to the City upon request.

#### **Overriding Considerations**

The Final EIR finds that the project would result in significant and unavoidable continuing air quality and greenhouse gas impacts during operations and these impacts cannot be mitigated to insignificant levelsfor the *Maximum Build Out*. However, all health risk indices are below thresholds for both worker and resident exposures. The project is a permittable project under local, state and federal regulations. The types of emissions associated with this project are consistent with this type of equipment and will employ best available control technology. The proposed project represents a decrease in overall emissions when compared to the existing gas handling operations conducted at Scattergood as well as in the use of flaring at HTP as a disposal method. This proposed project meets all of the objectives identified in the RFP. The project cannot be approved unless the City Council finds that the benefits of the project outweigh and thus override the unavoidable significant environmental impacts. The proposed Findings and Statement of Overriding Considerations are transmitted herewith (Transmittal No. 4).

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Reviewed By: FMD

Prepared by: Jim Marchese, RAD 213-847-5174 Respectfully submitted, . ENRIQUE C. ZALDIVAR, Director Bureau of Sanitation