South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Via Email and Certified Mail, return receipt requested

January 22, 2019

Stephen Zurn
General Manager
Glendale City, Glendale Water & Power
141 N Glendale Ave
Glendale, CA 91206-4426

Subject: Approval of AB 2588 Health Risk Assessment (HRA) for **Glendale City, Glendale Water & Power** (SCAQMD Facility ID No. **800327)**)

Dear Mr. Zurn:

This letter provides approval of the Health Risk Assessment (HRA) submitted on July 17, 2018 by Glendale City, Glendale Water & Power (Glendale Water & Power) pursuant to the Air Toxics "Hot Spots" Act (AB 2588) and South Coast Air Quality Management District's (SCAQMD) Rule 1402. As noted in the HRA Summary Form (Attachment A), the risks posed by Glendale Water & Power are above the public notification thresholds specified in Rule 1402. Pursuant to Rule 1402 (q)(1), Glendale Water & Power will be required to notify the public within thirty (**30**) days of the approval of the HRA. As stated in SCAQMD's Public Notification Procedures[1], this notification includes both written notices sent through the US Mail and a public meeting. Details regarding this HRA approval are below.

Background

In accordance with AB 2588 and SCAQMD Rule 1402, SCAQMD staff notified Glendale Water & Power on March 22, 2018 to submit an HRA based on its 2015 Air Toxic Inventory Report (ATIR). The HRA prepared for this request was submitted on July 18, 2018. The HRA was subsequently reviewed by SCAQMD staff.

Next Step: ***Public Notification***

As summarized in Attachment A, the cancer risk at the Maximum Exposed Individual Resident (MEIR) receptor is estimated to be 179.5 in a million. The cancer risk is due to dioxins and furans, hexavalent chromium, and arsenic emissions. Additionally, the non-cancer chronic hazard index at the MEIR receptor is estimated to be 1.69. The non-cancer chronic hazard index is due to arsenic, dioxins and furans, and nickel emissions. A cancer burden of 4.97 is estimated based on a 70-year exposure. Both cancer risk and cancer burden exceed the Action Risk Level specified in Rule 1402, and the non-cancer hazard index exceeds the Notification Risk Level specified in

[1] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf

Rule 1402. While the facility uses natural gas, the emissions contributing to both cancer risk and non-cancer hazard index were primarily generated from combustion of landfill gas. Emissions from combustion of landfill gas were calculated using SCAQMD default emission factors, which are from the California Air Toxics Emission Factor (CATEF) database. At the time of the ATIR approval, these were the best available emission factors. Any new information presented by the facility will be reviewed by SCAQMD staff for purposes of risk reduction implementation.

A map showing the areas with health risk levels exceeding public notification thresholds is also attached to this letter (Attachment B). Therefore, Glendale Water & Power must conduct public notification pursuant to SCAQMD Public Notification Procedures within **30** days of approval of the HRA. The Public Notice must be sent to all addresses within the notification area contour (cancer risk of 10 in a million or greater and non-cancer chronic hazard of 1.0 or greater) found in Attachment B.

It is SCAQMD's practice to post the HRA on its website and in a public library once it is approved. SCAQMD staff did not find any information marked confidential in the submitted HRA. If there is any business confidential information contained within the submitted HRA, please let us know and provide us with a redacted version of the HRA within two weeks, or no later than February 5, 2019.

In addition, given the short timeframe for conducting public notification, please schedule a meeting with SCAQMD staff within one week to discuss the next steps for public notification. If you have any questions regarding this letter, please contact either Edward Lee, Air Quality Engineer, at (909) 396-3323, or Victoria Moaveni, Program Supervisor, at (909) 396-2455.

Sincerely,

Tracy A. Goss, P.E.
Planning & Rules Manager
Planning, Rule Development & Area Sources

Attachment:
A. HRA Summary Form
B. Public Notification Area Map

TG:VM:EL

ATTACHMENT A

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HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : GLENDALE CITY, GLENDALE WATER & POWER
Facility Address: 800 AIR WAY, GLENDALE, CA 91201

Type of Business: MUNICIPAL POWER GENERATING PLANT
SCAQMD ID No.: 800327

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Inventory Reporting Year : 2015
2. Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
   a. Offsite 264.0 in a million Location: 382153 m E, 3780332 m N
   b. Residence 179.5 in a million Location: 382168 m E, 3780462 m N
   c. Worker 6.4 in a million Location: 382160 m E, 3780420 m N
3. Substances Accounting for 90% of Cancer Risk: DIOXINS AND FURANS (80%), HEX. CHROMIUM (8%), ARSENIC (7%)
   Processes Accounting for 90% of Cancer Risk: LANDFILL COMBUSTION IN THE BOILERS
4. Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*
   a. Cancer Burden 4.97
   b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure 2,318,409
   c. Maximum distance to edge of 70-year, 1 x 10^{-6} cancer risk isopleth (meters) 26,587

B. Hazard Indices

[Long Term Effects (chronic) and Short Term Effects (acute)]
(non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")

1. Maximum Chronic Hazard Indices:
   a. Residence HI: 1.69 Location: 382168 m E, 3780462 m N toxicological endpoint: RESPIRATORY SYSTEM
   b. Worker HI : 0.73 Location: 382160 m E, 3780420 m N toxicological endpoint: RESPIRATORY SYSTEM
2. Substances Accounting for 90% of Chronic Hazard Index: ARESNIC (25%), DIOXINS AND FURANS (28%), NICKEL (18%)
3. Maximum 8-hour Chronic Hazard Index:
   8-Hour Chronic HI: 0.11 Location: 382160 m E, 3780420 m N toxicological endpoint: CENTRAL NERVOUS SYSTEM
4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: MANGANESE (90%)
5. Maximum Acute Hazard Index:
   PMI: 0.80 Location: 382275.4 m E, 3780141 m N toxicological endpoint: IMMUNE SYSTEM
6. Substances Accounting for 90% of Acute Hazard Index: NICKEL (99%)

C. Public Notification and Risk Reduction

1. Public Notification Required? X Yes No
   a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI >1
   16,542
2. Risk Reduction Required? X Yes No

ATTACHMENT B
Public Notification Map
(Cancer Risk 10 in-a-million)