



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178  
(909) 396-2000 • [www.aqmd.gov](http://www.aqmd.gov)

*Via Email and Certified Mail, return receipt requested*

August 21, 2020

Michael D. Bechtol  
Phillips 66 Wilmington  
1660 W Anaheim Street  
Wilmington, CA 90744

Subject: Approval of AB 2588 Health Risk Assessment (HRA) for  
**Phillips 66 Wilmington** (South Coast AQMD Facility ID No. **171107**)

Dear Mr. Bechtol:

This letter provides approval of the Health Risk Assessment (HRA) submitted by Phillips 66 Wilmington pursuant to the Air Toxics “Hot Spots” Act (AB 2588) and South Coast Air Quality Management District’s (South Coast AQMD) Rule 1402. As noted in the HRA Summary Form (Attachment A), the risks posed by Phillips 66 Wilmington are above the Notification Risk Level and the Action Risk Level specified in Rule 1402.

## **Background**

South Coast AQMD staff notified Phillips 66 Wilmington on March 1, 2017 to prepare an Air Toxics Inventory Report (ATIR) based on the 2015 inventory year. Staff received the ATIR on April 18, 2019 and conditionally<sup>1</sup> approved it on May 3, 2019. Staff then notified you on May 3, 2019 to submit an HRA based on the approved ATIR. The HRA prepared for this request was initially submitted on January 17, 2020. Staff requested subsequent revisions, with the most recent revision submitted on June 9, 2020. This approval is for the HRA as revised on June 9, 2020.

## **Next Step: Public Notification**

As summarized in Attachment A, the cancer risk at the Maximum Exposed Individual Resident (MEIR) receptor is estimated to be 33.8 in-a-million. The cancer risk is primarily due to diesel particulate matter, PAH’s, naphthalene, hexavalent chromium, and benzene. Therefore, residential cancer risk exceeds both the Notification Risk Level and Action Risk Level specified in Rule 1402.

As stated in South Coast AQMD’s Public Notification Procedures<sup>2</sup>, public notification typically consists of three components: distribution of the approved HRA, distribution of public notification materials, and a public meeting. Phillips 66 Wilmington must distribute facility’s approved HRA

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<sup>1</sup> Phillips 66 Wilmington was required to conduct additional source tests to incorporate the results of the tests with the HRA to be submitted. The results of these tests are allowable for preparing a risk reduction plan.

<sup>2</sup> [http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn\\_procedures.pdf](http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf)

and public notification materials pursuant to South Coast AQMD Public Notification Procedures within **30** days of the approval date on this letter, or **September 21, 2020**. A map showing the areas with health risk levels exceeding the Notification Risk Level is also attached to this letter (Attachment B). The public notification materials must be approved by South Coast AQMD and 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. The public meeting must take place within **30** days of the distribution of public notification materials.

**Future Plans: Risk Reduction**

Because the Rule 1402 Action Risk Level was exceeded in the approved HRA, Phillips 66 Wilmington shall submit a Risk Reduction Plan (RRP) within 120 days of this letter, or **December 22, 2020**, pursuant to Rule 1402 (f)(1) to reduce the impact of total facility emissions below the Rule 1402 Action Risk Level.

South Coast AQMD will post the approved HRA on our website and make a copy available in our library. South Coast AQMD 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, both in electronic format and hardcopy, within two weeks, or no later than **September 4, 2020**.

In addition, given the short timeframe for conducting public notification, please schedule a meeting with us within one week to discuss the next steps for public notification. If you have any questions regarding this letter, please contact either Alberto Jasso, Air Quality Engineer II, at (909) 396-3581, 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:FC:AJ



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**HEALTH RISK ASSESSMENT SUMMARY FORM**

Facility Name : Phillips 66 Wilmington  
Facility Address: 1660 West Anaheim Street, Wilmington CA 90744  
Type of Business: Refinery  
SCAQMD ID No.: 171107

**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 47.4 in a million Location: 381400, 3737400
  - b. Residence 33.8 in a million Location: 381343, 3737980
  - c. Worker 2.9 in a million Location: 381500, 3737300
- 3. Substances Accounting for 90% of Cancer Risk: Diesel PM, PAHs, Naphthalene, Hexavalent Chromium, Benzen  
Processes Accounting for 90% of Cancer Risk: Rental Portable Diesel ICEs, Welding, Fugitives, FCC, Heaters
- 4. Estimated Population Exposed to Specific Risk Levels for a 70-year exposure
  - a. 1 to <10 in a million 262325
  - b. 10 to <100 in a million 2241
  - c. >100 in a million 3
  - d. Total >= 1 in a million 264569
- 5. Cancer Burden: 0.64 *Cancer Burden = (cancer risk) x (no. of people exposed to specific cancer risk)*
- 6. Maximum Distance to Edge of 70-year, 1 x 10<sup>-6</sup> Cancer Risk Isoleth (meters) 8000

**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: 0.17 Location: 381343, 3737980 toxicological endpoint: Respiratory
  - b. Worker HI : 0.19 Location: 381500, 3737300 toxicological endpoint: Respiratory
- 2. Substances Accounting for 90% of Chronic Hazard Index: Arsenic, Nickel, Sulfuric Acid, HCN
- 3. Maximum 8-hour Chronic Hazard Index:  
8-Hour Chronic H 0.02 Location: 381343, 3737980 toxicological endpoint: Respiratory
- 4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: Nickel, Acrolein, Formaldehyde
- 5. Maximum Acute Hazard Index:  
PMI: 0.44 Location: 380800, 3738400 toxicological endpoint: Eye
- 6. Substances Accounting for 90% of Acute Hazard Index: Acrolein

**C. Public Notification and Risk Reduction**

- 1. Public Notification Required?  Yes  No
  - a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI >1 1532
- 2. Risk Reduction Required?  Yes  No

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

