Subject: Approval of AB 2588 Health Risk Assessment (HRA) for Boral Roofing LLC (SCAQMD Facility ID No.1073)

Dear Ms. Kovacovsky:

This letter provides approval of the HRA submitted on June 26, 2018 by Boral Roofing LLC (Boral Roofing) 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 Boral Roofing are above the public notification thresholds specified in Rule 1402. Pursuant to Rule 1402 (q)(1), Boral Roofing will be required to notify the public within thirty (30) days of the approval of the HRA. As stated in SCAQMD’s Public Notification Procedures¹, 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 Boral Roofing on March 27, 2018 that it must submit an HRA based on its 2015 Air Toxic Inventory Report (ATIR). The HRA prepared for this request was submitted on June 26, 2018. The HRA was subsequently reviewed by SCAQMD staff.

**Next Step: Public Notification**

As summarized in Attachment A, the non-cancer chronic hazard index at the Maximum Exposed Individual Worker (MEIW) receptor is estimated to be 2.72, which exceeds the public notification threshold specified in Rule 1402. This non-cancer chronic hazard index is due to arsenic, hydrogen fluorides, and hydrogen chlorides emissions from the kilns. A map showing the areas with health risk levels exceeding public notification thresholds is also attached to this letter (Attachment B). Therefore, Boral Roofing 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 (non-cancer chronic hazard of 1.0) 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 September 27, 2018.

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 Alicia Martinez at (909) 396-3165 or Victoria Moaveni at (909) 396-2455.

Sincerely,

Jillian Wong

Jillian Wong, Ph. D.
Planning & Rules Manager
Planning, Rule Development & Area Sources

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

JW:VM:FC:AM
ATTACHMENT A

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name: Boral Roofing LLC
Facility Address: 909 Railroad St.
Corona, CA 92882
Type of Business: Structural Clay Tile Manufacturing
SCAQMD ID No.: 1073

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: 103 in a million
     Location: UTM Zone 11; X = 446659.5, Y = 3749812.3
   - Residence: 0.41 in a million
     Location: UTM Zone 11; X = 446650.0, Y = 3749800
   - Worker: 190 in a million
     Location: UTM Zone 11; X = 446700.0, Y = 3749850

3. Substances Accounting for 90% of Cancer Risk:
   Arsenic (58%), Chromium (IV) (31%), Di2-EthylHtPhthal (3%)

4. Cancer Burden for a 70-yr exposure:
   (Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])
   - Cancer Burden: 0.00145
   - Number of people exposed to >1 per million cancer risk for a 70-yr exposure: 1003
   - Maximum distance to edge of 70-year, 1 x 10^6 cancer risk isopleth (meters): 1400

B. Hazard Indices
[Long Term Effects (chronic) and Short Term Effects (acute)]

1. Maximum Chronic Hazard Indices:
   - Residence HI: 0.57
     Location: 446650 E, 3749600 N
     Toxicological endpoint: Respiratory
   - Worker HI: 2.72
     Location: 446700 E, 3749850 N
     Toxicological endpoint: Respiratory

2. Substances Accounting for 90% of Chronic Hazard Index:
   Arsenic (49%), HCl (17%), HF (16%), Fluorides (10%)

3. Maximum 8-hour Chronic Hazard Index:
   - 8-Hour Chronic HI: 0.16
     Location: 446659.5 E, 3749812.3 N
     Toxicological endpoint: CNS & Respiratory

4. Substances Accounting for 90% of 8-hour Chronic Hazard Index:
   Arsenic (52%), Nickel (25%), Manganese (18%)

5. Maximum Acute Hazard Index:
   - SPM: 0.51
     Location: 446659.5 E, 3749812.3 N
     Toxicological endpoint: Eye & Respiratory

6. Substances Accounting for 90% of Acute Hazard Index:
   HF (41%), Fluorides (25%), HCl (13%), Nickel (11%), Arsenic (7%)

C. Public Notification and Risk Reduction

1. Public Notification Required? \( \text{X}_\text{Yes} \ ~ \text{No} \)

   a. If 'Yes', estimated population exposed to risks >1 in a million for a 30-year exposure, or as HI >1
   \[ \text{Facility} \]

2. Risk Reduction Required? \( \text{X}_\text{Yes} \ ~ \text{No} \)