



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • <http://www.aqmd.gov>

*Via email and US Mail*

May 8, 2015

Mr. Bruce Greene  
Hixson Metal Finishing  
829 Production Place  
Newport Beach, CA 92663-2809

## **SCAQMD Staff Review of Hixson Metal Finishing (Facility ID 11818) AB2588 Health Risk Assessment**

On April 3, 2014 SCAQMD staff informed Hixson Metal Finishing (Hixson) by letter that they were required to prepare an AB2588 Air Toxics Hot Spot Health Risk Assessment (HRA) and Risk Reduction Plan (RRP) pursuant to SCAQMD Rule 1402. As you know, HRAs estimate potential health risks over a lifetime of exposure from air toxics. For Hixson, the HRA and RRP were required in response to elevated levels of hexavalent chromium [Cr (VI)] that have been identified at monitors located on Hixson's property and at two adjacent properties (an apartment to the south and an industrial property to the north). On November 13, 2014 Hixson submitted its draft Health Risk Assessment to SCAQMD. After a preliminary review, SCAQMD staff submitted the HRA to the state Office of Environmental Health Hazard Assessment (OEHHA) for their concurrent review pursuant to Health and Safety Code 44361. OEHHA's February 18, 2015 comment letter is included as Attachment 1. Based on a review of the HRA and OEHHA's comments, SCAQMD is approving the HRA with some modifications, which include using the recently updated OEHHA HRA Guidelines<sup>1</sup>. Although monitoring has shown that offsite concentrations have been decreasing since the HRA's inventory year of 2013 due to operational changes by Hixson (see Attachment 2), current levels are still substantially above the risk limits set by Rule 1402. Hixson must therefore implement measures to reduce this risk to acceptable levels as quickly as feasible.

### **1) Modification to HRA**

*Updated OEHHA AB2588 Methodology* – The HRA provided by Hixson used 2013 as the applicable inventory year<sup>2</sup> and the OEHHA HRA Guidelines and risk calculation software then in effect. After Hixson submitted its HRA, and after OEHHA submitted comments on the draft HRA, OEHHA subsequently approved new HRA Guidelines that place greater emphasis on infant's and children's higher susceptibility to carcinogenic compounds. In general, for equivalent emissions, these new Guidelines yield calculated residential cancer risks that are higher by a factor of two to three compared to the previous Guidelines. In the case of Hixson,

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<sup>1</sup> Available here: [http://oehha.ca.gov/air/hot\\_spots/hotspots2015.html](http://oehha.ca.gov/air/hot_spots/hotspots2015.html)

<sup>2</sup> As you know, AB2588 HRAs assume that emission levels from the applicable inventory year (i.e. 2013) are assumed to exist for every year in the risk analysis, even though actual emissions in the future may be different. These assumptions are made to ensure that all HRAs follow a consistent methodology and can be compared against each other.

the risks increase by a factor of about 3.7 due to the additional toxicity of hexavalent chromium through exposure pathways other than inhalation (e.g., skin exposure). In conjunction with OEHHA's updated Guidelines, on March 6, 2015 the state Air Resources Board (ARB) approved a new version of its HARP software<sup>3</sup> to analyze health risks consistent with the new OEHHA HRA Guidelines. Consistent with direction received from the SCAQMD Governing Board on March 6, 2015, SCAQMD staff has re-evaluated the HRA input files that Hixson submitted, using the new version of HARP.<sup>4</sup> The only modification made to these files was to expand the receptor network in order to capture the 1 per million risk contour for the cancer burden analysis. The HRA provided by Hixson yielded a maximum residential cancer risk of 407 per million assuming constant emission levels from 2013. For the same emission scenario, the new version of HARP (which incorporates the new OEHHA Risk Assessment Guidelines) yields a maximum residential cancer risk of 1502 per million. The detailed results of this analysis are included in Attachment 3.<sup>5</sup> These risk values should be considered as maximum levels as 1) monitoring in 2014 and 2015 has shown lower levels of Cr (VI) in the community, and 2) Hixson will be required to prepare and implement a RRP in order to meet Rule 1402 risk reduction thresholds.

## **2) General Comments on HRA**

*Model-Monitor Reconciliation* – Hixson was required to reconcile dispersion modeling results required under AB2588 with the elevated Cr (VI) levels found from monitoring. The purpose of this reconciliation was to determine the amount of Cr (VI) coming from all sources, particularly the contribution of fugitive sources (e.g., emissions not coming out of discrete stacks) in comparison to measurable emissions from stacks. This reconciliation analysis in the HRA concluded that fugitive sources represent ~99% of total Cr (VI) emissions from this facility based on the 2013 emissions inventory year.

The exact methodology used for this reconciliation yielded precise levels of emissions from several sources onsite. However, the calculated emission source strengths from this modeling analysis are not consistent with the onsite monitoring data (e.g., Building 4 is identified as the largest source of fugitive emissions, yet the onsite monitor with the highest levels is found on Building 2). Although the reconciliation analysis found good correlation between modeling and offsite monitoring results, this tight correlation appears to be an artifact more of the statistical method chosen rather than an exact representation of actual emissions. However, as this modeling analysis can accurately predict offsite concentrations from 2013, SCAQMD staff accepts the proposed emissions inventory for the purposes of fulfilling AB2588 and Rule 1402 HRA requirements only. The RRP should develop an emission inventory that considers both the HRA inventory and the data from the four onsite air quality monitors.

*Inventory Years* – Hixson was required to prepare an HRA based on a 2013 emissions inventory year. The HRA contains a supplemental analysis of 'Current Operations' based on an emissions profile built to match mid-2014 operations. This 'Current Operations' emissions profile also

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<sup>3</sup> Available here: <http://www.arb.ca.gov/toxics/harp/harp.htm>

<sup>4</sup> While AB 2588 does not require the use of the new OEHHA guidelines for revised HRAs if the original HRA was required by SCAQMD before the new guidelines are established, SCAQMD Rule 1402 gives the Executive Officer the authority to use the new guidelines.

<sup>5</sup> The revised health risks presented in Attachment 3 also include the calculation methodologies from ARB's proposed Risk Management Guidance that are contained within HARP (version 15076).

uses offsite monitoring results to determine fugitive source strength, however there are key limitations in this analysis as described below.

- The monitoring data used in this analysis is limited to the month of August 2014. As seen in the attached chart (Attachment 4), August 2014 represents an anomalous low in comparison to monitored levels since January 2014 and is not reflective of ‘current’ operations.
- The ‘Current Operations’ model-monitor reconciliation analysis used a different set of meteorological data than was used for the 2013 analysis. The ‘met’ data used for the 2014 analysis was collected from an onsite monitor at Hixson, while the 2013 analysis and HRA relied on the met data collected at nearby John Wayne Airport. SCAQMD staff does not believe that the met station located at Hixson meets the criteria necessary (e.g., siting and/or instrumentation requirements) to rely on its use for dispersion modeling pursuant to AB2588.

Because of these limitations, SCAQMD staff does not approve of the ‘Current Operations’ results or their use in the RRP. If Hixson wishes to utilize a ‘Current Operations’ scenario as a baseline for evaluating risk reduction measures, then the more recent onsite and offsite monitoring results since August 2014 should also be included.

### **3) Next Steps**

*Public Notification* – As the residential cancer risks identified in this approved HRA are above 100 per million, Hixson is required to conduct annual public notice until Rule 1402 ‘action’ levels are achieved pursuant to Rule 1402(p) and SCAQMD’s Public Notification Procedures (Attachment 5). The first public notification must occur within 30 days of the date of this letter. SCAQMD staff will conduct a public meeting in the community to discuss the Hixson HRA and next steps. Please contact us to arrange a meeting to discuss the public notification and community meeting.

*Risk Reduction Plan* –SCAQMD staff’s comments on the March 2015 draft RRP is discussed in a separate letter from Mohsen Nazemi.

Should you have any questions regarding this HRA approval letter, please contact me via phone at (909) 396-3244, or via email at [imacmillan@aqmd.gov](mailto:imacmillan@aqmd.gov).

Sincerely,



Ian MacMillan  
Manager  
Planning, Rule Development, Area Sources

Attachments

cc: Joe Hower – Environ

# Attachment 1

## Office of Environmental Health Hazard Assessment



Matthew Rodriguez  
Secretary for  
Environmental Protection

George V. Alexeeff, Ph.D., D.A.B.T., Director  
Headquarters • 1001 I Street • Sacramento, California 95814  
Mailing Address: P.O. Box 4010 • Sacramento, California 95812-4010  
Oakland Office • Mailing Address: 1515 Clay Street, 16<sup>th</sup> Floor • Oakland, California 94612



Edmund G. Brown Jr.  
Governor

February 18, 2015

Mr. Ian MacMillan  
Program Supervisor, AB2588  
Planning, Rule Development, and Area Sources  
South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, California 91765-0904

Subject: Review of risk assessment for Hixson Metal Finishing (SC-011818)

Dear Mr. MacMillan:

The 2013 Air Toxics Hot Spots Program health risk assessment for airborne emissions from **Hixson Metal Finishing** in Newport Beach has been reviewed by staff of the Office of Environmental Health Hazard Assessment (OEHHA), as required by Health and Safety Code Section 44361. The facility conducts anodizing, testing, plating, coating, and painting operations for the aerospace and defense industries. The report uses AERMOD (v. 14134) and HARP (v. 1.4f) computer programs and models at 10,971 receptors the risks due to 21 Hot Spots chemicals emitted from 14 sources. The facility based the report on estimated air emissions in 2013 which included 0.851 lbs. of hexavalent chromium, 0.252 lbs. of cadmium, and 0.008 lbs. of nickel (Table ES-1).

The risk assessment reports that for 2013 the total cancer risk at the off-site PMI (Point of Maximum Impact, on the boundary of the facility) is  $2.75 \times 10^{-3}$  (receptor #12) (70-year lifetime risk). The risk at the MEIR (resident) is  $4.07 \times 10^{-4}$  (receptor #748). The risk at the MEIW (worker) is  $8.95 \times 10^{-5}$  (receptor #924). Hexavalent chromium is the responsible toxic air contaminant and is a known human carcinogen.

The facility underwent a variety of upgrades and modification of its processes to lower emissions and submitted a supplemental risk assessment using recent/current emissions (2014) which included 0.118 lbs. of hexavalent chromium (Table ES-14). For

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California Environmental Protection Agency

Sacramento: (916) 324-7572 Oakland: (510) 622-3200

[www.oehha.ca.gov](http://www.oehha.ca.gov)

Mr. Ian MacMillan  
February 18, 2015  
Page 2

2014 the risk at the MEIW (worker) is currently estimated to be  $1.34 \times 10^{-5}$  (receptor #925). The risk at the MEIR (resident) is calculated as  $5.92 \times 10^{-5}$  (receptor #750).

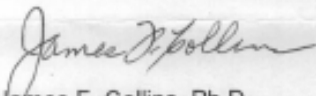
For 2013 emissions the highest chronic hazard index (HI) is predicted to be 0.07 for the respiratory system due to hexavalent chromium and cadmium. For recent operations the highest chronic HI is 0.06 for the kidney due to emissions of cadmium.

In 2013 the highest acute hazard index (HI) is predicted to be 0.15 for the immune system due to emissions of nickel. For recent operations the highest acute HI is 0.25 for the immune system due to emissions of nickel.

OEHHA is currently updating its risk assessment guidelines as mandated by the Children's Environmental Health Protection Act of 1999. The most current health values, including the acute and chronic Reference Exposure Levels (RELs) for benzene adopted in 2014, were used in the risk assessment.

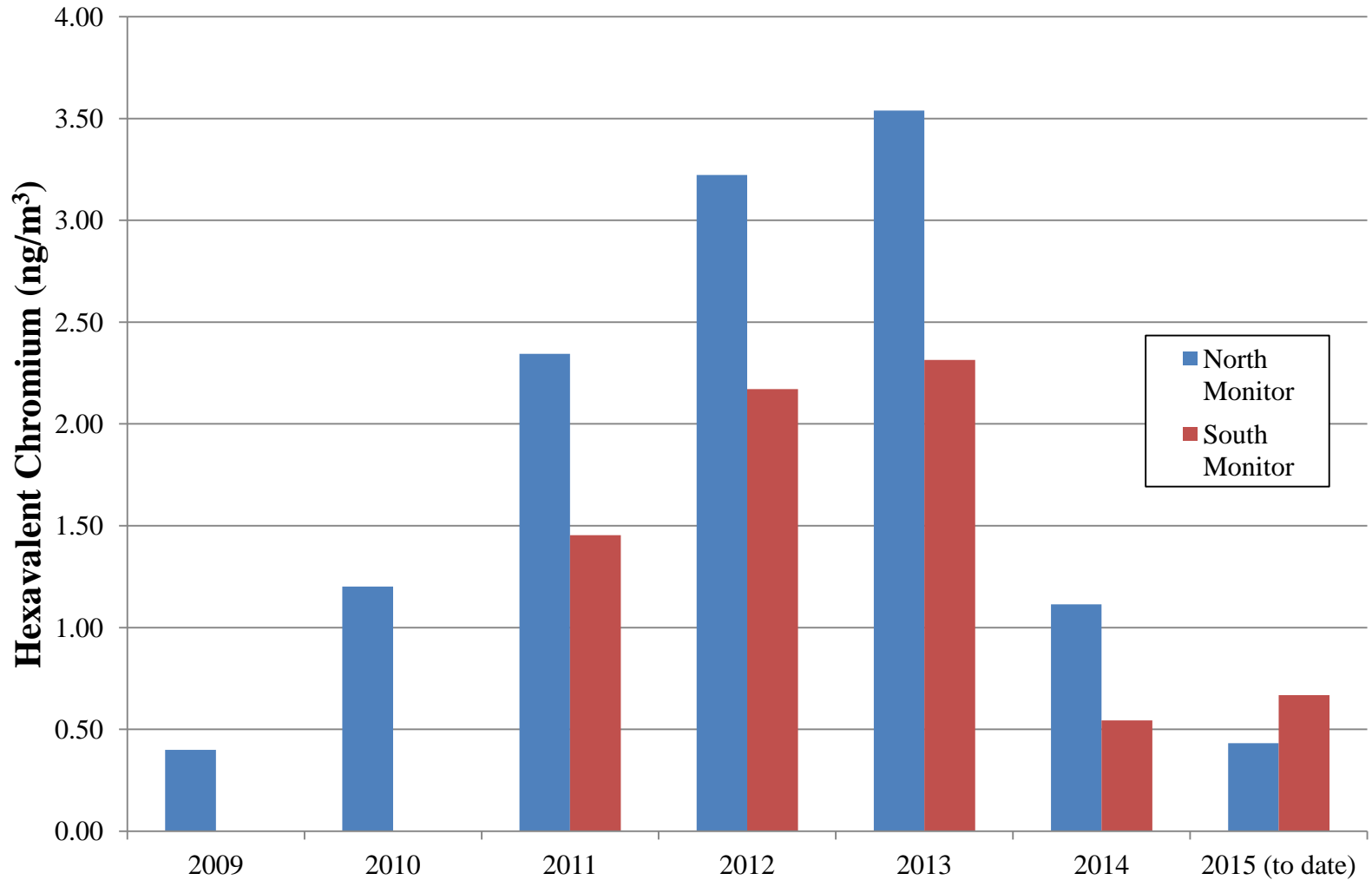
Our analysis of the risks depends on the accuracy of the emissions estimates and the appropriateness of the air dispersion modeling. The intent of this letter is to confirm or reevaluate the results of the risk assessment; it should not be construed to imply that OEHHA agrees with any editorial comments or statements contained in the text of the risk assessment that do not impact the results. We hope that our comments are useful to the District and will help in any risk management decisions. If you would like to discuss the review, please call me or Dr. John Budroe at (510) 622-3150.

Sincerely,



James F. Collins, Ph.D.  
Staff Toxicologist  
Air Toxicology and Risk Assessment Section

## Attachment 2 Offsite Monitoring Near Hixson



# Attachment 3



## South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182

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### HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : Hixson Metal Finishing  
Facility Address: 829 Production Place  
Newport Beach, California  
Type of Business: Metal Finishing  
SCAQMD ID No.: 11818

#### 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)*

- Inventory Reporting Year : 2013, HRA modified by SCAQMD staff to use 2015 OEHHA methodology
- Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*

a. Offsite	<u>7,830</u> in a million	Location:	<u>Receptor #12 (413384.5E, 3721595.6N; Fenceline)</u>
b. Residence	<u>1,502</u> in a million	Location:	<u>Receptor #748 (413375E, 3721575N; South Apartment)</u>
c. Worker	<u>88</u> in a million	Location:	<u>Receptor #924 (413425E, 2721675N; North Commercial)</u>
- Substances Accounting for 90% of Cancer Risk: Cr (VI)  
Processes Accounting for 90% of Cancer Risk: Fugitive Sources
- Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*

a. Cancer Burden	<u>1.09</u>
b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure	<u>142,077</u>
c. Maximum distance to edge of 70-year, $1 \times 10^{-6}$ cancer risk isopleth (meters)	<u>8,000</u>

#### 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")*

- Maximum Chronic Hazard Indices:

a. Residence HI:	<u>0.04</u>	Location:	<u>Receptor #748</u>	toxicological endpoint:	<u>Kidney</u>
b. Worker HI :	<u>0.07</u>	Location:	<u>Receptor #925</u>	toxicological endpoint:	<u>Kidney</u>
- Substances Accounting for 90% of Chronic Hazard Index: Cadmium
- Maximum 8-hour Chronic Hazard Index:

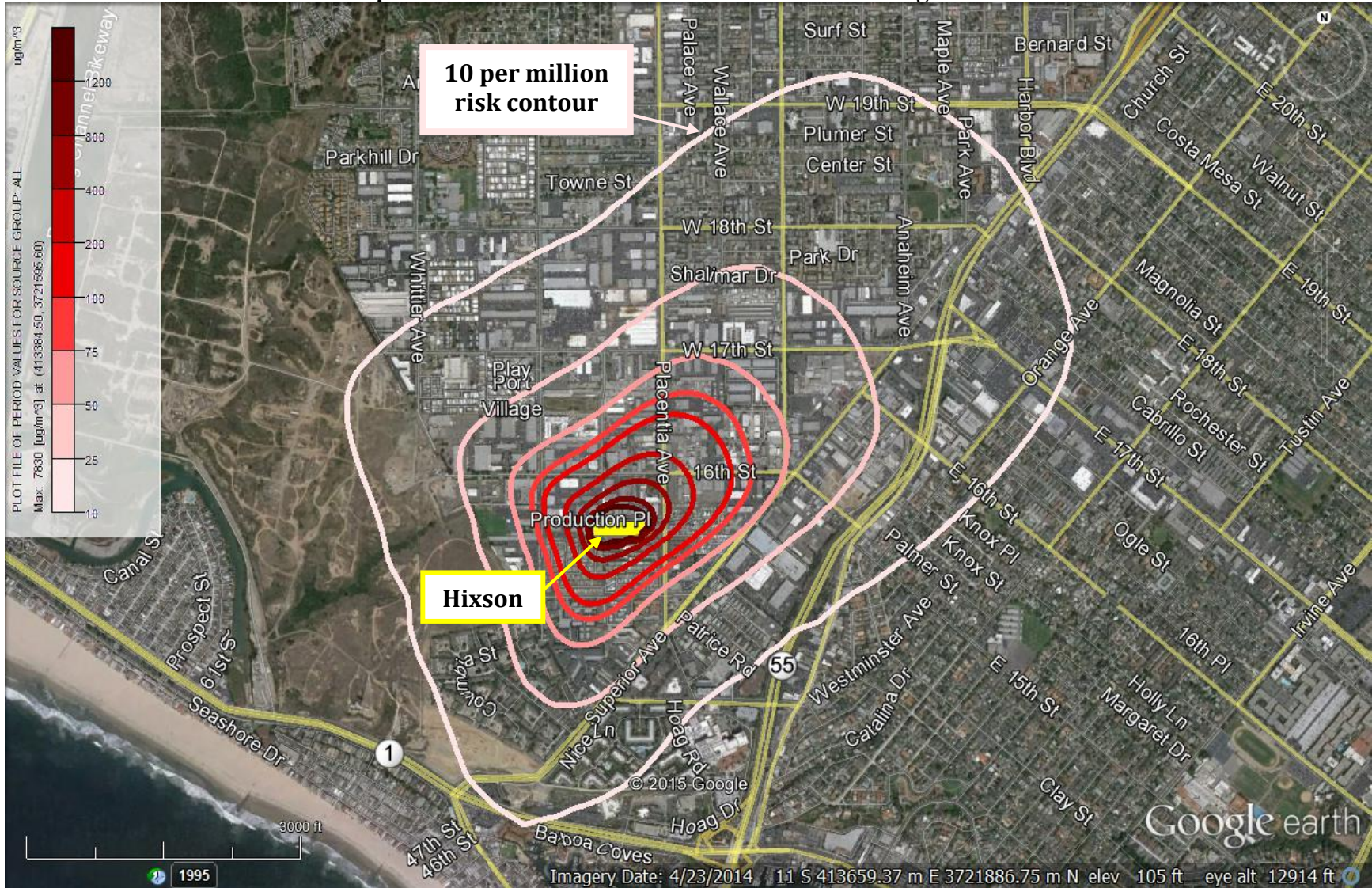
8-Hour Chronic HI:	<u>0.001</u>	Location:	<u>Receptor #3</u>	toxicological endpoint:	<u>Respiratory</u>
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- Substances Accounting for 90% of 8-hour Chronic Hazard Index: Nickel
- Maximum Acute Hazard Index:

PMI:	<u>0.15</u>	Location:	<u>Receptor #12</u>	toxicological endpoint:	<u>Immune System</u>
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- Substances Accounting for 90% of Acute Hazard Index: Nickel

#### C. Public Notification and Risk Reduction

- Public Notification Required? Yes X No     
  - If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI > 1  
7,992
- Risk Reduction Required? Yes X No

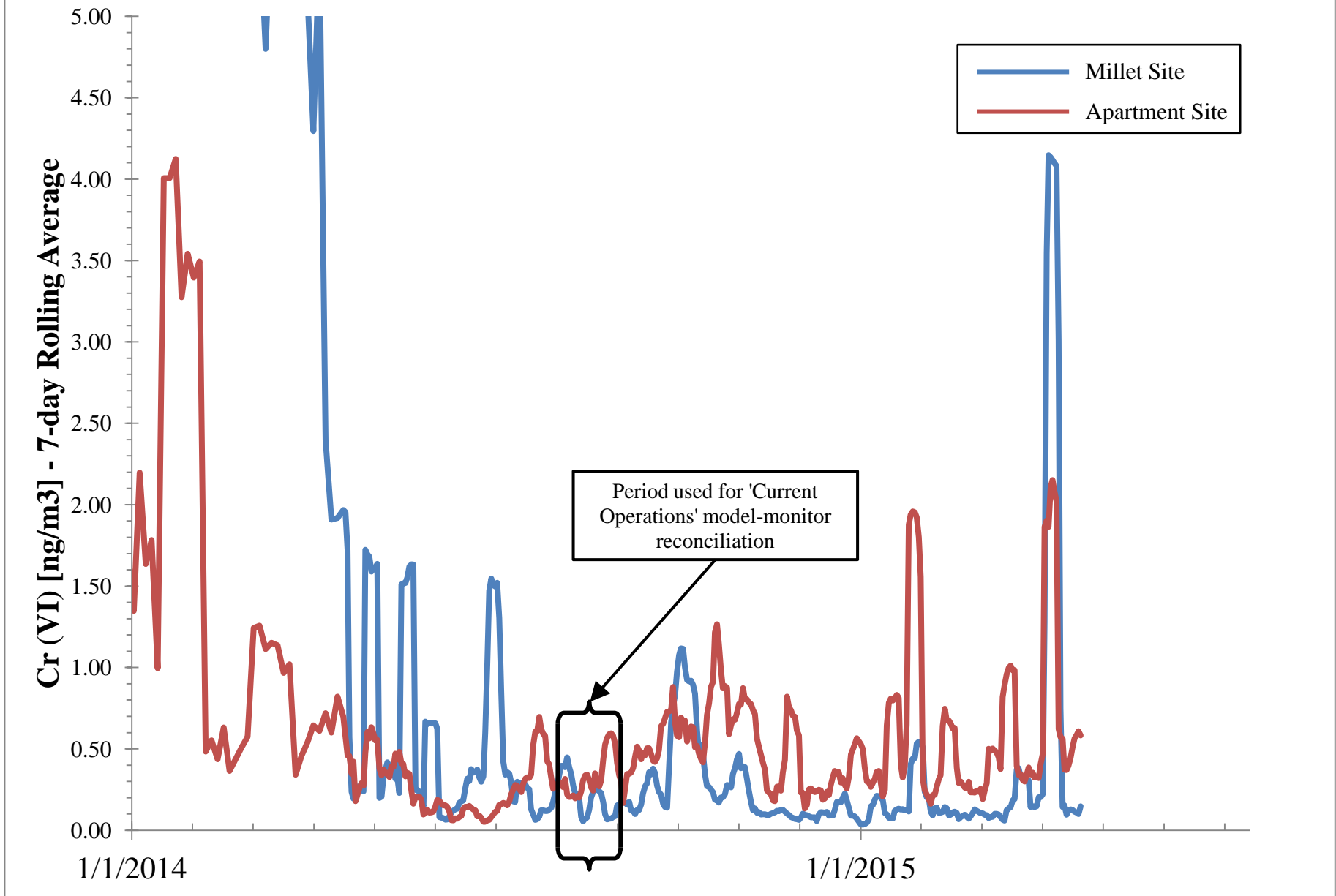
## 10 per million Residential Cancer Risk Contour Using HARP 2





# Attachment 4

## Hixson Offsite Cr (VI) Monitoring Data



# Attachment 5

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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### **Public Notification Procedures for Phase I and II Facilities under the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588)**

Version 1.0  
July 1994

Office of Stationary Source Compliance

Deputy Executive Officer  
Pat Leyden, A.I.C.P.

Director, Major Sources/RECLAIM  
Lee Lockie

Assistant Director, Major Sources/RECLAIM  
Carol Coy

Senior Manager  
Benjamin Shaw

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BENJAMIN SHAW - SENIOR MANAGER  
WILLIAM WONG - SENIOR DEPUTY DISTRICT COUNSEL

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## **I. INTRODUCTION**

Under the Air Toxics "Hot Spots" Information and Assessment Act of 1987, commonly known as AB 2588, at Health and Safety Code Section 44362(b), the operator of a facility must provide notice to all exposed persons if, in the judgment of the local air district, the facility's AB 2588 health risk assessment indicates there is a significant health risk associated with air toxic emissions from the facility. The notice is to be made in accordance with procedures specified by the district.

The South Coast Air Quality Management District Governing Board (Board) adopted public notification procedures for AB 2588 at its October 2, 1992 meeting. This document describes the AQMD's public notification procedures. The Board's resolutions adopting the procedures is attached as Appendix A.

The public notification procedures described in this document apply only to facilities in Phases I and II of the AB 2588 program. They do not apply to facilities in Phase III or the industrywide inventory program. Public notification procedures for Phase III and industrywide facilities will be proposed, workshopped and adopted at a later date.

Questions regarding the AB 2588 notification procedures may be directed to Kate Crespi Chun (909-396-3088) or Pierre Sycip (909-396-3095).

## **II. BACKGROUND ON AB 2588**

AB 2588 is a state-wide program to inventory and assess the health risks from facilities that emit air toxics in the state of California and to notify the public about significant health risks associated with these emissions.

Facilities in the AB 2588 program are required to submit air toxic emission inventory plans and reports. The local air districts use the inventory reports to prioritize facilities into high, intermediate and low priority. High priority facilities are required to submit health risk assessments (HRAs). If a HRA indicates, in the judgment of the district, that there is a significant health risk associated with emissions from the facility, the operator of the facility must provide notice to all exposed persons. Notice is to be made in accordance with procedures specified by the district.

Facilities are phased into the AB 2588 program based on their emissions of criteria pollutants or their occurrence on lists of toxic emitters compiled by local air districts. Phase I facilities are those which either emit more than 25 tons per year of any criteria pollutant or were listed in a toxics emitters list, and were required to submit emissions inventory reports for calendar year 1989. Phase II facilities are those emitting between 10 and 25 tons per year, and were required to submit inventory reports for calendar year 1990. Phase III consists of certain designated types of facilities that emit less than 10 tons per year, and were required to report

their emissions for calendar year 1991. Inventory reports must be updated every four years.

Many Phase III sources have been included in the industrywide program. The industrywide program includes classes of sources emitting toxic air contaminants which are predominantly small businesses for which compliance with AB 2588 reporting requirements would pose an economic hardship. For these classes of facilities, the AQMD is preparing the emissions inventories and HRAs.

In 1992, AB 2588 law was amended by Senate Bill (SB) 1731 to include an air toxics risk reduction requirement. The AQMD has adopted Rule 1402, Control of Toxic Air Contaminants from Existing Sources, in order to implement the risk reduction requirements of SB 1731. Rule 1402 requires facilities which exceed specified health risk levels to prepare and implement risk reduction plans to reduce below those levels. The health risk levels specified in Rule 1402 are a maximum individual cancer risk of 100 in one million ( $1 \times 10^{-4}$ ) or a total hazard index of 5. Facilities whose HRA indicates that they exceed either of these levels will be notified by the AQMD to submit a risk reduction plan. The facility will be required to implement the plan to reduce below these risk levels as quickly as feasible and by no later than five years after the date of plan submittal.

### III. PUBLIC NOTIFICATION REQUIREMENTS

#### III. A. Summary of Public Notification Requirements

The Board adopted the following total facility risk thresholds as significant health risk levels requiring public notification under AB 2588:

Maximum Individual Lifetime Cancer Risk (MICR)	$\geq 1 \times 10^{-5}$ (10 in one million)
Total Hazard Index (THI)	> 1.0 for all compounds except lead
Hazard Index (HI) for lead (Interim level)	> 0.5 (30-day averaging period)

Upon AQMD review and approval of a HRA, the facility operator will be notified in writing if the facility exceeds any significant risk level and therefore is required to provide public notice. Facilities that are required to notify must perform the following notification requirements:

- (1) Distribute public notice materials to all addresses and to parents of children attending school in the area of impact;
- (2) Conduct a public meeting;

- (3) Distribute copies of the facility's approved HRA to the public library closest to the facility and all school libraries in the area of impact.

Each of the requirements is described in detail in the following subsections.

### **III. B. Significant Risk Levels for Notification**

The significant risk levels are formulated in terms of maximum individual cancer risk (MICR) and hazard index (HI). MICR is the estimated increase in the probability of an individual contracting cancer as a result of continuous lifetime exposure to cancer-causing toxic air contaminants. The MICR is calculated as the sum of the MICRs for all carcinogenic air contaminants emitted by a facility. HI is the ratio of the estimated level of exposure to a toxic air contaminant to its Reference Exposure Level (REL). THI is the sum of the HIs for all toxic air contaminants affecting the same target organ. Notification is required for any and all THIs that exceed 1.0, including both acute and chronic THIs.

The toxic air contaminants to be included in the calculation of MICR and THI are listed in the California Air Pollution Control Officers Association (CAPCOA) Air Toxic "Hot Spots" Program Risk Assessment Guidelines. This list may change periodically to reflect updates to the risk assessment guidelines. For a copy of the CAPCOA risk assessment guidelines, please contact CAPCOA (916-676-4323) or the AQMD's Public Information Center (909-396-3600).

The Board set the notification trigger level for lead at a HI of greater than 0.5 due to concern that the REL for lead specified in the version of the CAPCOA guidelines current at the time the notification procedures were adopted might not be sufficiently health protective. OEHHA is currently reevaluating the REL for lead. In addition to the reevaluation of the REL, OEHHA has recommended that a 30-day averaging time be used to calculate a HI for lead. Until OEHHA provides further guidance regarding the REL for lead and subject to the AQMD's subsequent determination of the HI for notification for lead, notification will be required for a HI for lead exceeding 0.5, calculated for a 30-day averaging period.

### **III. C. Distribution of Public Notice Materials**

#### **III. C. 1. Timing of Distribution**

The facility operator must distribute the public notice materials in the area of impact within 30 days of receipt of the AQMD letter informing the facility of its obligation to perform public notification.

### III. C. 2. Public Notice Materials

The AQMD has prepared public notice materials which must be used to provide public notice. The facility has the option of including a letter of its own authorship which has been reviewed and approved by the AQMD.

Notice materials (AQMD and facility) must be written in both English and Spanish. The need for translation into additional languages will be assessed by the AQMD. Translation can be arranged by the AQMD and the cost charged to the facility.

#### III. C. 2. a. Notice Materials Prepared by the AQMD

The AQMD will provide a set of the notice materials to the facility operator when informing the facility that it must provide notice. A sample set of the AQMD-prepared notice materials is provided in Appendix C.

The AQMD will tailor the content of the letters to the particular health risk notification levels that are exceeded. The AQMD may revise the notice materials periodically to incorporate new or additional relevant information.

#### III. C. 2. b. Optional Facility Letter

Facilities have the option of including their own letter with the AQMD-prepared materials. The facility letter is subject to review and approval by the AQMD. Facility letters must follow the guidelines in Appendix D.

If a facility chooses to include its own letter, a draft of the facility letter must be submitted to the AQMD within two weeks after receipt of a letter from the AQMD informing the facility of its public notice obligation.

### III. C. 3. Area of Distribution (Area of Impact)

Notice materials must be distributed to all addresses -- both residential and non-residential -- and to all parents of children attending school within the area of impact.

For cancer risk, the area of impact is the geographic area encompassed by the ten in one million ( $1 \times 10^{-5}$ ) MICR isopleth. For noncancer health risk, the area of impact is the geographic area encompassed by the 1.0 THI isopleth, or the 0.5 HI isopleth for lead.

For the purpose of public notification, the definition of "school" under Health and Safety Code Section 42301.9 shall be used. Under this definition, "school" means any public or private school used for purposes of the education of more than 12

children in kindergarten or any of grade 1 to 12, but does not include any school in which education is primarily conducted in private homes.

The following options are available for distributing public notices to parents of school children, depending on the preference of the school involved:

The facility operator obtains from each school a list of addresses of parents of children attending the school and distributes the notice materials to the parents.

The facility operator provides copies of the notice materials to the school or a third party approved by the school, which will then distribute the notices to parents. The facility operator is responsible for the distribution expenses.

In both cases, the facility operator must provide verification to the AQMD that the distribution was completed.

The AQMD plans to provide the notice materials to local governments with jurisdiction in the area receiving public notice, including city councils, mayors and planning committees.

#### III. C. 4. Method of Distribution

The facility operator is responsible for reproducing and distributing copies of the notice materials. All notice materials are to be enclosed in envelopes with AQMD return address labels. These envelopes may be obtained from the AQMD.

Distribution of the notice materials must be conducted by a third party which specializes in mail or delivery services, such as the U.S. Postal Service or other mailing or distribution services. Door-to-door hand delivery is not acceptable, in part because U.S. Postal Service regulations prohibit the use of individual's mail boxes by unauthorized persons.

#### III. C. 5. Verification of Distribution

The facility operator must verify distribution of the notice materials using the verification form provided in Appendix B. Proof of distribution must be included with the verification and may be in the form of receipts from delivery or mail service agencies or the post office which describe the boundaries of notification and/or the addresses included in the mailing.



### III. D. Public Meetings

A public meeting must be held as part of the public notification process. The facility operator will be requested to hold the meeting. It is important that facility operators work closely with the AQMD concerning their plans for the public meeting, including time, date, location and content. Meetings will be attended by AQMD staff.

Public meetings should be scheduled for a date that is within two to four weeks of the distribution of the notice materials. The notice letter will include information about the time, date, location and purpose of the public meeting.

The meeting should be held on a weekday evening or weekend and at a location that is convenient for community members. The facility may wish to hold the meeting at their facility site if they have an available room with a capacity of at least 50 people. The AQMD's Public Advisor's Office maintains a list of facilities (schools, community centers, etc.) which may be available for public meetings. For a list of sites close to your facility, please contact Ron Ketcham (909-396-3213) or Lourdes Cordova-Martinez (909-396-3214).

Facility operators are encouraged to work closely with the AQMD regarding the meeting agenda. The recommended agenda includes a presentation followed by a question and answer period. A pre-meeting should be arranged between the AQMD and facility staff to finalize meeting plans, including the appropriate persons to attend and assist in the presentation. It is recommended that the following topics be included in the presentation:

- o purpose of the meeting;
- o overview of the AB 2588 program;
- o description of the facility: type of operation, processes involved, and materials used or produced at the facility;
- o overview of health risks from air toxics;
- o description of the health risk assessment process;
- o description of facility emissions and results of the HRA;
- o facility's projects or plans to reduce toxic emissions or risk;
- o government programs to reduce risks from air toxics;

The pre-arranged meeting agenda may not meet the needs of the public in all cases. The facility operator should be prepared to modify the meeting agenda in response to the reasonable needs of the attendees.

### **III. E. Distribution of Approved Facility Health Risk Assessment to Schools and Public Libraries**

Prior to distribution of the notice materials, the facility must deliver a copy of their approved HRA, with a cover letter provided by the AQMD (sample provided in Appendix E), to all school libraries and schools in the area of impact and the public library closest to the facility.

The facility is required to verify the delivery of its approved HRA by submitting to the AQMD a completed verification form (provided in Appendix B).

The AQMD will also make a copy of the facility's approved HRA available at the AQMD headquarters library in Diamond Bar.

### **III. F. Frequency of Public Notice**

Public notice is required each time an approved AB 2588 HRA indicates an exceedance of the AQMD's notification trigger levels. A facility will be required to perform the notification requirements again if a new or updated HRA based on an emission inventory update indicates an exceedance of the notification trigger levels.

### **III. G. Additional Suggestions on Risk Communication**

Facility operators may choose to continue their dialogue with the community after they have completed their notification requirements. This dialogue could take the form of newsletters, facility tours or additional public meetings. The AQMD encourages these efforts and requests that facilities keep the AQMD informed about their communication activities.

**APPENDIX A**

**SCAQMD Board Resolutions on AB 2588 Public Notification Procedures**

RESOLUTION NO. 92 - 33

A Resolution of the South Coast Air Quality Management District adopting the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) Public Notification Procedure for Phase 1 and 2 Facilities.

WHEREAS, the Governing Board of the South Coast Air Quality Management District must determine significant health risk levels for the purpose of public notification required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 pursuant to the California Health and Safety Code Section 44362(b); and

WHEREAS the Governing Board of the South Coast Air Quality Management District in determining a significant health risk level for the purpose of public notification required by the Air Toxics "Hot Spots" Information and Assessment Act of 1987 does not intend to predetermine the significance level to be established for purposes of Senate Bill 1731, which triggers the requirement to develop plans to implement toxic risk reduction measures. Further, the Governing Board intends to evaluate all relevant factors in determining the risk level for triggering emission control requirements under SB 1731; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District must establish public notification procedures for purposes of implementing AB 2588 pursuant to the California Health and Safety Code Section 44362(b); and

WHEREAS, the Governing Board of the South Coast Air Quality Management District adopted screening risk levels in February 1991 for risk assessments conducted to comply with the Air Toxics "Hot Spots" Information and Assessment Act of 1987; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has adopted a procedure for prioritizing facilities for the purpose of identifying facilities which must conduct and submit health risk assessments pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has received and filed reports identifying prioritized facilities which must conduct and submit health risk assessments pursuant to the Air Toxics "Hot Spots" Information and Assessment Act of 1987; and

WHEREAS, the South Coast Air Quality Management District has held six public consultation meetings and a public workshop; and

WHEREAS, a public hearing has been noticed; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has held a public hearing; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has amended the staff recommendation to ensure that a copy of the facility's approved health risk assessment for which public notification is required, be made available for public review at the local public library closest to the facility and school libraries within the impacted area; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has amended the staff recommendation to require public meetings to be held for all facilities required to provide public notice and the date, time and location of the public meeting to be included in the notice letter; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has amended the staff recommendation to require staff to develop a simplified notice letter, with technical materials attached; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has amended the staff recommendation to allow affected facilities to include, in the District notification packet, a facility authored letter which will be subject to review and approval by District staff; and

WHEREAS, the Governing Board of the South Coast Air Quality Management District has amended the staff recommendation to allow facilities three weeks to correct significant errors in the health risk assessment. Significant errors are limited to the discontinuation of use of compounds or reduction in the volume of compounds used but do not include corrections to source testing data or emission factors.


NOW, THEREFORE, BE IT RESOLVED that the Governing Board of the South Coast Air Quality Management District does hereby adopt the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) Public Notification Procedure for Phase 1 and 2 Facilities, as set forth in the attached staff report, which is incorporated herein by this reference, and as amended above.

Attachments

AYES: Antonovich, Albright, Berg, Braude, Morgan, Mikels, Paulitz, Schiller, Wedaa, Wieder, Wilson and Younglove

NOES: None

Dated: 10-2-92

  
Clerk of the District Board

**APPENDIX B**

**Verification Form for Distribution of Public Notices and Health Risk Assessments**

**VERIFICATION OF DISTRIBUTION  
OF PUBLIC NOTICES AND HEALTH RISK ASSESSMENTS**

**Facility Name** \_\_\_\_\_

**Facility Address** \_\_\_\_\_

\_\_\_\_\_

**AQMD ID No.** \_\_\_\_\_

I hereby verify that the operator of the facility identified above has performed all of the following public notification requirements:

Distribution of public notice materials to all addresses in the area of impact

Distribution of public notice materials to all parents of children attending school in the area of impact

Distribution of a copy of the approved health risk assessment prepared for this facility to the public library closest to the facility and all school libraries in the area of impact

Attached to this form are the following required items:

Proof of distribution of the notice materials to all addresses required

List of schools for which notices were distributed to parents of attending children

List of school libraries in which a copy of the health risk assessment has been deposited

Name and address of the public library in which a copy of the health risk assessment has been deposited

\_\_\_\_\_  
**Name of Facility Representative**

\_\_\_\_\_  
**Title of Facility Representative**

\_\_\_\_\_  
**Telephone number**

\_\_\_\_\_  
**Signature of Facility Representative**

\_\_\_\_\_  
**Date**

**APPENDIX C**  
**Sample AQMD Notice Materials**

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**South Coast  
AIR QUALITY MANAGEMENT DISTRICT**

21865 E. Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000

**PUBLIC NOTICE**

State law ensures your right to know about possible health risks from toxic air pollutants emitted by facilities in your neighborhood. The law requires the following facility to notify you:

**Facility Name:**

**Address:**

**Type of Business:** <Oil refinery, chemical manufacturing, etc.>

Even though this facility may be complying with all current air pollution control regulations, some toxic chemicals escape to the air during its normal operations. State law requires the facility to notify all of the people in the area where there is a possible health risk. That area is shown on the map on the back of this notice.

As the air pollution control agency for this area, the South Coast Air Quality Management District (AQMD) has prepared the enclosed "Information Sheet" describing the facility, the toxic air pollutants involved, and the health risks those pollutants might cause. The facility was given the option of enclosing its own letter providing additional information.

This facility will conduct a public meeting in your area to answer any questions you may have about the toxic chemicals, the health risks, and what is being done to reduce toxic emissions. Officials from the AQMD will also be at the meeting to help answer your questions. This public meeting is scheduled for:

**Date:**

**Time:**

**Location:**

If you would like to know more about the facility or the public meeting, please contact <facility contact name and phone number> at <facility name>. For more information about government programs to control toxic air pollution, call the AQMD Toxics Section at (909) 396-2393.

**Businesses receiving this notice should post it  
where it is most likely to be read by employees.**

**Notice [Facility ID Number]**

**[Date]**

# FACILITY RISK MAP





**South Coast  
AIR QUALITY MANAGEMENT DISTRICT**

21865 E. Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000

**INFORMATION SHEET**

**What are toxic air pollutants?**

Chemicals that cause cancer, birth defects or other health effects are known as toxic substances. When these toxic substances are released into the air, they are called toxic air pollutants.

**Where do toxic air pollutants come from?**

Toxic air pollutants come from a variety of sources. These sources include chemical plants and large manufacturers as well as cars and trucks and smaller businesses. Many products used at home, such as cleaners and paint thinners, also emit toxic air pollutants.

**What toxic air pollutants does this facility emit?**

Under normal operation, this facility emits the toxic air pollutants listed below. The possible health effects of exposure to those pollutants are also listed.

<b>Pollutant</b>	<b>Possible Health Effect</b>
< chemical name >	< health effect: cancer, lung damage, etc. >
< chemical name >	< health effect: cancer, lung damage, etc. >

**What is the cancer risk from this facility? <include if notice is required for MICR>**

For chemicals that could cause cancer, a calculation called a "risk assessment" was done. This is the best method officials currently have for estimating the chance that breathing small amounts of a chemical over a long period of time will cause cancer. Because the odds are generally small, they are written as a "number of chances in a million" of getting cancer.

A safety factor is built into this risk estimate by assuming that a person would be continually breathing the same level of these pollutants for an entire lifetime (24 hours per day, 365 days per year, for 70 years). Most people are not exposed for that amount of time, so their actual risk is likely to be lower.

Based on the risk assessment, people in the area shown on the Facility Risk Map would have their chance of getting cancer increased by up to <MICR at MEI> chances in a million because of the emissions from this facility. The map shows the risks at various locations.

The risk assessment is based on what the facility emitted in (insert year). The current emissions from the facility may be different. This facility must continue to report its emissions to the AQMD.

**How does the risk from this facility compare to other risks?** <include if notice is required for MICR >

The risk from this facility is relatively small compared to the overall risk that the average American has of getting cancer. Currently, about three out of ten people get cancer for one reason or another. In other words, the odds of getting cancer at some time in your life are about 300,000 in a million.

**What is the cancer risk from toxic air pollution in general?** <include if notice is required for MICR >

The "Cancer Risk From Toxic Air Pollution" figure on the last page shows the estimated chance of getting cancer due to a lifetime of exposure to all of the air pollution in our area. The cancer risk estimates are based on pollution levels measured at AQMD monitoring stations.

The estimated chance of cancer at these locations ranges from 550 in one million to 1,300 in one million. These estimates assume that a person is exposed for an entire lifetime to the current levels of pollution. The levels of pollution should decrease in the future under AQMD and other government programs to reduce emissions.

The cancer risk from toxic air pollutants in your neighborhood may be higher or lower than the risks at these five locations, depending on toxic emissions in your area. AQMD is expanding its pollution monitoring activities so that it can measure pollutants at more locations in the future.

**What about health effects other than cancer?** <include if notice is required for HI >

<Text if notice is required for chronic HI >

Long-term exposure to high levels of <chemical > can cause <describe health effects >. A "reference exposure level" for this pollutant has been established by the California Environmental Protection Agency. This level includes several safety factors and assumes a person is exposed continuously for a 70-year lifetime.

The Facility Risk Map shows the area where levels of this pollutant from the facility are estimated to be higher than the "reference exposure level." Because of the safety factors, the levels are not necessarily unsafe. However, there could be a small health risk. If you are exposed for less than 24 hours per day and 365 days per year, the chance of any health effects is even smaller.

<Text if notice is required for acute HI >

Short-term exposure to <chemical > at high levels can cause <describe health effects >. A "reference exposure level" for this pollutant has been established by the

California Environmental Protection Agency. This is a level that a person could be exposed to an hour without experiencing any health effects. This level includes several safety factors.

The Facility Risk Map shows the area where levels of the pollutant from the facility could exceed the "reference exposure level" on some occasions. Because of the safety factors, the levels are not necessarily unsafe. However, there could be a small health risk.

<Text for both chronic and acute HI>

The risk assessment is based on what the facility emitted in <insert year>. The current emissions from the facility may be different. This facility must continue to report its emissions to the AQMD.

**What is being done to reduce the health risks from this facility?**

The law that required this public notice is one step in getting facilities to reduce their toxic emissions. The AQMD and other agencies also have other programs to prevent pollution and reduce toxic emissions exposure to toxic air pollutants. New regulations are also being developed.

<Insert if applicable>

Many facilities are also taking steps to reduce their emissions. [Facility name] has enclosed a letter that describes what it is doing to reduce its emissions.

**How can I get more information?**

A copy of <facility name>'s risk assessment report is available for your review at the AQMD library at the address provided below, at <name and address of public library> and at school libraries located inside the area indicated on the Facility Risk Map.

If you would like to know more about the state law or AQMD's toxics program, call or write the AQMD at:

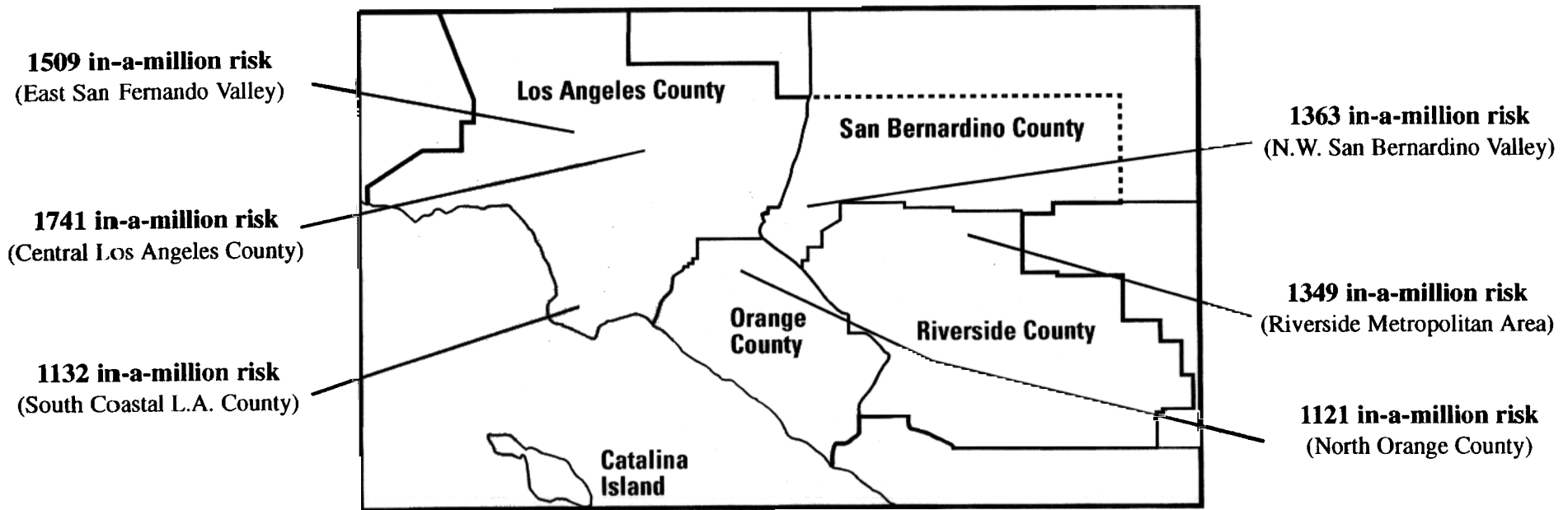
AQMD - Air Toxics Branch  
21865 Copley Drive  
Diamond Bar, CA 91765  
(909) 396-2393

If you would like to know more about <facility name>'s activities, call or write:

<facility contact person>  
<facility address>  
<facility phone number>

## CANCER RISK FROM TOXIC AIR POLLUTION

Like the air in other urban areas across the country, the air in our 4-county area contains pollutants that can cause cancer. The AQMD measures the levels of these pollutants at several locations. Based on these measurements, the chance of getting cancer as a result of a lifetime of breathing these levels of pollutants has been estimated and shown on this map. These numbers represent the risk in the general areas shown, not just the specific points at which the samples were collected.



## RIESGO DE CANCER DEBIDO A CONTAMINANTES TOXICOS DEL AIRE

Como el aire en otras areas urbanas a traves el pais, el aire en nuestra area de 4-condados contiene contaminantes que pueden causar cancer. El AQMD mide los niveles de estos contaminantes en varios locales. Basado en estos medidos, el riesgo de adquirir cancer debido a toda una vida de exposicion a los niveles medidos de contaminacion han sido estimados y mostradas en este mapa. Estos numeros representan el riesgo generalmente en las areas mostradas, no solamente en los puntos especificos en donde las muestras fueron colectadas.

## **APPENDIX D**

Guidelines for Optional Facility Public Notice Letter

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## **GUIDELINES FOR OPTIONAL FACILITY PUBLIC NOTICE LETTER**

Facilities have the option of including a letter of their own authorship with the AQMD public notice letter. The following are guidelines for preparing the letter.

### **Time Period for Submittal**

If a facility chooses to include its own letter with the AQMD public notice materials, a draft of the facility letter must be submitted to the AQMD within two weeks of receiving the AQMD letter informing the facility of its public notice obligation.

### **Content**

The facility operator may choose to prepare a brief letter that simply refers to the enclosed AQMD materials, or a longer letter communicating additional information. In either case, the letter should consist of brief paragraphs in non-technical language. Some acceptable information includes:

- o A description of the facility and its products or services;
- o An explanation of why the facility emits toxic air contaminants;
- o Steps the facility has taken or will take to reduce emissions;
- o An invitation to the public meeting;
- o Identification of the facility contact person with a phone number;
- o Other information relating to facility emissions or the HRA.

Certain content will not be accepted in the facility letter. Statements that undermine the risk assessment process or trivialize the risk associated with air toxics are not considered appropriate to include in a public notice and will be disapproved by the AQMD. For example, the facility letter should not discredit the risk assessment methodology used in the AB 2588 program or imply that it is overly conservative.

### **Translation**

The facility letter must be written in both English and Spanish, and any other languages that the AQMD deems appropriate for the area receiving the notice. Translation can be arranged by the AQMD and the cost charged to the facility.



**APPENDIX E**

**Sample AQMD Cover Letter for Libraries**





**South Coast  
AIR QUALITY MANAGEMENT DISTRICT**

21865 E. Copley Drive, Diamond Bar, CA 91765-4182 (909) 396-2000

[date]

[Librarian's Name]  
[Library Address]

Dear [Librarian's Name]:

Enclosed is a copy of [facility name]'s Health Risk Assessment report to be made available to the public in your library.

Under the state law known as the Air Toxics "Hot Spots" Information and Assessment Act, certain facilities are required to inform their neighbors about potential health risks due to pollutants that they routinely emit into the air in the course of doing business. The South Coast Air Quality Management District (AQMD) has required [facility name], a company in your neighborhood, to provide a copy of this report to your library pursuant to this law. The AQMD is the agency that monitors facilities to ensure that they comply with the requirements of air pollution laws.

The enclosed Health Risk Assessment report evaluates the air toxic emissions from the facility and the potential health risks associated with these emissions.

If you have any questions concerning this report, please call the AQMD at (909) 396-2393.

Very truly yours,

**Benjamin W. Shaw  
Senior Manager, Air Toxics Team  
Stationary Source Compliance**