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

Via Certified Mail and Return Receipt

May 8, 2015

Mr. Douglas Greene
President
Hixson Metal Finishing
829 Production Place
Newport Beach, CA 92663

Subject: Rejection of Rule 1402 Risk Reduction Plan for **Hixson Metal Finishing, Newport Beach** (Facility ID No. **11818)**

Dear Mr. Greene:

The South Coast Air Quality Management District (SCAQMD) has completed the review of the proposed Risk Reduction Plan (RRP) for Hixson Metal Finishing, located at 829 Production Place, Newport Beach (Facility ID# 11818), which was prepared and submitted by Environ International Corp., Hixson's consultant, to SCAQMD on March 2, 2015, as required pursuant to SCAQMD Rule 1402. **Please note that based on our careful review of the RRP and subsequent information provided by Hixson and our discussions and meeting that SCAQMD staff has had with Hixson and your consultants, the SCAQMD is hereby rejecting the RRP.** The reason for our rejection of the proposed Hixson RRP is that it does not provide sufficient information to demonstrate that facility risks have been or can be reduced permanently below Rule 1402 action risk levels. Based on SCAQMD staff's detailed review and evaluation of the proposed Hixson RRP, the attached comments and recommendations have been prepared for your use.

Hixson must completely and satisfactorily address the attached concerns before a revised RRP may be approved. The revised RRP may propose alternatives to fully address the concerns raised, subject to SCAQMD's approval. The Hixson Rule 1402 compliance period began with the submittal of the Hixson's proposed RRP on March 2, 2015. All the requirements to demonstrate full compliance with Rule 1402, including, but not limited to, equipment and/or control strategy studies, permitting, construction, procurement and installation, optimization, source testing, and Rule 1402 compliance demonstration

(including submittal of a new Health Risk Assessment demonstrating the effectiveness of the proposed RRP) shall be submitted and completed as quickly as feasible and by the date(s) specified in any potential future approved risk reduction plan for each risk reduction measure. Although Rule 1402 sets a three year deadline from submittal of the initial Risk Reduction Plan, such a deadline would be unreasonable based on the conditions that exist at Hixson and the surrounding community, the amount of time Hixson has already had, and the degree of risk created by Hixson. We expect an aggressive compliance schedule to reduce the health risk to acceptable levels as quickly as possible.

Hixson shall submit a revised RRP by June 8, 2015. The revised RRP must also include an implementation schedule that ensures all measures are implemented as quickly as possible.

Pursuant to Rule 1402(g)(1), Hixson has the right to appeal this rejection of the Hixson RRP to the Hearing Board. This appeal would follow the process provided in SCAQMD's Rule 216 – Appeals.

Sincerely,

Mohsen Nazemi, P.E.
Deputy Executive Officer
Engineering & Compliance

Certified Mail and Return Receipt

cc: Barry Wallerstein, SCAQMD
Kurt Wiese, SCAQMD
Philip Fine, SCAQMD

Hixson Metal Finishing Proposed Risk Reduction Plan

Summary of the Risk Reduction Plan (RRP)

On April 3, 2014, Hixson Metal Finishing (Hixson) was informed that Hixson is required to prepare a Health Risk Assessment (HRA) and Risk Reduction Plan (RRP) pursuant to South Coast Air Quality Management District (SCAQMD) Rule 1402 and the requirements of the Air Toxics "Hot Spots" Information and Assessment Act (AB2588). The RRP was originally due September 30, 2014 but after several requests for additional time, SCAQMD agreed to extend the RRP due date to December 16, 2014. Hixson missed this extended deadline and was issued a Notice of Violation (P 53088) on February 16, 2015, for failure to submit the RRP by the due date. Subsequently, Hixson submitted its proposed RRP on March 2, 2015.

The proposed RRP is based on the risks calculated for the 2014 'Current Operations' scenario from the draft AB2588 HRA. This HRA assumes that the calculated Facility cancer risk, which exceeds the SCAQMD Rule 1402 Action Risk Level of 25 in a million, is due primarily to fugitive Hexavalent Chromium (Cr VI) and Cadmium emissions (96% and 4% , respectively). In the proposed RRP, Hixson claims that the newly proposed measures, in addition to the changes in its current equipment operation, should reduce the risk profile of the facility to below Rule 1402 requirements. The following identifies the main control measures as proposed by Hixson in the proposed RRP:

- Relocation of Tank 100 from Building No. 1 to General Plate or Precious Metal Department in Building No. 3.

- Installation of a HEPA filtration system for control of emissions from VacCad operation in Building No. 1.

- Construction of a Permanent Total Enclosure (PTE) in Building No. 2, part of Building No. 3 (General Plate or Precious Metal Department) and part of the Waste Water Treatment Area (between Buildings Nos. 2 and 3).

- Addition of a 2 micron mesh pad to the back end of a previously permitted new acid scrubber (currently under construction) for control of Cr VI emissions from Building No. 2.

- Relocation of Tanks 87, 97, and 98 from Building No. 2 to Building No. 3 (Research and Development Area).

- Replacement of two existing scrubbers (acid and cyanide scrubbers) with a proposed single scrubber with a 2 micron mesh pad for control of emissions from part of Building No. 3 (General Plate and Precious Metal Department Area) and part of the Waste Water Treatment Area.

- Installation of covers on the Waste Water Treatment tanks located outside the proposed PTE.

- Relocation of the de-masking operation, ovens and a paint booth from Building No. 3 to Building No. 4 and installation of a new HEPA filtration system in Building No. 4 to reduce fugitive emissions from de-masking operation.

- Relocation of paint racks and supersacks to inside of Building No. 4 to reduce fugitive emission.

- Daily HEPA vacuuming of the paint racks and supersack storage areas, along with other areas of the facility.

Hixson has neither proposed a schedule for completion of the various proposed control measures, nor a contingency plan in the event the control measures fail to reduce the facility's cancer risk below the SCAQMD Rule 1402 requirements.

Comments and Recommendations:

Based on SCAQMD staff's review and evaluation of the HRA, the proposed RRP and other related information, staff's observation of the operations at Hixson, and consideration of the information from recent source tests conducted by Hixson and SCAQMD, it has been determined that Hixson's proposed RRP does not substantiate that it will achieve the risk levels claimed in the proposed RRP, and therefore, it is not approvable in its existing form. The main concerns about the proposed RRP's ability to meet the risk levels specified in the plan are listed below:

Proposed Risk Reduction Plan Methodology

1. The fugitive source contributions for the August 2014 HRA 'Current Operations' scenario were back-calculated with a monitor-model reconciliation in the HRA. Although these modeled source contributions may yield acceptable results for determining pollutant concentrations offsite for the HRA, they likely do not reflect actual source strengths. For example, the present ambient monitored levels for Cr VI at Building No. 2 since August 2014 are approximately 10 times higher than the levels at Building No. 3. Yet in the modeling and risk reduction calculations Building No. 3 emissions are assumed to be 70% higher than Building No. 2. Because Hixson has not provided a clear description of how the Cr VI emissions are generated at a process level, when designing the proposed RRP, the onsite monitoring should be used to guide where control efforts should be focused.

2. The August 2014 HRA 'Current Operations' scenario used as the baseline for the risk reduction is not appropriate given the higher monitoring results since that time. On average, the levels from August 2014 until now at the Millet and Apartment sites are 1.75 times higher than just in August 2014. These higher

monitoring results must be considered for any 'Current Operations' scenario in the proposed RRP.

3. After applying the new Office of Environmental Health Hazard Assessment (OEHHA) methodology (including increases from multi-pathway risks), and scaling up the results based on more recent monitoring data, it appears that the cancer risks would still be above 25 in 1 million after implementation of the proposed RRP, even assuming the proposed mitigation approach worked exactly as stated in Hixson's proposed RRP. The proposed measures in the proposed RRP would therefore not satisfy the requirements of Rule 1402.

Risk Reduction Plan Supporting Information

4. The RRP does not contain supporting calculations for the assumed level of risk reduction. New emission levels presented in Tables A-1 and A-2 are different from emission levels in the HRA. The detailed calculations used to determine these values need to be provided in addition to the qualitative text descriptions in the proposed RRP itself.

5. Greater justification needs to be provided for the assumed level of emission reduction for each measure. For some measures, the proposed RRP relies on 'engineering judgment' without further support or explanation.

6. No justification was provided in the proposed RRP for the proposed control efficiency of the HEPA filters (assumed to have 99.99% control in the RRP) and the scrubber systems (99% in the proposed RRP). Additional specification, including manufacturer guarantees for overall particulate control and control of particulates both greater or equal to, and less than 2 microns for the proposed scrubbers and mesh pads must be provided before they are assumed in the proposed RRP calculations.

7. The proposed RRP did not remodel the many point sources that Hixson is proposing to relocate or add. These sources must be remodeled in order to properly calculate the projected post-implementation risk.

8. The proposed RRP must identify the location of all exhaust stacks (existing and proposed) in all of the buildings (including stack height, stack diameter, exhaust flow rate, and the exhaust temperature).

9. Hixson must provide detailed analysis on the effectiveness of the proposed PTE in Buildings Nos. 2 and 3, and the Waste Water Treatment Area for control of fugitive emissions. The proposed RRP fails to address proper ventilation of each of the tanks, which are sources of fugitive emissions, and relies only on the ventilation of the total enclosure to the proposed control system (scrubber and mesh pad) for control of the tanks, as well as all other fugitive emissions.

10. The proposed RRP must include detailed design parameters for the proposed PTE in Buildings Nos. 2 and 3, the Waste Water Treatment Area, and the modified PTE in Building No. 4. Hixson must also demonstrate how these modifications will meet the requirements of United States Environmental Protection Agency (US EPA) Method 204. Hixson must provide the location, configuration, and the air flow through each intake exhaust hood, detailed location and size of any openings and walls, and any proposed modifications to the existing structures. In addition, Hixson must provide a detailed analysis of the effect of the proposed scrubber exhaust system on the existing Anodizing Tank (Tank 70) located in Building No. 2 PTE.

11. The proposed RRP fails to describe how the proposed scrubber and mesh pad system, servicing the operations in Building No. 3 and part of the Waste Water Treatment Area, can replace the existing scrubbers which are designed to handle both acid and cyanide fumes. Hixson must provide detailed design specifications for the proposed scrubber.

12. The proposed RRP must provide a detailed description regarding the control of fugitive emissions in Building No. 4 including the proposed relocation of the de-masking operation, relocation of ovens and paint spray booth, and storage of paint racks and supersacks. Hixson must provide the location and description of any structural modification, location and the air flow through any intake exhaust hoods for the new and existing HEPA systems, the effect of the ovens and the paint booth on the new and the existing exhaust systems, and documentation to support the effectiveness of the new and the existing HEPA systems in capturing and controlling particulate emissions.

13. Hixson must provide the type and design of the proposed covers for the tanks in the Waste Water Treatment Area that are outside of the PTE between Buildings Nos. 2 and 3 and which are not vented to the proposed scrubber and mesh pad.

14. The proposed RRP identifies HEPA vacuuming of the paint rack and supersack storage area in Building No. 4, along with many other areas in the facility. However, based on SCAQMD's observation, many of Hixson's HEPA vacuums are not designed to capture and control heavy metals such as Cr VI. Hixson must provide manufacturer's information and guarantees on the effectiveness of the capture and control efficiency of the HEPA vacuums that are proposed or are presently used at the facility.

15. The proposed RRP fails to provide justification, analysis, and reasons as to Hixson's inability to totally enclose and control operations in all buildings and areas that are potential sources of direct and/or fugitive emissions.