

Office of Environmental Health Hazard Assessment

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Matthew Rodriguez
Secretary for
Environmental Protection

April 3, 2014



Edmund G. Brown Jr.
Governor

Mr. Tom Chico
Air Toxics Section
South Coast Air Quality Management District
21865 East Copley Drive
Diamond Bar, California 91765-0904

Subject: Review of risk assessment for Gerdau (TAMCO) Steel Mill (SC-18931)

Dear Mr. Chico:

The 2013 Air Toxics Hot Spots Program health risk assessment for airborne emissions from the **Gerdau (TAMCO) – Rancho Cucamonga Mill** (SC-18931) 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 produces steel reinforcing bars from recycled ferrous steel scrap. The report uses AERMOD and HARP (version 1.4f) computer programs and models at 5,824 receptors the risks due to 54 Hot Spots chemicals (Table ES-1) emitted from at least 27 point, 15 volume, and 2 area sources. The facility based the report on estimated air emissions in 2011 which included 78.7 lbs. of nickel, 5.94 lbs. of hexavalent chromium, 152 lbs. of mercury, 993 lbs. of manganese, 73.1 lbs. of cadmium, 0.000111 lbs. of total dioxins, 232 lbs. of diesel exhaust particulate matter, and 1,173 lbs. of lead.

The risk assessment used the HARP program which calculates a total cancer risk at the off-site PMI (Point of Maximum Impact) of 2.62×10^{-4} (receptor #4195). The risk at the MEIW (worker) is 2.75×10^{-5} . The risk at the MEIR (resident) is 1.62×10^{-5} (receptor #1351). Hexavalent chromium, dioxins, cadmium, and diesel exhaust particulates are the responsible toxic air contaminants. The first three are known human carcinogens.

The highest chronic hazard index (HI) is predicted to be 2.68 for the central nervous system due to emissions of mercury, manganese, and arsenic (receptor #974, the MEIW).

The highest acute hazard index (HI) is predicted to be 5.83 for the immune system due to emissions of nickel. The receptor is the MEIW.

California Environmental Protection Agency

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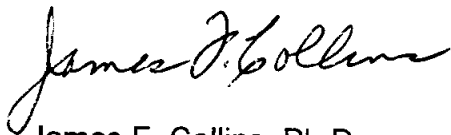
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OEHHA continues to update its risk assessment guidelines as mandated by the Children's Environmental Health Protection Act of 1999. On June 18, 2008 the Scientific Review Panel on Toxic Air Contaminants approved OEHHA's Technical Support Document for the Derivation of Noncancer Reference Exposure Levels. The updating of Reference Exposure Levels (RELs) for specific chemicals is continual and several new acute, 8-hour, and chronic RELs have been adopted. The most current OEHHA health values were used in this 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 contact me or Dr. Daryn Dodge at (916) 324-7572.

Sincerely,



James F. Collins, Ph.D.
Staff Toxicologist
Air, Community, and Environmental
Research Branch