



South Coast Air Quality Management District

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EMAILED and MAILED: July 5, 2016

July 5, 2016

Mr. Mark Olson
Gerdau - Rancho Cucamonga Mill
12459-B Arrow Route
Rancho Cucamonga, CA 91739

Subject: Conditional Approval of Rule 1402 Risk Reduction Plan (RRP) for **Gerdau, Rancho Cucamonga Mill** (SCAQMD No.: **18931**)

Dear Mr. Olson:

This letter is in response to the submission by Gerdau, Rancho Cucamonga Mill (Gerdau) of its Revised Risk Reduction Plan (Revised RRP), dated July 1, 2016 for the facility located at 12459-B Arrow Route, Rancho Cucamonga, California (Facility ID #18931).

BACKGROUND:

On October 8, 2015, SCAQMD staff required Gerdau to prepare and submit a RRP within 180 days, as the modeled Health Risk Assessment (HRA) submitted on January 20, 2015 indicated that the cancer risk, cancer burden, maximum chronic hazard index (HI), and maximum acute HI exceed the action risk levels set forth in SCAQMD's Rule 1402.

Gerdau submitted its first RRP on April 5, 2016. After review of the RRP and several meetings with facility representatives, SCAQMD staff requested Gerdau to revise its RRP to incorporate staff's comments. On July 1, 2016, Gerdau submitted a Revised RRP. SCAQMD staff reviewed the proposed 8 risk reduction measures, emission calculation and modeling analysis in the July 1, 2016 Revised RRP. This Revised RRP projected a potential maximum residential cancer risk of 7.2 in a million once it is completely implemented. The Health Risk Assessment (HRA) included with the Revised RRP did not account for hexavalent chromium emissions from ladle heaters, billet reheat furnace, and spray chamber stack. SCAQMD staff added these emissions which would increase the cancer risk by approximately 1.5 in a million at the maximally exposed receptor. As a result, the Revised RRP's projected potential maximum residential cancer risk with the implementation of the 8 proposed risk reduction measures will be 8.7 in a million and the cancer burden, and the acute and chronic hazard indices will be below 1. These levels are now below the action risk levels.

RISK REDUCTION PLAN CONDITIONAL APPROVAL

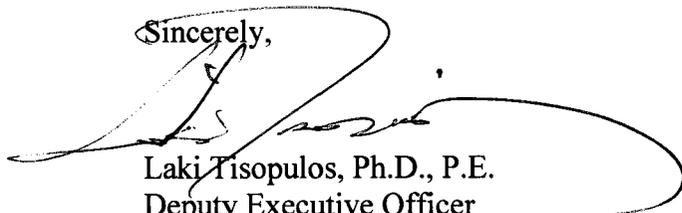
After careful review of Gerdau's Revised RRP by SCAQMD staff, the SCAQMD hereby grants conditional approval of this plan, contingent upon the following:

- All the 8 control measures identified in the Revised RRP on July 1, 2016 are implemented in accordance to the dates proposed in the plan. These are as summarized below.
 1. Risk Reduction Measure #1: Construction of the new Melt Shop Emission Control System including a new 800,000 acfm pulse jet baghouse.
 2. Risk Reduction Measure #2: Replacement of all diesel light towers with either solar powered or electric units.
 3. Risk Reduction Measure #3: Replacement of all portable diesel welders and other diesel powered non-mobile source equipment to non-diesel powered units.
 4. Risk Reduction Measure #4: Paving of the Finished Goods Yard
 5. Risk Reduction Measure #5: Watering on roadways and storage piles
 6. Risk Reduction Measure #6: Application of chemical dust suppressant on roadways and storage piles
 7. Risk Reduction Measure #7: Sweeping on all paved roads and parking lots
 8. Risk Reduction Measure #8: Cleaning pedestrian pathways

In addition, the permit conditions that will be listed on the Permit to Construct (Application No. 586136) for the new baghouse and dust loadout system to conduct source tests and for monitoring of the control system will have to be adhered to meet the Risk Reduction Measure #1. The requirements to ensure continuous compliance with Risk Reduction Measures #4 - #8 will be listed on the Compliance plan (Application No. 582911) that will be issued pursuant to Rule 1420.2.

If you have any questions regarding this Revised RRP conditional approval, please contact me at (909) 396-3123.

Sincerely,



Laki Tisopulos, Ph.D., P.E.
Deputy Executive Officer
Engineering & Permitting

LT: MB
Attachment

cc: Wayne Nastri, SCAQMD
Jill Whynot, SCAQMD
Kurt Wiese, SCAQMD
Philip Fine, SCAQMD
Joe Hower, Environ



HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : GERDAU
 Facility Address: 12459-B Arrow Route
Rancho Cucamonga, California
 Type of Business: Steel Mini-Mill
 SCAQMD ID No.: 18931

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 : GERDAU RRP
- Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
 - Offsite 36.2 in a million Location: Fenceline Point 4146; (450869.2 m, 3772854.1 m)
 - Residence 8.7 in a million Location: Point 1351; (451800 m, 3773300 m)
 - Worker 1.0 in a million Location: Point 1106; (451300 m, 3772800 m)
- Substances Accounting for 90% of Cancer Risk: Dioxins-w/o, Cr(VI), Arsenic, Lead
 Processes Accounting for 90% of Cancer Risk: Baghouse, ladle heaters, road dust, spray chamber
- Estimated Population Exposed to Specific Risk Levels for a 70-year exposure
 - 1 to <10 in a million _____
 - 10 to <100 in a million _____
 - >100 in a million _____
 - Total >= 1 in a million 195010
- Cancer Burden: 0.34
 Cancer Burden = (cancer risk) x (no. of people exposed to specific cancer risk)
- Maximum Distance to Edge of 70-year, 1×10^{-6} Cancer Risk Isopleth (meters) 15200

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:
 - Residence HI: 0.18 Location: 451800 m, 3773300 m toxicological endpoint: CNS
 - Worker HI : 0.61 Location: 450900 m, 3772900 m toxicological endpoint: CNS
- Substances Accounting for 90% of Chronic Hazard Index: Manganese, Arsenic
- Maximum 8-hour Chronic Hazard Index:

8-Hour Chronic HI: 0.24 Location: 450900 m, 3772900 m toxicological endpoint: CNS
- Substances Accounting for 90% of 8-hour Chronic Hazard Index: Managanese
- Maximum Acute Hazard Index:

PMI: 0.49 Location: 450696.8 m, 3773038.5 m toxicological endpoint: IMMUN
- Substances Accounting for 90% of Acute Hazard Index: Nickel, Benzene

C. Public Notification and Risk Reduction

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