



Katie Hobbs
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Karen Peters
Director

VIA EMAIL

August 10, 2023

Javier Del Rio
Copper World, Inc.
5285 East Williams Circle, Suite 2010
Tucson, Arizona 85711
javier.delrio@hudbayminerals.com

Re: Copper World Project Air Quality Control Permit Application No. 96659 – Response to the Comprehensive Request for Additional Information
Plant Name: Copper World Project

Dear Mr. Del Rio:

The Arizona Department of Environmental Quality (ADEQ) provided Copper World, Inc. with a Comprehensive Request of Additional Information suspending the licensing time frame (LTF) for Air Quality Permit Application No. 96659 in accordance with Arizona Administrative Code (A.A.C.) R18-1-504.C on May 2, 2023. On May 31, 2023, Copper World, Inc. submitted an information package in response to the Comprehensive Request for Additional Information. Following review of the information package, ADEQ requires the following information be provided to satisfy the Comprehensive Request for Additional Information and resume the LTF.

1. Ore and Waste Rock Hauling

- a. Revised emissions calculation methodology for calculating haul road emissions such that emissions for each unpaved road segment are calculated based on throughput of material mined and hauled, haul truck capacity, and 2-way haul road length for each road segment rather than allocating total emissions based on the annual weighted average hauling distance over the length of each road segment. Ensure that the haul road lengths used for emissions calculations are consistent with the modeled haul road lengths.
- b. Revised methodology for the allocation of tailpipe emissions from haul truck operations to ensure that tail pipe emissions from haul trucks are not solely allocated within the Broadtop Butte and Rosemont pits, and instead are appropriately allocated across the haul roads, pits, and waste rock facilities.
- c. Revised starting point of “Combined Haul Road 1-2” in Model Year 8 to the intersection of “BT Haul Road” and “Combined Haul Road 7-8.”
- d. Justification for the allocation of 35% of in-pit hauling emissions and 10% of mobile equipment emissions from Broadtop Butte Pit to “BT Haul Road” rather than modeling all in-pit emissions associated with the Broadtop Butte Pit as a single open-pit source.
- e. Verification that waste rock will not be hauled to tailings storage facilities or used for the construction of the buttress for the proposed tailings storage facilities, and removal of references to these operations from the emissions inventories.

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2. Blasting Modeling Methodology
 - a. Revised methodology for modeling blasting emissions such that blasting volume sources are concentrated into a single area within the pit when demonstrating compliance with the 1-hour and 24-hour National Ambient Air Quality Standards rather than allocating blasting volume sources across the pit.
 - b. Revised methodology for modeling blasting emissions such that the area of the blasting volume sources is consistent with the surface areas used to develop emissions calculations.
3. Modeled Emissions Rates Verification
 - a. Validation of modeled emission rates for open-pit sources for all model years.
 - b. Validation of modeled emission rates for wind erosion from the run of mine stockpile (Model Source ID: PC01).
 - c. Justification for the use of an NO₂/NO_x in-stack ratio of 0.05 for emissions of NO₂ from the sulfuric acid plant and fire water pump.
 - d. Identification of the following modeled emission sources in the emissions inventories: MoWHMOBV, CUMOMOBV, TRKMOBV, and CDRMOBV.
4. Sensitivity Analysis
 - a. Revised sensitivity analysis to evaluate sensitivity of meteorological variables for Model Year 8 of the revised model rather than Model Year 14 of the initial submittal.
 - b. Revised sensitivity analysis methodology ensuring consistency with the methodology outlined in Table 5-1 of the modeling report.
5. Helvetia Road
 - a. Emissions calculations for delivery and product shipment associated with the Copper World Project on Helvetia Road for parcels owned by Copper World, Inc.
 - b. Revised model accounting for emissions from delivery and product shipment associated with the Copper World Project on Helvetia Road for all model years.
6. Ambient Air Boundary
 - a. Confirmation that the following parcels are to be included in the footprint of the Rosemont pit: 30560012D, 30560012F, and 30560012G.
 - b. Removal of the portion of parcel number 30561007M included in the footprint of the Rosemont pit.

Please provide the additional information within 60 days of this Request. As an alternative to providing ADEQ with all of the additional information identified above, you may respond to this Request within 15 days with a Notice of Intent to Rely on the Application Components as Submitted in accordance with A.A.C. R18-1-205(B) and R18-1-520.

If you have any questions, please contact Jeff Christensen at (602) 771-0001 or Christensen.Jeff@azdeq.gov or me at (602) 771-4527 or Vaidyanathan.Balaji@azdeq.gov.

Sincerely,

DocuSigned by:

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Balaji Vaidyanathan, Manager
Facility Emissions Control Section
Air Quality Division