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**Re: Concerns Over Copper World, Inc. Air Pollution Permit Application,
Proposal to Issue Class II as Opposed to Class I Permit**

Dear Director Peters and Ms. Murrieta:

The undersigned write to express significant concerns over Copper World Inc.'s application for a Class II air pollution permit for the Copper World Project, a new open pit copper mine in the Santa Rita Mountains in Pima County. Based on materials submitted by Copper World to the Arizona Department of Environmental Quality (ADEQ), it does not appear the proposed mine qualifies as a Class II source of air pollution and must instead be permitted as Class I source. We request ADEQ permit the Copper World Project appropriately to ensure adequate and full protection of clean air, public health, and the environment.

Under the Arizona State Implementation Plan (SIP), an entity seeking to construct and operate a new stationary source of air pollution must obtain an appropriate permit prior to construction. See A.A.C. R18-2-302.A. For a source that has the potential to emit 100 tons per year or more of any air pollutant, also known as a major source, an entity must obtain a "Class I permit." A.A.C. R18-2-302.B.1. If a source has the potential to emit less than 100 tons per year of any air pollutant, also known as a minor source, an entity generally must obtain a "Class II permit." A.A.C. R18-2-302.B.2.

In the case of the Copper World Project, Copper World, Inc. has applied for a Class II permit, claiming that the potential to emit of the new mining operations would be below major source thresholds. However, it does not appear that Copper World has appropriately calculated potential emissions and has not accurately determined the new mining project would not, in fact, be a major source.

Our primary concern is that Copper World has not properly categorized fugitive emissions. While fugitive emissions are excluded from the calculation of whether a source is major, non-fugitive emissions are not. Here, we are concerned that Copper

World has inappropriately excluded non-fugitive emissions, erroneously claiming the Copper World Project will not be a major source and not require a Class I permit.

Under the Arizona SIP, fugitive emissions are defined as, “those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.” A.A.C. R18-2-101.59.¹ In interpreting this definition, the U.S. Environmental Protection Agency (EPA) has consistently explained that a determination of whether emissions can “reasonably pass through a stack, chimney, vent, or other functionally equivalent opening” is based on an assessment of whether emissions can reasonably be collected and passed through a stack, chimney, vent, or other functionally equivalent opening. See Exhibit 1, U.S. EPA, “Interpretation of the definition of fugitive emissions in Parts 70 and 71,” Memo from Thomas C. Curran to Judith Katz (Feb. 10, 1999) at 2. When assessing whether emissions can reasonably be collected, EPA has further held that a determination of “reasonableness” should be construed “broadly.” Exhibit 2, U.S. EPA, “Classification of emissions from landfills for NSR applicability purposes,” Memo from John S. Seitz to Regional Air Division Directors (Oct. 21, 1994) at 2. EPA has generally held that where emission collection technology is in use by other sources within the same source category or by a similar pollutant emitting activity, there is a presumption that collection is reasonable. *Id.*

We are first and foremost concerned that Copper World appears to believe that a determination of whether emissions are fugitive is based on whether emissions are passing or will pass through a stack, chimney, vent, or other functionally equivalent opening.

In response to a May 2, 2023 ADEQ request for additional information, Copper World asserted that emissions from “rock breakers and associated material transfer points” were fugitive because they “are not emitted into the atmosphere through a ‘vent, stack or functionally equivalent opening.’” Copper World Response to Comprehensive Request for Additional Information (May 31, 2023) at 4. However, a determination of whether emissions are fugitive is not based on whether emissions **are** passing or **will pass** through an opening. Rather, a determination of whether emissions are fugitive is based on whether emissions **can** “reasonably pass through” a “vent, stack or functionally equivalent opening,” meaning **can** emissions reasonably be collected and passed through an opening. Here, as Copper World notes in its application, emissions from the rock breakers and material transfer points can be collected using dust collectors, enclosures, and other techniques. See Copper World Air Permit Application, at 4-9—4-10. This means the emissions are not fugitive.

Secondly, Copper World classifies a number of pollutant emitting activities as sources of fugitive emissions, even though these emissions could reasonably pass through vents, stacks or functionally equivalent openings. For instance, Copper World

¹ This definition echoes the definition of “fugitive emissions” found in federal regulations implementing various stationary source permitting requirements of the Clean Air Act. See 40 C.F.R. § 51.165(a)(1)(ix), 40 C.F.R. § 51.166(b)(20), 40 C.F.R. 52.21(b)(20), 40 C.F.R. § 63.2, 40 C.F.R. § 70.2, and 40 C.F.R. § 71.2.

appears to classify all stockpiles as sources of fugitive particulate matter, including PM₁₀ and PM_{2.5}, yet stockpiles can be enclosed, which allows for the capture of emissions and the ability to vent them through a vent, stack or functionally equivalent opening. Enclosed stockpiles are utilized at mining operations around the world and companies offer custom-engineered enclosures (see e.g. “Custom Covers and Enclosures” offered by Dust Control Technologies, Inc., <https://dustcontroltech.com/products> and Bulk storage domes offered by Geometrica, <https://www.geometrica.com/en/bulk-subsection-english>). Copper World itself discloses in its application that it intends to enclose the copper concentrate stockpile at the proposed mine, indicating that enclosed stockpiles are presumed reasonable.²

Although it may be claimed that the cost of constructing emission collection systems, such as enclosures, etc., argues against considering emissions to be non-fugitive, the EPA has cautioned that cost considerations should not “be given any more weight than other factors.” Exhibit 1 at 3. This is especially true given that a determination that emissions from the Copper World Project are non-fugitive would not require Copper World to construct collection systems. Rather, it would simply require Copper World to either take steps to limit the facilities’ potential to emit non-fugitive emissions or to employ other control strategies to comply with applicable permitting requirements.

It is also concerning that several pollutant emitting activities are classified as fugitive by Copper World when the company’s application indicates emissions will actually be collected and controlled. This includes emissions from crushers, rock breakers, and related activities. For example, emissions from several crushers, including the oxide primary crusher, the oxide secondary crusher, and the sulfide primary crusher, will be captured and controlled with a dust collector, yet Copper World claims these emissions will be fugitive. Emissions from other crushers, rock breakers, conveyors, transfers, feeders, chutes, and screens are also similarly classified as fugitive, yet Copper World’s own application discloses that emissions from these sources will be captured and controlled with dust collectors. It is telling that Copper World claims that emissions from these activities will largely be controlled by 99% or more, an extremely high control efficiency reflecting the fact that emissions will be contained and controlled and are not fugitive.

The failure to properly characterize fugitive and non-fugitive emissions is greatly concerning. According to Copper World, total non-fugitive emissions of individual pollutants will be below the Class I permitting threshold of 100 tons per year. If non-fugitive emissions were properly characterized, however, non-fugitive emissions would exceed the Class I permitting threshold. Indeed, if PM₁₀ pollution just from primary crushing, conveying, coarse ore storage, and reclaim conveying, oxide ore process,

² In spite of the fact that the copper concentrate stockpile will be enclosed, Copper World classifies emissions from the stockpile as “fugitive” in its application, further underscoring that the company has not accurately characterized fugitive and non-fugitive emissions.

sulfide ore process, and tailings storage were properly characterized as non-fugitive, total emissions would be more than 104 tons per year.

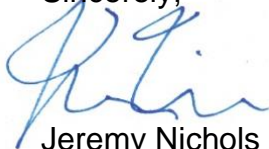
We are finally concerned that Copper World has claimed unreasonably high control efficiencies in estimating the proposed mine's potential to emit. In its application, the company asserts that fogging sprays, scrubbers, and dust collectors used to control emissions will achieve a 99% control efficiency for all pollutants. To begin with, this exceptionally high level of control efficiency would require Copper World to operate and maintain its equipment at near-perfect performance levels at all times, and presumes that there would be no malfunctions, no upsets, and no instances of human error. This is incredibly unrealistic does not appear to reflect what will be actual operating conditions. Although fogging sprays, scrubbers, and dust collectors can achieve high control efficiencies, it is unreasonable to presume they will achieve a 99% control efficiency at all times during the life of the proposed mine.

Also concerning is Copper World's broad assumption that dust collectors will achieve a 99% control efficiency for all forms of particulate matter, including fine and coarse. While dust collection systems can often achieve high levels of coarse particulate matter control, they do not necessarily achieve the same level of control for fine particles, or PM₁₀ and PM_{2.5}.

In light of this, we have concerns that emissions of PM₁₀ and PM_{2.5} have been significantly underestimated for purposes of determining the Copper World Project's potential to emit. Even if Copper World's assumed control efficiencies are erroneous by just one or two percent, the potential to emit from a number of activities could be more than double what is currently estimated.

Copper World's proposed mine poses serious risks to air quality, public health, and the environment. To this end, it is critical that ADEQ ensure that the Copper World Project is subject to appropriate scrutiny and permitting under the Arizona SIP and applicable requirements of the Clean Air Act. This must start with assuring the Copper World Project is subject to Class I permitting requirements under the SIP.

Sincerely,



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