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Please require Copper World to get a more stringent Class I Permit.

1) This mine will create a great volume of tailings and dust hundreds of feet high near schools and residences. Tailings often contain toxins like lead and arsenic and typically blow 5-30 miles in dry and windy conditions like those near the mine. Winds are from the west, but daily wind changes will blow toxics from east to west toward Green Valley, Sahuarita, Corona de Tucson, and housing developments southeast of Sahuarita. An example of dust in the air can be seen almost every morning from Green Valley when vehicles on Santa Rita Road raise dust clouds that drift across the Santa Rita Experimental Range.

2) Students at Copper Ridge Elementary will be at risk from particulates that will drift into their area from the Copper World tailings piles just ~1 mile from the school grounds. Recent studies of tiny particulates from mines (dust and haze) show that there is virtually no safe level of exposure for young children – the smaller the particulates, the more likely children will inhale them deeply into their lungs. At the very least, Copper Ridge School (and other schools in Corona de Tucson and Vail) will need to constantly monitor air quality, plan to protect students during emergency alerts, cancel outdoor activities when necessary, train school nurses to deal with respiratory ailments, and possibly cancel classes when risks are high.

3) Copper World Mine will produce minuscule particulate matter less than 2.5 micrometers in diameter. This will be perceived as dust, inhalable particles, or haze between the mountains and Sahuarita. No one disputes this. In its plans, Copper World says it will monitor and suppress minuscule toxic particulates that might drift into Green Valley and Corona de Tucson homes and schools. However, recent scientific studies show no safe "threshold" for such particulates. Adverse health effects will include toxic effects from absorption of lead particulates into blood, toxic effects from absorption of zinc and other heavy metals, increasing respiratory symptoms, including the aggravation of asthma. Risks are highest for the elderly and young children. Smaller, difficult-to-control particles may be more dangerous because they can be inhaled deeply into the lungs. The lifespan of the Copper World mine may last 40 years or longer. For people who live in the mine area, this will increase the likelihood of serious physical problems.

4) When the Copper World mine operation is established, heavy haul trucks loaded with harmful copper concentrates and possibly purified copper cathodes will almost certainly run constantly on the shortest route between the mine and the town of Sahuarita. Despite claims by Copper World that suppressed vehicle speeds and constant watering will keep down dust clouds on dirt roads, it is not realistic to think that particulates will be fully contained in the boxes of the trucks or that spillage will be prevented. Heavy metals can contaminate land for hundreds of years.

5) The proposed mine will drive away unique large animals in the northern Santa Rita Mountains – jaguar, mountain lion, bobcat, black bear, coati, ringtail, and more – because of toxic dust, emissions, noise, blasting, and nighttime light. These animals' sense of smell is documented as

hundreds or even thousands of times more powerful than a human's. This part of the Sky Island mountain range has been their home for thousands of years, and in a relatively few years their habitat will be gone because of the haze of toxic particulates that will drift across their home range.

6) Residents of Pima County need to be aware of the enormous piles of leftover material in the proposed Copper World Mine's tailings. This waste material - perched on the mountains above Corona de Tucson and Vail - should not be considered "gravel" or "crushed rock." Much of it will be sand and dust particles that could escape the tailings piles or pipes and then spread toxins into the landscape between the Santa Rita Mountains and communities to the west, northwest, and north.

In any open-pit mine operation, tailings must have safeguards, such as dams and liners, to keep them in check. The Copper World Mine owners have already demonstrated a willingness to cut corners with necessary protections. Downstream residents, however, deserve state-of-the-art safeguards for tailings piles that will be hundreds of feet deep. Metals such as lead, cadmium, and zinc are especially dangerous when they become airborne or flushed out of tailings, working their way down washes during storms.

There is no way to make this mine safe for the local air quality of citizens and therefore a permit should not be issued