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SOUTHWESTERN REGION

February 3, 2014

Regional Forester/Deputy Regional Forster
USFS Southwestern Region
Coronado National Forest, Nogales Ranger District
333 Broadway SE
Albuquerque, NM 87102Regional Forester: _____
Deputy Regional Forester: _____
Deputy Regional Forester: _____
CC Staff: LM
Return to: _____
RF-225

Dear Jim Upchurch, Forest Supervisor,

I am commenting again on the Rosemont Copper Project: A Proposed Mining Operation by virtue of my original comments submitted on July 11, 2008 and on January 2, 2012. [Copies are enclosed.] As

- an astronomer with a doctorate from Cornell University, as
- an Associate Research Professor at the College of Optical Sciences at the University of Arizona, as
- a Member of the American Meteorological Society and the local chapter of that Society, and as
- the Owner of Optical Data Associates, LLC - a nationally respected test laboratory - which I founded 23 years ago,

I believe that I have some authority to speak on the issue of air pollution from the proposed mine.

As I have pointed out before, the proposed mine not only will destroy the environment of the northern Santa Rita Mountains, but it is in the WORST POSSIBLE LOCATION with respect to the Tucson metropolitan area. The prevailing winds blow from the southeast, which is exactly where the huge open pit will be. If there is any doubt about this assertion regarding the prevailing winds, just consider the orientation of the main runways of both Davis Monthan Air Force Base and Tucson International Airport. They are northwest - southeast to take advantage of the lift from the wind when aircraft takeoff to the southeast.

What could possibly go wrong? Here are some probable outcomes.

- Dust from the pit - Roughly a cubic mile of material will be blasted out of the mountain! What will happen to it? Much will be entrained by the prevailing wind and blow over Tucson. Some will fall on Tucson and some will be carried further to degrade the skies of Phoenix, with more serious air problems than Tucson does. Can we suppress the dust? Maybe, with vast volumes of water, of which Arizona has dwindling amounts.

- Dust from the vehicles on the vast spiral roadway around the mine and roadways out of the mine and into Greater Tucson. As a more extensive source of dust, this will generate a host of additional problems in dust control. We should not forget that these vehicles will produce additional pollution from their powerful engines.

- Dust from the processing facilities by the mine, and

- Dust from the mountains of tailings, which will cover a land area larger than the mine footprint.

Dust generates problems in several areas:

- Dust reduces visibility because dust scatters light. This will affect the blueness of our skies and the transparency of the atmosphere, affecting tourism, astronomy, and the general quality of life for everyone living here.

- Dust interferes with night sky darkness because dust reflects light. The effects of light pollution will be magnified as the rays emitted from the city lighting are reflected back down by dust in the air. This could seriously affect astronomy in the area.

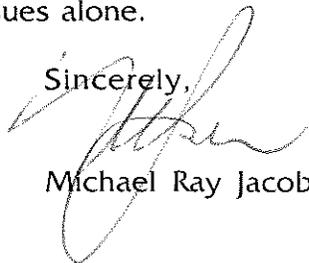
- Dust affects health, both through the wind transport of heavy metals into the city - heavy metals are why Rosemont wants to blast this module to bits upstream - and by the wind transport of biological hazards like valley fever spores.

- Dust is dirt, and therefore is just plain dirty. We already have problems with dust. Why make it much, much worse?

If the mine were planned for a different location, I would not be as opposed to it, because the hazards involved would affect fewer people. But when roughly a million people in Tucson will be directly exposed, and about five million people in Phoenix less directly exposed, the risk-benefit analysis is far too risky. My personal experience as a child illustrates this. I grew up in the 1950s in the Greenfield section of Pittsburgh, one to two miles downwind from seven blast furnaces of the Jones & Laughlin Steel company. The air was highly polluted with hydrogen sulfide, coal dust, and other toxins. The sky glowed, and vast plumes of smoke frequently erupted. How wonderful our world was!

I do not want to repeat this experience. Without even considering the dangers to the water supply, wildlife, and the general environment, the Rosemont Mine should be rejected on the basis of air quality issues alone.

Sincerely,



Michael Ray Jacobson