

Proposed Air Quality Permit #55223 for Rosemont Copper Company

Pursuant to Arizona Administrative Code (A.A.C.) Title 18, Chapter 2 and Arizona Revised Statutes, Title 49, Chapter 3, the Arizona Department of Environmental Quality is proposing to issue a Class II air quality permit to Rosemont Copper Company.

OVERVIEW OF ROSEMONT COPPER COMPANY

Rosemont Copper Company (RCC) has proposed to construct and operate an open pit copper mine, milling, leaching, and solvent extraction/electrowinning facility to be located at 21900 South Sonoita Highway, Vail, Arizona 85641. The facility is approximately 30 miles southeast of Tucson, west of State Highway 83, in Pima County, Arizona. The facility is accepting voluntary emissions limitations to stay below major source thresholds. Therefore, a Class II synthetic minor air quality permit is proposed. The proposed mine has an anticipated operating life of 20 years with peak mining rates of ore and waste rock of up to 359,500 tons per day.

JURISDICTION – WHY IS ADEQ ISSUING THIS PERMIT?

RCC's mine is located within Pima County where the local agency, Pima DEQ (PDEQ), has Environmental Protection Agency (EPA) approval to issue air quality permits. RCC submitted an application to PDEQ in July 2010, which was denied in September 2011, after issuing a draft permit for public comment. On July 5, 2012, the Arizona Superior Court in Pima County ruled that the PDEQ's action to deny Rosemont's application was both arbitrary and capricious. To address this uncertainty and to ensure that duplicative air quality permits from PDEQ and ADEQ are not required, ADEQ, pursuant to A.R.S. 49-402(B) and R9-3-1101 of the Arizona State Implementation Plan (SIP), has asserted complete air quality jurisdiction. ADEQ is seeking comments from the public if PDEQ should be offered oversight of the permit after issuance by ADEQ.

HOW DOES THE ADEQ PERMIT DIFFER FROM THE PIMA DEQ PERMIT THAT WAS OFFERED FOR PUBLIC COMMENT?

The ADEQ permit establishes very stringent requirements as noted below:

- Replacing six wet scrubbers that are capable of controlling 99 percent of particulate matter emissions with state-of-the-art high-efficiency cartridge filters that will now control 99.99 percent of these emissions
- More stringent particulate matter emission limits

- Additional control requirements at the primary crushing and lime systems that were reconfigured for process optimization
- Paving 3.1 miles of industrial roads within the facility boundary
- Use of EPA certified Tier 4 engines in six non-road engine vehicles and Tier 2 on other vehicles
- Increased monitoring, recordkeeping and reporting requirements

The above additional measures have resulted in emissions reduction of total emissions of particulate matter less than ten microns (PM₁₀) by 47 tons per year (tpy) and emissions of particulate matter less than 2.5 microns (PM_{2.5}) by 43 tpy.

WHAT ARE AMBIENT AIR QUALITY IMPACTS FROM THE ROSEMONT COPPER MINE?

The state permitting program requires all new sources to conduct an air quality modeling assessment to ensure compliance with the National Ambient Air Quality Standards. Rosemont's proposed site is located in a "clean air area"—one that has been designated as attainment or unclassifiable for all criteria pollutants under the Clean Air Act. A thorough analysis of ambient air quality impacts from the proposed mine was conducted which demonstrated that the emissions would not cause or contribute to an exceedance of any applicable National Ambient Air Quality Standard.

WHAT ARE ROSEMONT COPPER MINE'S EMISSIONS?

The potential annual non-fugitive and fugitive emissions from the mining operations are listed in Table 1 on the next page.

It should, however, be noted that the fugitive emissions are accounted for in the modeling analysis to determine compliance with the National Ambient Air Quality Standards (NAAQS).

HOW DOES THE EIS AND DEQ MODELING DIFFER?

In the modeling analysis submitted to ADEQ, Rosemont accounted for the additional control measures required by the Department. These controls, however, were not included in the initial EIS documents submitted to the United States Forest Service and those documents will need to be updated to reflect the additional control measures.

Table 1

Pollutant	Non-Fugitive Emissions (tons per year)	Fugitive Emissions* (tons per year)
PM ₁₀	39.51	947
PM _{2.5}	10.97	106
NO _x	16.76	154
SO ₂	0.055	18
VOC	1.54	3.77
CO	9.0	606
GHG	5,792	5,125
HAPs	0.0132	0.0
PM ₁₀ -Particulate matter less than 10 microns PM _{2.5} -Particulate matter less than 2.5 microns NO _x -Nitrogen Oxides SO ₂ -Sulfur dioxide VOC-Volatile Organic Compounds CO -Carbon Monoxide HAPs-Hazardous Air Pollutants GHG -Green House Gases		
*Pursuant to state law, fugitive emissions are not included in the determination of major source applicability for non-categorical sources such as copper mines		

HOW DID ADEQ DEVELOP THE TERMS OF THE PROPOSED PERMIT?

The proposed permit includes emission limits and standards and compliance demonstration requirements from federal, state and local air quality regulations. Federal requirements for the mine come from Title 40 of the Code of Federal Regulations Part 60 New Source Performance Standards, Subpart LL - Metallic Mineral Processing Operations, and Subpart IIII - Internal Combustion Engines. Other requirements set forth in this permit are a result of state and county rules and limitations based upon ambient air dispersion modeling.

HOW WILL ADEQ ENSURE THAT THE ROSEMONT MINE COMPLIES WITH PERMIT REQUIREMENTS?

The proposed permit includes stringent monitoring, testing, recordkeeping, and reporting requirements to provide assurance that emissions from the mine operations are minimized. ADEQ inspectors will also conduct periodic announced and unannounced inspections of the facility if not delegated to PDEQ. ADEQ’s preference would be to delegate those responsibilities to PDEQ.

WHAT OTHER REGULATORY REQUIREMENTS DO ROSEMONT HAVE TO MEET?

In addition to this air quality permit, RCC will have to obtain other independent approvals prior to the construction and operation of the mine. They include the Environmental Impact Statement (EIS) Record of Decision from the United States Forest Service, the Aquifer Protection Permit (APP) from ADEQ and the 404 Permit from the Corps of Engineers.

HOW DOES THE PUBLIC COMMENT PROCESS WORK?

ADEQ will hold a **public meeting** to answer questions on the proposed permit on **Monday, October 01, 2012, at 6:00 p.m.** at the Sycamore Elementary School located at 16701 S Houghton Road, Vail, Arizona 85641. At the public meeting, citizens will have an opportunity to have informal discussions about the proposed air permit with agency staff.

ADEQ will hold a public hearing to receive public comments on the proposed permit on Tuesday, October 09, 2012, at 6:00 p.m. at the Sycamore Elementary School located at 16701 S Houghton Road, Vail, Arizona 85641. The public comment period will officially close on October 31, 2012. **Therefore, all comments must be postmarked, emailed, or hand-delivered no later than October 31, 2012.**

E-mails should be sent to rosemontairpermit@azdeq.gov or via postal mail or hand-delivered to 1110 W Washington St, Phoenix, AZ 85007, Mail Code 34.

Additional information on the public notice, and copies of the proposed permits and technical support documents, will be available for review on the ADEQ Web site at:

<http://www.azdeq.gov/environ/air/permits/rcc.html>.

Citizens can also subscribe to email or text alerts to news and other events related to this proposed permit at <https://public.govdelivery.com/accounts/AZDEQ/subscriber/new>

ADEQ CONTACT

We encourage you to be informed and involved in ADEQ activities. We need your involvement to help us protect our environment and public health. For more information, please contact:

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