

Sierrita Facts from FCX



Tailings Dust Management at Sierrita

Freeport-McMoRan makes it a priority to minimize the environmental impact of our processes, manage our facilities in a responsible and sustainable way, respond quickly to environmental incidents and take steps to prevent them from happening again.

Environmental Solutions

Freeport-McMoRan Sierrita Inc., is dedicated to minimizing the environmental impacts of its Sierrita facilities. Sierrita takes reasonable precautions to prevent excessive amounts of particulate matter from becoming airborne and limit dust from our tailings impoundments. Occasionally our best efforts to limit dust generation are overwhelmed due to the extreme weather events that are inherent to the area.

Sierrita employs an active management system to prevent dust from the tailings impoundment, spending up to \$2.5 million annually for dust control. Approximately 25 individuals are employed in tailings operations and dust control, managing more than 3,600 acres of tailings.

Dust Control Initiatives

Freeport-McMoRan Sierrita Inc., uses a variety of techniques and equipment to maintain dust control and our initiatives include the following practices:

- Manage tailings distribution to maximize the extent of wet or encrusted tailings surface
- Spray tailings roads and berms with water on a regular basis
- Cap tailings roads with native soil and restrict vehicle traffic and speed to reduce dust from unpaved roads
- Apply a dust suppressant on the tailings impoundment that tacks down loose particles and absorbs moisture from the air which helps reduce dust potential
- Re-vegetate side-slopes to minimize erosion from wind and rain
- Monitor the tailings surface daily to identify potential problem areas and respond quickly to dust events (environmental staff on-call 24-hours per day)

One of the most effective ways to minimize dust is to keep the tailings wet. However, this contrasts with our efforts to conserve water throughout our operation. We will continue to experiment with alternative crusting and spraying technologies to minimize our use of water while effectively reducing dust generation.

Because of Sierrita's pioneering development of new technologies and practices, we have observed a significant reduction in those dust events, even under equally unfavorable weather conditions. We will continue to work towards eliminating unacceptable levels of dust from Sierrita.

What is contained in windblown tailings?

Freeport-McMoRan performed an analysis of the Sierrita tailings after a 2006 dust event and submitted the report to the Arizona Department of Environmental Quality, the Arizona Department of Health Services and the Green Valley Community Coordinating Council in 2007. The study found organic constituents used in copper concentrating were not present in the tailings in detectable quantities and that tailings dust found around Green Valley had metal values similar to dust from other sources in the area.

For more information on Freeport-McMoRan, visit us at fcx.com or contact Collette Brown at 520.393.2409.