Rosemont Copper Project, Coronado National Forest
Environmental Impact Statement

Groundwater Quality

Tailings and Waste Rock

- Water in the tailings would seep out over time, at a rate of about 8 gallons per minute, or 4.2 million gallons per year, during the active mine life. Seepage is modeled to approach zero gallons per minute after 500 years.
- Waste rock has no process water associated with it. However, precipitation falling on the waste rock may infiltrate and cause seepage.
- Geochemical modeling predicts that seepage from both the tailings and the waste rock would not exceed any numeric Arizona aquifer water quality standards.

Heap Leach

- The heap leach drainage is expected to exceed numeric Arizona aquifer water quality standards for several metals. This would not be a problem while the drainage is being collected during the leaching process.
- Heap leach seepage is expected to continue at low levels for about 115 years after the leaching operation ends. This seepage would be treated to comply with the Arizona permitting requirements.

Mine Pit Lake

- Geochemical modeling predicts that the mine pit lake would not exceed any numeric Arizona aquifer water quality standards.
- A concern at many mine sites is the potential for acid drainage, or for mine pit lakes to turn highly acidic. Laboratory tests conducted for this project indicate that the rock formations would buffer and control any acidic waters. The mine pit lake and seepage from the tailings and waste rock is not expected to become highly acidic.

Existing Conditions

- Ground water in the project vicinity has been analyzed and found to not exceed any new numeric Arizona Aquifer Water Quality Standards.