

El Pilar Mine

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Current Status, Potential Water Resource Impacts
and Environmental Mitigation Measures

El Pilar Mine – Current Status

- Recent news reports indicate that in October 2014 Stingray Copper Inc. initiated the sale of the mine
- Stingray parent company Mercator Minerals has filed for bankruptcy in Canada, but this process does not affect the sale of El Pilar

El Pilar Mine – Water Rights

- Groundwater from the Santa Cruz Aquifer (extraction coordinates 31°10'58.1" N, 110°41'52.4" W)
- 10-year water concession authorization as of November 24, 2012
- Issued to Recursos Stingray de Cobre S.A. de C.V.
- Authorizes the use of 1,166,336 cubic meters (~94,500 acre-feet) of groundwater annually
- Maximum extraction rate of 37 lps (1.31 cfs)
- Well depth: 200 m

El Pilar Mine – Environmental Measures

- PRIMARY MEASURE: Leach pad lining system
 - For leaching “patio” + ponds, treatment process plant + ponds, as well as an additional overflow pond designed to contain a 24-hour duration of a 100-year storm event.
- Lining system = Synthetic geomembrane and a layer of HDPE
- Leak detection system

El Pilar Mine – Environmental Measures

DURING CONSTRUCTION

- GROUNDWATER QUALITY
 - Lining system
 - Groundwater monitoring
- SURFACE WATER/EROSION/SOIL QUALITY
 - Sediment retention structures, remediation
 - Structures to redirect any local runoff around the site into nearest natural channel
 - No access roads through natural channels without adequate drainage structures

El Pilar Mine – Environmental Measures

DURING OPERATION

- **GROUNDWATER QUALITY**
 - Lining System
 - Groundwater monitoring
- **SURFACE WATER/EROSION/SOIL QUALITY**
 - Surface water monitoring
 - Sediment retention structures, remediation (retained sediment will be reincorporated into eroded areas)
 - Structures to redirect any local stormwater runoff around the site into nearest natural channel
 - Emergency response plan

El Pilar Mine – Environmental Measures

DURING CLOSING

- To counteract acid mine drainage, neutralizing substances (sodium hydroxide or calcium oxide) will be applied or the patio surface will be covered in layers of clay soil and vegetation to isolate the acid drainage.