

Independent Monitoring of the Yanacocha Gold Mine, Northern Peru

The Yanacocha gold Mine is located in northern Peru, near the city of Cajamarca. The Compliance Advisory Ombudsman (CAO) office of the International Finance Corporation (IFC) of the World Bank contacted Dr. Ann Maest in December 2001 to assemble a team and conduct an independent study of water quality and quantity issues at the Minera Yanacocha gold mine in northern Peru, the largest gold mine in Latin America. Ann formed a team with colleagues at Stratus Consulting, Inc., who managed and conducted the work (Ann is Senior Advisor there). Ann served as the water quality expert for the study, which lasted for approximately 21 months. Approximately 50 locations in the Cajamarca area were sampled to determine if operations of the mine have adversely affected the water quality and quantity of the surrounding area. The sampling was conducted with veedores from communities and groups in the area, and the veedores were trained to evaluate if we were following the sampling plan. The report, released in October 2003, found that although most of the locations examined did not exceed water quality standards, mine operations had significantly affected water quality and quantity at certain locations and certain times. The study compared measured concentrations in streams to international water quality standards, and found that standards were exceeded at certain locations, especially during the transition from the dry to the rainy season. For other locations where treated mine process waters were discharge to streams, standards were exceeded at times that did not relate to the transition period. Ann also examined the effect of natural mineralization to determine if the observed changes were due to naturally elevated concentrations of metals or acid. In a limited number of locations near the mine boundary this was found to be true, but most of the water quality exceedences at downstream locations were not related to natural conditions. As a result of the study, all the water quality monitoring data for stream locations at the mine boundary were made public for the first time (in the report), and the implications of the data and the report were discussed both in the report and in-person with representatives from the communities potentially affected by mine operations. The mine has agreed to continue participating in independent monitoring and is also undertaking studies to determine where and how the water in the area is used to help evaluate the actual effects of drinking the water on communities surrounding the mine. The report can be viewed at http://www.cao-ombudsman.org/html-english/ombudsman_report_peru.htm