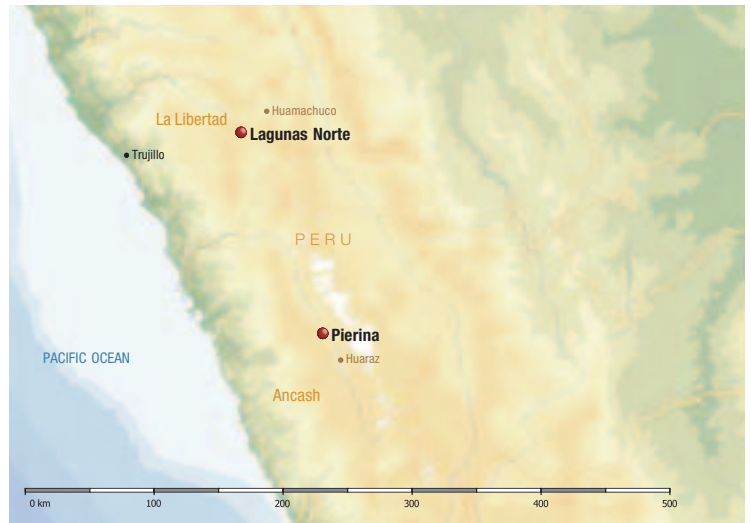




# Pierina Mine



**Barrick's Pierina Mine** is creating long lasting benefits for its employees and contractors, and for the communities in which it operates.

Pierina contributes to local communities by generating jobs, improving health care and educational opportunities, and by laying down the foundations for sustainable economic development, while preserving the area's cultural heritage and protecting the environment.

Performance data located on page 6 of this report.

## MAJOR MILESTONES 2004

- Third party certification of Pierina's environmental management systems (ISO 14001 Certification)
- Assisted with water system infrastructure development in local communities of Jangas and the Huaraz area
- More than 1,000,000 trees planted since start of operations
- Consolidation of strong relationships within local communities
- 1st Place Mine Rescue National Championship

## Who Are We?

The Pierina gold mine is located in the Callejón de Huaylas in the Peruvian Andes, approximately 10 air kilometers north of Huaraz, Peru at an average elevation of 4,100 meters. Surface mining began at Pierina in 1998. Ore is processed by valley fill heap leaching. During 2004, the Pierina operation had an average of 375 employees and 850 contractors on site.

**Our Core Value:** At Pierina, as at all Barrick operations, we are guided by our commitment to responsible behavior. In practice, this translates into bringing long-term benefits

to the communities where we operate, and fostering a culture of excellence and collaboration among our employees.

**Our Commitment:** Corporate Social Responsibility is the commitment of business to contribute to sustainable economic development – working with employees, their families, the local community and society at large to progressively improve the quality of life, in ways that are both good for business and good for development. At Pierina, we are committed to making a positive difference in the communities in which we live and work.

## Environmental Responsibility

**At Barrick's Pierina mine, environmental stewardship is integrated into the mining life cycle.**

Stewardship began early in project planning, when extensive baseline environmental and archaeological studies were initiated in the project area. As development proceeded, the results of these studies ensured that the facilities and operations were designed with environmental protection in mind.

Now that Pierina is in operation, ongoing environmental monitoring provides the Company with feedback on the effectiveness of its environmental controls. Environmental specialists routinely monitor the land, air and water on and adjacent to the property. Monitoring

results are reviewed, areas for improvement identified and, as required, performance and site activities are reported to regulatory authorities. Pierina is also part of a multidisciplinary water and air monitoring committee which is headed by the mayor of the Jangas district and includes local community representatives. Analysis results are shared with local communities.

**Materials Management:** Safe transport, storage and handling of chemicals is a priority at Pierina. Spill prevention measures, such as double-walled tanks and lined or bermed



containment cells, minimize the risk of an accidental release of petroleum products or other chemical solutions impacting the environment or leaving the mine site.

Pierina has established recycling programs on site, and regularly recycles scrap metal, used oil, batteries, cardboard and paper, HDPE pipe and liner material, 55 gallon drums and wood boxes.

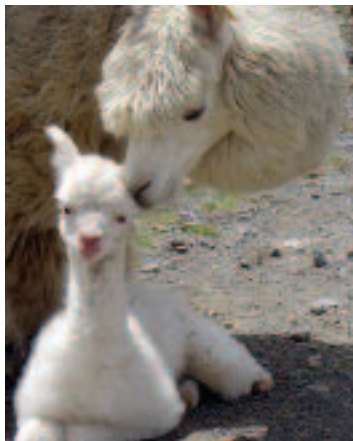
**Water Management:** Mining requires water for ore processing and dust suppression. We recognize that water is an invaluable resource and, as such, every effort is made to conserve water and to minimize the impacts of its use. The mine obtains water from groundwater wells and from rain-water collection. Specific water conservation activities at the site include the use of instrumentation to measure and control water consumption, the protection of downstream waterways, and the recycling of water through the mine's processing systems. In 2004, Pierina consumed 41 liters of water for each tonne of ore processed.

**Energy Management:** Energy at the Pierina mine is obtained from purchased electricity from a Barrick-built power line and also from the burning of propane, diesel and gasoline. With power being one of our largest on-site costs, good business sense dictates that we strive to maximize energy efficiencies, and Pierina is currently engaged in energy efficiency optimization efforts. Because greenhouse gas emissions are linked to energy usage, energy efficiency efforts which result in decreased energy consumption and/or increased energy efficiencies are expected to result in reduced greenhouse gas emissions.

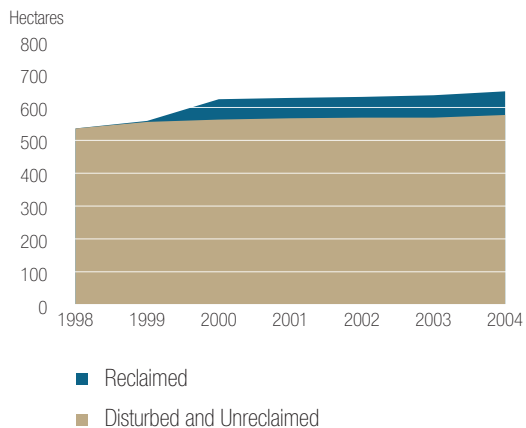


**Wildlife and Habitat Stewardship:** Pierina has developed a number of stewardship programs to protect animals from the hazards of mining activities, and to mitigate impacts to habitat around the mine site. An extensive nursery at the mine allows us to adapt, propagate and grow a variety of local plant species, including several varieties of rare cacti, for current and future reclamation activities. As well, a tree nursery provides locally-grown and acclimatized tree saplings, both common and threatened or endangered native species, for mine and community utilization. Pierina is also breeding Alpacas at the nursery with the intention of developing sustainable economic alternatives for local community farmers.

**Land Status:** Land disturbance is an unavoidable consequence of mining. By careful planning we aim to keep to a minimum the area affected by mining activities. During operations, when disturbed land is no longer required for the mining process it is reclaimed by re-contouring and re-vegetating the area. By the end of 2004, Pierina had reclaimed a total of 72 hectares of land previously disturbed by mining activities.



**PIERINA LAND STATUS**



## Health & Safety Responsibility

The health and safety of our employees is the top priority at the Pierina mine.



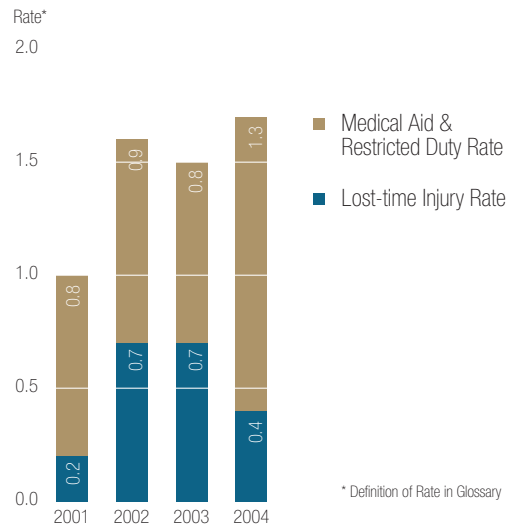
We are committed to eliminating or controlling all workplace hazards for the protection of our workers. We believe that everyone is responsible for workplace safety. Health and safety training programs are in place for managers, employees and contractors at Pierina. These programs provide all employees and contractors with a clear understanding of their rights, responsibilities and accountabilities in creating and maintaining a safe workplace for all.

A rigorous emergency response training program is provided regularly to the Emergency Response Team (employee volunteers), and includes mine rescue, hazardous materials handling, fire-fighting, crisis management and incident command training. Emergency response drills assist mine employees, and the Emergency Response Team, to assess their readiness to respond to an actual emergency.

During 2004, we implemented Barrick's Safety and Health System and provided over 7,700 hours of health and safety training to employees and contractors.

Occupational health and wellness entails identifying, controlling and monitoring workplace health hazards and exposures. Pierina's occupational health programs ensure that exposures are characterized and controlled within acceptable limits, and that emerging health protection standards are considered whenever applicable.

### PIERINA TOTAL MEDICAL INJURY RATE



In 2004, Pierina mine won a Barrick Bronze Site Performance Award for safety performance. As well, a Safety Champion Award was presented to Moises Depaz Valencia for going above and beyond in championing safety at Pierina.

## Social Responsibility

**Social responsibility at Pierina involves sharing the benefits of mining with our neighbors and our employees.**

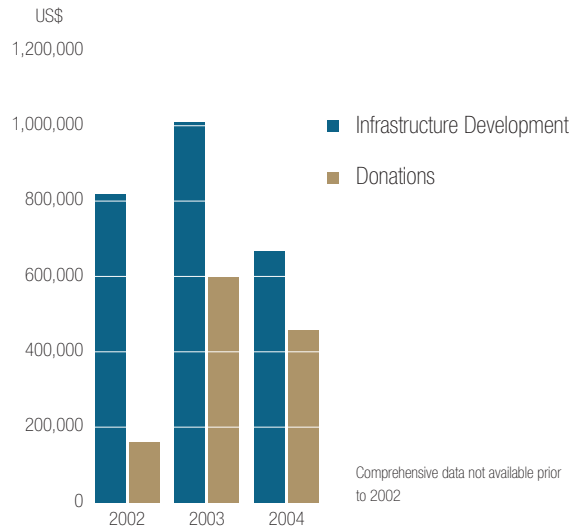
**Our Communities:** The mine supports sustainable development programs for 11 small communities around the mine, as well as for the nearby urban center of Huaraz. Our primary focus has been to assist with improvements in health care, education and to launch projects that promote economic development.

The Pierina Mine is addressing community needs through the funding of infrastructure development, as well as by charitable donations. Significant efforts over the past few years have included a community education program aimed at local elementary schools and a community health program which assists families with improved housing and improved drinking water supply systems. Among other projects, we have assisted with street paving, storm-sewer construction, and drinking water system improvements in the city of Huaraz, and with the development of a waterline in the Municipalities of Taricá and Jangas.

Pierina's social projects have a clear sustainability vision. They are developed as social investments, balancing social, economic, and environmental aspects. All projects are participative, involving community members and, where possible, government institutions and non-government organizations, especially those with a focus on health, education, and productive development.



**PIERINA COMMUNITY GIVING**



**Our Employees:** Pierina's employees are our most important asset. We respect and value the men and women who work for us, and are committed to fair employment practices, and a workplace in which all individuals are treated with dignity and respect, are free from harassment and discrimination and are given the opportunity to grow, personally and professionally. Along with good salaries and a comprehensive benefits package, Pierina has created a recognition policy that rewards those employees whose suggestions for improvement are successfully implemented.

Our employees live in nearby communities such the towns of Jangas and Huaraz. Approximately 30 percent of our employees live in a Barrick-built housing complex located in the town of Taricá. Barrick's focus on hiring locally means that, at the Pierina mine, approximately 98 percent of our employees and contractors are Peruvian. Annual salary and benefit packages totalled US \$11.3 million in 2004.

<b>Environmental Compliance</b>	<b>2004</b>	2003	2002	2001	2000	1999
Number of Regulatory Actions	0	0	0	0	0	0
Fines Paid (US\$)	0	0	0	0	0	0
<b>Environmental Training (Hours)</b>	<b>2004</b>	2003	2002	2001	2000	1999
Employee Environmental Training	2,235	1,311	1,332	1,200	950	1,316
Contractor Environmental Training	3,513	2,800	2,100	900	450	656
<b>Spill Management (Reportable Spills/Liters)</b>	<b>2004</b>	2003	2002	2001	2000	1999
Volume Escaping Second Level Spill Containment	50	0	999	26,800	0	0
Volume Escaping Site Boundary	10	0	696	0	0	0
<b>Air Emissions &amp; Water Discharges</b>	<b>2004</b>	2003	2002	2001	2000	1999
Total Water Discharged Under Permit (Kiloliters)	0	0	0	202,994	0	35,999
Water Permit Excursions	0	0	0	0	0	0
Air Permit Excursions	0	0	0	0	0	0
<b>Energy Consumption (GigaJoules)</b>	<b>2004</b>	2003	2002	2001	2000	1999
Direct Consumption	945,736	859,671	758,130	718,589	787,213	565,847
Indirect Consumption (Electricity)	215,386	199,060	170,775	149,971	127,898	116,033
Use Rate (GigaJoules/Ounce)	1.8	1.2	1.0	1.0	1.1	0.8
<b>Water Consumption (Kiloliters)</b>	<b>2004</b>	2003	2002	2001	2000	1999
Consumption	626,293	446,372	296,028	291,699	326,719	296,442
Liters Consumed/Ounces of Gold Produced	970	490	330	320	398	354
Liters Consumed/Tonne of Ore Processed	41	31	24	n/a	n/a	n/a
<b>Materials Management</b>	<b>2004</b>	2003	2002	2001	2000	1999
Sodium Cyanide Use (Tonnes)	2,633	2,641	2,757	2,354	2,316	2,657
Explosives Use (Tonnes)	6,998	5,849	n/a	n/a	n/a	n/a
<b>Waste &amp; Recycling</b>	<b>2004</b>	2003	2002	2001	2000	1999
Hazardous Waste Disposal (Tonnes)	112	43	n/a	n/a	n/a	n/a
Non-hazardous Waste Disposal (Tonnes)	945	988	n/a	n/a	n/a	n/a
Scrap Metal Recycled (Kilograms)	640,296	127,100	543,292	179,683	143,643	0
Waste Oil Recycled (Liters)	407,643	385,149	335,514	351,352	364,108	258,744
<b>Health &amp; Safety Compliance</b>	<b>2004</b>	2003	2002	2001	2000	1999
Number of Regulatory Actions	0	0	0	0	n/a	n/a
Fines Paid (US\$)	0	0	0	0	n/a	n/a
<b>Health &amp; Safety Training (Hours)</b>	<b>2004</b>	2003	2002	2001	2000	1999
Employee Health & Safety Training	3,062	3,275	2,285	1,720	n/a	n/a
Contractor Health & Safety Training	4,655	5,482	2,997	2,845	n/a	n/a
Emergency Response Training	8,087	5,804	3,922	4,176	n/a	n/a
<b>Health &amp; Safety Performance</b>	<b>2004</b>	2003	2002	2001	2000	1999
Fatalities (Number)	0	0	0	0	n/a	n/a
Lost Time Injury Rate	0.4	0.7	0.7	0.2	n/a	n/a
Total Medical Injury Rate	1.7	1.5	1.6	1	n/a	n/a

n/a = not available

## Glossary

**Gigajoule:** 1,000,000,000 joules. A unit of energy having the following equivalents:  
1 kilowatt hour = 0.0036 gigajoules  
1 British thermal unit (Btu) = 0.000001 gigajoules.

**Hazardous Waste:** waste that is defined as hazardous by the specific jurisdiction governing the operation. Disposal procedures are prescribed.

**Heap Leaching:** a process whereby gold is extracted by “heaping” broken ore on sloping impermeable pads and applying to the heaps a weak sodium cyanide solution, which dissolves the gold content. The gold-laden solution is then collected for gold recovery.

**Infrastructure:** the basic facilities and systems serving a country, city, or area, including transportation, communication, sanitation, medical and school systems.

**Lost-time Injury Rate:** any work-related injury that results in workdays away from work. Lost-time incidents rate is calculated as the number of incidents for each 200,000 hours worked.

**Medical Aid and Restricted Duty Rate:** any work-related injury that results in medical treatment or restricted duty, but no days away from work. The rate is calculated as the number of incidents for each 200,000 hours worked.

**Reclamation:** the process of converting lands disturbed by mining activities to other productive land uses. This process typically involves reshaping areas to a stable configuration, establishment of drainage systems, placement of topsoil or plant growth media and revegetation through planting or seeding.

**Regulatory Action:** written directions from a regulatory agency specifying that certain existing conditions must be corrected. Due to varying degrees of regulatory oversight, a common definition of regulatory action is used by Barrick for consistent reporting purposes.

**Reportable Spill:** chemical spill which is required to be reported to the regulatory authority.

**Sodium Cyanide:** the chemical reagent used in the liberation of precious metals (gold and silver) from mined rock.

**Spill Containment Structures:**

curbing, collection areas and berming designed to collect and contain solution spills. Barrick operations are typically designed with redundant spill containment to ensure that spillage does not escape the site.

**Sustainable Development:** development that meets the needs of today's generation without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987).

**Total Medical Injury Rate:** all work-related injuries excluding first-aid (the combination of fatal, lost-time, restricted duty and medical treatment injuries). Total medical injury rate is calculated as the number of incidents for each 200,000 hours worked.

**Unit Conversion Table:** metric measures are used in this report. To convert to non-metric units, the following factors apply:

1 tonne = 1.1025 tons (short)  
1 liter = 0.2642 gallons (U.S.)  
1 hectare = 2.4691 acres  
1 kilometer = 0.6215 miles  
1 kilogram = 2.2046 pounds