

Use of Cyanide at Barrick Darlot

Barrick is a signatory to the International Cyanide Management Code. Reflecting this, the company's Darlot gold mine employs cyanide management practices that are based on the most stringent safety and environmental standards, and employee protection systems. Due to rigorous safety procedures, there has not been a single fatality associated with cyanide at Barrick's operations around the world. In fact, cyanide intoxication incidents are extremely rare.

Use of Cyanide

Cyanide has been widely used in the gold industry for over a century to extract gold from ore. Cyanide is used in ore processing at many of Barrick's operations around the world, including the Darlot gold mine.

The initial process used to extract the gold is called leaching. Leaching is carried out with controlled pH in large tanks that contain slurry, which is ground up ore mixed with water. A 6% by weight cyanide solution is added to a leach feed hopper prior to being pumped to the primary leach tank at levels determined by the operator based on two hourly cyanide tests.

The resultant soluble gold-cyanide complex is then preferentially absorbed on carbon granules which are added to the slurry. The gold absorbed is extracted from the carbon into a concentrated solution in the stripping circuit. The gold is recovered from the concentrated solution by an electro winning process and the carbon is recycled.

Transport and Storage of Cyanide

Solid cyanide is used at Barrick Darlot and is transported to the mine via road train in the form of briquettes. The briquettes are contained inside a plastic lined tough walled fabric that is stored in large wooden crates. The crates are then placed into padlocked shipping containers that are then loaded onto the road train for safe transportation to site.

Orica Australia Limited, a global leader in the supply of chemicals to the mining industry and also a signatory to the International Cyanide Management Code, is responsible for the safe transportation of the cyanide to the mine.

When the cyanide arrives on site, the shipping containers are off loaded from the road train by Orica personnel, strictly adhering to Orica's and the site's safety procedures. The wooden crates unloaded from the containers are then stored within a locked, secured compound.

Safety Management

High standards in workplace health and safety are non-negotiable at Barrick Darlot and a requirement to ensure that each and every one of our employees goes home safe and healthy everyday.

Cyanide used on site is only handled by experienced and trained employees, who are required to follow strict procedures relating to the handling, use and management of cyanide products in order to minimise risk.

As at all Barrick mine sites, employees are required to wear appropriate Personal Protective Equipment (or PPE, as it is often called) such as safety helmet and glasses, steel capped boots, reflective shirts and ear protection. Employees handling cyanide products are required to wear additional and more specialised PPE to ensure they are well protected.

Cyanide levels are regularly monitored using specialised monitoring equipment; and daily inspections are conducted of all cyanide delivery, storage and processing areas to ensure safe operation. Regular preventative maintenance is also undertaken to ensure that all plant equipment is in good working order.

Emergency Response

In the unlikely event of a cyanide-related spill on or off site, the Barrick Darlot emergency response team is well trained and skilled to be able to effectively handle and manage the incident, following the key steps below:

1. Evacuate the area
2. Isolate the source of the leak
3. Barricade the area
4. Implement site protocols and procedures to contain the situation
5. Undertake remediation work

Although Orica is responsible for emergency response coordination and supervision in the event of an incident during transportation - the site emergency response team may be called to assist in containing the situation. In such a scenario, the team would work closely, alongside local emergency service personnel such as the police, ambulance and fire brigade.

The Barrick Darlot emergency response team continues to strengthen their skills through regular mock drill exercises that allow them to hone their skills and knowledge in identifying exposure scenarios, emergency response and first aid.

Further Information

If you have any questions, please email us at: publicaffairsap@barrick.com

If you would simply like to read more about Barrick's responsible use of cyanide or find out more about the International Cyanide Management Code, go to:

- [www.barrick.com/Corporate Responsibility/KeyTopics/CyanideManagement](http://www.barrick.com/Corporate%20Responsibility/KeyTopics/CyanideManagement)
- www.cyanidecode.org