

Cyanide management

What is cyanide?

Cyanide is a chemical compound occurring as a solid, liquid and gas. Cyanide for industrial use is normally in the form of solid sodium cyanide briquettes or a concentrated solution.

- Cyanide compounds occur naturally in trace quantities. It is not a cumulative poison and non-fatal doses naturally detoxify through the body’s metabolism.
- In certain circumstances cyanide can be acutely toxic, but it is only dangerous if not managed correctly.

How will cyanide be used at Amulsar?

- A cyanide solution will be used to irrigate the heap leach facility (HLF) to separate gold and silver from the ore.
- The cyanide used will be purchased in solid briquettes, which are safer to transport. Solid cyanide will be mixed with water to form a dilute solution for use in the HLF.
- The cyanide is then destroyed or recycled after precious metals are extracted through a close circuit with no discharge.

Materials	Range of cyanide levels
Cigarette smoke	Up to 1600 ppm
Road salt	Up to 350 ppm
Gold mining	Up to 200 ppm
Almonds	26-100 ppm
Lima beans	1-31 ppm
Sorghum	Up to 25ppm
Table salt	Up to 13ppm

ppm = parts per million concentration

International Cyanide Management Code (ICMC)

ICMC is a code for the gold mining industry which commits signatories to responsibly manage cyanide acquisition, transport, storage and handling. Compliance is subject to independent audit.

How will Lydian manage the potential impacts of cyanide use?

- The mine is designed and will be operated in accordance with the International Cyanide Management Code (ICMC).
- The project has a dedicated Cyanide Management Plan which is publicly available – this includes applying monitoring/inspection procedures and undertaking public awareness campaigns.

What potential impacts might remain?

- In the highly unlikely case that cyanide is released into the environment, degradation and attenuation is rapid and can turn into a number of less toxic compounds.