



(COP 38) CYANIDE

A *Definitions and applicability*

Cyanide means the cyanide ion, hydrogen cyanide, as well as salts and complexes of cyanide with a variety of metals in solids and solutions.

Source:

- *International Cyanide Management Code*

The **Cyanide** section of the COP is applicable to Members in the Mining Sector using cyanide in the recovery of Gold.

B *Issue background*

The International Cyanide Management Institute's (ICMI) Code for the Manufacture, Transport and Use of Cyanide in Gold Mining (the "Cyanide Code") is a voluntary industry program designed to assist the global gold mining industry and the producers and transporters of cyanide used in gold mining in improving cyanide management practices. The Cyanide Code is intended to reduce the potential exposure of workers and communities to harmful concentrations of cyanide, to limit releases of cyanide to the environment, and to enhance response actions in the event of an exposure or release.

Cyanide effectively and efficiently extracts gold from ore. While a number of other chemicals are available to extract gold, they form less stable complexes with gold and thus require more aggressive conditions and oxidants to dissolve the gold. The alternative chemicals are generally more expensive to use and also present risks to health and the environment that may be similar to or greater than that presented by cyanide.

The Cyanide Code is intended to complement an operation's existing regulatory requirements, and addresses those issues related to the management of cyanide at gold mines that have been identified as being of most immediate concern. These include the production of cyanide; its transport from the producer to the mine; its on-site storage and use in the recovery of gold; decommissioning of cyanide facilities; financial assurance; accident prevention; worker health and safety; emergency response and training; community dialogue; public reporting; and stakeholder involvement.

Signatories of the International Cyanide Management Code commit to follow the Cyanide Code's Principles and Standards in the use of cyanide. The Standards of Practice listed under each Principle in the Cyanide Code set performance goals and objectives that an operation must achieve in order to be certified as in compliance with the Cyanide Code.

C *Key regulations*

The Cyanide Code is a voluntary program for the gold mining industry to promote responsible management of cyanide, with a focus on protecting human health and the environment. The Cyanide Code focuses exclusively on the safe management of cyanide that is produced, transported and used for the recovery of gold, and on mill tailings and leach solutions. It includes a series of standards designed to ensure that mining operations manage cyanide process solutions and waste streams to protect human health and the environment. Compliance with the Cyanide Code does not replace or alter requirements under applicable law.

D Suggested implementation approach

The Suggested implementation approach provides general guidance for implementing the mandatory requirements of the Code of Practices. The guidance is not normative and should be seen as a starting point for information and support.

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Members in the Mining Sector using cyanide in the recovery of Gold shall ensure applicable sites are certified to the International Cyanide Management Code.

Points to consider:

- Comprehensive information about the Cyanide Code is available from the ICMI's website. Operations are audited by an independent third-party auditor meeting the Cyanide Code's criteria and using its Verification Protocol.
- Companies using cyanide for the recovery of gold agree to adoption of the Cyanide Code by becoming Signatories and committing to bring their designated gold mining operations into compliance with the Code within three years. The name of the Signatory company and its operations are identified on the ICMI website.
 - Note: While the ICMI provides a 3 year period from becoming a Signatory to bring mining operations into compliance with the Cyanide Code, the RJC Code of Practices requires bringing mining operations into compliance with the Cyanide Code as part of the Member's conformance to the Code of Practices, which must be audited within two years of joining the RJC.
- Cyanide Code Certification applies to the level of the certified operation, not the signatory company. Members must ensure that all of their relevant Facilities and operations within their RJC Membership, to which the Cyanide Code applies, have been certified or become certified before the RJC Certification Audit, in order to conform to the RJC Code of Practices.
 - Note: A Signatory's operations that are found in substantial but not full compliance with the Cyanide Code are "conditionally certified", and must develop and implement a Corrective Action Plan to achieve full certification. For the purposes of the RJC Verification Assessment, a situation of conditional certification under the Cyanide Code would normally result in a Minor Non-Conformance under the Code of Practices.

CHECK

- Do any of your operations use cyanide in the recovery of gold?
- If so, are you a signatory to the International Cyanide Management Code, and are the relevant operations certified to the Code?

E Further information

The following websites have further information on cyanide:

- Centers for Disease Control and Prevention, Cyanide Emergency Preparedness & Response emergency.cdc.gov/agent/cyanide/index.asp
- CyanideMine: Cyanide Use in Gold Extraction and its Environmental Impact technology.infomine.com/cyanidemine/
- International Cyanide Management Code for the gold mining industry (Cyanide Code) www.cyanidecode.org/
- Leading Practice Sustainable Development Program for the Mining Industry (Australia) – Cyanide Management (2008) www.ret.gov.au/resources/documents/lpsdp/lpsdp-cyanidehandbook.pdf