



INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

THE INTERNATIONAL CYANIDE MANAGEMENT CODE

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The International Cyanide Management Code (hereinafter “the Code”, “Code” or “the Cyanide Code”), this document, and other documents or information sources referenced at www.cyanidecode.org are believed to be reliable and were prepared in good faith from information reasonably available to the drafters. However, no guarantee is made as to the accuracy or completeness of any of these other documents or information sources. No guarantee is made in connection with the application of the Code, the additional documents available or the referenced materials to prevent hazards, accidents, incidents, or injury to employees and/or members of the public at any specific site where gold or silver is extracted from ore by the cyanidation process. Compliance with this Code is not intended to and does not replace, contravene or otherwise alter the requirements of any specific national, state or local governmental statutes, laws, regulations, ordinances, or other requirements regarding the matters included herein. Compliance with this Code is entirely voluntary and is neither intended nor does it create, establish, or recognize any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.



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INTRODUCTION

The "International Cyanide Management Code For the Manufacture, Transport, and Use of Cyanide In the Production of Gold" (Cyanide Code) is a voluntary, performance driven, certification program of best practices for gold and silver mining companies and the companies producing and transporting cyanide used in gold and silver mining. This framework provides a mechanism of assurance for enhancing the protection of human health and reducing the potential for environmental impacts.

The objective of the Cyanide Code is to improve the management of cyanide used in gold and silver mining and to improve the protection of human health and the reduction of environmental impacts, while assuring stakeholders of the safe handling of cyanide through the disclosure of results from periodic audits by independent professional auditors.

Based on Principles and Standards of Practice, the Cyanide Code provides a management system for the safe management of cyanide throughout its use cycle. The Cyanide Code program also provides step-by-step guidance on implementing practices to achieve those practices.

Gold and silver mining companies and the companies producing, storing, repackaging and transporting cyanide used in gold and silver mining can become signatories to the Cyanide Code. Signatory companies commit to follow the Cyanide Code's Principles and implement its Standards of Practice for Mining, Production, and Transport.

Implementation of the Cyanide Code is verified through triennial audits conducted by independent third-party auditors. Companies that adopt the Cyanide Code must have their operations that use, transport, or produce cyanide audited to determine the status of Cyanide Code implementation. Those operations that meet the Cyanide Code requirements are certified.

The Cyanide Code is administered by The International Cyanide Management Institute, a non-profit corporation established to administer the Cyanide Code through an independent Board of Directors consisting of individuals knowledgeable in the use and management of cyanide in the gold and silver mining industries and other interested stakeholders.

The Cyanide Code was developed by a multi-stakeholder Steering Committee under the guidance of the United Nations Environmental Program and the then-International Council on Metals and the Environment.

SCOPE

The Cyanide Code focuses exclusively on the safe management of cyanide that is produced, transported and used for the recovery of gold and silver, and on mill tailings and leach solutions.



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The Cyanide Code addresses production, transport, storage, and use of cyanide and the decommissioning of cyanide facilities. It also includes requirements related to financial assurance, accident prevention, emergency response, training, public reporting, stakeholder involvement and verification procedures. Mining operations using cyanide, and cyanide producers and transporters, are subject to the applicable portions of the Cyanide Code.

The Cyanide Code is intended to complement an operation's existing regulatory requirements. Compliance with the rules, regulations and laws of the applicable political jurisdiction is necessary; the Cyanide Code is not intended to contravene such laws. It does not address all safety or environmental issues that may be present at gold and silver mining operations such as the design and construction of tailings impoundments or long-term closure and rehabilitation of mining operations, nor safety or environmental issues at production and transport operations that do not involve cyanide.

The term "cyanide" used throughout the Cyanide Code generically refers to the cyanide ion, hydrogen cyanide, and the salts and complexes cyanide forms with a variety of metals in solids and solutions. It must be noted that the risks posed by the various forms of cyanide are dependent on the specific chemical forms and concentrations.

STRUCTURE

The Cyanide Code is comprised of two fundamental components for each of the three industries within its scope. Principles state broad commitments that signatory gold and silver mines, cyanide producers, and cyanide transporters make to manage cyanide in a responsible manner. Standards of Practice follow within each Principle, identifying the performance goals and objectives that must be met to comply with the Principle. Guidance on the measures that typically must be implemented to meet these goals are provided in separate Guidance Documents for Mining Operations, Production Operations, and Transport Operations.



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THE INTERNATIONAL CYANIDE MANAGEMENT CODE FOR THE MANUFACTURE, TRANSPORT, AND USE OF CYANIDE IN THE PRODUCTION OF GOLD

I. MINING OPERATIONS: PRINCIPLES AND STANDARDS OF PRACTICE

Mining Principle 1 | PRODUCTION AND PURCHASING

Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.

Mining Standard of Practice 1.1

Purchase cyanide from certified manufacturers employing appropriate practices and procedures to limit exposure of their workforce to cyanide and to prevent releases of cyanide to the environment.

Mining Principle 2 | TRANSPORTATION

Protect communities and the environment during cyanide transport.

Mining Standard of Practice 2.1

Require that cyanide is safely managed through the entire transportation and delivery process from the production facility to the mine by use of certified transport with clear lines of responsibility for safety, security, release prevention, training and emergency response.

Mining Principle 3 | HANDLING AND STORAGE

Protect workers and the environment during cyanide handling and storage.

Mining Standard of Practice 3.1

Design and construct unloading, storage and mixing facilities consistent with sound, accepted engineering practices and quality control and quality assurance procedures, spill prevention and spill containment measures.

Mining Standard of Practice 3.2

Operate unloading, storage and mixing facilities using inspections, preventive maintenance and contingency plans to prevent or contain releases and control and respond to worker exposures.



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Mining Principle 4 | OPERATIONS

Manage cyanide process solutions and waste streams to protect human health and the environment.

Mining Standard of Practice 4.1

Implement management and operating systems designed to protect human health and the environment including contingency planning and inspection and preventive maintenance procedures.

Mining Standard of Practice 4.2

Introduce management and operating systems to minimize cyanide use, thereby limiting concentrations of cyanide in mill tailings.

Mining Standard of Practice 4.3

Implement a comprehensive water management program to protect against unintentional releases.

Mining Standard of Practice 4.4

Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

Mining Standard of Practice 4.5

Implement measures to protect fish and wildlife from direct and indirect discharges of cyanide process solutions to surface water.

Mining Standard of Practice 4.6

Implement measures designed to manage seepage from cyanide facilities to protect the beneficial uses of ground water.

Mining Standard of Practice 4.7

Provide spill prevention or containment measures for process tanks and pipelines.

Mining Standard of Practice 4.8

Implement quality control/quality assurance procedures to confirm that cyanide facilities are constructed according to accepted engineering standards and specifications.

Mining Standard of Practice 4.9

Implement monitoring programs to evaluate the effects of cyanide use on wildlife, and surface and groundwater quality.



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Mining Principle 5 | DECOMMISSIONING

Protect communities and the environment from cyanide through development and implementation of decommissioning plans for cyanide facilities.

Mining Standard of Practice 5.1

Plan and implement procedures for effective decommissioning of cyanide facilities to protect human health, wildlife, livestock, and the environment.

Mining Standard of Practice 5.2

Establish a financial assurance mechanism capable of fully funding cyanide-related decommissioning activities.

Mining Principle 6 | WORKER SAFETY

Protect workers' health and safety from exposure to cyanide.

Mining Standard of Practice 6.1

Identify potential cyanide exposure scenarios and take measures as necessary to eliminate, reduce and control them.

Mining Standard of Practice 6.2

Operate and monitor cyanide facilities to protect worker health and safety and periodically evaluate the effectiveness of health and safety measures.

Mining Standard of Practice 6.3

Develop and implement emergency response plans and procedures to respond to worker exposure to cyanide.

Mining Principle 7 | EMERGENCY RESPONSE

Protect communities and the environment through the development of emergency response strategies and capabilities.

Mining Standard of Practice 7.1

Prepare detailed emergency response plans for potential cyanide releases.

Mining Standard of Practice 7.2

Involve site personnel and stakeholders in the planning process.

Mining Standard of Practice 7.3

Designate appropriate personnel and commit necessary equipment and resources for emergency response.

Mining Standard of Practice 7.4

Develop procedures for internal and external emergency notification and reporting.



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Mining Standard of Practice 7.5

Incorporate remediation measures and monitoring elements into response plans and account for the additional hazards of using cyanide treatment chemicals.

Mining Standard of Practice 7.6

Periodically evaluate response procedures and capabilities and revise them as needed.

Mining Principle 8 | TRAINING

Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.

Mining Standard of Practice 8.1

Train workers to understand the hazards associated with cyanide use.

Mining Standard of Practice 8.2

Train appropriate personnel to operate the facility according to systems and procedures that protect human health, the community and the environment.

Mining Standard of Practice 8.3

Train appropriate workers and personnel to respond to worker exposures and environmental releases of cyanide.

Mining Principle 9 | DIALOGUE AND DISCLOSURE

Engage in public consultation and disclosure.

Mining Standard of Practice 9.1

Promote dialogue with stakeholders regarding cyanide management and responsibly address identified concerns.

Mining Standard of Practice 9.2

Make appropriate operational and environmental information regarding cyanide available to stakeholders.



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II. CYANIDE PRODUCTION OPERATIONS: PRINCIPLES AND STANDARDS OF PRACTICE

Production Principle 1 | OPERATIONS

Design, construct and operate cyanide production facilities to prevent release of cyanide.

Production Standard of Practice 1.1

Design and construct cyanide production facilities consistent with sound, accepted engineering practices and quality control/quality assurance procedures.

Production Standard of Practice 1.2

Develop and implement plans and procedures to operate cyanide production facilities in a manner that prevents accidental releases.

Production Standard of Practice 1.3

Inspect cyanide production facilities to ensure their physical integrity and prevent accidental releases.

Production Principle 2 | WORKER SAFETY

Protect workers' health and safety from exposure to cyanide.

Production Standard of Practice 2.1

Develop and implement procedures to protect facility personnel from exposure to cyanide.

Production Standard of Practice 2.2

Develop and implement plans and procedures for rapid and effective response to cyanide exposure.

Production Principle 3 | MONITORING

Ensure that process controls are protective of the environment.

Production Standard of Practice 3.1

Conduct environmental monitoring to confirm that planned or unplanned releases of cyanide do not result in adverse impacts.

Production Principle 4 | TRAINING

Train workers and emergency response personnel to manage cyanide in a safe and environmentally protective manner.

Production Standard of Practice 4.1

Train employees to operate the facility in a manner that minimizes the potential for cyanide exposures and releases.



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Production Standard of Practice 4.2

Train employees to respond to cyanide exposures and releases.

Production Principle 5 | EMERGENCY RESPONSE

Protect communities and the environment through the development of emergency response strategies and capabilities.

Production Standard of Practice 5.1

Prepare detailed emergency response plans for potential cyanide releases.

Production Standard of Practice 5.2

Involve site personnel and stakeholders in the planning process.

Production Standard of Practice 5.3

Designate appropriate personnel and commit necessary equipment and resources for emergency response.

Production Standard of Practice 5.4

Develop procedures for internal and external emergency notification and reporting.

Production Standard of Practice 5.5

Incorporate remediation measures and monitoring elements into response plans and account for the additional hazards of using cyanide treatment chemicals.

Production Standard of Practice 5.6

Periodically evaluate response procedures and capabilities and revise them as needed.

III. CYANIDE TRANSPORTERS: PRINCIPLES AND STANDARDS OF PRACTICE

Transport Principle 1 | TRANSPORT

Transport cyanide in a manner that minimizes the potential for accidents and releases.

Transport Standard of Practice 1.1

Select cyanide transport routes to minimize the potential for accidents and releases.

Transport Standard of Practice 1.2

Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

Transport Standard of Practice 1.3

Ensure that transport equipment is suitable for transport of cyanide.



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Transport Standard of Practice 1.4

Develop and implement a safety program for transport of cyanide.

Transport Standard of Practice 1.5

Follow international standards for transportation of cyanide by sea.

Transport Standard of Practice 1.6

Track cyanide shipments to prevent losses during transport.

Transport Principle 2 | INTERIM STORAGE

Design, construct and operate cyanide interim storage sites to prevent releases and exposures.

Transport Standard of Practice 2.1

Store cyanide in a manner that minimizes the potential for accidental releases.

Transport Principle 3 | EMERGENCY RESPONSE

Protect communities and the environment through the development of emergency response strategies and capabilities.

Transport Standard of Practice 3.1

Prepare detailed emergency response plans for potential cyanide releases.

Transport Standard of Practice 3.2

Designate appropriate response personnel and commit necessary resources for emergency response.

Transport Standard of Practice 3.3

Develop procedures for internal and external emergency notification and reporting.

Transport Standard of Practice 3.4

Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.

Transport Standard of Practice 3.5

Periodically evaluate response procedures and capabilities and revise them as needed.

