



The CODE

The Newsletter of
the International Cyanide
Management Institute
www.cyanidecode.org

1st Quarter 2022 Edition

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Welcome to the 1st Quarter 2022 edition of *The Code*

Milestone Met: 1000th Cyanide Code Certification Reached

In February, the International Cyanide Management Code recorded a landmark 1000th certification in the program.

To be certified, a company must have their operations examined by independent third-party auditors to make certain they meet Cyanide Code provisions. The audit results are made public to ensure transparency for stakeholders and others.

[Certification is multi-step process](#) that typically begins with a “gap analysis” conducted either by the company or an outside auditor. This analysis includes detailed questions to help an auditor determine whether an operation is in compliance with each of the Cyanide Code’s Standards of Practice and what improvements need to be made in order to be in compliance.

To prepare for certification, companies should familiarize themselves with guidance documents including the [Mining Operations Verification Protocol](#), the [Cyanide Transportation Verification Protocol](#), and the [Cyanide Production Verification Protocol](#). For initial certification audits, the on-site portion of an audit must be completed within three years of the date the signatory company lists an operation for certification. For operations that are already certified, the on-site portion of the recertification audit must be conducted within three years of the date of the operation’s current certification.

As of January 1, 2022, 358 operations were participating in the program, of which 290 operations were certified in compliance with the Cyanide Code, including 106 gold mines, 34 cyanide production facilities, and 150 cyanide transporters. A total of 228 operations had been audited two or more times and found to have maintained compliance.

An indication of the Code’s certification acceptance is that half of the world’s gold production by cyanidation at industrial mines is taking place under the provisions of the Cyanide Code. However, while most of the major gold mining companies are signatories, the majority of signatories are mid-tier and smaller producers, including operations with a gold mine producing as little as 50,000 ounces of gold per year.

The Code has been recognized and accepted by government agencies, non-government organizations, academics and financial institutions as the premier cyanide safety program for gold mines and related activities involving cyanide.

Bickham and Klapwijk Reelected to ICMI Board

Edward Bickham and Philp Klapwijk each have been reelected to a second, four-year term to ICMI's Board of Directors.



Edward Bickham

Edward Bickham holds many senior advisory roles in the mining and energy sectors including being a Senior Adviser to Critical Resource Ltd and to the World Gold Council. In the latter role, he has advised on the development of the Responsible Gold Mining Principles and recently led the production of a major report on "Lessons Learned on the management of the interface between large-scale and artisanal and small-scale mining." He is a former Strategic Adviser to the International Council on Mining and Metals, and from 2010-14 he was Senior Adviser to the World Gold Council advising on the development of the Conflict-Free Gold Standard. He served at Board level in the development of the Extractive Industries Transparency Initiative from 2005 until 2013. He is currently a member of the Steering Board for the UK National Contact Point for the OECD Guidelines on Multinational Enterprises. Between 2014 and 2019 he served as Chairman of the Institute of Business Ethics. He is Non-Executive Chair of Levin Sources and has been a Trustee of development NGO, Care International UK, since 2014 and Chair of its Programme and Policy Committee since 2017.



Philip Klapwijk

Philip Klapwijk is the Managing Director of Precious Metals Insights Limited (PMI), a boutique precious metals markets consultancy based in Hong Kong, which provides market analysis and business advisory services to a wide range of clients in the precious metals market in China, the United States, and Europe. Mr. Klapwijk also serves as Chief Consultant to Metals Focus Limited, which is one of the market's most important providers of statistics and other information on precious metals, including the provision of quarterly gold supply/demand data to the World Gold Council.

Manual Aimed at Small-Scale Miners Based on Cyanide Code Practices

A recently-released manual intended mainly for small-scale miners follows the same basic structure of the International Cyanide Management Code and its best practices for responsible management of cyanide to protect human health and the environment.

[*Manual de buenas practicas: Uso responsable del cianuro en la pequeña minería de orodeals*](#) provides practical and simple recommendations to improve the cyanidation process. It focuses on the particular challenges facing small-scale mining operations including the potential for environmental and occupational health effects caused by cyanide if used inappropriately. The 16-page manual, published by the [Swiss Better Gold Association](#) in Spanish with an English version under consideration, starts with the purchase and transportation of cyanide, then



continues with storage and the necessary precautions to prepare the cyanide solution. The manual also addresses worker safety, highlighting the necessary personal protection equipment, emergency response issues including brief guides to response against cyanide intoxication, and the need to train workers.

The manual was written by [Bruno Pizzorni](#), a Peru-based Health, Safety and Environmental consultant who regularly carries out risk assessments for mines using cyanide. Mr. Pizzorni told *The Code* that following the practices of the Cyanide Code does not necessarily require large investments of money. "Following the Code is sometimes thought to be only within the reach of world-class mining operations, but rather I am convinced that it is mainly a matter of good practices in cyanidation processes that is achieved in most cases through adequate education and good management in cyanidation processes."

He added: "Obviously facing challenges like large investments to protect birds from tailings dams containing more than 50 ppm of WAD (Weak Acid Dissociable) is out of reach of small miners given the necessary investment in protective measures, but other aspects of mines' cyanide operations can be managed within the parameters required by the Cyanide Code."

Mr. Pizzorni is a civil engineer registered with the International Cyanide Management Institute as a Lead Auditor and as Technical Auditor for gold and silver mining, production and cyanide transportation. His experience includes more than 10 years working with projects related to Cyanide Code certifications for both small and world-class mining operations, production plants, cyanide warehouses, supply chains and cyanide transporters.

Auditor's Corner: Temporary Closure or Cessation of Operations

Welcome to this installment of the *Auditor's Corner*, a continuing feature of *The Code*. As readers know, this column is intended not only for auditors but also for operations preparing for audits or gap analyses. We welcome your suggestions for future topics at info@cyanidecode.org.

The subject of temporary closure and cessation of operations is being increasingly discussed as some mines, producers and transporters were forced to suspend operations during the height of the COVID pandemic. As the pandemic continues, with varying effects around the world, we thought it worthwhile to make sure that auditors and operations understand the Cyanide Code's expectations regarding temporary closure and cessation of mining operations.

Question 4.1.5(c) in the [Mining Operations Verification Protocol](#) asks: "*Does the operation have cyanide management contingency procedures for non-standard operating situations... that may present a potential for cyanide exposures and releases, such as... temporary closure or cessation of operations due to situations such as work stoppages, lack of ore or other essential materials, economics, civil unrest, or legal or regulatory actions?*" Here, the Code is concerned with cyanide management for temporary closures or cessation of operations that usually extend for weeks, months, or longer, rather than days, such as might occur for routine maintenance activities. These longer shutdowns are frequently open-ended, as the conditions causing the shutdown may not be in the operation's control. Temporarily closing due to COVID certainly fits into this category.

The intent of the Code is to ensure that any cyanide on site continues to be managed safely during non-operating conditions, when reduced number and types of operational personnel may affect routine practices such as inspections, maintenance, environmental monitoring, water management, emergency response capabilities, and other operational practices.

Although the [Guidance for Use of the Mining Operations Verification Protocol](#) does not offer specific expectations for what should be included in contingency plans for temporary closure, operations should ensure that their plans account for how cyanide is safely managed during a temporary shutdown or cessation of operations.

This would include management of any cyanide on site, such as solid cyanide stored in Intermediate Bulk Containers (IBCs), reagent-grade cyanide solution stored in tanks, and lower-concentration process solution within the process facilities, such as tanks, vessels, pipelines, ponds, heap leach and tailings facilities.

Safe management of process solution and high-strength cyanide on site during periods of temporary closure or cessation of operations might include activities such as conducting ongoing facility inspections and required maintenance, water management and monitoring activities, or possibly draining tanks and piping of process solution, draining ponds, and rinsing and neutralizing tanks. It might also include management of residual high-strength cyanide solution, such as by neutralization, and safe management of solid cyanide by ensuring its continued safe storage or by its removal off site. An operation's procedures for safely shutting down a process plant or circuit, such as for maintenance activities, would most likely only serve as the first step towards addressing the Cyanide Code's expectations for addressing temporary closure or cessation of operations.

To satisfy the Cyanide Code's expectations for safe cyanide management during temporary closure, mining operations may rely on documents such as procedures for decommissioning, closure plans, emergency response plans, environmental monitoring plans, inspection procedures, and maintenance activities if these documents address the activities deemed necessary in the event of cessation of activities. Regardless of the documents used to ensure safe cyanide management during a temporary cessation of activities, both operations and auditors should ascertain that procedures and plans used for safe management during temporary closure or cessation of operations are identified and encompass all activities necessary for cyanide safety and environmental protection. Along with the documents used to meet the Code's expectations, auditors should also note in the audit report the activities the operation would undertake to ensure continued safe cyanide management in the event of a temporary closure or cessation of operations.