



# The CODE

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Management Institute  
[www.cyanidecode.org](http://www.cyanidecode.org)

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**W**elcome to the 4th Quarter 2017 edition of *The Code*.

## **Use of Colorant in Cyanide Approved by ICMI Board, Takes Effect July 2019**

The Board of Directors of the International Cyanide Management Institute (ICMI) has approved a change to the International Cyanide Management Code (Cyanide Code) program requiring mining operations to use colorant dyes as a visual aid in identifying cyanide releases.

In late 2015, ICMI identified several possible program changes having the potential to strengthen the Cyanide Code program. Among the suggestions was whether to require or otherwise encourage the practice of adding dye to reagent cyanide as a means of visual identification of leaks or spills at mine sites or during transportation.

Many chemical manufacturers add colorants, odoriferants and other indicators to dangerous chemicals that do not possess an obvious identifying characteristic. The purpose is to provide a quick and distinctive way for users to identify these substances.

Working through its Industry Advisory Group (IAG), ICMI requested formation of a working group from IAG participants to generate initial discussion of potential benefits and issues regarding the addition of dye to cyanide. The ICMI Board of Directors discussed this issue at its May 2017 meeting and approved the initiation of a stakeholder consultation on the proposed programmatic change. On August 9, 2017, ICMI announced on its website that it was seeking comments on the [proposed requirement](#) for the use of dye in high-strength cyanide solutions at mining operations. Stakeholders were requested to provide comments by no later than October 9, 2017, on this proposed requirement for mining operations, including its advisability, any policy or technical issues dye addition might raise, and any other issues that ICMI should consider about the proposed change. ICMI also publicized the consultation in the third quarter edition of its newsletter, which has nearly 1,700 subscribers. Additionally, a letter was sent from ICMI to each of the mining companies and cyanide manufacturer companies participating in the Cyanide Code inviting them to comment on this proposal.

In response to the comments received and staff recommendations the ICMI Board of Directors approved the proposed requirement with the following three additions:

- High-strength cyanide solutions will be defined as those with a minimum cyanide concentration of 15%, which would provide coverage to cyanide in both liquid and briquette form;

- The guidance will require that dye be included in high-strength cyanide solutions prior to delivery at the mining operation, and that dye be added to solid cyanide prior to or at the time of mixing; and
- Cyanide used in laboratories will be exempted from the dye requirement.

To implement this change, several Cyanide Code and ICMI documents will be revised. These include the Cyanide Code's Implementation Guidance, ICMI's Mining Operations Verification Protocol, and the Auditor Guidance for Use of the Mining Operations Verification Protocol. ICMI will publish the changes to those documents in January 2018, and a notice will be posted on its website. The changes will become effective on July 1, 2019.

## After the Gold: Decommissioning and the Cyanide Code

In 2017, Goldcorp's Marlin gold mine in Guatemala became the second audited gold mining operation to verify that cyanide facilities had been decommissioned and that the International Cyanide Management Code no longer applies to the operation. The first, Goldcorp's El Sauzal mine in Mexico, was decommissioned in 2015. While the Cyanide Code does not require certified mines to undergo decommissioning or closure audits following the cessation of cyanidation activities, the program's audit process allows for audits to verify that cyanide and cyanide facilities no longer remain on site and that the mines therefore are no longer subject to the Cyanide Code.

For both the El Sauzal and Marlin mines, an independent third-party auditor evaluated measures implemented by Goldcorp to decommission the mine's cyanide facilities and remove residual cyanide reagents pursuant to Cyanide Code requirements. This included evaluating the need to install measures necessary to control or manage surface or ground water, such as surface water diversions and pumping and treatment systems that would operate during the mine's closure period. Additionally, the auditor evaluated whether cyanide was still being transported to the El Sauzal site, stored on site, or used on site for the recovery of gold. Because the Cyanide Code is only concerned with decommissioning of cyanide facilities, the auditor did not evaluate the need for or performance of any ongoing closure or post-closure facility inspections, maintenance and environmental monitoring programs, or water management activities.

Successful decommissioning of the Marlin mine represents a significant milestone for Goldcorp. The Marlin mine was initially certified in compliance with the Cyanide Code in August 2009, and the operation was audited every three years to evaluate continuing compliance. Responsible storage, handling and disposal of solid and hazardous waste are central to sound environmental management. Chris Cormier, Goldcorp's Vice President, Reclamation & Closure, said, "We focus first on minimizing the generation of waste and residue at our operations, then on recycling and re-using waste or by-products. When material can't be recycled, we dispose of it in a responsible way. Formally decommissioning our cyanide process in accordance with the Cyanide Code is an important step to ensure responsible management of our facilities during closure."

Paul Bateman, ICMI's President, said, "We applaud Goldcorp for taking additional steps beyond the Cyanide Code's strict requirements to demonstrate that it has taken the appropriate measures to safely decommission its cyanide facilities at these mines. They have demonstrated leadership in this area. The use of audits in this innovative fashion is an acknowledgement of the safe management practices in both Goldcorp's operational and closure processes. It accomplishes the Cyanide Code's goal to safeguard human health and the environment by promoting the responsible management of cyanide used in gold and silver mining."



Goldcorp's Marlin Mine in Guatemala

## Philip Klapwijk Elected ICMI Director



**Philip Klapwijk**

Philip Klapwijk has been elected to the Board of Directors of the International Cyanide Management Institute, effective January 1, 2018. He 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.

His career in the precious metals market began in 1987 with Consolidated Gold Fields, where he was Group Economist for the former London-based mining conglomerate. Thereafter, he spent much of his career working at GFMS (formerly Gold Fields Mineral Services), the leading specialist consultancy on the global precious metals markets, where he was the company's co-owner and Executive Chairman. In 2011, Mr. Klapwijk sold GFMS to the information provider Thomson Reuters, staying on until February 2013 as the group's Global Head of Metals Analytics and responsible for all Thomson Reuters' precious and base metals markets analysis and research.

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. He holds degrees in economics from the London School of Economics and the College d'Europe, Bruges.

## Scott Miller Elected IAG Chair; Peter Cooper is Vice Chair



**Scott Miller**

Scott Miller, Group Executive - Environment at Newmont Mining Corporation, has been elected Chair of ICMI's Industry Advisory Group (IAG). The IAG is a forum to advance the education, communication, and discussion about the implementation of the International Cyanide Management Code amongst the program's participating signatory companies.

Peter Cooper, Export Manager for Australian Gold Reagents Pty Ltd, was elected Vice Chair.

In his role at Newmont, Mr. Miller has global responsibility for providing thought leadership, strategy, standards and subject matter expertise to the company's corporate, regional and operational teams on all aspects of the environment. He also has broad responsibilities for leading corporate strategies and teams for Water, Energy & Climate Change, Mine Closure, and Biodiversity.

For 22 years prior to joining Newmont in 2008, Mr. Miller worked as an environmental consultant, supporting the mining industry on new project permitting, baseline studies and impact mitigation, environmental program set up and technical review, environmental compliance, and mine closure and reclamation. Additionally, he spent a number of years supporting companies in the preparation for complying with the International Cyanide Management Code and was a lead auditor conducting a number of the early mine certifications. Mr. Miller has been a board member of the International Network for Acid Prevention (INAP), and is active in the ICM Environmental Programs for Land Stewardship, Water and Energy & Climate Change.

Both men will serve two-year terms.