

INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE 2023 REPORT

Global *Achievement*

of the Cyanide Code



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A GLOBAL PRESENCE:

The Cyanide Code reaches around the world and across operations to champion safe cyanide management.



Since the Cyanide Code was deployed in 2005, the number of signatories and certified operations has grown dramatically, providing evidence of its importance to the industry — and so has the Code's increasing visibility and its impact on safe cyanide management, from production and delivery, through use and disposal.

During 2023, signatories included gold mining operations operating in 31 countries located on six continents. They also included cyanide producers and transporters who form Cyanide Code-certified supply chains stretching thousands of miles to deliver cyanide in a variety of forms and containers. Signatories' mining operations were both large and small, located in geographically well-known mining centers, and in newly emerging locations — and employing different techniques for using and managing cyanide in processing ore.

The Cyanide Code has become the world's most respected source for standards and best practices for cyanide management. Code certification itself has become the highest standard of achievement for every aspect of cyanide-related operations, from process management, to training and worker safety, emergency response, and decommissioning of facilities.

WHAT UNITES ALL CYANIDE CODE SIGNATORIES:

Their *shared global commitment* to the safety of workers, communities, and the environment.

Global engagement *continued to expand* during 2023

Global Outreach

The International Cyanide Management Institute and the Turkish Gold Miners Association co-hosted a well-attended conference in Ankara in January. Later in the year, ICMI's Senior Vice President, Dr. Eric Schwamberger, was a keynote speaker at the 9th International Congress on Social and Environmental Sustainability, Metallurgy and Mining in Lima, Peru, where he shared his insights on the benefits of the Cyanide Code as a risk management system, and its expanding adoption in the global gold mining industry.

Global Engagement

Over the past year, we continued to engage with mining companies, governments, other standards and assurance systems, banks, insurers, and other stakeholders interested in advancing best practices in cyanide management.

Global Recognition

The Cyanide Code was recognized by the International Governmental Forum (IGF) on Mining, Minerals, Metals, and Sustainable Development when this inter-government forum of 81 nations convened in Geneva this past November to ratify its updated Mining Policy Framework. The framework references the Cyanide Code as the established source for best practices for cyanide management for both industrial and artisanal and small-scale mining.

Global Adoption

The Cyanide Code is now a well-established assurance system for the gold and silver mining industries' management of cyanide, providing a credible assurance framework for stakeholders to assess participants' performance. It is cross-referenced into other assurance systems in the mineral sector, and relied upon by a range of users to assess the performance of the Code's signatories. Beyond the formal participants in the Cyanide Code framework, the Code is being used informally by a wide range of mining companies seeking to improve their management of cyanide.

Global Training

ICMI hosted well-attended workshops on implementing and auditing the International Cyanide Management Code in Elko, Nevada and Perth, Australia. Both attracted attendees from mining companies, cyanide transport operators, cyanide manufacturing companies, audit professionals, and government regulatory officials.

why?

… are a growing number of mining companies seeking Cyanide Code Certification proactively?

1.

Cyanide can trigger community concerns. As mining companies work with stakeholders to begin operations, Cyanide Code compliance — demonstrated through certification — can address these concerns.

2.

Early certification allows the Code's best practices to be built into every aspect of company policies and procedures right from the start.

3.

The Code's requirements for stakeholder dialogue and triennial audits allow mines to publicly demonstrate continuous compliance and assist in maintaining social licenses.

Code Certification helps take cyanide *"off the table"*.

OVERVIEW OF THE CODE:

The Cyanide Code is the most widely adopted, transparent certification program across the gold sector.



Since its inception in 2005, the Cyanide Code has held signatories to the world's highest standards for cyanide management, training, and practices.

During 2023, companies using cyanide in gold and silver mining operations faced accountability and rising expectations globally from regulators, investors, employees, and end-user customers. By undergoing regular audits and maintaining continuous compliance, Cyanide Code-certified signatories turned this rigorous *and transparent* assurance framework into a real-world risk management tool enabling them to:

Activate a well-prepared, well-tested emergency response at the first sign of a problem

Mitigate risk

Demonstrate compliance to maintain the social license to operate and grow

Improve operational performance and reduce costs

Build training and EHS systems capacity

Increase the value of sustainability and supply chain performance

Engage stakeholders

CYANIDE CODE PRINCIPLES:

Purchasing / Transportation / Handling & Storage
Operational Use / Decommissioning / Worker Safety
Emergency Response / Training / Dialogue

From cyanide manufacturing to use at mine operations, through to decommissioning of cyanide facilities, Cyanide Code certification advances global commitment to human and environmental safety.

Based on Principles and Standards of Practice, the Cyanide Code provides a **management framework** and **step-by-step guidance** for implementing practices to achieve the Code's requirements.

This single, comprehensive code applies across the industry — to cyanide producers, transporters and gold/silver mining operations. It reaches virtually every level of day-to-day operations, affecting safety records to costs to operational performance.

VIEW THE FULL SCOPE AND STRUCTURE OF THE CYANIDE CODE HERE.

Because of this expanding global impact, 2023 was a milestone year of progress for the Cyanide Code.

2023 Highlights

GLOBAL Investment
IN THE CODE'S VALUE

133
Mines now participate
with 100 certified

78%
Certified
of ALL participating operations

81%
Re-certified at least once
of ALL certified operations

GLOBAL Commitment
TO ONGOING IMPROVEMENT

48
Countries where the Code is at work
certified operations in 41

176
Certified Trucking Companies *and* **Cyanide Supply Chains**

7
Languages
that Code documents are issued in

2
Social Channels – *LinkedIn and X*– where stakeholders can engage

GLOBAL Progress
IN SAFETY / ENVIRONMENTAL PROTECTION

358
Participating Operations
281 fully certified

84
Operations Certified *in 2023*

1170
Cumulative Certifications
since program inception

84
Audit Reports Received *in 2023*

214
Cyanide Code Signatories

Dear Stakeholders,

This was another year of progress for the Cyanide Code and the Institute that manages its assurance framework.

During 2023, the Cyanide Code expanded its global reach and impact on the gold mining industry's commitment to cyanide safety and environmental protection.

Recognition grew for the Cyanide Code as a well-established, globally trusted risk management system.
The Code's sharp focus on safe, environmentally responsible cyanide management continued to elevate the performance of companies producing gold and/or silver as well as companies manufacturing, warehousing, and transporting cyanide. Beyond industry, a growing range of stakeholders such as governments, banks, NGOs, and communities placed their trust in the Code's high standards, and its rigorous, independent, transparent, and continuous assurance system.

The Institute welcomed 6 new mining companies.
Notably, all those joining in 2023 are producing mining companies. Asante Gold Corporation operates in Ghana; Gübretaş Maden Yatırımları A.Ş. and KOZA Gold Corporation operate in Türkiye; Prodigy Gold Corporation commenced gold production in Canada late last year; Sibanye-Stillwater, the South Africa-based gold producer and platinum group metals miner; and Sierra Antapite, which operates a small mine in Peru.

In addition to producing-mine companies like these, pre-operational companies are reaching out to ICMI to become signatories. Notably, the Cyanide Code's role is increasingly expanding to parts of the world that are not commonly associated with gold mining, and being adopted by companies that are not widely known players in the industry.

Globally, even small operations follow the same best practices as the industry's largest mines.
We anticipated greater growth from the mining sector, but three factors led to a pause in growth during 2023: *Industry consolidation* resulted when signatory companies acquired other signatory companies. *Sanctions on Russian companies* caused some companies to withdraw because they were unable to advance their projects. *While awaiting results of scheduled audits*, several prospective mining companies delayed becoming signatories.

With 2023's strong global pipeline, the Institute expects to achieve higher participation in 2024.
The Institute has a strong pipeline of mining companies progressing towards becoming signatories to the Cyanide Code. Already in 2024, we have accepted applications from seven mining companies:

Denver-based SSR Mining, an intermediate gold mining company with four producing mines, three of which use cyanide to process ore;

Brazauro Recursos Minerais, a subsidiary of G Mining Ventures in Canada, is developing a gold project in Brazil;

Veta Dorada, a subsidiary of Montreal-based Dynacor, an industrial gold ore processor that operates a carbon-in-leach plant in Peru that processes ore purchased from artisanal and small-scale mining operations;

MIDROC Gold Mine, which operates a gold mine in Ethiopia;

Three subsidiaries of Pan American Silver have each become signatories, which were acquired in the acquisition of Yamana Gold in 2023: ***Minera Florida Limitada***, located in Chile, is currently certified under the Cyanide Code, having achieved certification three times while operated by its prior owner. Similarly, ***Minera Jacobina*** in Brazil achieved certification four times while under Yamana's control, as has ***Minera Meridian El Peñón*** in Chile, with three certifications.

Our ICMI team is lean, efficient, experienced, and rich with talent. I want to thank my ICMI colleagues for their high standards, hard work, and dedication to advancing the Cyanide Code. Their efforts are making a global impact.

During 2023, we welcomed new members to the Industry Advisory Group (IAG), our forum for advancing the implementation of the Code through education, communication, and discussion amongst the signatory companies. We thank Helisangela Alencar of Kinross Gold for serving the past two years as the IAG's Chair, and Tim Ihle of Orica as Vice Chair. Their strong leadership helped advance industry communication about best practices and shared learning.

A further strength of the Institute is our active and engaged Board of Directors, which has broad and deep experience. Their strategic direction and collegial counsel has ensured our program remains rigorous and credible. We thank them for their leadership, which enables us not just to respond to industry changes, but to anticipate them.

We recognize the commitment of signatories and stakeholders. We especially thank the Cyanide Code's signatories in their efforts this past year. They continued to steward the future of the global gold industry. Through their certification of operations they prove the Cyanide Code continues to matter in a changing world.

Finally, I want to thank the many stakeholders with whom we have established such rewarding partnerships. On behalf of the Board and the ICMI staff, thank you for your support in 2023. We look forward to strengthening our partnerships in the years ahead.

PAUL BATEMAN, **PRESIDENT**





Global

Leadership

Cyanide Code *Champions*

Though not required by the Cyanide Code, many operations appoint a Cyanide Code "Champion." With a thorough understanding of the Code, Champions provide leadership at the operational level to help teams prepare for certification audits, achieve certification, and ensure continuous compliance between audits.

The leadership of Code Champions — like the three profiled on the following pages — contributes directly to the Cyanide Code's success in protecting workers and the environment.



Global Champion

"Cyanide Code certification is a testament to the mining industry's dedication to sustainable and ethical practices, safeguarding both the environment and its people."





Pelin Usta Özkayhan

Environmental, Social, and Governance Director at Öksüt Madencilik, a subsidiary and operating gold mine of Centerra Gold. With over 20 years of experience in the mining industry, Pelin manages the fulfillment of Centerra's objectives for sustainable mining in Türkiye, specializing in environmental, permitting, public affairs, and governance.

"The rigorous internal audits and standards enforced throughout the certification process have enhanced our operational procedures. While both international regulations and the laws and regulations in Türkiye contribute to the environmental and social sustainability of the mining sector, it is equally important to highlight the positive role the Cyanide Code certification process has had for Öksüt in demonstrating responsible gold mining practices.

Certification has significantly increased the trust in our business among our employees and external stakeholders. Seeing how these stringent audits and standards improve day-to-day safety has assured and motivated our workforce while underscoring our dedication to protecting the workplace and preserving the environment. Similarly, our external stakeholders, such as communities and regulators, view certification as a testament to our commitment to fulfilling our environmental and social obligations as a responsible business entity.

Attaining Cyanide Code certification shows our level of concern about the responsible use of cyanide and our commitment to go beyond standard regulatory compliance."

Global Champion

"In leading the program, I value management's support in doing what's needed to promote compliance with the Code Standards of Practice."





Cameron Tickner

Cameron Tickner has been employed by AngloGold Ashanti since 2012 and became the Cyanide Code Champion at the Tropicana Gold Mine in 2017 before moving to Sunrise Dam Gold Mine in 2019 as the Metallurgy Superintendent and Cyanide Code Champion.

"To comply with the Cyanide Code, practices must be maintained at the highest standards. Employees appreciate how this makes the plant safer and more worker-friendly. It also benefits the business: training outcomes are better documented, contributing to the development of a highly-skilled and tested emergency response team. Well-maintained equipment and infrastructure create higher equipment availability and lower production costs.

The Cyanide Code recognizes the importance of community and stakeholder engagement in explaining why and how we use and manage cyanide. This strengthens relationships and enhances our social license to operate."

Global Champion





"By obtaining Cyanide Safety Code certifications, ProMS LLP can confidently establish itself as a reliable and responsible partner in the international trading market."

Olga Sher

Olga Sher was appointed General Director of ProMS LLP in January 2022, when ProMS became a signatory. As a signatory in both the transporter and producer (cyanide distributor) categories, ProMS actively prepared for both production and transport certification audits under the Cyanide Code in March 2023.

"Every day, the company tries to apply best-in-the world-experience and practice in ensuring industrial safety and reducing the potential for negative impact of cyanide on the environment. This is why our company decided to become signatory of the Cyanide Code.

Through teamwork of personnel directly involved in using Cyanide Code systems, requirements and processes, certification was successfully completed. In February 2024, ProMS became the first certified warehouse distributor and transportation company in Kazakhstan."



Global

Participation

2023 Signatory Companies

AS OF 12/31/23

Mining Companies

Agnico Eagle Mines Limited, Canada
AK Altynalmas JSC, Republic of Kazakhstan
AMAK Mining Company, Saudi Arabia
AMG, French Guiana
AngloGold Ashanti, South Africa
Asanko Gold Ghana Limited, Ghana
Asante Gold Corp, Ghana
Aura Minerals Inc., Canada
Barrick Gold Corporation, Canada
Belo Sun Mining Corporation, Canada
Boroo Gold, LLC, Mongolia
Centerra Gold Inc., Canada
Demir Export, Türkiye
Dundee Precious Metals Inc., Canada
Eldorado Gold Corporation, Canada
Equinox Gold Corp., Canada
Evander Gold Mining Limited, South Africa
Evolution Mining (Cowal) Pty Ltd, Australia
Evolution Mining - Red Lake Operation, Canada
Gold Fields Limited, South Africa
Golden Star Resources Ltd., Canada
Gorubso-Kardzhali PLC, Bulgaria
Gübretaş Maden Yatırımları A.Ş., Türkiye
Haile Gold Mine, Inc., United States
Harmony Gold Mining Company Ltd, South Africa
Kalgoorlie Consolidated Gold Mines Pty Ltd., Australia
Kingsgate Consolidated Limited, Australia
Kinross Gold Corporation, Canada
KOZA Mining Corp., Türkiye
Lydian International Ltd., United States
Marathon Gold Corporation, Canada
Marigold Mining Company, United States
Minas Argentinas S.A., Argentina
Minera Penmont S de R.L. de C.V., Mexico
Minera Sotrami S.A., Peru
Minera Yanaquihua S.A.C., Peru
Nampala SA, Republic of Mali
Newmont Corporation, United States
PanAust Limited, Australia
Polymetal International PLC, Cyprus
Polyus Verninskoye JSC, Russia
Prodigy Gold, Canada
PT Indotan Halmahera Bangkit, Indonesia
PT J Resources Nusantara, Indonesia
Sibanye-Stillwater, South Africa
Sierra Antapite S.A.C., Peru
Signal Gold Inc. *(previously Anaconda Mining)*, Canada
Société d'Exploitation des Mines d'Or de Sadiola S.A., Republic of Mali
Torex Gold Resources Inc., Canada
TUMAD Madencilik Sanay Ve Ticaret A.S., Türkiye
Wharf Resources (USA) Inc., United States

Cyanide Manufacturers

Anhui Anqing Shuguang Chemical Co., Ltd., P.R. China
Arabian Petrochemical Company (PETROKEMYA), Saudi Arabia
Asahi Kasei Corporation, Japan
Australian Gold Reagents Pty Ltd., Australia
Cyanco, United States
CyPlus, Germany
CyPlus Idesa S.A.P.I. de C.V., Mexico
Draslovka Mining Solutions, Czech Republic
Guang'an Chengxin Chemical Co., Ltd., P.R., China
Hebei Chengxin Co., Ltd., P.R., China
Hindusthan Chemicals Company, India
Inner Mongolia Chengxin Yongan Chemical Co., Ltd., China
Joint-Stock Company "Korund-CN," Russia
JSC Rustavi Azot, Georgia
Orica Australia Pty Ltd., Australia
Proquigel Quimica S/A, Brazil
Saratovorgsintez LLC, Russia
Sasol South Africa (Pty) Limited, South Africa
TaeKwang Industrial Co., Ltd., Republic of Korea
Talas Investment Company, Republic of Kazakhstan
Tongsuh Petrochemical Corporation, Ltd., Republic of Korea
UPL Limited, India



global

Assurance

Total Mines *in Program*	*Total Mines* *projected for 2024*	Operations Recertified *in 2023*	Total Certified Operations
133	*139*	70	281

85 Certifications announced in 2023 help ensure cyanide moves *more safely* across the length of supply chains.

The more mining companies, producers, and transporters that earn Cyanide Code certification, the fewer risks exist for workers, communities, and the environment, the faster emergencies can be defused, and the stronger the industry becomes.

The Cyanide Code is at work at 100 Certified Mining Operations in 26 Countries.



Number of certified mining operations within each country as of December 31, 2023

Certification Status of Leading Gold Mines using Cyanide in 2023

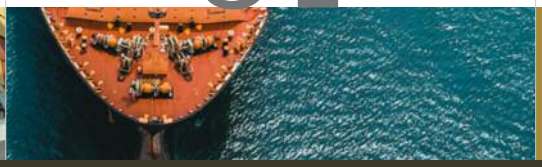
ANNUAL GOLD PRODUCTION IN 1000 OZ.

Compiled by ICMI from various sources; list excludes operations majority-owned by governments.



Rail Operators	International / Domestic Ports	Marine Shipping Companies	Certified Cyanide Supply Chains
20	111	34	64





Cyanide Code certification requires transporters to be fully accountable for the rail operators, ports, and ocean carriers they select and use for transport in supply chains.

To be included in a supply chain, each port, rail carrier and marine carrier must undergo a due diligence review, to confirm that they have systems for managing cyanide safely.



global

Accountability

A mission of the Cyanide Code is to develop the industry's most well-trained, prepared, and committed operations around the world — and Code certification works to identify these industry leaders.

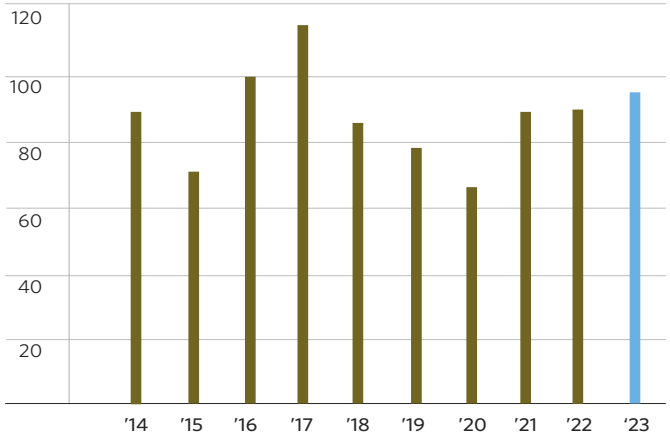
To maintain Cyanide Code certification, operations must pass *a certification audit* every three years.

The rigor of the certification audit has become a model used globally throughout the minerals industry.

95 Audit Reports were received in 2023

Signatories undergoing certification or recertification engaged **31 qualified lead auditors** and **18 technical experts** from **34 audit firms.**

Audit Reports Received 2014 – 2023



The Certification Process

Audit

Conducted every three years to inspect and independently validate every aspect of Cyanide Code compliance.

Auditor

Operations choose from auditors vetted by the Institute for their expertise and independence. No auditor can conduct more than two consecutive audits for the same operation.

Accountability

Auditors submit to ICMI summary and detailed reports that verify and document continuous Code compliance. They must also document corrective actions needed to return to compliance and earn certification.

Transparency

When ICMI confirms sufficient details are provided to support auditors' findings, the summary report is made available for other signatories, communities, regulators, investors, and others on the Cyanide Code website.

NEW

Advance Notification of Planned Audits is now a requirement.

Signatories scheduled for planned certification audits must now notify ICMI — in advance — of the audit dates and the auditors being engaged to conduct those audits.

In January 2023, ICMI rolled out an online system to assist operations in the timely planning and conducting of audits. The system requires Code participants to notify ICMI *in advance* of the dates for their upcoming certification audits and the names of the auditors being engaged to conduct those audits.

Mining, production, and transport operations with upcoming audits must complete and submit the online form, which is available on the **Cyanide Code website.**

The Audit defuses a major risk — *complacency* — and helps make good companies even better.

To remain certified, signatory companies must pass a rigorous audit every three years. There is no margin for complacency. Meeting Code auditors' high expectations requires continuous compliance — day after day, year after year, across the entire operation.

Being found 'substantially compliant' or 'non-compliant' is an opportunity for companies to take corrective action and return to full compliance. Their progress on corrective action plans can be tracked on the Cyanide Code website.

During 2023, auditors found two operations in substantial compliance, and two operations in non-compliance. Two of these operations completed their Corrective Action Plans within 2023, so that by the end of the year only one of these operations remained in substantial compliance and only one remained in non-compliance.

Non-Compliance

2 operations were found to be in non-compliance by auditors in 2023.

Non-compliance with the Cyanide Code can be triggered by issues such as deficiencies in operational practices or in documentation or failing to complete regular certification audits by the deadline.

Substantial Compliance

2 operations were found to be in substantial compliance in 2023.

To be substantially compliant, rather than non-compliant, an operation must be able to correct any deficiencies within one year, the deficiencies must not present an immediate risk to health, safety, or the environment, and the operation must have made a good faith effort to correct any deficiencies prior to the audit. To provide full transparency to stakeholders, audit reports with findings of substantial compliance are also posted on the Cyanide Code website, along with the Corrective Action Plan to return the operation to full compliance. When an operation completes all necessary actions to correct deficiencies, it may return to full compliance status.

Inactive Operations

6 operations were listed as inactive at the end of 2023.

Operations participating in the Cyanide Code program that have suspended their activity for at least six months, can enter "temporarily inactive" status. They can later re-enter the program under certain conditions. Reasons for inactivity might include economic and operational changes such as mine expansion or operational improvements.

Auditor *Voices*

Four experienced Cyanide Code auditors around the globe speak to different aspects of how the Cyanide Code is making a difference on the ground at operations.







Global Auditor Voice





The Code's role is increasing in new projects and expansion.

"As an auditor, I have noted mining operations changing their approach to implementing the Code. Their main objective is no longer to certify or recertify, but to have and maintain a safe operation for workers, the environment, and communities. By doing this, they understand certification/recertification will occur on its own.

Mining operations are demanding that design engineering companies meet the requirements of the Code. Mining operations now also consider Code requirements in the conception and design of new projects, or expansion of existing mining operations.

The Code has also driven change in stakeholder communication. Prior to certification, many mining companies expressed concerns over disclosing information to communities regarding their use of cyanide. However, the result has been the opposite: communities appreciate good communication from the company. By following Cyanide Code best practices, mining companies have learned the benefits of communicating with communities — upfront and in a proactive manner."

— ***Tito Campos***

Cyanide Code Lead and Technical Expert Auditor for Mining Operations





The impact of the Code's gap-audit inspections.

"At the beginning of 2023, I conducted a gap audit to assess preparation for Cyanide Code certification. The facility was so covered in dust and sediment that solution leaks were hardly detectable. Throughout the facility the gap audit noted mis-used objects, pipes tied with ropes and wires, lack of infrastructure maintenance, general disorder, and unsafe conditions.

During follow-up teleconferences, the operation showed enthusiasm for correcting problems and maintaining standards as required. When I returned for the actual audit, I found the plant clean, painted, and adequately signed. Workers had personal protective equipment. Frequent inspections were helping to prevent possible spills and confirming that everything and everyone were operating safely.

Both employees and management were proud to have implemented the standards that the Cyanide Code requires and largely attribute the improvements to the Code's expectations for efficient, systematic inspection systems."

— ***Bruno Pizzorni***

Cyanide Code Certification Auditor





Advances in emergency planning and supply chain safety.

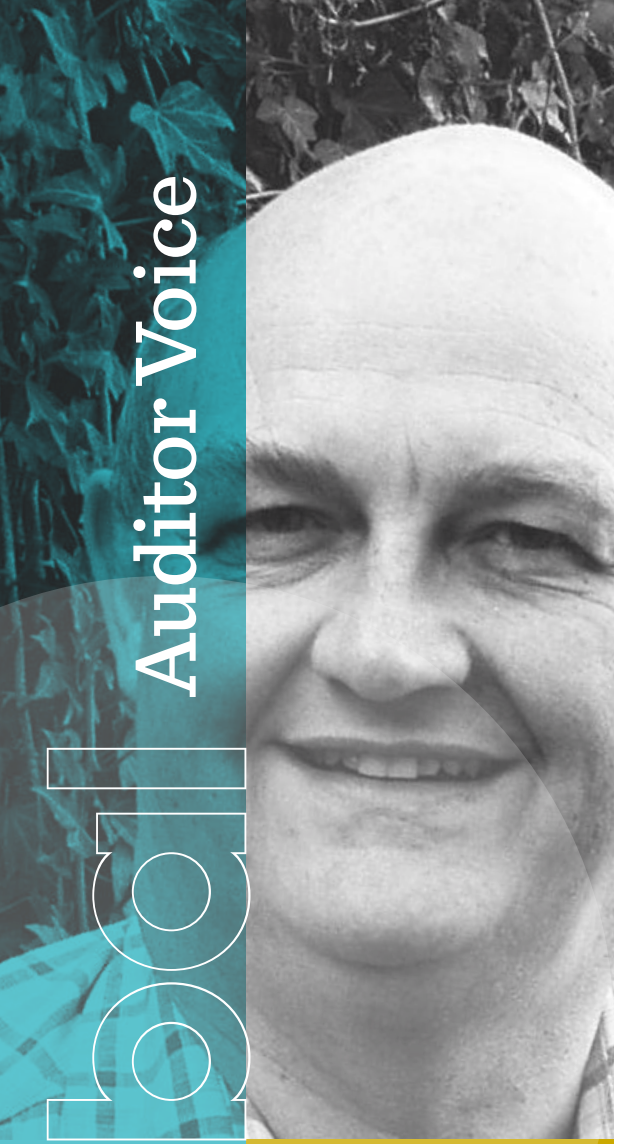
"One of the rewards of conducting over 125 audits is seeing improvements that result from the certification process.

Raising emergency response preparedness and supply chain safety engagement across all sectors is one example of this. Another is the implementation of annual emergency response drills required by the Code. These real-world drills can uncover deficiencies that go undetected during tabletop discussions — such as the discovery, by transload and production facilities, that it is impossible to extract an unconscious operator from a cleanout pit without a backboard in place at point of use to carry the person up a ladder.

Multi-site mining operations have found response actions and plans can be inconsistent across sites, which can cause confusion when personnel from different locations respond to the same emergency. Code-required drills can address risks like these. Because Cyanide Code requirements are more rigorous than ISO 14001 (environmental management) and ISO 45001 (safety and health management) requirements, the Code can even help ISO-certified companies discover gaps in systems and training."

— ***Nicole Jurczyk***

Lead Cyanide Code Auditor for Production, Transportation, and Mining audits



Global Auditor Voice



Environmental and safety benefits of the Cyanide Code.

"When I started Cyanide Code certification auditing in 2006, few WAD (Weak Acid Dissociable) cyanide measurements were taken, were taken manually and infrequently, and focused on free cyanide as a threat to aquatic life. That practice changed quickly as sites realized that automated analyzers could measure WAD cyanide levels *at least* every 15 minutes — reducing cyanide consumption costs *and* risks of aquatic toxicity. I recall one new WAD cyanide analyzer that paid for itself in three months.

Cyanide Code certification has also improved operational procedures, in particular for worker safety. Frequently, older sites conducting gap audits for initial certification realized that they depended solely upon the skill and experience of employees. They hadn't written up critical tasks as procedures and the audits revealed how dangerous many of the sites' cyanide management practices were.

As soon as operations are motivated to write and implement procedures as required by the Code, they are rewarded with safety benefits."

— Arend Hoogervorst

Cyanide Code Certification Auditor



Global

Oversight

THE CODE'S TRACK RECORD CONTINUES:

Since its inception, there have been *0 fatalities* and *0 major environmental catastrophes* caused by cyanide at Code-certified operations.

In 2023, ICMI was notified of seven significant cyanide incidents at signatory operations. Six occurred at mining operations. One occurred at a production facility.

Four of the incidents involved human exposures and three involved releases to the environment. Code-mandated containment and emergency procedures minimized the impact. *Of note, no transport incidents were reported in 2023.*

The resolution of these incidents offers further proof of the Cyanide Code's global achievement in helping to protect people, the environment, and the gold/silver mining industry itself.

Follow this link to learn more about the Cyanide Code's criteria for a "significant" cyanide incident.



Global

Industry Impact

Since the Cyanide Code was first implemented, ICMI has noted improvements in cyanide management throughout mining, transport, and production operations. While the Code's standards alone cannot take full credit, the participation of companies worldwide has done much to drive these improvements at certified operations *and* across the industry.

WORLDWIDE IMPROVEMENTS:

Reinforced by the Cyanide Code, *years of steady progress* have been made in the safe management of cyanide.

Code-propelled improvements can be seen *worldwide*.

> Improved cyanide antidote availability and training

Audit reports indicate marked improvements in the availability of antidotes, and improved training on use of antidotes across all types of operations — mining, production, and transportation.

> Increased frequencies and completeness of emergency response drills

Audit reports consistently report more frequent drills and more comprehensive drills.

> Safer transport

Increased use of convoys and escorts including medical and security personnel; carrying oxygen and antidote during transport.

> Better monitoring instrumentation

Improved accuracy and precision, lower detection limits, and increased ability to achieve real-time monitoring. All improvements result in better cyanide management, lower consumption, decreased costs of neutralization systems, and less risks to wildlife in tailings impoundments.

> Increased sophistication of predictive water balance modeling for environmental protection

Better water balance models result in better control of pond volumes, less risk of releases, and improved water use efficiency.

> Use of dyed high-strength cyanide

Increases ability to identify potential exposure and spills.

Since 2005, when the Cyanide Code was introduced, there have been *1,170 certifications*, each accompanied by an audit report — and these audit reports reveal promising industry trends.

The reports enable the Institute to distill insights and data that inform standards and highlight how the industry is evolving.

Tailings Management Trend

The Institute identified that the use of dry-stack tailings ***more than doubled*** at Code-certified mines over a five year period. While most of the increase comes as new operations enter the program, discussions with mining companies have made the Institute aware that some companies plan to convert operations from wet tailings to dry stacking. Others are already dry-stacking as a preferred alternative to wet tailings. *Globally, ICMI expects this trend to accelerate in coming years.*

2018

> of 97 Code-certified mines:

22 used heap leach with no tailings
and
75 disposed of tailings
with
4 operations dry-stacking

2023

> of 100 Code-certified mines:

18 used heap leach with no tailings
and
82 disposed of tailings
with
11 operations dry-stacking

Global *Outreach*



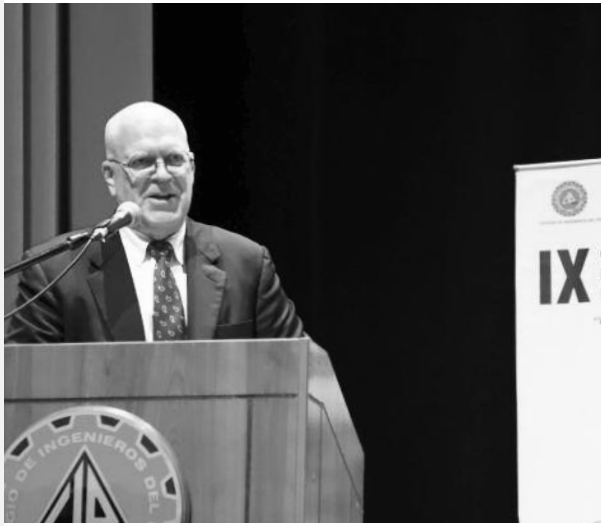
ICMI SVP Dr. Eric Schwamberger leading a training workshop in Perth, Australia

Training workshops support the Cyanide Code's growing impact on national regulations

In 2023, ICMI resumed conducting in-person global training sessions for signatories and auditors – one in Perth, Australia and the other in Elko, Nevada. These one-day workshops — led by ICMI Senior Vice President, Dr. Eric Schwamberger — help gold and silver mining companies, cyanide transporters, and other stakeholders understand the Code's expectations for the responsible management of cyanide. The workshops also instruct Code-Compliance auditors how to evaluate mines and cyanide transporters and present the findings. *In 2024, ICMI anticipates holding three training workshops in Ghana, Mexico, and Indonesia.*

ICMI also reaches out to companies that have not yet become signatories. In these workshops, prospective signatories can learn firsthand about the Cyanide Code. They also have the opportunity to discuss with ICMI officials issues of greatest importance to them. The sessions offer insight into the procedural and interpretive aspects of the Cyanide Code to prepare operations for successful audits and make Cyanide Code auditors more effective.

In 2023, the Institute also undertook bespoke training for a mining company that was preparing to become a signatory. The Institute will provide these individual training sessions for other interested companies. *Interested companies can contact ICMI at info@cyanidecode.org for more information about the training and fee.*



Our expanding leadership role

ICMI SVP Eric Schwamberger shared his insights on the benefits of the Cyanide Code as a risk management system and its expanding adoption in the global gold mining industry at the 9th International Congress on Social and Environmental Sustainability, Metallurgy and Mining in Lima, Peru.

The Code is transparent and accessible.

The
CyanideCode.org website
provides news, Audit Reports, the Cyanide Code, digital tools, and more.

Our
social media channels
on LinkedIn and X (@Cyanide_Code) support global communications and dialogue.

ICMI continuously refreshes content and makes information easy to access. This ongoing transparency provides a global portal into cyanide management best practices and the operations that are meeting those high standards.

Summary reports with findings for every Cyanide Code certification audit (including any corrective actions required) are available online for viewing by other signatories, regulators, investors, and communities.

Cyanide Code Program documents provide guidance, administrative requirements and instructions for auditors and operations preparing for certification audits. Document translations are available in *7 languages* including English, Chinese, French, Portuguese, Spanish and, added in 2023, Turkish and Russian.

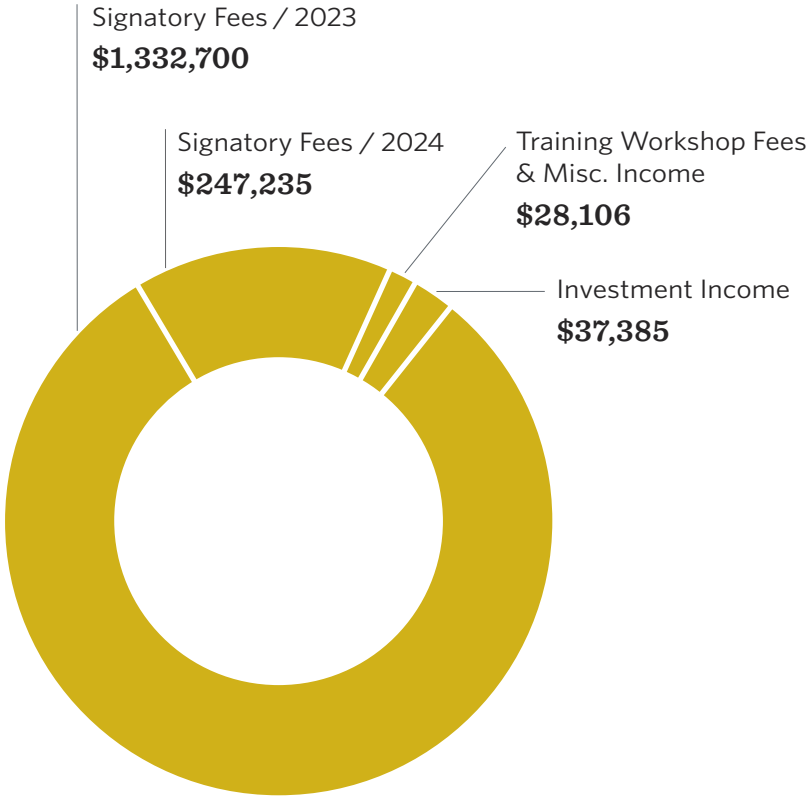


Reinforcing global outreach to signatories, auditors and other stakeholders, **The Cyanide Code quarterly newsletter** continues to provide updates, news, data, and insights.

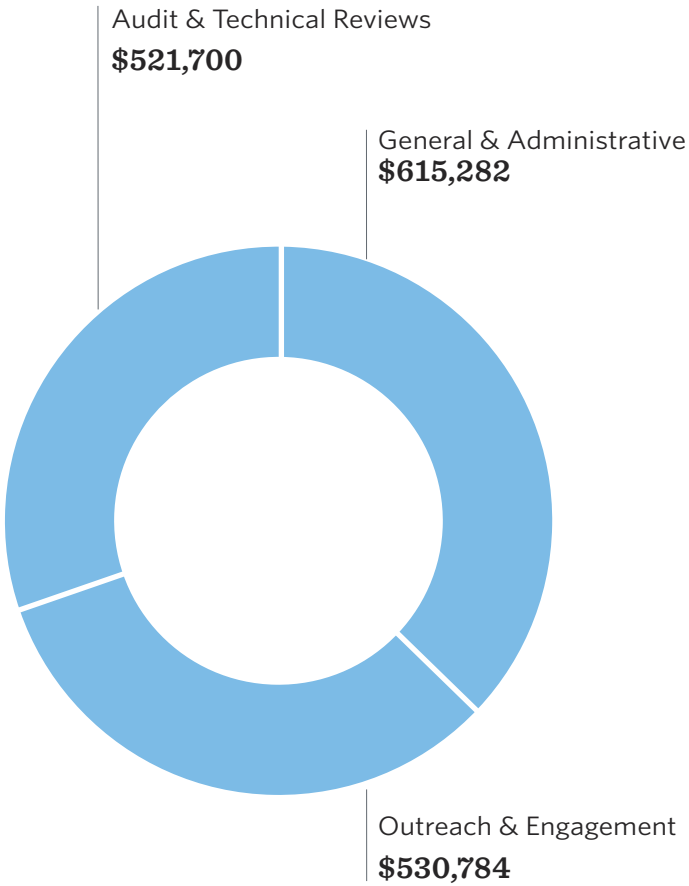
For both auditors and operations, our **CodeCast podcast** series provides practical online tools for real-world training on topics ranging from emergency response plans and audit evidence, to pipeline spill prevention and containment.

2023 Financial Overview

REVENUE



EXPENDITURES



Leadership

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To become a Cyanide Code signatory and be able to display this symbol, email the International Cyanide Management Institute at info@cyanidecode.org or visit www.cyanidecode.org.

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