



The CODE

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

April 2011 Edition

What's Inside

Status Update

January 2011 Code
Changes

Code Training
Workshops

For Certified
Operations Only

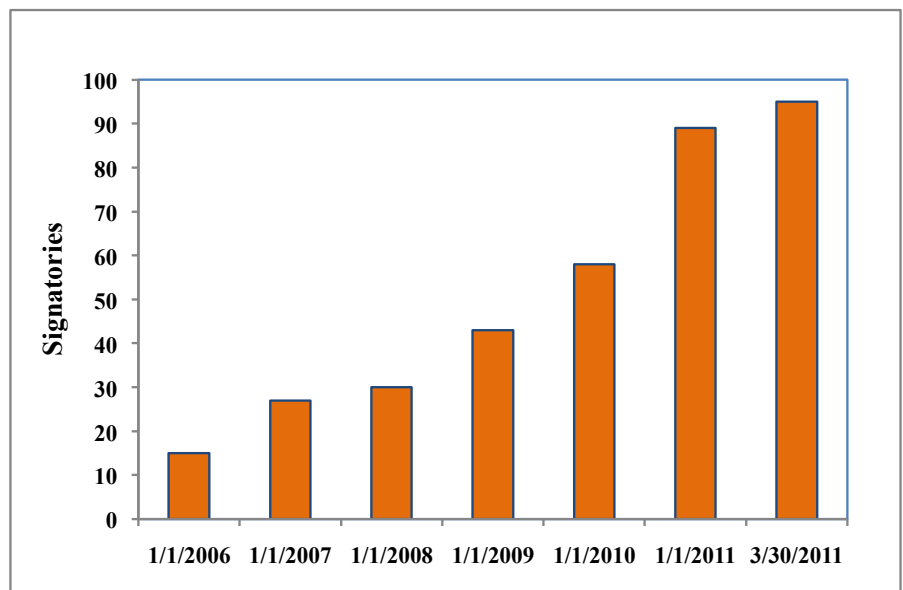
Code Questions

Welcome to the International Cyanide Management Institute's (ICMI) April 2011 Cyanide Code Newsletter. The International Cyanide Management Code (Code) has continued its tremendous growth in the last months and is rapidly approaching 100 signatory companies. ICMI greatly appreciates the strong and ongoing support the Code has received from the gold mining industry and the producers and transporters of the cyanide it uses. The Code's success is directly attributable to the commitment of time and resources made by its signatories to implement globally-recognized best practice for the management of cyanide.

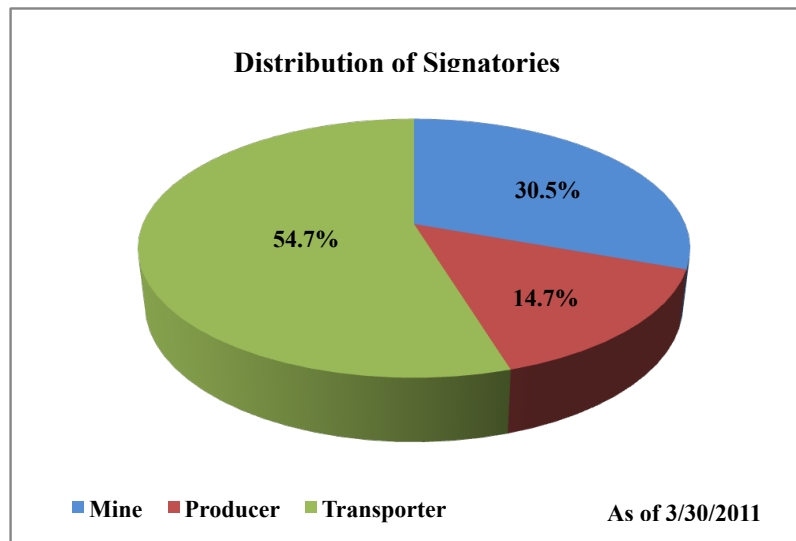
The industry leaders that have already become signatories have set a bar of high performance. Companies that have been observing the Code at a distance until its implementation was demonstrated to be achievable and beneficial have started to embrace the Code. The pace of new signatories is accelerating and there is a palpable sense of momentum surrounding the Code as its sixth full year of implementation progresses.

Status Update

Gold mining companies and cyanide producers and transporters continue to become signatories to the Code at a rapid pace. We have seen average annual increases of approximately 44% in the total number of signatories and 24% in gold mining signatories since November 2005, when the first signatories to the Code were accepted, as shown on the graph below.



The Code now has 95 signatory companies, including 29 gold mining companies, 14 cyanide producers, and 52 cyanide transporters operating in 42 countries around the world.



Code signatory companies represent 220 operations, including 142 in 28 countries (76 mines, 17 production facilities and 49 transporters) that already have been certified in compliance. Thirty-four of the certified operations, including 20 mines, 9 production facilities and 5 transporters, have been audited and certified a second time.

ICMI also continues to review the credentials of prospective Code auditors to determine if they have the experience, expertise and professional certification necessary for approval as technical expert auditors and lead auditors. Auditor requirements are found in ICMI's Auditor Criteria Document, available on the Code web site at http://cyanidecode.org/pdf/7_AuditorCriteria.pdf. A list of auditors meeting the criteria and approved to conduct Code certification audits can be found at <http://cyanidecode.org/pdf/AuditorList.pdf>. We currently have 89 individual auditors, with 51 approved as lead auditors, 37 as mining technical experts, 16 as production technical experts, and 23 as transport technical experts. Additionally, the first Code auditors in China, Panama, Peru and Singapore have been approved in the past several months.

January 2011 Code Changes

On January 24, 2011, ICMI announced a number of changes to the Code and its implementing documents intended to:

- Authorize pre-operational certification of cyanide production facilities and cyanide transport operations;
- Provide additional guidance with respect to how past deficiencies should be addressed in Code recertification audits;
- Clarify that storage of cyanide in a warehouse prior to delivery to a mine is considered to be a production activity under the Code and must be evaluated for certification using the Cyanide Production Verification Protocol.

These changes are summarized below; Code signatory companies, prospective signatories, and Code auditors should carefully review the new and revised provisions to inform their decisions about Code issues and streamline the audit process and ICMI's completeness review of audit reports.

Pre-operational Certification of Cyanide Production and Transport Operations

Since its inception, the Code has allowed a gold mine that is not yet operating to be audited for certification based on its design documents, draft management plans and procedures, and other written commitments to design, construct and operate the facility consistent with the Code's Principles and Standards of Practice. However, this same opportunity has not been available to cyanide producers or cyanide transporters – until now. Changes to the Code and its implementing documents made in January authorize pre-operational certification of these facilities in a manner nearly identical to that for gold mines. Pre-operational certification is conditional and requires that, once in operation, these facilities undergo full Code certification audits to demonstrate that they have been designed, constructed, and operated in compliance with the Code. A production or transport operation that has been certified pre-operationally must have this audit conducted within six months of its first receipt of cyanide rather than the one year allowed for a mine that has been certified pre-operationally.

To implement this change, the “Code Verification and Certification” section of the Code has been revised to authorize pre-operational certification of cyanide production facilities and cyanide transport operations and to require that these facilities have a full Code audit within six months of their start of cyanide production or handling to confirm that they comply with the Code. Consistent with the requirements for gold mines, a pre-operationally certified cyanide production or transport operation must notify ICMI within 90 days of the start of cyanide production or management activities.

ICMI announced its intention to make these changes in a notice posted on the Code web site on November 30, 2010, and solicited input from Code stakeholders on the advisability of the change as well as on any related issues that should be considered as the proposed Code revisions were made. The single comment received was from an outside stakeholder supporting the change.

Additional Guidance on Identifying Deficiencies in a Recertification Audit Report

Since recertification audits evaluate a certified operation’s compliance with the Code over the previous three-year audit period, the operation may have experienced a non-compliance situation or other potential deficiency at some time during that period which was corrected prior to the audit. Therefore, it is possible, even likely, that recertification audits will come to the same finding of full compliance for operations that have experienced compliance problems and those which have had no problems. Although ICMI’s Guidance for Recertification Audits discusses various factors to be considered by an auditor in determining the operation’s compliance status, it does not include guidance on what deficiencies should be identified in the recertification audit report. The January 2011 Code revisions provide such guidance and instruct the auditor to identify, describe and evaluate in the report two types of situations that may have occurred and been corrected. This will allow stakeholders reviewing audit reports to differentiate between operations found in full compliance because they had no compliance issues and those that have had problems but have corrected them and have been found in full compliance.

The Guidance for Recertification Audits has been revised to require that the Detailed Audit Findings Reports and Summary Audit Reports of recertification audits discuss any “significant cyanide incidents” that the operation reported to ICMI as required by the Instructions for the Signatory Application Form. In addition, any cyanide releases or exposures that are subject to the disclosure provisions of Item 9.3.3 in the Gold Mining Verification Protocol must also be addressed in these reports for any operation, including those for cyanide production facilities and cyanide transporters as well as reports for gold mines. This new guidance also requires auditors to include a statement for an operation found in full compliance noting that the operation has had no compliance issues during the preceding audit cycle or that it has experienced some deficiency that has been corrected.

Clarification Regarding Cyanide Storage in a Warehouse

Revisions were also made to several of the Code’s implementing documents to clarify that storage of cyanide that occurs during transport when changing carriers or transport modes, termed “interim storage” under the Code, is to be evaluated using the Verification Protocol for Transportation. Any storage other than interim storage and storage at a mine site is considered to be a production activity and is evaluated using the Cyanide Production Verification Protocol. In order to clarify the applicability of the various Protocols, ICMI has added definitions of “interim storage” and “warehouse” to its Definitions and Acronyms document. It also has revised Sections 1, 2 and 9 of the General Guidance section of the Transport Guidance document, as well as the discussion under Principle 2 of the Code to more clearly differentiate between interim storage activities and storage in a warehouse.

Code Training Workshops

ICMI ended its 2010 training activities with a highly successful Workshop on Code Implementation and Auditing in Perth, Western Australia, on December 8, 2010. While ICMI has participated in numerous Code briefings and conferences in Australia, this was the first formal Code training workshop ICMI has conducted there. The Workshop was attended by more than 40 representatives of gold mining companies, cyanide producers and transporters, and auditors.

ICMI’s first Workshop of 2011 will be held in Sao Paulo, Brazil, on April 27. The Workshop will be presented in English and will have simultaneous translation into Portuguese. Slides will be in both languages. ICMI also is planning on holding Workshops in Africa in June and in China in September, and will announce the details on the Code web site when they are available.

For Certified Operations Only

Code-certified operations are authorized to display the Cyanide Code logo to demonstrate to stakeholders that they have been inspected by independent professional auditors and found in compliance with the Code. Until recently, however, the only evidence of their certification was the certification letter sent by ICMI to the signatory company and the documentation posted on the signatory's page of the Code web site.

ICMI is now issuing certificates of certification to each operation found in compliance with the Code. The certificates, suitable for display at certified mines, cyanide production facilities and cyanide transport operations, attest to the fact that the operation has undergone a detailed site inspection and review of its records and documentation by an independent third-party, professional auditor meeting the Institute's requirements. Based on this in-depth evaluation, the auditor has determined that the facility's cyanide management systems, plans and procedures have been developed and are being implemented in compliance with the International Cyanide Management Code For The Manufacture, Transport and Use of Cyanide In The Production of Gold.

In addition, ICMI has commissioned the production of Cyanide Code flags. The flags, which are 3 feet by 5 feet and cost US\$100.00 each, show the Code logo on a white background. Certified operations can order a flag by contacting ICMI at +1-202-495-4020 or info@cyanidecode.org. Flying a Cyanide Code flag is a dramatic way to demonstrate that your operation is Code-certified.



Cyanide Code Flag at Goldfield's Driefontein Operation in South Africa

Questions and Answers

Question 1: Are certified transporters required to follow the Code when delivering cyanide to mines that are not certified under the Code?

Answer: Yes. Certification ensures the public that an operation employs Code-compliant practices with respect to its cyanide management. A certified transporter is expected to employ the same standard practices and procedures for cyanide transport in all situations, regardless of the status of the mine to which it delivers.

Question 2: Under the Code changes announced in January 2011, cyanide production facilities and transporters can be audited in their pre-operational phase. If these facilities are found in full compliance, they are certified conditionally and allowed to operate for up to six months after initiating cyanide management activities. The operations must then have an on-the-ground audit to confirm that they are Code-compliant, and if so, they are fully certified. If a gold mine receiving cyanide from such a producer or transporter undergoes its certification or recertification audit during that six-month period, can the mine be found in full compliance based on the full compliance finding of the pre-operational verification?

Answer: A mine being audited while its cyanide producer and/or transporter are still certified conditionally can only be found in substantial compliance for the applicable Standard(s) of Practice, and assuming it is not found in non-compliance with any Standard of Practice, must itself be conditionally certified until the producer and/or transporter undergoes its on-the-ground confirmatory audit and is fully certified. The mine would be required to develop a Corrective Action Plan with measures to bring it into full compliance, such as monitoring the producer/transporter's actions in achieving full compliance and/or developing alternate suppliers in the event the producer and/or transporter does not achieve full certification. It also is possible that the producer and/or transporter could be found in substantial compliance during its confirmatory audit. In such a case, it would remain conditionally certified until it completed its Corrective Action Plan, and the mine's conditional certification would continue until its producer and/or transporter achieved full certification.

Question 3: Installation of new process equipment at a fully-certified gold mine requires the temporary removal of part of a concrete secondary containment surrounding a process solution tank. How would this impact the mine's compliance status during its next Code audit?

Answer: Compliance with the Code does not preclude a certified operation from conducting maintenance or construction activities needed to continue operation. If cyanide management equipment or facilities must be temporarily taken out of service, the operation should take the appropriate measures to compensate for their loss, and re-establish them as soon as practical. For example, if a containment bund will be compromised during construction and a temporary diversion or replacement cannot be reasonably established, the operation may need to conduct a detailed inspection of the tanks before the bund is removed, and increase the frequency or rigor of its inspections to lessen the likelihood of a release. It also may be appropriate to make operational changes, especially if a release without the bund would adversely impact employees in the area, a local community or nearby water body. Any such actions should be documented so that during its next audit, the operation can demonstrate to its auditor that its procedures were effective in addressing this non-routine situation.

Question 4: Standard of Practice 4.7 of the Code addresses spill prevention and containment for pipelines carrying cyanide solution but not conveyors. If cyanide is added to crushed ore during agglomeration and then conveyed to a leach pad, what spill prevention or containment measures would the Code require?

Answer: Although the Code does not specifically address spill prevention and/or containment for conveyors, the appropriate controls would be similar to those for a pipeline. Assuming that the concentration of WAD cyanide added during agglomeration is 0.5 mg/l or greater, the solution is considered to be process solution and some type of spill containment or prevention measures would be necessary. While the specific controls necessary to meet the Code can vary with the environmental and process conditions at any particular mine site, the same factors that the mine should consider in evaluating pipeline would also apply to conveyors.

As discussed in the Auditor Guidance for Use of the Gold Mining Verification Protocol (available on the Code web site at <http://cyanidecode.org/pdf/RevisedAuditorGuidance.pdf>) with respect to question 5 under Standard of Practice 4.7, operations can use spill containment measures, spill prevention measures, or a combination of these approaches depending on site-specific conditions such as the cyanide concentration, ground water depth and quality, and the nature and frequency of inspections and preventive maintenance.

For example, in a situation where ground water is deep and/or of poor quality, the cyanide concentration is relatively low, inspections are frequent, and the facility implements procedures to clean up any spills and remediate the ground surface, compacting rather than lining the land surface beneath the conveyor may be appropriate. The need for containment bunds along the conveyor corridor would depend on the topography of the area and the presence of potential receptors such as a surface water body that could be impacted by a spill. The design of the conveyor as well as the effectiveness of the agglomerator in mixing the solution in with the ore and the resulting amount of free solution present on the conveyor belt also should be considered in determining what controls are necessary and appropriate.

Question 5: Do Code requirements for secondary containment and ventilation apply to a mine's storage of cyanide in IBCs (plastic bags inside wooden boxes) within the sea containers in which they are shipped?

Answer: Storage of IBCs in sea containers is a relatively common practice, and usually meets the intent of the Code with respect to containment. Solid cyanide should be stored within secondary containment, but packing in IBCs typically involves several layers of plastic as well as the wooden box, and the sea container provides an additional level of spill protection. Although operations are expected to implement procedures to prevent the rupture of IBCs during unloading, additional containment or a concrete surface in the area where the IBCs are unloaded from the sea container would not be necessary unless the site conditions create a risk that a spill from an IBC could allow cyanide to be released to a nearby community or to enter surface or ground water before it could be effectively cleaned up.

Ventilation of cyanide storage facilities is a Code requirement. However, sea containers are built without ventilation to limit the potential for water spray to come into contact with cyanide during ocean transport. Providing ventilation by drilling holes in the container and sealing them when the container is empty and will be returned to the vendor may be one way to address the issue. Alternately, if such temporary ventilation of a sea container is not feasible, an operation can still comply with the Code by developing and implementing procedures by which personnel can enter the container safely. For example, the operation could install HCN monitoring equipment in the container to determine if it can be safely opened. Another option would be restricting access to the area and using portable monitoring equipment and appropriate PPE when opening the container while emergency response personnel observe and are prepared to act if needed.