

Chapter 22  
THE INTERNATIONAL CYANIDE MANAGEMENT  
CODE—A CASE STUDY OF A NEW  
VOLUNTARY BEST PRACTICES CODE:  
LESSONS FOR INDUSTRY?

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§ 22.01 **Introduction**

While not a substitute for the laws of host governments around the world, voluntary codes offer the opportunity to encourage use of environmental, worker, and public health and safety best management practices in controversial mineral extractive settings. The modern gold mining industry's successful extraction of microscopic gold from low quality ore, through flotation system applications of weak cyanide-water solutions to finely crushed ores, is a remarkable story of technology and production. However, envi-

ronmental problems caused by occasional tailings and other spills have caused significant waterfowl and fish kills, resulting in substantial social and economic losses. To minimize these losses, the recently completed International Cyanide Management Code For The Manufacture, Transport and Use of Cyanide in The Production of Gold (International Cyanide Management Code or Code) establishes best management practices for the use of cyanide in gold mining. Compliance with the Code includes rigorous audits by independent third-party auditors, public posting of summary audit reports and necessary corrective action plans, and other features designed to provide transparency and strong participation by all stakeholders. This article discusses the need for the Code, its development, its future prospects for success, and lessons to be learned and used in voluntary codes for other industries.

## § 22.02 Microscopic Gold

### [1] Modern Gold Mining—A Remarkable Industrial Success Story

The old days of gold rushes are virtually over today, replaced by a vibrant, world-wide industry mining microscopic flecks of gold (a fraction of a troy ounce per ton of ore). Today, a more regularized gold rush takes place every year; for example, according to the World Gold Council, worldwide gold production for 2005 was 2,520.3 tonnes.<sup>1</sup> The success of microscopic gold mining largely depends on the use of a weak cyanide in water solution to chemically separate (leach) the gold from waste rock, as the finely pulverized ore goes through a flotation system.<sup>2</sup> While this weak cyanide and water solution is generally benign, there have been a number of occasions when these closed systems have failed for various reasons, resulting in significant waterfowl and fish kills.<sup>3</sup>

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<sup>1</sup>See Supply and Demand (tonnes), available at [http://www.gold.org/value/stats/statistics/gold\\_demand/index.html](http://www.gold.org/value/stats/statistics/gold_demand/index.html).

<sup>2</sup>See How Gold is Mined, available at <http://www.newmont.com/en/about/gold/howmined/index.asp>. The authors estimate that approximately 450 mines around the world produce gold using cyanide in this fashion.

<sup>3</sup>See, e.g., Examples of Modern Mines that Damaged Rivers & Fisheries (compiled by Maria Bacsujlaky for the Bristol Bay Alliance, Oct. 2004), available at [http://www.bristolbayalliance.com/mines\\_and\\_fish.htm](http://www.bristolbayalliance.com/mines_and_fish.htm).

## [2] The Cyanide Spill at Baia Mare, Romania

With the use of cyanide in gold mining already under pressure for greater restrictions from the public, non-governmental organizations (NGOs), and governments (including outright prohibition of its use),<sup>4</sup> on January 30, 2000, a break occurred in a tailings pond dam at a gold mine operated by Aural SA Company in Baia Mare, NW Romania. The break resulted in a spill of about 100,000 cubic meters of liquid and suspended waste containing about 50 to 100 tonnes of cyanide, along with copper and various other heavy metals.<sup>5</sup> The break was probably caused by a combination of design defects, unexpected operating conditions, and bad weather conditions.<sup>6</sup> Over a four-week period, the spill traversed about 2,000 kilometers of the Danube River catchment area before reaching the Black Sea.<sup>7</sup> This seminal event led to the development of the International Cyanide Management Code.<sup>8</sup>

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<sup>4</sup>The use of cyanide in gold mining is banned in the Czech Republic, Germany, Turkey, Greece (judicial prohibition at certain sites), Costa Rica (moratorium on open-pit cyanide leach mining), Montana (repeated efforts to repeal ban have failed), four counties in Colorado, and Rio Negro province in Argentina. See <http://www.rainforestinfo.org.au/gold/Bans.html> (last updated July 24, 2005).

<sup>5</sup>The Cyanide Spill at Baia Mare, Romania—Before, During and After (Paul Csagoly ed., The Regional Environmental Center for Central and Eastern Europe June 2000), available at <http://www.rec.org/REC/Publications/CyanideSpill/ENG/Cyanide.pdf>.

<sup>6</sup>*Id.*

<sup>7</sup>*Id.*

<sup>8</sup>See generally <http://www.cyanidecode.org>.

**§ 22.03 Development of the International Cyanide Management Code (The Code)**

**[1] A Workshop on Industry Codes of Practice; Cyanide Management<sup>9</sup>**

To address public concern about cyanide, following the Baia Mare spill, in May 2000, the United Nations Environment Programme (UNEP) and the International Council on Metals and the Environment (ICME) sponsored a two-day workshop in Paris, France, to consider developing a code of practice for the use of cyanide in the gold mining industry.<sup>10</sup> Workshop participants were comprised of almost 40 representatives of such diverse organizations as the Worldwide Fund for Nature, the Minerals Policy Center, the Sierra Club, the ICME, the World Gold Council, along with representation from the U.S. Environmental Protection Agency (EPA), Australia, France, Hungary, Romania, and the world's leading gold producers and cyanide producers.<sup>11</sup> Workshop participants recognized that in all countries where mining is a substantial industry, regulation of mine safety exists, and that many major mining companies have their own internal standards; however, "there is no one single international Code specifically for the use of cyanide in gold mining."<sup>12</sup> In concluding that such an international code was necessary, workshop participants concluded that a code should: "establish high standards of management practices and control . . . ; drive improved performance in mines around the world;" and result in public "confidence that the adopted stan-

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<sup>9</sup> Cyanide is a rapidly acting, potentially deadly chemical that exists in gaseous or crystalline form. Cyanide was used by the Third Reich as a genocidal agent, under the name Zyklon B. It also may have been used in the Kurdish city of Halabja in northern Iraq. In manufacturing, cyanide is used to make paper, textiles, and plastics. It is present in the chemicals used to develop photographs. Cyanide salts are used in metallurgy for electroplating, metal cleaning, and removing gold from its ore. Cyanide gas is used to exterminate pests and vermin in ships and buildings. *See* Centers for Disease Control, Emergency Preparedness & Response, Facts About Cyanide, at <http://www.bt.cdc.gov/agent/cyanide/basics/facts.asp>. Based on discussions with industry representatives, the authors estimate that about 170,000 tons of hydrogen cyanide are produced each year, of which 13% is used in gold mining.

<sup>10</sup> *See* A Workshop on Industry Codes of Practice: Cyanide Management (May 25-26, 2000, Ecole des Mines, Paris, France), available at <http://www.mineralresourcesforum.org/initiatives/cyanide/docs/cyanide-report.pdf>.

<sup>11</sup> *Id.* at 19-20.

<sup>12</sup> *Id.* at 4.

dards meet their expectations and are being applied.”<sup>13</sup> At the conclusion of the workshop, it was decided that workshop participants would become a Reference Group, enlarged as necessary, as UNEP and ICME developed an ongoing code development process, and that UNEP and ICME would develop a Steering Group to consult with the Reference Group.<sup>14</sup>

## [2] The Steering Committee

As promised, a multi-stakeholder Steering Committee was established, meeting five times between December 2000 and December 2001.<sup>15</sup> An Industry Advisory Group comprised of representatives of 18 gold producers and cyanide producers agreed to provide technical assistance and funding, through the Gold Institute, to the Steering Committee.<sup>16</sup> The process of developing the Code was transparent. Code drafts and Steering Committee minutes were posted on the Internet for public review and comment. More than 140 entities were asked to review the Code and submit comments to the Steering Committee. The Committee heard 15 presentations from Australia, Chile, Papua New Guinea, Eastern Europe, South Africa, Canada, and the United States (from governments, industry, cyanide experts, and NGOs). The Committee also received 68 sets of written comments from around the world. A Code Manager was identified to provide support to the Steering Committee, in addition to the secretariat services provided by UNEP and the ICME (now known as the International Council on Mining & Metal (ICMM)).<sup>17</sup> Set forth below is a schematic depicting the Code’s development process.

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<sup>13</sup> *Id.* at 6.

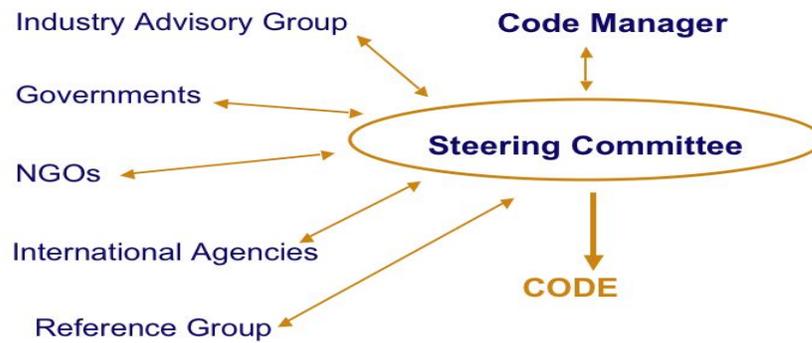
<sup>14</sup> *Id.* at 15.

<sup>15</sup> Steering Committee meeting minutes can be found at <http://www.mineralresourcesforum.org>, click on UNEP Initiatives, then on Cyanide Code.

<sup>16</sup> *Id.* at Minutes of the First Steering Committee Meeting (Dec. 4-5, 2000).

<sup>17</sup> *Id.*

### Code Development Process



In addition to developing a Code, over the next four meetings, the Steering Committee wrestled with the questions of an entity to administer it and how to encourage its adoption.<sup>18</sup> The Steering Committee developed a logo, and at its last meeting decided to send its work product to UNEP and the ICMM, following finalization by the Code Manager and final review by the Steering Committee.<sup>19</sup> The logo is depicted below.



<sup>18</sup> Minutes of the Fifth Steering Committee Meeting, December 3-5, 2001.

<sup>19</sup> *Id.*

The Steering Committee concluded its last meeting by discussing Code roll-out and promotion and outside legal review.<sup>20</sup> While the Steering Committee’s work was fundamental to all that followed, it quickly became apparent that even though the Code itself was completed, a great amount of work remained prior to its launch. Similar to implementing a new statute, the Code would need implementing procedures, protocols, guidelines, and forms, and an entity to administer it. The Code, therefore, did not become operational until July 2005.

### [3] What the Code Is—And What It Is Not

The Code is—

- “a voluntary initiative for the gold mining industry and the producers and transporters of the cyanide used in gold mining”;<sup>21</sup>
- “intended to complement . . . existing regulatory requirements”;<sup>22</sup>
- focused “exclusively on the safe management of cyanide that is produced, transported, and used for the recovery of gold.”<sup>23</sup>

Both management systems and on-the-ground compliance are required by the Code, making it more comprehensive than programs such as ISO 14000<sup>24</sup> (which focuses mainly on management systems) and most governmental regulations (which do not necessarily require documented management systems).

The Code is not—

- “intended to contravene regulations and laws of the applicable political jurisdiction”;<sup>25</sup>

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<sup>20</sup> *Id.*

<sup>21</sup> See The International Cyanide Management Code 1 (July 2005), at <http://www.cyanidecode.org/pdf/thecode.pdf> [hereinafter The Code].

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> See <http://www.iso14000.com/FAQs.htm#FAQ3>.

<sup>25</sup> The Code, *supra* note 21, at 1.

- intended to “address all safety or environmental problems that may be present at gold mining operations such as . . . long-term closure and rehabilitation of mining operations”;<sup>26</sup>
- “neither intended to nor does it create, establish, or recognize any legally enforceable obligations or rights on the part of its signatories, supporters or any other parties.”<sup>27</sup>

#### [4] Contents of the Code—Two Major Elements

Code Principles broadly state commitments that signatories make to manage cyanide in a responsible fashion, e.g., Principle 1, “PRODUCTION: Encourage responsible cyanide manufacturing by purchasing from manufacturers who operate in a safe and environmentally protective manner.”<sup>28</sup> Nine Principles deal with production of cyanide, its transportation, handling, and storage; use during operations; decommissioning of facilities; worker safety; emergency response; worker and emergency response personnel training; and dialogue encouraging public consultation and disclosure.<sup>29</sup> Code Standards of Practice implement and “follow each Principle, identifying the performance goals and objectives that must be met to comply with the Principle.”<sup>30</sup> For example, the Code’s Principle 9, dealing with dialogue, is implemented by three Standards of Practice to:

- 9.1 Provide stakeholders with the opportunity to communicate issues of concern.
- 9.2 Initiate dialogue describing cyanide management procedures and responsively address identified concerns.
- 9.3 Make appropriate operational and environmental information regarding cyanide available to stakeholders.<sup>31</sup>

Thirty-two Standards of Practice implement the Principles.<sup>32</sup>

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<sup>26</sup> *Id.*

<sup>27</sup> See Legal Disclaimer, available at <http://www.cyanidecode.org/legaldisclaimer.php>.

<sup>28</sup> The Code, *supra* note 21, at 2.

<sup>29</sup> *Id.* at 2-5.

<sup>30</sup> *Id.* at 1.

<sup>31</sup> *Id.* at 5.

<sup>32</sup> *Id.* at 2-5.

### **[5] Code Implementation Guidance**

Further fleshing out the Principles and Standards of Practice is a non-mandatory 32-page Implementation Guidance.<sup>33</sup> The Implementation Guidance reiterates each Principle and Standard of Practice, followed by more specific means of implementing the Code.<sup>34</sup> These specific means are not mandatory, however, in that an operation can achieve Code compliance if it can demonstrate that its methods achieve the performance goal as stated in the Standard of Practice.<sup>35</sup> Essentially, the purpose of the Implementation Guidance is to provide a tool for all stakeholders to understand acceptable methods to achieve the performance goals set by the Standards of Practice.<sup>36</sup>

### **[6] Other Code Procedures, Protocols, Guidelines, and Forms Necessary to Implement the Code**

In addition to the Code and its Implementation Guidance, a number of other procedures, protocols, guidelines and forms were contemplated (and have since been developed) as necessary to implement and flesh out the Code. These are discussed briefly below.<sup>37</sup>

#### **[a] Signatory Application Form<sup>38</sup>**

This form prescribes applicant qualifications, how to describe operations, the applicant's ongoing duty to provide current information as necessary (but in any event by each anniversary date of becoming a Code signatory), authorization for posting of certain information on the Code website, and the applicant's agreement to participate in and abide by the Code's Dispute Resolution Procedures.<sup>39</sup>

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<sup>33</sup> Implementation Guidance for the International Cyanide Management Code (Nov. 2005), available at <http://www.cyanidecode.org/pdf/revised%201GJan06.pdf>.

<sup>34</sup> *Id.*

<sup>35</sup> *Id.* at 1.

<sup>36</sup> *Id.*

<sup>37</sup> For additional information, see *infra* § 22.04.

<sup>38</sup> Available at [http://www.cyanidecode.org/pdf/1\\_SignatoryApplication.pdf](http://www.cyanidecode.org/pdf/1_SignatoryApplication.pdf). See also *infra* § 22.04[2].

<sup>39</sup> [Http://www.cyanidecode.org/pdf/1\\_SignatoryApplication.pdf](http://www.cyanidecode.org/pdf/1_SignatoryApplication.pdf), at 2-3.

**[b] Auditor Credentials Form**<sup>40</sup>

This form requires a description of the lead auditor's credentials, the cyanide-related operations experience of all involved auditors, and a statement of no conflict from each auditor.<sup>41</sup>

**[c] Auditor Criteria**<sup>42</sup>

The Code's Auditor Criteria contain detailed requirements regarding the experience and expertise of auditors, including a requirement for certification of the lead auditor by a self-regulating professional organization.<sup>43</sup> This professional organization must have an enforceable code of ethics; baseline requirements for education, experience, and/or expertise; and requirements for continuing professional development and experience.<sup>44</sup> The Auditor Criteria also include detailed provisions regarding conflicts of interest.<sup>45</sup>

**[d] Auditor Guidance for Use of the Gold Mining Operations Verification Protocol**<sup>46</sup>

Like the Code's Implementation Guidance,<sup>47</sup> the 80-page Auditor Guidance for Use of the Gold Mining Operations Verification Protocol reiterates each Code Principle and Standard of Practice and then poses a series of questions about the elements of each.<sup>48</sup> This Auditor Guidance also provides information on how to use the Gold Mining Operation Verification Protocol<sup>49</sup> and describes the scope of the Code and various audit factors and considerations.<sup>50</sup>

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<sup>40</sup> Available at [http://www.cyanidecode.org/pdf/8\\_ICMIAuditorCredentialsForm.pdf](http://www.cyanidecode.org/pdf/8_ICMIAuditorCredentialsForm.pdf).

<sup>41</sup> *Id.*

<sup>42</sup> Available at [http://www.cyanidecode.org/pdf/7\\_AuditorCriteria.pdf](http://www.cyanidecode.org/pdf/7_AuditorCriteria.pdf). See also *infra* § 22.05[1].

<sup>43</sup> [http://www.cyanidecode.org/pdf/7\\_AuditorCriteria.pdf](http://www.cyanidecode.org/pdf/7_AuditorCriteria.pdf), at 1-3.

<sup>44</sup> *Id.* at 3.

<sup>45</sup> *Id.* at 4.

<sup>46</sup> Available at <http://www.cyanidecode.org/pdf/AuditorGuidance.pdf>.

<sup>47</sup> *Supra* § 22.03[5].

<sup>48</sup> See, e.g., Auditor Guidance, *supra* note 46, at 11-13 (dealing with the Code Principle regarding production of cyanide).

<sup>49</sup> *Infra* § 22.03[6][f].

<sup>50</sup> See <http://www.cyanidecode.org/pdf/AuditorGuidance.pdf>, at 1-10.

**[e] Gold Mining Operations Pre-Operational Verification Protocol<sup>51</sup>**

This 56-page Protocol is to be used by Code auditors in assessing whether an operation not yet active but sufficiently advanced in its planning and design phases can be audited for conformance with the Code's Principles and Standards of Practice in order to be conditionally certified.<sup>52</sup>

**[f] Gold Mining Operations Verification Protocol<sup>53</sup>**

Following the format of a series of questions after each Principle and Standard of Practice, this 21-page Protocol is to be used by Code auditors to assess whether a gold mining operation is adhering to the Code.<sup>54</sup>

**[g] Gold Mining Operations Summary Audit Report Form<sup>55</sup>**

This form includes the auditors' overall finding as to whether the operation is in full compliance, substantial compliance, or not in compliance with the Code.<sup>56</sup> In addition, auditors must make such a determination for each Principle and Standard of Practice, and auditors must summarize the bases for the findings or deficiencies identified.<sup>57</sup>

**[h] Similar Protocols and Forms for Cyanide Producers and Transporters**

Similar protocols and forms have been developed for cyanide producers and transporters.<sup>58</sup>

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<sup>51</sup> Available at [http://www.cyanidecode.org/pdf/11\\_ICMIPre-OperationalVerificationProtocol.pdf](http://www.cyanidecode.org/pdf/11_ICMIPre-OperationalVerificationProtocol.pdf).

<sup>52</sup> *Id.* at 1. See also *infra* § 22.04[4].

<sup>53</sup> Available at [http://www.cyanidecode.org/pdf/9\\_GoldMiningProtocol.pdf](http://www.cyanidecode.org/pdf/9_GoldMiningProtocol.pdf).

<sup>54</sup> *Id.* at 1.

<sup>55</sup> Available at [http://www.cyanidecode.org/pdf/10\\_ICMIGoldMiningOperationsSummaryAuditForm.pdf](http://www.cyanidecode.org/pdf/10_ICMIGoldMiningOperationsSummaryAuditForm.pdf).

<sup>56</sup> *Id.* at 3. See also *infra* § 22.04[4].

<sup>57</sup> [Http://www.cyanidecode.org/pdf/10\\_ICMIGoldMiningOperationsSummaryAuditForm.pdf](http://www.cyanidecode.org/pdf/10_ICMIGoldMiningOperationsSummaryAuditForm.pdf), at 4-11.

<sup>58</sup> See, e.g., Cyanide Production Verification Protocol, available at [http://www.cyanidecode.org/pdf/12\\_ICMIProductionProtocol.pdf](http://www.cyanidecode.org/pdf/12_ICMIProductionProtocol.pdf); Cyanide Transportation Verification Protocol, available at [http://www.cyanidecode.org/pdf/14\\_ICMITransportProtocol.pdf](http://www.cyanidecode.org/pdf/14_ICMITransportProtocol.pdf). See Cyanide Production Summary Audit Report Form, available at [http://www.cyanidecode.org/pdf/13\\_ICMI](http://www.cyanidecode.org/pdf/13_ICMI)

## § 22.04 How the International Cyanide Management Code Works

### [1] The International Cyanide Management Institute (ICMI)

Embedded in the Code itself is a requirement for establishment of the ICMI to administer and manage the Code.<sup>59</sup> The Code calls for the ICMI to be a non-profit corporation, governed by a multi-stakeholder Board of Directors comprised of gold mining industry representatives and other stakeholders.<sup>60</sup> ICMI's responsibilities are to—

- promote Code adoption and compliance;
- monitor Code effectiveness and implementation;
- develop funding for ICMI activities;
- work with governments, NGOs, and other stakeholders;
- identify technical or administrative problems or deficiencies that may exist with Code implementation; and
- determine when and how to revise and update the Code.<sup>61</sup>

The ICMI was incorporated in California in 2002.<sup>62</sup> Currently, the ICMI has six directors from five countries: France, the United States, Peru, Republic of South Africa, and Australia.<sup>63</sup> ICMI, led by a President who is also Chair of the Board of Directors, does not maintain traditional offices and staff; instead it is web-based, using the web site as the primary forum regarding Code and ICMI activities.<sup>64</sup> ICMI is in the process of establishing stakeholder Advisory Panels to provide information and guidance to the ICMI Board and the President.<sup>65</sup>

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ProductionSummaryAuditForm.pdf, and Cyanide Transportation Summary Audit Report Form, *available at* [http://www.cyanidecode.org/pdf/15\\_ICMITransportSummaryAuditForm.pdf](http://www.cyanidecode.org/pdf/15_ICMITransportSummaryAuditForm.pdf).

<sup>59</sup>The Code, *supra* note 21, at 5.

<sup>60</sup>*Id.*

<sup>61</sup>*Id.*

<sup>62</sup>*See* ICMI, By-Laws, *available at* [http://www.cyanidecode.org/who\\_bylaws.php](http://www.cyanidecode.org/who_bylaws.php).

<sup>63</sup>*See* [http://www.cyanidecode.org/who\\_governance.php](http://www.cyanidecode.org/who_governance.php).

<sup>64</sup>*Id.*

<sup>65</sup>*Id.*

## [2] Code Signatories

Code signatories commit to follow the Code’s Principles and Standards of Practice and agree to be audited within three years of signing the Code or lose signatory status.<sup>66</sup> By applying for signatory status, the signatory agrees to provide the ICMI with current information about the operations for which certification is sought and agrees to participate in and be bound by the Code’s Dispute Resolution Procedure.<sup>67</sup>

## [3] Code Verification and Certification

Verifications are conducted every three years by independent, third-party professionals who meet the ICMI’s criteria for auditors.<sup>68</sup> Auditors use the Code’s Verification Protocols which contain the criteria for all audits.<sup>69</sup> Operations seeking certification must provide all relevant data to the auditors, including the complete findings of their most recent Code Verification Audit.<sup>70</sup> Following completion of the audit, the auditors must review the audit findings with the operation for factual accuracy and make necessary changes.<sup>71</sup> Detailed Audit Findings Reports—

- address the criteria in the relevant Verification Protocol;
- are provided to the audited operation, the signatory, and the ICMI;
- are the confidential property of the operation and will not be released by the ICMI without the express written consent of the signatory and audited operation.<sup>72</sup>

Summary Audit Reports—

- include the conclusion regarding the operation’s compliance with the Code;

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<sup>66</sup>The Code, *supra* note 21, at 6.

<sup>67</sup>See *supra* § 22.03[6][a], and *infra* § 22.05[2].

<sup>68</sup>The Code, *supra* note 21, at 6. See also *supra* § 22.03[6][b] & [c].

<sup>69</sup>The Code, *supra* note 21, at 6. See also *supra* § 22.03[6][b], [e] & [f].

<sup>70</sup>The Code, *supra* note 21, at 6.

<sup>71</sup>*Id.*

<sup>72</sup>*Id.*

- will be posted for public viewing on the ICMI’s website, along with any comments of the audited operation.<sup>73</sup>

#### **[4] Substantial Compliance, Conditional Certification, and Action Plans**

Operations in “substantial compliance” with the Code are “conditionally certified,” subject to successful completion of an Action Plan.<sup>74</sup> Substantial compliance means “the operation has made a good-faith effort to comply with the Code and that the deficiencies identified by the auditor can be readily corrected and do not present an immediate or substantial risk to employee or community health or the environment.”<sup>75</sup> Operations in substantial compliance must develop and implement an Action Plan to correct the identified deficiencies within one year from the date of the audit.<sup>76</sup> Auditors must submit the Action Plan, along with the Audit Findings Report and the Summary Audit Report to the ICMI which, in turn, will post the Action Plan and Summary Audit Report on the ICMI website for public viewing.<sup>77</sup> Gold mining operations not yet active, but sufficiently advanced in planning and design, can request “pre-operational” conditional certification, based on the auditor’s review of site plans and proposed operating procedures.<sup>78</sup> Within one year of first receiving cyanide, an on-site audit must confirm that the operation has been constructed and is being operated in compliance with the Code.<sup>79</sup>

#### **[5] Certification Maintenance**

To maintain certification, an operation must meet all of the following conditions—

- the auditor must conclude that the operation is either in full or substantial compliance with the Code;

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<sup>73</sup> *Id.* See also *supra* § 22.03[6][g].

<sup>74</sup> The Code, *supra* note 21, at 7.

<sup>75</sup> *Id.*

<sup>76</sup> *Id.*

<sup>77</sup> *Id.*

<sup>78</sup> *Id.*

<sup>79</sup> *Id.*

- an operation in substantial compliance must have submitted an Action Plan to correct its deficiencies and must implement the Action Plan in the agreed-upon time;
- no verified evidence of non-compliance with the Code must exist;
- a verification audit must have been conducted within three years; and
- a verification audit must be conducted within two years of a change in ownership, i.e., a “change of the controlling interest of the operating company.”<sup>80</sup>

### § 22.05 Auditor Criteria and Dispute Resolution

In addition to the Code’s Principles and Standards of Practice, central to the implementation of the Code are its Auditor Criteria for independent third-party auditors and its Dispute Resolution Procedure.<sup>81</sup>

#### [1] Auditor Criteria

All auditors other than the lead auditor must have a minimum of three years experience with the type of operation being audited, and at least one auditor must have seven years of such experience.<sup>82</sup> All auditors must have participated in at least three environmental, safety, and/or health audits, assessments, inspections, or reviews in the seven years prior to the audit.<sup>83</sup> The lead auditor must have organized and/or directed at least three environmental, health, or safety audits in the seven years prior to the Code audit.<sup>84</sup> The lead auditor must be certified as a professional auditor by a self-regulating professional organization.<sup>85</sup> Such certification must be as an environmental, health, or safety auditor or environmental, health, or safety management systems auditor at any

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<sup>80</sup> *Id.* at 8.

<sup>81</sup> See generally Auditor Criteria, at [http://www.cyanidecode.org/pdf/7\\_AuditorCriteria.pdf](http://www.cyanidecode.org/pdf/7_AuditorCriteria.pdf), and Dispute Resolution Procedures at [http://www.cyanidecode.org/pdf/Dispute\\_Resolution\\_Procedure.pdf](http://www.cyanidecode.org/pdf/Dispute_Resolution_Procedure.pdf).

<sup>82</sup> See Auditor Criteria, *supra* note 81, at 1.

<sup>83</sup> *Id.* at 2.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* at 3.

grade or level other than an entry or provisional level.<sup>86</sup> Self-regulatory certifying professional organizations must have the following attributes—

- a code of ethics;
- a process for revocation of certification;
- education and experience/expertise requirements for initial certification; and
- continuing professional development, education, or experience requirements for maintenance of certification.<sup>87</sup>

Auditors cannot audit any aspect of an operation's cyanide management system that the auditor's company was primarily responsible for designing or developing.<sup>88</sup> No audit or audit company can conduct a Code Verification audit of an operation more than twice consecutively.<sup>89</sup> No auditor can have been an employee of the operation or its parent company for one year prior to the audit.<sup>90</sup> No auditor or audit company can derive more than 30% of its income (as an average over the five-year period prior to the year of the audit) from the operator being audited, its parent corporation, and other subsidiaries of the parent corporation.<sup>91</sup> Operations seeking certification must ensure that the auditors selected meet the Code's Auditor Criteria.<sup>92</sup> Selected auditors must provide information to the ICMI on an Auditor Credentials Form demonstrating that they meet these criteria.<sup>93</sup> The Auditor Credentials Form will be included with the Summary Audit Report for each certified operation and will be posted on the ICMI site for public review.<sup>94</sup>

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<sup>86</sup> *Id.*

<sup>87</sup> *Id.*

<sup>88</sup> *Id.* at 4.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> *Id.*

<sup>92</sup> *Id.* at 1. *See also supra* § 22.03[6][c].

<sup>93</sup> Auditor Criteria, *supra* note 81, at 1.

<sup>94</sup> *Id.*

## [2] Dispute Resolution<sup>95</sup>

The Code’s Dispute Resolution Procedure is designed to be used in disputes involving—

- auditor credentials;
- audit findings; and
- certification and/or decertification of operations.<sup>96</sup>

The Procedure is a three-tier process consisting of—

- informal reconsideration;
- non-binding mediation; and
- binding arbitration.<sup>97</sup>

Complainants must meet broad minimum requirements for standing, meaning that a complainant must be an individual or group that may be affected by implementation of the Code that can present evidence that the Code has been implemented incorrectly, erroneously, or in a manner inconsistent with the Code’s intent, goals, procedures, and/or limitations.<sup>98</sup> Parties to the Procedure, in addition to the complainant and respondent will also include—

- the ICMI;
- the gold mining operation, cyanide production facility, or cyanide transporter involved, if the dispute involves a certification issue; and
- the lead auditor, if the dispute involves the ICMI’s granting or denial of auditor credentials or the findings of a Code Verification Audit.<sup>99</sup>

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<sup>95</sup> Dispute Resolution Procedure, *supra* note 81.

<sup>96</sup> *Id.* at 1.

<sup>97</sup> *Id.*

<sup>98</sup> *Id.* Informal resolution is open to “any individual or group without limit in order to ensure that all information and issues potentially related to an operation’s compliance with the Code can be identified and fully evaluated.” *Id.* at 5 n.1. Non-binding mediation and binding arbitration are available to any qualified “stakeholder,” defined to mean an “individual or group that may be affected by implementation of the Code and that can present evidence that the Code has been implemented incorrectly or erroneously or in a manner inconsistent with its stated intent, goals, procedures and/or limitations.” *Id.* at 8.

<sup>99</sup> *Id.* at 3-4.

All parties to the Procedure “agree that its outcome is final and agree to be bound by that outcome.”<sup>100</sup> Recognizing that there is a need for a level playing field for these various parties, the Dispute Resolution Procedure mandates that all parties owe to one another a Duty of Reasonable Cooperation.<sup>101</sup>

## § 22.06 The Code’s Prospects For Success

### [1] The Code Is Still in Its Infancy

In November 2005 when the ICMI announced the initial signatories to the Code, Mineweb.com reported “A quiet revolution was publicly unveiled . . . that—with a little luck—will spread throughout the international gold mining sector.”<sup>102</sup> As of the end of June 2006, 24 companies have become code signatories, including 13 gold producers (representing about 35% of the world’s gold production), seven cyanide producers, and four cyanide transporters. Signatory companies cover more than 90 operations on five continents.<sup>103</sup> Over the next few years, as operations are audited, the true success of the Code will be determined. The ICMI is already beginning to receive audit reports. ICMI expects at least 90 audit reports by the end of 2008. It is expected that banks and international financial institutions may eventually incorporate mandatory implementation of the Code into the gold mining loans they make. It is also understood that several governments are looking at the Code with a view toward incorporating some or all of its requirements into current or future statutes and regulations.

### [2] An Important Step Forward

In sum, the Code represents an important effort by the modern gold mining industry to adhere voluntarily to industry best practices in the management of cyanide. The Code is a living document, and there is every expectation that it will evolve as best practices develop and new or additional issues involving cyanide use in gold mining are identified. The Code represents a significant advancement in the self-regulation of the global gold industry. The Code is not perfect; it does not address every potential

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<sup>100</sup> *Id.* at 2.

<sup>101</sup> *Id.* at 17.

<sup>102</sup> Dorothy Kosich, Cyanide Management Code is Just the Beginning (Mineweb.com, Nov. 4, 2005) available at [http://www.ecologyasia.com/news-archives/2005/nov-05/mw\\_051104\\_1.htm](http://www.ecologyasia.com/news-archives/2005/nov-05/mw_051104_1.htm).

<sup>103</sup> See Code Signatories, available at <http://www.cyanidecode.org/signatorycompanies.php>.

health and environmental issue related to mining, nor even to the use of cyanide. However, it will be reviewed annually to identify any substantive or administrative deficiencies, and it will be revised as necessary. Prior to any expansion of the Code's scope, however, it will be necessary to have the Code, as it currently exists, implemented around the world. The drafters of the Code realized at the outset that no Code or set of practices can guarantee that incidents cannot or will not occur. Nonetheless this Code for cyanide management is an important tool for the industry and its partners in the ongoing effort to minimize both the likelihood and the impact of such incidents in the future. Designed to be sufficiently flexible to allow its implementation around the world in countries with varying social settings and environments, the greatest measure of the Code's success will be the scope of its adoption by industry. The goal now for industry is to achieve widespread adoption of the Code, by large and small operators, around the globe. With the Code's broad implementation, we should expect to see fewer cyanide incidents, and should one occur, we will see improved responsiveness and less impact. Producing the Code showed that the industry, working together with a broad range of interested parties, could develop a consensus on common issues. The Code marks a new era for the gold mining industry in terms of its use of independent third-party auditors, its commitment to the public disclosure of information, and its expectation that all gold mines around the world should be able to demonstrate that they manage cyanide in a safe and environmentally sound manner.