CRAFT 2.0
Code Volume 2B
Requirements for ASM Mineral Producers
Commodity-specific Requirements

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Official version: English

CRAFT 2.0 supersedes the CRAFT 1.0 (July 31, 2018) after the second round of public consultation

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1 In the case of inconsistency between versions, reference defaults to the official language version: English, version number 2.0.
## CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>3</td>
</tr>
<tr>
<td>1. Gold: Specific requirements</td>
<td>5</td>
</tr>
<tr>
<td>MODULE 1: ADOPTING A MANAGEMENT SYSTEM</td>
<td>5</td>
</tr>
<tr>
<td>MODULE 5: “NON-ANNEX II” HIGH RISKS REQUIRING IMPROVEMENT</td>
<td>6</td>
</tr>
<tr>
<td>1.1 Human and Workers’ Rights</td>
<td>6</td>
</tr>
<tr>
<td>2. Tin, Tantalum, Tungsten (3T): Specific requirements</td>
<td>10</td>
</tr>
<tr>
<td>MODULE 5: “NON-ANNEX II” HIGH RISKS REQUIRING IMPROVEMENT</td>
<td>10</td>
</tr>
<tr>
<td>2.1 Human and Workers’ Rights</td>
<td>10</td>
</tr>
<tr>
<td>3. Cobalt: Specific requirements</td>
<td>13</td>
</tr>
<tr>
<td>MODULE 5: “NON-ANNEX II” HIGH RISKS REQUIRING IMPROVEMENT</td>
<td>13</td>
</tr>
<tr>
<td>3.1 Human and Workers’ Rights</td>
<td>13</td>
</tr>
<tr>
<td>4. Coloured Gemstones: Specific requirements</td>
<td>16</td>
</tr>
</tbody>
</table>
INTRODUCTION

The CRAFT Code consists of three indivisible volumes. Volume 1 contains the description of the purpose, logic and principles of CRAFT, its scope and terminology. Volume 2 assumes that users are familiar on how to apply CRAFT in alignment with Volume 1.

Volume 2A contains all commodity-independent requirements for ASM Mineral Producers (AMPs). Requirements for AMPs that apply only for certain commodities are contained in this Volume 2B. Beyond improved readability and clarity of applicable requirements\(^2\), this separation has no further implication at all. Volume 2B is the continuation of Volume 2A and both together conform the Volume 2.

Background information, further comments, explanatory notes and suggested tools are contained in Volume 4 (Guidance Book).

\(^2\) e.g. Gold miners do not have to read the requirements for cobalt and tantalum miners and vice versa. It eliminates the need for AMPs to evaluate if a requirement applies or not (e.g. in exaggerated terms: gemstone miners wondering why they should reduce mercury?).
SPECIFIC REQUIREMENTS OF MINERAL PRODUCTS

01
Requirements specific for gold

02
Requirements specific for tin, tantalum and tungsten (3T)

03
Requirements specific for cobalt

04
Requirements specific for precious stones
1. GOLD: SPECIFIC REQUIREMENTS

In addition to the commodity-independent requirements in Volume 2A the following commodity-specific requirements apply for all AMPs producing gold as main- or by-product.

MODULE 1: ADOPTING A MANAGEMENT SYSTEM

The AMP declares that it is committed to support the Minamata Convention on Mercury and to “reduce, and where feasible eliminate, the use of mercury”, as required by the Convention.

Criteria: The AMP declares (in the CRAFT Report or a separate statement) its commitment to “reduce, and where feasible eliminate, the use of mercury”, as required by the Minamata Convention.
MODULE 5: “NON-ANNEX II”
HIGH RISKS REQUIRING IMPROVEMENT

1.1 HUMAN AND WORKERS’ RIGHTS

**M.5/1.3.11/S.1.1**
(Addresses Minamata Convention, Annex C, par.1 (b) (i))

1. Category: Human and Workers’ Rights
1.3 Issue: Occupational Health & Safety
1.3.11 Sub-Issue: Mercury Use & Production

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**The AMP takes steps towards elimination of whole ore amalgamation.**

**Risk**

The entire mined ore (alluvial sediments or hard rock mineral) is amalgamated without any pre-concentration ("whole ore amalgamation").

**Controlled**

The AMP does not use whole ore amalgamation. All mined ore is pre-concentrated (using hand sorting, gravimetric concentration, flotation or other methods) and, if amalgamation is needed, only the concentrate is amalgamated.

**Progressing**

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**Improvement:** The AMP has a technical improvement plan in place and implements it, by assessing appropriate mineral concentration methods, implementing these methods in its domestic and industrial mineral processing plant(s), and making them mandatory for all members.

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**Controlled**

The AMP does not use mercury.
The AMP takes steps towards elimination of open burning of amalgam or processed amalgam.

Risk

Amalgam burning is done without the use of any kind of mercury recovery device.

Controlled

Open burning of amalgam does not take place. Amalgam burning is only done in retorts or under fume hoods equipped with mercury capturing devices.

-- or --

The AMP does not use mercury.

Progressing

Improvement: The AMP has a technical improvement plan in place and implements it, by raising awareness of mercury-related health hazards, making mercury recovery devices available and accessible to individual members (miners and aggregators), and making their use mandatory.
The AMP takes steps towards elimination of amalgam burning in residential areas.

- **Risk**: Amalgam burning takes place in residential areas such as in the homes of miners or typical downtown gold shops.

- **Controlled**: Amalgam burning is done in dedicated areas only, never inside homes or near residential areas. -- or --
  The AMP does not use mercury.

- **Improvement**: The AMP has a technical improvement plan in place and implements it, by making miners and their families aware of the health hazards of mercury and avoiding amalgam burning at home, and relocating aggregators of the AMP (gold shops) to dedicated areas non-adjacent to residential areas, food markets, or restaurants.
The AMP takes steps towards elimination of the practice of cyanide leaching in sediments, ore, or tailings to which mercury had been added, without first removing the mercury.

Risk

Amalgamation tailings (from alluvial sediments or hard rock ore) are, without any pre-treatment to remove mercury, processed in cyanide leaching plants. This also applies for amalgamated pre-concentrates (where whole ore amalgamation has already been eliminated).

Controlled

Materials to leach (sediments, ore or tailings) do not originate from preceding amalgamation processes where mercury had been added.
-- or --
The AMP does not apply cyanide leaching.

Progressing

Improvement: Materials to leach (sediments, ore or tailings) are pre-processed before leaching, in order to first removing the mercury.
2. TIN, TANTALUM, TUNGSTEN (3T): SPECIFIC REQUIREMENTS

In addition to the commodity-independent requirements in Volume 2A the following commodity-specific requirements apply for all AMPs producing tantalum as main- or by-product.

MODULE 5: “NON-ANNEX II”
HIGH RISKS REQUIRING IMPROVEMENT

2.1 HUMAN AND WORKERS’ RIGHTS
Tantalum ores (Coltan) may contain traces of radioactive elements, namely uranium, thorium and radium that can affect the health of Miners engaged in their extraction, processing or transport.

The content of radioactive elements in the tantalum ore (Coltan) is insignificant.

-- or --

Miners are aware of the risk and, if exposed to Coltan more often than occasionally, use dust masks at the workplace, and wash body and change clothes before leaving the workplace.

Improvement: If the tantalum ore (Coltan) contains radioactive elements in a concentration that is considered a health hazard, the AMP informs its Members about health risks, and an improvement plan to mitigate the risk of acute occupational radiation exposure, especially by Coltan particles, is being developed and implemented.

³See definition in Volume 1: The term Miner includes all men and women involved in mineral extraction, selection, processing or transportation from primary or secondary deposits, dumps and tailings. mercury?).
Applies to Tantalum: The AMP takes steps to minimize the exposure of residential areas to radioactive emissions from tantalum ore (Coltan) and concentrates.

Risk

Tantalum ores (Coltan) may contain traces of radioactive elements, namely uranium, thorium and radium that can affect the health of Miner’s families if mined products are stored in their homes.

Controlled

The content of radioactive elements in the tantalum ore (Coltan) is insignificant.

-- or --

Miners are aware of the risk and avoid stockage of mineral bags in homes.

Progressing

Improvement: If the tantalum ore (Coltan) contains radioactive elements in a concentration that is considered a health hazard, the AMP informs its Members about health risks, and an improvement plan to mitigate long-term radiation exposure, especially from storing ore or concentrate in homes and residential areas, is being developed and implemented.
3. COBALT: SPECIFIC REQUIREMENTS

In addition to the commodity-independent requirements in Volume 2A the following commodity-specific requirements apply for all AMPs producing cobalt as main- or by-product.

MODULE 5: “NON-ANNEX II”
HIGH RISKS REQUIRING IMPROVEMENT

3.1 HUMAN AND WORKERS’ RIGHTS
The AMP takes steps to minimize the exposure of Miners\(^4\) to cobalt and traces of other potentially harmful chemical elements contained in the ore.

Risk

Excessive exposure to cobalt may cause various adverse health effects. Additionally, cobalt ores may contain traces of other potentially toxic or radioactive elements. This can affect the health of Miners engaged in their extraction, processing or transport.

Controlled

Miners are aware of the risk and, if exposed to cobalt ore or concentrate more often than occasionally, use dust masks at the workplace, and wash body and change clothes before leaving their workplace.

Progressing

**Improvement:** The AMP has obtained information on the chemical characteristics of its ore and informs its Members about health risks. An improvement plan to mitigate the risk of occupational poisoning or radiation exposure, especially by dust particles of cobalt ore, is being developed and implemented.

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\(^4\) See definition in Volume 1: The term Miner includes all men and women involved in mineral extraction, selection, processing or transportation from primary or secondary deposits, dumps and tailings.
The AMP takes steps to minimize the exposure of residential areas to cobalt and traces of other potentially harmful chemical elements contained in the ore.

**Risk**

Excessive exposure to cobalt may cause various adverse health effects. Additionally, cobalt ores may contain traces of other potentially toxic or radioactive elements. This can affect the health of Miner’s families if mined products are stored in their homes.

**Controlled**

Miners are aware of the risk and do not store mineral bags in homes and loading and transport is done in a safe way.

**Improvement:** The AMP has obtained information on the chemical characteristics of its ore and informs its Members about health risks. An improvement plan to mitigate the risk of contaminating homes, residential areas and along transportation routes is being developed and implemented.
4. COLOURED GEMSTONES: SPECIFIC REQUIREMENTS

All commodity-independent requirements in Volume 2A apply. No commodity-specific requirements apply.