ICMI Cyanide Code Gold Mining Recertification Audit

Corrective Action Plan

Jacobina Mineração e Comércio Ltda
Jacobina mine

Bahia, Brazil

Submitted to:
The International Cyanide Management Institute
1400 I Street, NW – Suite 550
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2025 Audit Cycle

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CORRECTIVE ACTION PLAN FOR JACOBINA MINE

1. Introduction

One of the components of the International Cyanide Management Code (ICMC) is the development of a Corrective Action Plan (CAP) for those parts of the audit findings that have been found to be in substantial compliance or non-compliance and require focused responses to take the site to full compliance.

ICMC requirements indicate that full implementation of the Corrective Action Plan and adequate notification to the ICMI (International Cyanide Management Institute) must be completed within one year of the posting on the Cyanide Code website of the Summary Audit Report of an operation found in Substantial Compliance.

The sections below detail the corrective actions, agreed by the Jacobina Mineração e Comércio Ltda (JMC) and the Lead Auditor, necessary to bring JMC into full compliance, as indicated in the Detailed Audit Findings Report (DAFR) and the Summary Audit Report (SAR).

2. Corrective Action Plan

Standard of Practice 4.3: Implement a comprehensive water management program to protect against unintentional releases.

This Standard of Practice was found to be in substantial compliance for JMC.

4.3(1) Has the operation developed a comprehensive, probabilistic water balance model?

Deficiency

JMC manages the TSF water balance using an Excel spreadsheet that considers the following factors: tailings production; tailings deposition rates; precipitation, evaporation and seepage rates; and freshwater input. JMC has zero process water

discharges to surface waters. This water balance spreadsheet is sent to external consultant GWS periodically for review and calibration, with frequencies that vary between monthly, quarterly and biannually. The water balance is calibrated by using real precipitation data and tailings deposition.

During the field audit it was unclear whether GWS uses a comprehensive and probabilistic water balance model to review and calibrate JMC water balance data to meet Code requirements. During preparation of the audit report, JMC sent evidence that the site is planning to acquire and implement a Goldsim water balance model, which has probabilistic features. The implementation of the water balance model will start in Q1 2026 and will take at least 6 months, which exceeds the submission timeline of this report. As such, this item has been included in a Corrective Action Plan (CAP) for the site.

Corrective Action

JMC needs to provide evidence that the Goldsim water balance model has been implemented and that the site is using it for operational management decisions.

JMC needs to provide the following evidence for completion of the corrective action plan:

- Report on implementation of the Goldsim model.
- Screenshots of the Goldsim water balande model showing that it is being used at the site for operational purposes

This corrective action should be closed by August 31st, 2026.

Standard of Practice 4.4: Implement measures to protect birds, other wildlife and livestock from adverse effects of cyanide process solutions.

This Standard of Practice was found to be in substantial compliance for JMC.

4.4(2) Can the operation demonstrate that the cyanide concentration in open water in Tailings Storage Facilities, leach facilities and ponds does not exceed 50 mg/l WAD cyanide?

Deficiency

JMC analyzes free cyanide daily at the last CIP tank before the tails are sent to the TSF. No sampling is conducted at the spigots due to safety reasons to reach the sampling points. Therefore, the last CIP tank is considered the compliance sampling point for the cyanide chemistry at discharge to the TSF.

During the field visit, the auditors reviewed the free cyanide concentrations in the last CIP tank for the recertification period. Average free cyanide values for the recertification period were 85 mg/l, while maximum free cyanide values reached levels of 141 mg/l. Considering a factor of 1.1 as the relation between free and WAD cyanide, based on Jacobina operational history, it is observed that the cyanide present in the operation occurs predominantly in the free form, accounting for at least 80% of the total cyanide. This characteristic indicates the absence, or only a negligible presence, of iron or other complex agents capable of forming complex cyanide species. As a result, WAD cyanide concentrations are generally above 50 mg/L. At the time of the recertification audit, JMC production process does not include a system to destroy or lower cyanide concentrations in the tailings slurry that are sent to the TSF. In addition, JMC has not established a target of WAD cyanide concentration in the tailings discharged to the TSF.

Corrective Action

JMC to provide evidence that it has implemented controls to ensure that wildlife are not exposed to WAD cyanide concentration greater than 50 mg/l in a consistent manner.

JMC needs to provide the following evidence for completion of the corrective action plan:

- Document the mechanisms or processes that have been implemented by JCM that demonstrate that the cyanide concentration in open water in tailings storage facilities does not exceed 50 mg/l WAD cyanide concentration. Alternatively, JCM demonstrate the use of alternative methods to meet Standard of Practice 4.4 presenting the scientific rationale for the lack of mortality at a cyanide concentration that would otherwise be toxic.
- Daily monitoring data for a period of 3 months showing that the WAD cyanide concentrations are mantained below 50 mg/l in the tailings storage facility in a consistent manner.
- Procedure documenting the established target of WAD cyanide concentration in the tailings discharged to the TSF.

This corrective action should be closed one year after publication of JMC Summary Audit Report on the ICMI website.