

Attachment A

Corrective Action Plan

International Cyanide Management Code Mining Operation Recertification Audit

Report Prepared for

Western Mesquite Mines, Inc

6502 E. U.S. Highway 78
Brawley, California 92227



Report Prepared by



SRK Consulting (U.S.), Inc.

SRK Project 343600.020

June 17, 2021

Western Mesquite Mines, Inc. International Cyanide Management Code Recertification Detailed Audit Report

Client Name

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Western Mesquite Mines, Inc.

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Signature of Lead Auditor

June 17, 2021

Date

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1.0 Operational Information

Mine Operations: Mesquite Mine
Mine Owner: Equinox Gold Corp.
Name of Operator: Western Mesquite Mines Inc.
Name of Responsible Manager: Bill Martinich
Address and Contact information: Western Mesquite Mines, Inc.
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2.0 Background

The Mesquite Mine is an open pit, heap leach operation owned by Equinox Gold Corp ("Equinox"). Equinox's wholly owned subsidiary, Western Mesquite Mines, Inc. ("WMMI") holds a 100% interest in the property and operates the mine. The Mesquite Mine was first certified under the International Cyanide Management Code ("ICMC" or "Code") in October 2011 and was recertified in February 2015 and May 2018.

The 2020 ICMI audit determined that WMMI was conditionally certified under the International Cyanide Management Code. An operation is conditionally certified when the auditors determine that the operation is in **substantial compliance** with the Code. The conditional certification is subject to the operation implementing a Corrective Action Plan ("CAP") that brings it into full compliance with the Code. The operation must fully implement the CAP and notify the International Cyanide Management Institute ("ICMI") within one year of the ICMI posting the conditional certification on its website.

As described in the detailed and summary audit reports prepared for this ICMC verification audit, the auditors determined a finding of substantial compliance for four (4) ICMC Standards of Practice. In response to the deficiencies identified, SRK Consulting, U.S., Inc. ("SRK") developed this CAP, which details the actions necessary to bring the operation into full compliance with the Code.

The previous ICMC audits; 2011, 2015, and 2018 determined that the Gold Plant as a non-ICMC facility, as supported by analytical data from WMMI carbon. At the time of the 2020 ICMC recertification audit, the site was processing carbon from the Castle Mountain project. This began in October 2020, and subsequent analytical data for the Castle Mountain carbon was above the ICMI threshold for cyanide facilities, based on this the Gold Plant is now a cyanide facility. The auditors determined that the Gold Plant did not meet Code requirements for full certification and requires corrective actions. The corrective actions are outlined in the following sections.

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3.0 Corrective Action Requests

3.1 WMMI-ICMC-CAR-01: Standard of Practices 4.1 ICMC Protocol Questions: 4.1.1, 4.1.2, 4.1.3, 4.1.6, 4.1.7b, 4.1.7d, 4.1.8, & 4.1.9

Description of the Deficiency

Previous ICMC audits determined the Gold Plant was a non-ICMC facility and based on operational modifications; processing carbon from the Castle Mountain Project that is above the ICMI threshold for cyanide facilities, the Gold Plant is a cyanide facility.

Written management and operating plans, to comply with the ICMC, for the safe and environmentally sound operation of the facility, including preventative maintenance and inspections were not available for review. In addition, inspections of pipes, pumps, secondary containment for deterioration, etc., were not available for review.

Corrective Actions Required

To achieve full compliance under this Standard of Practice (SP), WMMI must complete the following corrective actions (CA):

- SP 4.1.1** Develop and implement written management plans, operating plans and/or procedures for the Gold Plant that comply with the ICMC requirements of this protocol question.
- SP 4.1.2** Plans and procedures developed in response to SP 4.1.1 must include assumptions and parameters as necessary to prevent or control cyanide release and exposure. The expectation is that only major assumptions and parameters are included such as: acceptable pH ranges, cyanide concentrations, etc.
- SP 4.1.3** The written management plans, operating plans and/or procedures referenced in 4.1.1 above, must include specific measures to comply with the ICMC, such as inspections and preventative maintenance. For example; inspections for various cyanide components such as process tanks and pipelines, containment areas, and sumps.

Inspections (forms/log books) must include the information required in Protocol question 4.1.8.
- SP 4.1.6** Establish inspection and preventative maintenance frequencies sufficient to assure and document that facilities are operating within design parameters.
- SP 4.1.7b** Reference information requested in 4.1.1 and 4.1.3.
- SP 4.1.7d** Reference information requested in 4.1.1 and 4.1.3.
- SP 4.1.8** Inspections, outlined above, must be documented - including the date of the inspection, the name of the inspector, and any observed deficiencies. The

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nature and date of corrective actions must be documented, and records must be maintained.

SP 4.1.9 Develop, implement and document preventative maintenance programs/activities for the Gold Plant that ensure equipment and devices function as necessary for safety cyanide management.

Evidence Required for Verification of Corrective Action Completion

SP 4.1.1 Copies of modified or new written management plans, operating plans and/or procedures addressing the elements requested above. Supporting preventative maintenance records, as applicable, and inspection forms. In addition, training records associated with all new written procedures must be provided.

SP 4.1.2 Plans and procedures developed for SP 4.1.1.

SP 4.1.3 Information required in 4.1.1 **and** completed inspection and maintenance records for a period of not less than 3-months post implementation.

SP 4.1.6 Information provided in 4.1.1 and 4.1.3.

SP 4.1.7b Information provided in 4.1.1 and 4.1.3.

SP 4.1.7d Information provided in 4.1.1 and 4.1.3.

SP 4.1.8 Information provided in 4.1.1, 4.1.3, and records for corrective actions documented during inspections.

SP 4.1.9 Copies of modified or new preventative maintenance programs/activities for the Gold Plant. Provide preventative maintenance records of activities.

**3.2 WMMI-ICMC-CAR-02: Standard of Practice 4.7
ICMC Protocol Questions: 4.7.1, 4.7.2, 4.7.3, & 4.7.5**

Description of the Deficiency

The Gold Plant has a concrete floor with curbing and sumps to capture solution and return it to the process. However, documentation was not available at the time of the field verification audit to determine if the floor provided secondary containment for the largest tank and pipelines draining back. Procedures for handling solutions within the Gold Plant concrete floor (secondary containment) were not available at the time of the field verification. Spill prevention or containment measures for all cyanide process solution pipelines to collect leaks and prevent releases to the environment were unable to be verified at the time of the field verification.

Corrective Actions Required

SP 4.7.1 See CA for SP 4.8.5, site must provide containment calculations for the Gold Plant verifying adequate containment is present. In addition, the engineer must inspect, and verify the integrity of the containment as competent.

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SP 4.7.2 See CA for SP 4.7.1 and 4.8.5

SP 4.7.3 See CA for 4.7.1 and 4.8.5

SP 4.7.5 See CA for SP 4.7.1 and 4.8.5. In addition, the site must evaluate the pipeline from the Gold Plant to the NCIC area and confirm compliance to the ICMC.

Evidence Required for Verification of Corrective Action Completion

SP 4.7.1 Evidence requirements from SP 4.7.1 and SP 4.8.5 to include containment calculations for the Gold Plant and containment competency.

SP 4.7.2 Evidence requirements for SP 4.7.1 and SP 4.8.5

SP 4.7.3 See evidence requirements for 4.7.1 and 4.8.5

SP 4.7.5 Evidence requirements for SP 4.7.1 and SP 4.8.5 to include the Gold Plant to NCIC area review for containment and containment integrity.

**3.3 WMMI-ICMC-CAR-03: Standard of Practice 4.8
ICMC Protocol Questions: 4.8.5**

Description of the Deficiency

The Gold Plant was constructed in approximately 1987 - available design, construction and QA/QC documentation was not available during the verification audit and may no longer exist.

Corrective Actions Required

SP 4.8.5 The site must have an appropriately qualified person, such as a professional engineer registered in the state of California, determine if the facility can continue to be operated in accordance with ICMC requirements.

The inspection must include, at a minimum, visual inspection of all tanks, vessels, pipelines, pumps and associated valves and fittings, concrete and/or steel structures supporting this equipment, and secondary containments of process solution tanks and vessels. The evaluation must determine whether, from a stability and/or containment perspective, as appropriate, this equipment is fit to continue functioning as currently operated. Required containment volumes and adequacy should be determined.

If, in the opinion of the professional engineer, the facility cannot continue to operate, a corrective action plan must be developed and implemented to bring the facility into ICMC compliance, this corrective action plan will be incorporated by reference to this corrective action plan.

Evidence Required for Verification of Corrective Action Completion

SP 4.8.5 Site must provide all correspondence from the qualified person conducting the Gold Plant inspection including at a minimum; inspectors name, affiliation, and qualifications. In addition, the site must submit the inspection protocol,

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inspection summary, inspection findings, inspection conclusion, and corrective actions, as appropriate.

If the inspection results in a corrective action plan to bring the facility into full compliance with ICMC, the site must provide a plan to implement the corrective actions and schedule for completion.

**3.4 WMMI-ICMC-CAR-04; Standard of Practice 6.1
ICMC Protocol Questions: 6.1.2**

Description of the Deficiency

Previous ICMC audits determined the Gold Plant was a non-ICMC facility and based on operational modifications; processing carbon from the Castle Mountain Project that is above the ICMI threshold for cyanide facilities, the Gold Plant is a cyanide facility.

Written management and operating plans, to comply with the ICMC, for the safe and environmentally sound operation of the facility, including preventative maintenance and inspections were not available for review. In addition, inspections of pipes, pumps, secondary containment for deterioration, etc., were not available for review. As such the auditor was not able to determine if they include the use of personal protective equipment and addressed pre-work inspections.

Corrective Actions Required

SP 6.1.2 The development of written management and operating plans outlined in SP 4.1 above, must include the identification, requirements and types of PPE required. In addition, pre-work inspections must also be included as necessary.

Evidence Required for Verification of Corrective Action Completion

SP 6.1.2 Copies of modified or new written management plans, operating plans and/or procedures addressing the elements requested above.

**3.5 WMMI-ICMC-CAR-04; Standard of Practice 6.2
ICMC Protocol Questions: 6.2.2, 6.2.3, 6.2.5, & 6.2.7**

Description of the Deficiency

The Gold Plant is an "open air" facility is well ventilated however, the potential for HCN generation does exist. The site has installed a fixed HCN meter in the acid wash area but has not conducted a risk analysis to determine where or if HCN could be generated (>4.7 ppm/8-hours or 10 ppm/instantaneous) and if additional HCN meters are warranted.

The facility has general signage adequate for a non-cyanide facility, however the cyanide signage is limited and does not meet the ICMC requirements.

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Corrective Actions Required

- SP 6.2.2** The site must conduct a review of the facility to identify potential areas with risk of HCN generation, based on several HCN surveys with portable gauges should be completed and areas with HCN risk to employees identified.
- SP 6.2.3** Surveys in SP 6.2.2 should identify areas that could generate HCN gas levels at 4.7 ppm/8-hour average and 10 ppm/instantaneous.
- SP 6.2.5** Survey and evaluate the Gold Plant for appropriate cyanide signage as required by this ICMC standard of Practice and implement.
- SP 6.2.7** Site must evaluate and verify that the Gold Plant fire extinguishers are dry powder or non-acidic sodium bi-carbonate and available where necessary.

Evidence Required for Verification of Corrective Action Completion

- SP 6.2.2** Copies of all reports, sampling/analytical data, surveys, and conclusions from the HCN surveys.
- SP 6.2.3** Incorporate the HCN criteria under for SP 6.2.3 into the reports for SP 6.2.2.
- SP 6.2.5** Photographs of the signage and site verification.
- SP 6.2.7** Field verification of the Gold Plant fire extinguishers and locations.

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