

TSM Verification Summary Report

Name of company	Yamana Gold
Name of facility	Jacobina
Address	Fazenda Itapicuru, s/n Zona Rural Jacobina – Bahia, Brazil 47.000-000
Country of operation	Brazil
Products/metals produced on site	Gold
Types of operations included in scope:	
Mining	<input checked="" type="checkbox"/>
Concentrate blending	<input type="checkbox"/>
Smelting	<input type="checkbox"/>
Refining	<input type="checkbox"/>
Other (<i>please explain</i>)	
Types of infrastructure included in scope:	
Roads	<input type="checkbox"/>
Rails	<input type="checkbox"/>
Ports	<input type="checkbox"/>
Other (<i>please explain</i>)	



Verifier and Verification Information

Verification firms	Borealis Environmental Consulting Inc., RDZ Consulting, Cedar Water Strategy
Confirmation that all verifiers involved in the verification are accredited TSM verifiers	(Yes or No) Yes (see https://mining.ca/wp-content/uploads/dlm_uploads/2021/07/2021-July-VSP-Contact-List.pdf)
Date(s) of verification activities (dd/mm/yyyy – dd/mm/yyyy)	15/09/2022 - 16/01/2023
Verification period	2019-2022
Summary of the verification methodology	<p>Original scope and conduct of the verification was as follows:</p> <ol style="list-style-type: none"> 1) kick-off meeting to initiate the verification and develop consensus regarding the process, communication and deliverables (<i>corporate staff and verifiers</i>); 2) initial review of the company's self-assessment scores, and the basis for these scores (use of company-completed evaluation spreadsheets, which include: self-assessed score; rationale for score; and, links to documentary evidence on a shared drive) (<i>verifiers</i>); 3) protocol-specific desktop reviews and evaluations of documentary evidence (against protocols) provided by corporate and site staff (<i>verifiers</i>); 4) virtual interviews (protocol-specific) with corporate and site staff, as appropriate, conducted to follow up on, and clarify, aspects of the review of documentary evidence (<i>verifiers</i>); 5) Community of Interest (COI) interviews conducted to determine alignment between stakeholders and site/company (<i>verifiers</i>); 6) following the interviews with corporate and site staff, outstanding documentary evidence provided to verifiers (<i>company staff, both corporate and site</i>); 7) comprehensive evaluation of all protocol-specific documentation reviewed against TSM protocol elements to determine scores (<i>verifiers</i>); 8) scores provided to the company to ensure accuracy of the basis of the evaluation (<i>verifiers</i>); and, 9) assemble findings, prepare draft report (including review by the company), and submission of final verification results to the company and the Mining Association of Canada (MAC) (<i>verifiers</i>). <p>NOTE: Tailings Management Protocol out of scope for this team of verifiers.</p>
Summary of the verification activities	<p>Verification activities were modified, as follows:</p> <p>There were several (up to three, depending on protocol) iterations of items 4, 6, 7 and 8 – listed above - to help clarify documentary</p>



	evidence (or lack thereof), in particular, for those protocol elements for which verifier scores did not align with company scores.
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Summary of Findings

Criterion Protocol/Indicator	Rating C, B, A, AA or AAA <i>(unless otherwise indicated)</i>	Gap to next level above and Comments
Indigenous and Community Relationships		
1. Community of Interest (COI) Identification	AA	Evidence in support of all three requirements not sufficient or not provided.
2. Effective COI Engagement and Dialogue	AA	No evidence provided for AAA requirements.
3. Effective Indigenous Engagement and Dialogue	A	No evidence provided for AA requirements..
4. Community Impact and Benefit Management	AA	No evidence provided for AAA requirements.
5. COI Response Mechanism	A	No evidence provided for AA requirements.

Safety and Health		
1. Commitments and Accountability	AA	External (third-party) audit that covers all criteria in the protocol and provides a verified rating for each indicator in the protocol.
2. Planning and Implementation	AA	Similar to Indicator 1.
3. Training, Behaviour and Culture	AAA	Maintenance of training and behavioral programs in place and measure results.
4. Monitoring and Reporting	A	Internal audit (e.g., ISO 45001 audit) that provides a confirmation of meeting the requirements of level A for this indicator.
5. Performance	A	Benchmarking evaluation related to site safety and health performance against peers.



Crisis Management and Communications Planning (Indicate YES or NO)		
1. Crisis Management and Communications Preparedness	Yes	
2. Review	Yes	
3. Training	Yes	

Preventing of Child and Forced Labour (Indicate YES or NO)		
1. Preventing Forced Labour	Yes	
2. Preventing Child Labour	Yes	

Energy and GHG Management		
1. Energy use and Greenhouse Gas Emissions Management Systems	A	Evidence that energy use and GHG emissions are considered in business planning (show proof that Thorn Assessment and recommendations are being implemented).
2. Energy use and Greenhouse Gas Emissions Reporting Systems	A	Public reporting of performance objectives and Energy and GHG reductions targets at the site level (based on Corporate targets).
3. Energy use and Greenhouse Gas Emissions Performance Targets	A	Emissions performance targets for three of the past four years, to meet Jacobina energy use and GHG reductions.

Biodiversity Conservation Management		
1. Corporate biodiversity conservation commitment, accountability, and communications	A	No evidence provided for AA requirements.
2. Biodiversity conservation planning and implementation	B	Evidence of an assessment of facility-level baseline data and, where available, local ecological knowledge.
3. Biodiversity conservation reporting	A	Evidence that public reporting on facility's biodiversity conservation has been subject to independent verification/review (internal or external) within the last three (3) years.






Tailings Management		
1. Tailings management policy and commitment	N/A	This protocol verified under separate cover.
2. Tailings management system and emergency preparedness	N/A	This protocol verified under separate cover.
3. Assigned accountability and responsibility for tailings management	N/A	This protocol verified under separate cover.
4. Annual tailings management review	N/A	This protocol verified under separate cover.
5. Operation, maintenance, and surveillance	N/A	This protocol verified under separate cover.

Water Stewardship		
1. Water Governance	A	Internal audit to determine alignment against TSM Water Stewardship Framework, ensure commitments distributed to employees and responsibilities assigned.
2. Operational Water Management	A	Water balance calculations for new permit requirements (including closure) to consider a climate change assessment criterion, even if impacts will be minor in the area.
3. Watershed-scale Planning	A	Evidence of water-related risks pertaining to COIs, pertaining to other water users in the watershed or even interactions with water authorities in the region.
4. Water Reporting and Performance	A	Report indicating water-related objectives or targets have been met in the reporting year and an independent verification to evaluate the accuracy of public reporting on water.



Statement of Verification

Statement of Verification	
The external verification was conducted in accordance with the <i>Terms of Reference for Verifiers</i> and, accordingly, consisted primarily of interviews, data analysis, and examination (on a sample basis) of other evidence relevant to management's assertion of conformance to the requirements of the TSM performance indicators.	YES The external verification was conducted in accordance with the <i>TSM Verifier Terms of Reference</i> .
The scores indicated in this report are verified as being accurate based on the evidence reviewed during the external verification of this facility.	YES The scores in this report are considered accurate based on this verification.
Limitations	
Additional comments	
Name of lead verifiers	<p>Guy Gilron, MSc, RPBio, ICD.D (Borealis Environmental Consulting Inc.)</p> <p>Fernando Rodriguez, MSc (RDZ Consulting Inc.)</p> <p>Amiel Blajchman, MES, P.Ag. (Cedar Water Strategy)</p>
Date of statement of verification	January 25, 2023
Signatures of lead verifiers	<p>BOREALIS ENVIRONMENTAL CONSULTING INC.</p> <p></p> <p>Guy Gilron, M.Sc., R.P.Bio., ICD.D, Senior Environmental Scientist/Principal</p> <p>RDZ CONSULTING INC</p> <p></p> <p>Fernando Rodriguez, M.Sc. Manager and Principal Consultant</p> <p>CEDAR WATER STRATEGY</p> <p></p> <p>Amiel Blajchman, M.E.S., P.Ag. President</p>