2021 Tailings Management Report





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	Internal Management and Oversight External Oversight and Assurance Risk Management



Sherritt's goal is that its joint venture operates and maintains its tailings management facilities in accordance with global best practices for safety and environmental management. We continually review our facilities and procedures and are committed to pursuing the highest standards at our operations.

Sherritt's tailings management facilities (TMFs) are located at the Moa Nickel Site ("the Site") and are a part of our Moa Joint Venture ("the Moa JV"). The Moa JV is a 50/50 joint venture between Sherritt and the General Nickel Company S.A. of Cuba (GNC) ("our Partner"). Accordingly, while the following reflects Sherritt's approach to tailings management, Sherritt cannot unilaterally control tailings management at the Site. Sherritt remains committed to working with our Partner to advocate that global best practices are followed.

1.0 Governance and Assurance

1.1.1 Internal Management and Oversight

The Sherritt Board of Directors, through its Reserves, Operations and Capital (ROC) Committee, oversees the management of Environment, Health, Safety and Sustainability, which includes the implementation of our Sustainability Framework and tailings standard, policies, systems, performance and auditing functions. Assurance activities associated with tailings management are also conducted through the Sherritt Board Audit Committee. In 2021, changes to the Committee structures were implemented to consolidate Board committees and more clearly include review of Environment, Social and Governance (ESG) matters including tailings and address future assurance of tailings disclosures.

In addition to the oversight provided by Sherritt's ROC and Audit Committees, Sherritt's Chief Commercial Officer (CCO), Chief Financial Officer (CFO) and Senior Vice President (SVP) Metals report directly to the President and CEO and have responsibilities for sustainability, health and safety, environment, community, and tailings management.

Additionally, the Moa JV Chief Operating Officer (COO) chairs regularly scheduled internal tailings review meetings and reports directly to the JV Chief Executive Officer (CEO). Members of the internal tailings review team include members of the Site's senior management team and tailings management subject matter experts from the Moa JV tailings group. The Independent Tailings Review Board (ITRB) provides third-party audit and assurance activities and issues binding recommendations. The Tailings Review Team is responsible for implementing recommendations from the ITRB and other audits and provides updates to management on operations, maintenance, monitoring, and emergencies as applicable.

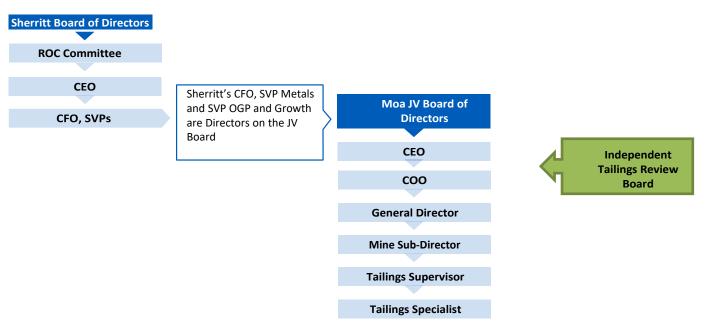


Figure 1: Tailings Management Operating Structure



The mandate of Sherritt's ROC Committee, as it pertains to tailings management, includes the following:

(j) ensure adequate and effective tailings management systems are in in place and utilized and compliance is monitored, (including through external verification on such periodic basis as the Committee considers to be appropriate), and offer advice and/or recommendations to the Board in connection herewith.

A full copy of the ROC Committee's mandate can be found <u>here</u>.

1.1.2 External Oversight and Assurance

The Moa JV has retained an independent Engineer of Record (EOR) to provide oversight and review in tailings management facility (TMF) design, construction, operation and closure planning. The Engineer of Record for the Moa Nickel Site Acid Leach Tailings Facility (ALTF) and area 22 Phase 3 TMFs is Knight Piésold, one of the world's leading mining engineering consulting firms. The EOR for the North Extension Tailing Facility (NETF) is EIPHC, a Cuban company.

The Moa JV is subject to binding recommendations from the ITRB which conducts annual third-party reviews of design, operation, surveillance and maintenance. It also reviews the progress of action items and will propose new action items as needed to meet international guidelines and the best practices available. The ITRB is comprised of experienced subject matter specialists in the areas of geotechnical engineering, hydrogeology and geochemistry. Additionally, during the year, the ITRB's opinion may be solicited for different issues that may arise from daily operations, tailings facilities construction, or other risk areas.

1.2 Risk Management

In 2021, dam failure remained one of the greatest risks for operating TMFs at the Site. Sherritt's Dam Safety Assurance Program (DSAP) evaluates the Moa JV's design, construction, operation and closure of the TMFs against international best-practice measures. For example, the DSAP requires operations to assess natural phenomena such as extreme flooding and seismic events, as well as operational criteria, and incorporate these factors into TMF designs.

In addition to the DSAP, TMF management is guided by national regulation, and where relevant, criteria that aligns with international guidelines from the Canadian Dam Association¹ and the International Commission on Large Dams². Regularly scheduled management activities to ensure these criteria are being met at the TMFs include:

- 1. **Ongoing operational surveillance** Operations are expected to monitor their TMFs on an ongoing basis using piezometers, inclinometers, pressure gauges, remote sensing and other technologies to monitor tailings dams, abutments, natural slopes and water levels. The results are assessed regularly by the management team of the operation.
- 2. Annual Dam Safety Inspections (DSI) Formal dam safety inspections are conducted annually by the external EOR, Knight Piésold, for all operations. A DSI evaluates and observes potential deficiencies in a TMF's current and past condition, performance and operation.
- 3. Dam Safety Reviews Dam safety reviews are also implemented periodically to assess preventative maintenance needs, collective management reviews of operational surveillance and monitoring results, to complete updates to potential failure impact assessments and associated emergency management procedures, which include response plans for community and environmental safety in the event of a significant incident. The results of Dam Safety Reviews are provided to both senior management and the Engineer of Record as part of the Annual DSI.
- 4. Independent Tailings Review Board (ITRB) The ITRB meets at least once per year, with frequency increased as needed, to conduct a third-party review of design, operation, surveillance and maintenance of the TMFs. The results from the ITRB assessments are reported to the Moa JV management and Board of Directors, Sherritt's senior management and the ROC Committee. Recommendations are binding and tracked to completion by management internal reviews.
- 5. Internal reviews The JV SVP conducts internal management reviews of Sherritt's tailings facilities on a regular basis. Summaries are reported to the ROC Committee of Sherritt's Board of Directors quarterly.



- 6. **Ongoing operational staff inspections** TMFs are inspected by trained operators and expert technical staff as frequently as several times daily. Additionally, a formal and documented audit inspection is scheduled at least once per month.
- 1. <u>https://www.cda.ca/</u>
- 2. https://www.icold-cigb.org/

1.3 Tailings Management Standard

Sherritt has had an internal tailings management standard in place since 2018. Management at the Moa Nickel Site has adopted this standard and is in the process of implementing it. The standard aims to align with the Mining Association of Canada's Towards Sustainable Mining <u>Tailings Management Protocol</u>. Sherritt continues to review and evaluate monitoring systems and risk assessments to ensure our approach is robust and current.

1.4 Engaging with Communities

Sherritt advocates that its operations undertake proactive stakeholder and community engagement across a broad range of operational topics, including TMFs where appropriate.

We require our operations, and those of our joint ventures, to develop and maintain emergency preparedness and response plans, and to communicate these plans with relevant stakeholders. Where appropriate, operations may also engage with local and regional emergency response services in scenario planning and practice exercises. In Cuba, engagement with communities with respect to tailings management is conducted by our partners in accordance with local laws and norms.

1.5 Continuous Improvement

Sherritt is committed to continually reviewing its joint venture facilities and procedures to maintain the highest standard of dam safety at its operations. Sherritt also works in partnership with local, national and international organizations to support improvements in tailings management across the industry, including the Mining Association of Canada (MAC). With the assistance of MAC, Sherritt is implementing the Towards Sustainable Mining (TSM) program, including the TSM Tailings Management Protocol, at our wholly owned operations and working with our partners to implement it at the Moa JV.

Sherritt advocates for the adoption of the <u>Global Industry Standard on Tailings Management (GISTM)</u> through MAC and the incorporation of its requirements into the appropriate TSM protocols. Sherritt is represented on a MAC working group that provided input on the GISTM and is updating the TSM Tailings Management Protocol and Tables of Conformance to align with the GISTM accordingly.

2.0 Tailings Management Facilities

There are several TMFs at the Site. A geotechnical engineer is employed to provide oversight of design, construction and operation of the tailings facilities. Third-party engineering firms are utilized in the design and monitoring of tailings facilities. The design and operation of existing facilities meets or exceed all applicable regulatory requirements.

Upstream and centreline designs have been used throughout the mine life. Stability is monitored as per the operating practices manual. Based on internal and third-party reviews of structural integrity and management systems, the facilities are operating to design specifications and are currently stable.

Sherritt and its partners have also been actively investigating options for tailings management expansions so that we can continue to support future mining operations. When evaluating expansion options, Sherritt works with our Partners to ensure design criteria minimize environmental impacts and meet international best practice in tailings management. A rehabilitation plan has also been developed at the Moa Nickel Site TMF and reclamation activities are underway in a section that is no longer active (see Figure 2 below).



Figure 2: Tailings Management Facilities



3.0 Performance

Highlights

Indicator	2021
Significant tailings-related environmental incidents	0
Percentage of TMFs that completed annual evaluations performed by a third-party Engineer of Record	100%
Percentage of TMFs reviewed by Independent Tailings Review Board	100%

GRI MM3 Total Amounts of Overburden, Rock, Tailings and Sludge and Their Associated Risks								
Component (tonnes) 2021 2020 2019								
Rock amount	108,117	183,867	253,449					
Overburden amount	3,497,581	4,034,738	2,432,948					
Tailings amount	3,059,888	3,104,653	3,136,436					



TMF	Annual Dam Safety Inspection ¹	Review by ITRB ²	Comment
Acid Leach Tailings Facility (ALTF)	Yes	Yes	Next review in 2022
North Extension	Yes	Yes	Next review in 2022
Area 22 – Stage 3	Yes	Yes	Next review in 2023 ³

1. The Engineer of Record performs a detailed examination of the facility, its related infrastructure and the records relating to these, to identify any conditions or changes that might contribute to, or signal the potential for, a compromise to the safety and reliability of the structure.

2. Review by a team of independent subject matter experts who review the facility design approach, surveillance results and a site's overall approach to tailings.

3. Construction at Area 22 – Stage 3 is ongoing throughout 2022. Accordingly, the next review will be completed in 2023 when the TMF becomes operational.

The TMFs at the Site are reviewed regularly, both internally and by third parties, namely the ITRB and EOR, for structural integrity and the effectiveness of management systems. Recommendations from these reviews are analyzed by Site management and action plans are developed to address them. In 2021, there were no significant incidents at the TMFs. However, there was one minor geotechnical slump at the North Extension Tailings Facility (NETF) in Q4 2021. There were no tailings release or injuries as a result of this event and no impact to the local environment or community. The dykes of the TMF remained intact as did the tailings behind the dykes. The slump was discovered during a routine physical inspection. Deposition in the facility was halted until a preliminary investigation could be completed. Corrective and preventive actions that meet international standards, including stability improvements, were launched and remain on track. Subsequently, tailings deposition in the NETF have continued following recommendations made by the engineer of record after they completed a preliminary stability assessment. Continuous monitoring and revised operating methods is being carried out to assure safe operation of the facility.

In 2021, the Independent Tailings Review Board recommended the following:

- 1. North Extension. Develop a Forensic Analysis to determine the root causes of the instability on the area;
- 2. Area 22 Stage 3. Change the Engineer of Record and the designer to assure a complete understanding of the international standards during the design; and
- 3. Future tailings storage. Continue with the feasibility study of the selected option.

To address these recommendations, the following actions are being taken or planned in 2022:

- 1. Complete investigation into North East Tailings Facility (NETF) slump, including a Forensic Analysis (ongoing); majority of remediation construction work to repair slumped section completed in 2021 and finished in early 2022.
- 2. Change the Engineer of Record and the designer for Area 22 Stage 3 project;
- 3. Pursue options for additional tailings deposition and storage capacity;
- 4. Complete feasibility assessment for long-term tailings deposition options;
- 5. Continue ALTF closure actions; and
- 6. Continue to track and execute on the consolidated action plan.

In 2021, the Site also updated its self-assessment against MAC's TSM Tailings Management Protocol and confirmed Level B status. A TSM Level B classification means that while some of the TMF systems and processes are considered best practice, consistent implementation, and documentation needs improvements and that some systems/processes are still in the planning phases. Specifically, the self-assessment identified the need to complete an external evaluation of annual tailings management reviews, the Operations Maintenance and Surveillance (OMS) manual, and Emergency Preparedness Plan (EPP). Updates to these will continue throughout 2022.



Long-Term Tailings Disposal

As part of our life of mine (LOM) optimization planning, the Moa JV has set out a proposed sequence for the development, operation and closure at the TMF at Moa Nickel (Figure 3). Priority projects include:

- Closure of the ALTF 2019 to 2023
- The North Extension Operation from 2019 to 2023; Closure 2023 to 2025
- Area 22 Stage 3 Phased Construction 2022 to 2024; Operations commencing in 2023
- Long Term Storage Initial Construction 2023 to 2024; Operations commencing in 2025

Figure 3: Proposed Sequence of Tailings Management Facility Development at the Moa Nickel Site

Project	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030–2039
ALTF			Clos	uro								
Closure			Clos	ure								
North			Oper	tion		Closure						
Extension			Opera			Closure						
Area 22 –				Construction								
Stage 3		-				Operati	on		Closure			
Long							C	onstructi	on			
Term Storage									0	peration		

The Acid Leach Tailings Facility (ALTF): Closure and stabilization work continued in 2021. Monitoring activities and further analysis of water levels are ongoing and informing the closure plans.

The North Extension: As the ALTF approached capacity, the Moa Joint Venture retained Knight Piésold to design an extension to the North East TMF that would ensure continued capacity to store tailings. In 2021, operations, staged construction, and additional stability analyses on the North Extension occurred. In 2021, due to the slump in the North Extension, a forensic analysis process began with Ausenco Limited, an international engineering firm.

Area 22: Detailed design and permitting of this multi-phased short-term tailings solution were completed in 2020. Construction has begun, with completion of phase 1 expected by October 2022. Preliminary Storage Capacity, calculated by KP, provides up to two years of total deposition.

Long-Term Storage: Pre-feasibility studies were completed during 2021 and feasibility studies commenced and are expected to continue in 2022. Also, advancing alternative options for mid-term and long-term tailings storage.

4.0 Church of England Disclosure

Although Sherritt did not receive a letter from the Church of England requesting greater disclosure on its tailings management facilities, Sherritt is committed to being open and transparent with stakeholders regarding the management of the TMFs operated by the Moa JV. Accordingly, Table 1 below contains standard disclosure requirements outlined by the Church of England as relevant to the Moa Nickel site.



Table 1. Facility #1: Acid Leach Tailings Facility

	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
1	"Tailings Dam" Identifier	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	Acid Leach Tailings Facility	Acid Leach Tailings Facility	Acid Leach Tailings Facility	N/A
2	Location	Please provide Long./Lat. coordinates	700,000 E 221 000 N	700,000 E 221 000 N	700,000 E 221 000 N	N/A
3	Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019	Moa Joint Venture	Moa Joint Venture	Moa Joint Venture	N/A
4	Status	Please specify: Active, Inactive/Care and Maintenance, Closed, etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&M is not considered closed until such time a closure plan has been implemented.	Inactive/Care and Maintenance	Inactive/Care and Maintenance	Inactive/Care and Maintenance	Closure plan of ALTF is on hold pending further analysis of water levels
5	Date of initial operation	N/A	1979	1979	1979	N/A
6	Is the dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20	No	No	No	The ALTF was operated as per the design and will be closed according to the designs
7	Raising method	Note: Upstream, Centreline, Modified Centreline, Downstream, Landform, Other.	Upstream	Upstream	Upstream	N/A
8	Current Maximum Height	Note: Please disclose in metres	40 m	40 m	40 m	N/A
9	Current Tailings Storage Impoundment Volume	Note: (m ³ as of March 2019)	53,700,000 m ³	53,700,000 m ³	53,700,000 m ³	N/A
10	Current Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for January 2024)	0	0	0	Facility is undergoing closure.
11	Most recent Independent Expert Review	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.	December 2020	December 2020	December 2019	Facility is undergoing closure
12	Do you have full and complete relevant engineering records, including design, construction, operation, maintenance and/or closure?	(Yes or No) We take the word "relevant" here to mean that you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an	Yes	Yes	Yes	All documents are stored on site



	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
		acquisition, or legacy site. More information can be provided in your answer to Q20				
13	What is your hazard categorization of this facility, based on consequence of failure?	N/A	Extreme	Extreme	Extreme	Change in consequence categorization recommended by the ITRB in 2019
14	What guidelines do you follow for the classification system?	N/A	CDA Hazard Potential Classification	CDA Hazard Potential Classification	CDA Hazard Potential Classification	N/A
15	Has the facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an Independent Engineer (even if later certified as stable by the same or different firm)?	(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a "Yes" answer may not indicate heightened risk. Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping, etc. If yes, have appropriately designed and reviewed mitigation actions been implemented? We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.	Yes; the facility experienced a slump along one of its embankments in January 2014. No impact to population nor to the environment was incurred as consequence of the slump. Corrective actions were put in place, additional buttressing and drains were installed. Engineers of record provided the remediation designs and were on site for the duration of the work. There have been no other incidents on record before or since.	Yes; the facility experienced a slump along one of its embankments in January 2014. No impact to population nor to the environment was incurred as consequence of the slump. Corrective actions were put in place, additional buttressing and drains were installed. Engineers of record provided the remediation designs and were on site for the duration of the work. There have been no other incidents on record before or since.	Yes; the facility experienced a slump along one of its embankments in January 2014. No impact to population nor to the environment was incurred as consequence of the slump. Corrective actions were put in place, additional buttressing and drains were installed. Engineers of record provided the remediation designs and were on site for the duration of the work. There have been no other incidents on record before or since.	N/A
16	Do you have internal/in- house engineering specialist oversight of this facility? Or do you have an external engineering support for this purpose?	Note: Answers may be "Both".	Both	Both	Both	The Moa Nickel Site has a tailings specialist engineer expat on site full time and also contracts the Engineer of Record (Knight Piésold) to complete a full review of the facility every six weeks.
17	Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure been undertaken and to reflect final conditions? If so, when did the assessment take place?	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.	Yes. The Hazard, Vulnerability and Risks Study was reviewed and updated in 2019	Yes. The Hazard, Vulnerability and Risks Study was reviewed and updated in 2019	Yes. The Hazard, Vulnerability and Risks Study was reviewed and updated in 2019	A formal analysis was carried out by Knight Piésold (KP) in 2022 for the entire tailings facility that included the ALTF.
18	Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g., Yes and Yes)	a) Yes b) Yes	a) Yes b) Yes	a) Yes b) Yes	N/A



	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
19	Have you assessed or do you plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g., over the next two years?	N/A	Yes. These considerations were included in the review and update of the Hazard, Vulnerability and Risks Study in 2019	Yes. These considerations were included in the review and update of the Hazard, Vulnerability and Risks Study in 2019	Yes. These considerations were included in the review and update of the Hazard, Vulnerability and Risks Study in 2019	N/A
20	Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you many have.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports, etc.	No	No	No	N/A



Table 2. Facility #2: North Extension

	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
1	"Tailings Dam" Identifier	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	North Extension	North Extension	North Extension	N/A
2	Location	Please provide Long./Lat. coordinates	701,000 E 222 000 N	701,000 E 222 000 N	701,000 E 222 000 N	N/A
3	Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019	Moa Joint Venture	Moa Joint Venture	Moa Joint Venture	N/A
4	Status	Please specify: Active, Inactive/Care and Maintenance, Closed, etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&M is not considered closed until such time a closure plan has been implemented.	Active	Active	Active	Will be active until 2023
5	Date of initial operation	N/A	2017	2017	2017	N/A
6	Is the dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20	Yes	Yes	Yes	The North Extension is being operated as per the design and specifications
7	Raising method	Note: Upstream, Centreline, Modified Centreline, Downstream, Landform, Other.	Upstream	Upstream	Upstream	Facility is undergoing closure
8	Current Maximum Height	Note: Please disclose in metres	17 m	14 m	11 m	Facility is undergoing closure
9	Current Tailings Storage Impoundment Volume	Note: (m ³ as of March 2019)	8,480,000 m ³	6,950,000 m ³	4,230,000 m ³	Facility is undergoing closure
10	Current Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for January 2024)	10,580,000 m ³	10,580,000 m ³	10,580,000 m ³	Operations to cease at end of 2023
11	Most recent Independent Expert Review	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.	December 2021	December 2020	December 2019	An annual independent review is conducted. It was performed online due COVID-19 restrictions.
12	Do you have full and complete relevant engineering records,	(Yes or No) We take the word "relevant" here to mean that you have all necessary	Yes	Yes	Yes	All documents are stored on site



	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
	including design, construction, operation, maintenance and/or closure?	documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q20				
13	What is your hazard categorization of this facility, based on consequence of failure?	N/A	Extreme	Extreme	Extreme	Change in consequence categorization recommended by the ITRB in 2019
14	What guidelines do you follow for the classification system?	N/A	CDA Hazard Potential Classification	CDA Hazard Potential Classification	CDA Hazard Potential Classification	
15	Has the facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an Independent Engineer (even if later certified as stable by the same or different firm)?	(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a "Yes" answer may not indicate heightened risk. Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping, etc. If yes, have appropriately designed and reviewed mitigation actions been implemented? We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/information may be supplied in your answer to Q20.	Yes, the facility experienced a minor slump on the fourth stage in 2021. The failed area was remediated plus additional actions were executed to assure ongoing stability.	No	No	N/A
16	Do you have internal/in-house engineering specialist oversight of this facility? Or do you have an external engineering support for this purpose?	Note: Answers may be "Both".	Both	Both	Both	The Moa Nickel Site has a tailings specialist engineer expat onsite full time and also contracts the engineer of record (EIPH Camaguey) to complete a full review of the facility every 15 days.
17	Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure been undertaken and to reflect final conditions? If so, when did the assessment take place?	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.	No	No	No	A formal analysis was carried out by Knight Piésold (KP) in 2022 for the entire tailings facility that included the North Extension.



	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
18	Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g., Yes and Yes)	No and Yes	No and Yes	No and Yes	Following completion of the Forensic Analysis, the Closure Plan will be prepared.
19	Have or, or you do plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g., over the next two years?	N/A	Yes	Yes	Yes	N/A
20	Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you many have.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports, etc.	No	No	No	N/A



Table 3. Facility #3: Area 22

	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
1	"Tailings Dam" Identifier	Please identify every tailings storage facility and identify if there are multiple dams (saddle or secondary dams) within that facility. Please provide details of these within question 20.	Area 22	Area 22	Area 22	N/A
2	Location	Please provide Long./Lat. coordinates	700,500 E 220 500 N	700,500 E 220 500 N	700,500 E 220 500 N	N/A
3	Ownership	Please specify: Owned and Operated, Subsidiary, JV, NOJV, as of March 2019	Moa Joint Venture	Moa Joint Venture	Moa Joint Venture	N/A
4	Status	Please specify: Active, Inactive/Care and Maintenance, Closed, etc. We take closed to mean: a closure plan was developed and approved by the relevant local government agency, and key stakeholders were involved in its development; a closed facility means the noted approved closure plan was fully implemented or the closure plan is in the process of being implemented. A facility that is inactive or under C&M is not considered closed until such time a closure plan has been implemented.	Inactive/Care and Maintenance	Inactive/Care and Maintenance	Inactive/Care and Maintenance	Inactive while third raise is designed and constructed.
5	Date of initial operation	N/A	2016	2016	2016	N/A
6	Is the dam currently operated or closed as per currently approved design?	Yes/No. If 'No', more information can be provided in the answer to Q20	No	No	No	Area 22, Stage 2 is inactive and Construction of Stage 3 continues
7	Raising method	Note: Upstream, Centreline, Modified Centreline, Downstream, Landform, Other.	Centreline	Centreline	Centreline	N/A
8	Current Maximum Height	Note: Please disclose in metres	15 m	15 m	15 m	N/A
9	Current Tailings Storage Impoundment Volume	Note: (m ³ as of March 2019)	4,680,000 m ³	4,680,000 m ³	4,680,000 m ³	N/A
10	Current Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for January 2024)	4.35 Mm ³ total for two years of tailings storage	4.8 Mm ³ total for two years of tailings storage	4.8 Mm ³ total for two years of tailings storage	The final capacity will be updated. Two- phase design is being conceptualized to assure tailings storage capacity for operational needs.
11	Most recent Independent Expert Review	(date) For this question we take 'Independent' to mean a suitably qualified individual or team, external to the Operation, that does not direct the design or construction work for that facility.	November 2021	December 2020	December 2019	An annual independent review is conducted. It was performed online due COVID-19 restrictions
12	Do you have full and complete relevant	(Yes or No) We take the word "relevant" here to mean that	Yes	Yes	Yes	All documents are stored on site



	Disclosure	Instructions	2021 Response	2020 Response	2019 Response	Comments
	engineering records, including design, construction, operation, maintenance and/or closure?	you have all necessary documents to make an informed and substantiated decision on the safety of the dam, be it an old facility, or an acquisition, or legacy site. More information can be provided in your answer to Q20				
13	What is your hazard categorization of this facility, based on consequence of failure?	N/A	Extreme	Extreme	Extreme	Change in consequence categorization recommended by the ITRB in 2019. Construction activities are underway to address this
14	What guidelines do you follow for the classification system?	N/A	CDA Hazard Potential Classification	CDA Hazard Potential Classification	CDA Hazard Potential Classification	N/A
15	Has the facility, at any point in its history, failed to be confirmed or certified as stable, or experienced notable stability concerns, as identified by an Independent Engineer (even if later certified as stable by the same or different firm)?	(Yes or No) We note that this will depend on factors including local legislation that are not necessarily tied to best practice. As such, and because remedial action may have been taken, a "Yes" answer may not indicate heightened risk. Stability concerns might include toe seepage, dam movement, overtopping, spillway failure, piping, etc. If yes, have appropriately designed and reviewed mitigation actions been implemented? We also note that this question does not bear upon the appropriateness of the criteria, but rather the stewardship levels of the facility or the dam. Additional comments/ information may be supplied in your answer to Q20.	No	No	No	N/A
16	Do you have internal/in-house engineering specialist oversight of this facility? Or do you have an external engineering support for this purpose?	Note: Answers may be "Both".	Both	Both	Both	The Moa Nickel Site has a tailings specialist engineer expat on site full time and also contracts the Engineer of Record (EIPH Camaguey) to complete a full review of the facility every 15 days.
17	Has a formal analysis of the downstream impact on communities, ecosystems and critical infrastructure in the event of a catastrophic failure been undertaken and to reflect final	Note: Please answer 'yes' or 'no', and if 'yes', provide a date.	Yes. A Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	Yes. A Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	Yes. A Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	A formal analysis was carried out by Knight Piésold (KP) in 2022 for the entire tailings facility that included Area 22.



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	conditions? If so, when did the assessment take place?					
18	Is there a) a closure plan in place for this dam, and b) does it include long term monitoring?	Please answer both parts of this question (e.g., Yes and Yes)	No and Yes	No and Yes	No and Yes	N/A
19	Have or, or you do plan to assess your tailings facilities against the impact of more regular extreme weather events as a result of climate change, e.g., over the next two years?	N/A	Yes. The current Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	Yes. The current Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	Yes. The current Hazard, Vulnerability and Risks Study was commenced in 2019 and finalized and approved in 2020	The Study includes designs considering extreme weather events (such as rainfall and seismic failures)
20	Any other relevant information and supporting documentation. Please state if you have omitted any other exposure to tailings facilities through any joint ventures you many have.	Note: this may include links to annual report disclosures, further information in the public domain, guidelines or reports, etc.	No	No	No	N/A

