sherritt 2022 Tailings Management Report





Table of Contents

1.0 Governance and Assurance	4
1.1 Approach	4
1.2 Risk Management	5
1.3 Tailings Management Standard	6
1.4 Engaging with Communities	6
1.5 Continuous Improvement	6
2.0 Tailings Management Facilities	6
3.0 Performance	7
4.0 Long-Term Tailings Disposal	9
5.0 Church of England Disclosures	10
Facility #1: Acid Leach Tailings Facility (ALTF)	10
Facility #2: North Extension Tailings Facility (NETF)	13
Facility #3: Area 22	16



Commonly Used Terms

Acronym Used	Definition
TMF	tailings management facility
JV	joint venture
GNC	General Nickel Company S.A.
ROC	Reserves, Operations and Capital
CCO	Chief Commercial Officer
CFO	Chief Financial Officer
SVP	Senior Vice President
CEO	Chief Executive Officer
ITRB	Independent Tailings Review Board
EOR	Engineer of Record
ALTF	Acid Leach Tailings Facility
NETF	North Extension Tailing Facility
EIPH	Empresa de Investigaciones y Proyectos Hidráulicos
DSAP	Dam Safety Assurance Program
DSI	dam safety inspection
MAC	Mining Association of Canada
TSM	Towards Sustainable Mining
GISTM	Global Industry Standard on Tailings Management
OMS	Operations Maintenance and Surveillance
EPP	Emergency Preparedness Plan

Forward-Looking Statements

This Report may contain forward looking information, please refer to the Forward-Looking Statement in the <u>2022 Sustainability</u> <u>Report</u>.



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 for the application of global best practices.

1.0 Governance and Assurance

1.1 Approach

Sherritt's goal is that its joint venture operates and maintains its TMFs 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.

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 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 Chief Executive Officer (CEO) and have responsibilities for sustainability, health and safety, environment, community relations and tailings management.

Additionally, the Moa JV Chief Operating Officer (COO) chairs regularly scheduled internal tailings review meetings and reports directly to the Moa JV 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 Tailings Review Team is responsible for implementing recommendations from the Independent Tailings Review Board (ITRB), Engineer of Record (EOR) (see Section 3.0 below), and other audits and provides updates to management on operations, maintenance, monitoring and emergencies as applicable.

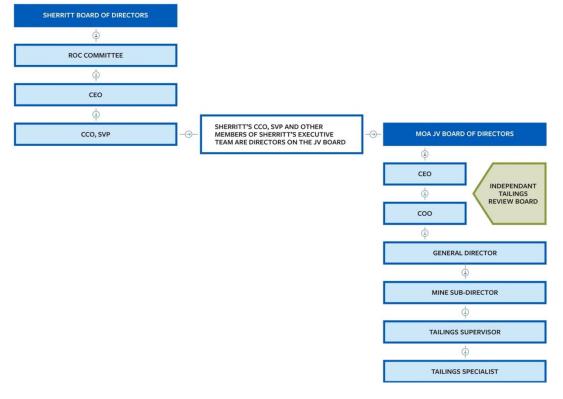


Figure 1: Tailings Management Operating Structure



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 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 here.

1.1.2 External Oversight and Assurances

The Moa JV has retained independent EORs to provide oversight and review of TMF design, construction, operation and closure planning. The EOR for Moa Nickel Acid Leach Tailings Facility (ALTF) and Area 22 Stage 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 Empresa de Investigaciones y Proyectos Hidráulicos (EIPH), a Cuban company.

The Moa JV is also accountable to an ITRB composed of independent experts who conduct annual third-party reviews of design, operation, surveillance and maintenance.

1.2 Risk Management

The risks associated with the TMFs at the Site are discussed in Sherritt's Annual Information Form available here.

In 2022, tailings facility failures were the greatest risk for the 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 align 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, settle monuments, pressure gauges, remote sensing and other technologies to monitor tailings dams, abutments, natural slopes and water levels. The results are assessed regularly by the operation's management team.
- 2. Annual Dam Safety Inspections (DSIs) Formal DSIs are conducted annually by the external EORs for all TMFs. 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 conducted periodically to assess preventative maintenance needs, to ensure continued operational surveillance, to obtain up-to-date monitoring results and to update 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 EORs 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 tracked to completion through management internal reviews.
- 5. Internal Reviews The SVP Metals conducts internal management reviews of Sherritt's tailings facilities on a regular basis. Summaries are reported quarterly to the ROC Committee of Sherritt's Board of Directors.
- 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.

² https://www.icold-cigb.org/



¹ https://www.cda.ca/

1.3 Tailings Management Standard

Sherritt has had an internal Tailings Management Standard in place since 2018. Management at Moa Nickel has adopted this standard and is in the process of implementing it. The standard aims to align with the Mining Association of Canada's (MAC) Towards Sustainable Mining (TSM) <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 potential TMF emergencies 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 Partner 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 MAC. With the assistance of MAC, Sherritt is implementing the TSM program, including the TSM Tailings Management Protocol, at our wholly-owned operations and working with our Partner 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. Throughout 2022, Sherritt participated in a MAC working group that provided input on the GISTM and updated the TSM Tailings Management Protocol and Tables of Conformance to align with the GISTM accordingly. A description of TSM Tailings Management Protocol alignment with GISTM is available <u>here</u>.

2.0 Tailings Management Facilities

There are several TMFs at the Site (see Table 1 below). A geotechnical engineer is employed to provide oversight of design, construction and operation of the tailings facilities. Third-party engineering firms, (the EORs) are utilized in the design and monitoring of tailings facilities. The design and operation of existing facilities meet or exceed all applicable local regulatory requirements.

Upstream and centreline designs have been used throughout the mine life. Stability is monitored as per the operating practices manual.

Sherritt and its Partner have been actively investigating options for tailings management expansions so that we can continue to support future mining operations. When evaluating expansion options, Sherritt is committed to working with our Partner to ensure design criteria minimize environmental impacts and meet international best practices in tailings management.

Table 1: Status of Tailings Management Facilities at the Site

Facility	Status
Acid Leach Tailings Facility (ALTF)	Closure
North Extension Tailings Facility (NETF)	Operational
Area 22 Stage 3	Under construction
Moa West	Prefeasibility underway



A rehabilitation plan has also been developed for the Moa Nickel TMFs and reclamation activities are underway in a section that is no longer active (see Figure 2 below).

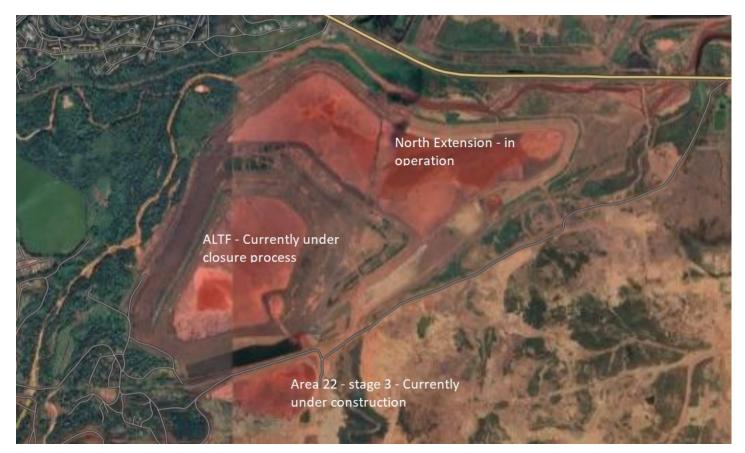


Figure 2: Tailings Management Facilities

3.0 Performance

Table 2: 2022 Performance Highlights

Indicator	2022
Significant tailings-related environmental incidents	0
Percentage of TMFs that completed annual evaluations performed by a third-party EOR	100%
Percentage of TMFs reviewed by ITRB	100%

Table 3: GRI MM3 Total Amounts of Overburden, Rock, Tailings and Sludge and Their Associated Risks

Component (tonnes)	2022	2021
Rock amount	57,338.000	108,117.000
Overburden amount	3,174,159.000	3,497,581.000
Tailings amount	3,074,314.000	3,059,888.000



Table 4: 2022 ITRB and Dam Safety Inspections

TMF	Dam Safety Inspection ¹	Review by ITRB ²	Comment
Acid Leach Tailings Facility (ALTF)	No	Yes	Next review in 2023
North Extension Tailings Facility (NETF)	No	Yes	Next review in 2023
Area 22	No	Yes	Next review in 2023 ³

1 The EOR 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. The next Dam Safety Inspections are anticipated to occur in 2023.

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 was 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, 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 2022, there were no significant incidents at the TMFs.

Following the 2022 in-person visit from the ITRB, the following priority recommendations were made:

- 1. Moa West TMF should be designated a priority project to ensure that it is ready to accept tailings by Q3 2025 (although current operational schedule indicates this is more likely to occur in mid-2026. See Figure 3 below);
- 2. Vigilant monitoring for any signs of movement during construction and filling of Lifts 5 and 6 and for ongoing tailings deposition operations of the NETF;
- 3. Identify whether an external water pond is feasible or necessary for Area 22 Stage 3. This decision should be made in consultation with the plant operations team; and
- 4. Construction of the temporary ALTF spillway to remove inflow to Area 22 Stage 3 is required. It is essential that this work be completed as soon as possible to allow construction and operation in Area 22 Stage 3.

To address these recommendations, the following actions are being taken or planned in 2023:

- 1. Complete the remaining remediation construction work in the NETF as per the Forensic Analysis completed in 2022;
- 2. Advance Moa West as the preferred option for securing additional long-term tailings deposition and storage capacity;
- 3. Continue ALTF closure actions; and
- 4. Continue to track and execute on the consolidated action plan.

In 2022, the Site also updated its self-assessment against MAC's TSM Tailings Management Protocol and confirmed Level B classification. A TSM Level B classification means that while some of the TMF systems and processes are considered best practice, consistent implementation and documentation needs improvement and some systems and 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 the Emergency Preparedness Plan (EPP), which will continue throughout 2023.



4.0 Long-Term Tailings Disposal

Historically, tailings were stored in the ALTF, which is now closed. The NETF is predicted to be full by the end of 2023, at which point tailings will be sent to the Area 22 Stage 3 TSF. Area 22 Stage 3 TSF is currently under construction, due for completion prior to 2024 and anticipated to have capacity to receive tailings until mid-way through 2026. After this, all tailings will be sent to the Moa West TSF, which is in the prefeasibility study phase. The tailings management plan is shown in Figure 3 and their locations are shown in Figure 2.

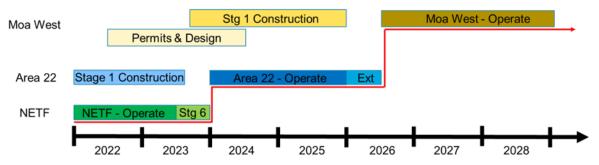


Figure 3: Proposed Sequence of Tailings Management Facility Development at Moa Nickel

The Acid Leach Tailings Facility (ALTF): Closure and stabilization work continued in 2022. Monitoring activities and further analysis of water levels are ongoing and informing the closure plans.

The North Extension Tailings Facility (NETF): As the ALTF approached capacity, the Moa Joint Venture retained EIPH to design an extension to the NETF that would ensure continued capacity to store tailings. In 2022, operations, staged construction and forensic analysis of the slump identified in 2021 were conducted by Ausenco Limited.

Area 22 Stage 3: Construction has begun, with completion of Phase 1 expected by October 2023. Preliminary storage capacity, calculated by Knight Piésold, provides up to two years of total deposition.

Moa West: Initial scoping studies were completed in 2022. Prefeasibility studies are expected to be completed in 2023. The outcomes of the prefeasibility study will inform the Stage 1 Construction, and ultimately the operational timelines for Moa West. As such, the schedule outlined in Figure 3 is subject to change.



5.0 Church of England Disclosures

Although Sherritt has not received a letter from the Church of England requesting greater disclosure on its TMFs, the tables below contain standard disclosure requirements outlined by the Church of England as relevant to Moa Nickel.

Facility #1: Acid Leach Tailings Facility (ALTF)

	Disclosure	Instructions	2022 Response	2021 Response	2020 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	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)	53.7 Mm ³	53.7 Mm ³	53.7 Mm 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 2022	December 2020	December 2020	Facility is undergoing closure.
12	Do you have full and complete relevant engineering	(Yes or No) We take the word "relevant" here to mean that you have all necessary documents to make an informed and	Yes	Yes	Yes	All documents are stored on site



	Disclosure	Instructions	2022 Response	2021 Response	2020 Response	Comments
	records, including design, construction, operation, maintenance and/or closure?	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	N/A
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	Yes	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. EOR 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.
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	Moa Nickel has a tailings specialist engineer expat on site full time and also contracts the EOR (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 2022	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 in 2022 for all TMFs at Moa Nickel, including the ALTF.
18	Is there a) a closure plan in place for this dam, and	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	2022 Response	2021 Response	2020 Response	Comments
	b) does it include long term monitoring?					
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.	Νο	Νο	Νο	N/A



Facility #2: North Extension Tailings Facility (NETF)

	Disclosure	Instructions	2022 Response	2021 Response	2020 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 NETF 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 in operation.
8	Current Maximum Height	Note: Please disclose in metres	20 m	17 m	14 m	Facility is in operation.
9	Current Tailings Storage Impoundment Volume	Note: (2022 value includes stage 6)	10.58 Mm ³	8.48 Mm ³	6.95 Mm ³	Facility is in operation.
10	Current Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for January 2024)	11.8 Mm ³	10.58 Mm ³	10.58 Mm 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 2022	December 2021	December 2020	An independent review is conducted annually.
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 acquisition, or legacy site. More information can be provided in your answer to Q20	Yes	Yes	Yes	All documents are stored on site.



	Disclosure	Instructions	2022 Response	2021 Response	2020 Response	Comments
13	What is your hazard categorization of this facility, based on consequence of failure?	N/A	Extreme	Extreme	Extreme	N/A
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 minor slump on the fourth stage in 2021. The failed area was remediated plus additional actions were executed to assure ongoing stability. A Forensic Analysis was completed in 2022.ongoing	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.	Νο	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	Moa Nickel has a tailings specialist engineer expat onsite full time and also contracts the EOR (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 in 2022 for all TMFs at Moa Nickel, including the NETF.
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	A closure plan will be prepared in 2023.



	Disclosure	Instructions	2022 Response	2021 Response	2020 Response	Comments
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



Facility #3: Area 22

	Disclosure	Instructions	2022 Response	2021 Response	2020 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)	4.68 Mm ³	4.68 Mm ³	4.68 Mm ³	N/A
10	Current Tailings Storage Impoundment Volume in 5 years' time	(m ³ as planned for 2024)	9.98 Mm ³ total for two years of tailings storage	4.35 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.	December 2022	November 2021	December 2020	An independent review is conducted annually.



	Disclosure	Instructions	2022 Response	2021 Response	2020 Response	Comments
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 acquisition, or legacy site. More information can be provided in your answer to Q20	Yes	Yes	Yes	All documents are stored on site.
13	What is your hazard categorization of this facility, based on consequence of failure?	N/A	Extreme	Extreme	Extreme	N/A
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.	Νο	Νο	Νο	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	Moa Nickel has a tailings specialist engineer expat on site full time and also contracts the EOR (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.	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 in 2022 for the entire tailings facility that included Area 22.



	Disclosure	Instructions	2022 Response	2021 Response	2020 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	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

