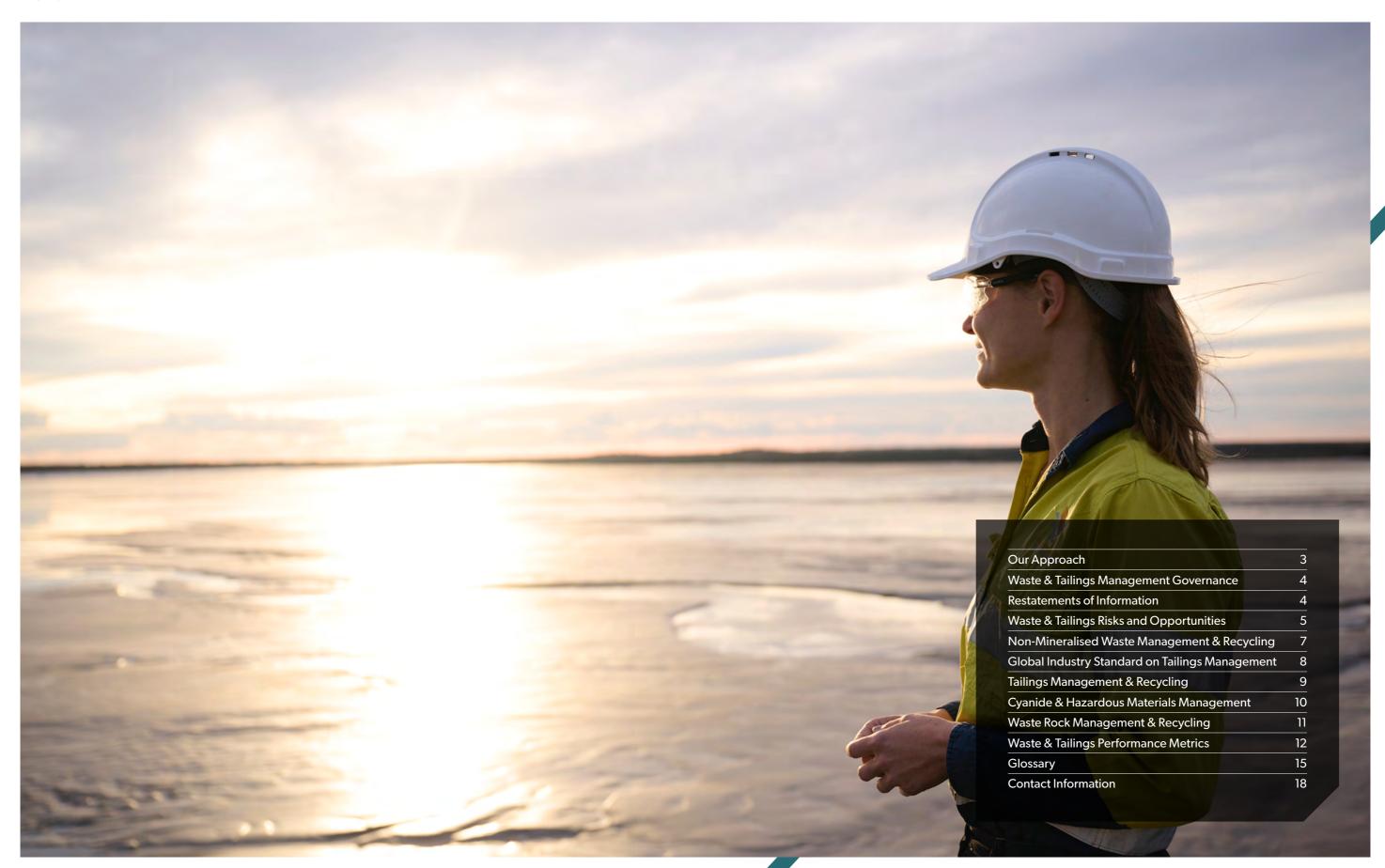


Waste & Tailings Management at Northern Star FY24



Waste & Tailings Management













 10.4^{K}

FY24 Total Non-Mineralised Waste Recycled (T)

 22.7^{K}

FY24 Non-Mineralised Waste Generated (T)

 4.2^{M}

FY24 Total Mineralised Waste Recycled (T)

130^M

FY24 Total Mineralised Waste Generated (T)

Our Approach

Northern Star has aligned the management of tailings storage facilities (TSF) with international requirements and complying with regulatory requirements. Our Tailings Management Standard sets out the minimum requirements that all Operational sites must maintain in relation to the design, construction, operation and decommissioning of any TSF's.

Each Operation site has a nominated person responsible for the management of tailings, and each site manages their

governance and oversight to monitor that all tailings management processes and practices are meeting the Company standards. This oversight also includes regular third-party audits.

individual facilities. Northern Star's

corporate team provide the necessary

Where possible Northern Star recycles tailings into underground pastefill, with all remaining tailings being deposited into designated storage structures.

1.7M

Waste Rock Recycled (T) in FY24 2.6^{M}

Tailings Recycled for Pastefill (T) in FY24

0

Number of Material Tailings Loss or TSF Incidents in FY24 7

FY24 Total Hazardous Waste Generated (T)

In order to maintain transparency and openness in disclosures, Northern Star publishes a list of all of its TSF structures, both operational and decommissioned, in a detailed report on the Company's website. Information is provided in relation to its location, design and construction (where known for legacy structures), operating status, and other pertinent information.

Waste & Tailings Management Governance

Northern Star's Board has oversight of waste and tailings management risks and opportunities within Northern Star, assisted by the Environmental, Social & Safety (ESS) Committee's oversight of operational risks and the Audit & Risk Committee's oversight of the Company-wide risk management framework.

The Company's waste and tailings management governance structure is shown in Figure 1. Waste and tailings related matters are considered quarterly by the Board through its ESS Committee meetings.

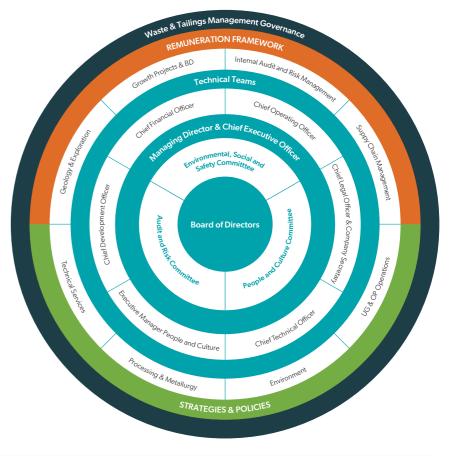
The function of the Committee is to assist the Board in implementing the Company's, environmental, social and safety strategies and ensuring responsible and sustainable business practices. In particular, the Committee will assist the Board in its oversight, monitoring and review of the Company's practices in the following key areas:

- environmental management
- long term environmental, social and safety strategic goals.

In addition, the Committee will refer any material environmental, social and safety related risk exposures or potential risks identified to the Audit & Risk Committee, for review and perform such other functions as assigned by the Board.

Development and delivery of Northern Star's waste and tailings management function is overseen by the ESS Committee and the Chief Operating Officer (reporting to the Managing Director and to the Board), supported by the technical services, operational, environmental and legal teams in the corporate office and on our sites.





Restatements of Information

Nil restatements from our FY23 Sustainability Report.



Waste & Tailings Risks and Opportunities

The focus on tailings management and storage has increased significantly over the last 15 years with a number of dam failures outside Australia and Alaska USA. Understanding the hazards of each TSF enables Northern Star to implement appropriate management strategies to minimise the risks.

A key part of our management strategy is to have an Engineer of Record (EOR) who is responsible for the design and construction of the TSF. The EOR ensures that the site operational management plans align with the design and construction to ensure that the TSF is maintained in accordance with the design.

When designing a TSF, the EOR takes into account the required size, location, climate, weather and seismology of the area. Location considerations also take into account people downstream of potential flow paths in the event of a dam failure.

Dam break studies are undertaken to determine the most likely failure mechanism and the location in the TSF that would cause the most damage if a failure occurred. This determines the risk of a particular TSF and then management strategies are implemented depending on the risk.

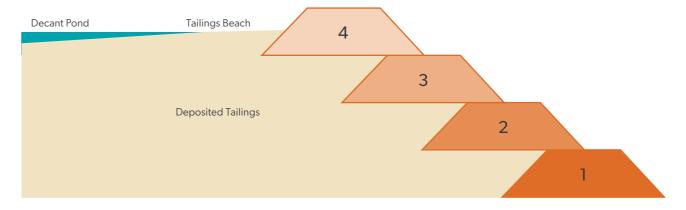
In the Eastern Goldfields in general risk to people is relatively low due to the low population density, however this does not preclude Northern Star from consulting with local stakeholders to ensure they understand the risk and management strategies.

The management strategies also include monitoring. This is to ensure that the site is maintaining the TSF in accordance with the EOR requirements and that the TSF is performing to designed expectations. Vibrating wire piezometer, water monitoring bores, radar, and prisms are all used depending on the TSF Risk. Cone Penetration

Testing units (CPTu) are utilised to understand whether the water levels in the operational TSF are at an acceptable level.

High water levels in TSF (phreatic levels) have contributed to some significant tailings failures. Vibrating wire piezometers and CPTu are an important method of checking the levels. Results from monitoring devices are gathered monthly with some sites using remote telemetry systems to allow online real time results. Northern Star is progressing to have all active TSFs with online real time monitoring in the future. This will enable the sites to use Trigger Action Response Plans (TARPs) to respond to online monitoring that shows movement outside of control limits.

Figure 2 Typical Upstream TSF Construction (Cross Section)



The majority of the TSF's at the Australian assets are upstream turkey's nest construction as shown in Figure 2 above. The Pogo TSF is a Dry Stack Tailing Facility (DSTF). The DSTF is constructed with filtered tailings and waste rock from underground. Both materials are truck dumped, then reshaped and compacted and forms a "dry stack".

Water is limited in the DSTF by directing runoff around the DSTF. This ensures that the phreatic surface is minimised. This makes the DSTF very stable.



Global Industry Standard on Tailings Management

Northern Star intends to align with the Global Industry Standard on Tailings Management (GISTM) over time, ensuring that all new tailings storage facilities align to GISTM on a risk-based approach, and use the principles moving forward. GISTM was developed by a collaborative group of industry experts, including academics, consultants and mining companies.

Governance is important to ensure that all stakeholders understand the TSF and risks surrounding the TSF and its operation and this is provided through topic areas of GISTM.

Northern Star considers that its current performance-based risk-informed approach is consistent with best practice standards and is appropriate for Northern Star's operations.

Figure 3 GISTM Topic Areas

Topic Area I

• Focuses on project-affected people

Topic Area II

• Requires operators to develop knowledge about the social, environmental and local economic context of a proposed or existing tailings facility

Topic Area III

 Aims to lift the performance bar for designing, constructing, operating, maintaining, monitoring, and closing tailings facilities

Topic Area IV

• Focuses on the ongoing management and governance of a tailings facility

Topic Area V

• Covers emergency preparedness and response in the event of a tailings facility failure

Topic Area VI

· Requires public disclosure of information about tailings facilities to support public accountability

In May 2024 we commenced an audit process whereby at the end of Q1 FY25 all sites will have had their operational TSFs and TSFs under construction assessed as part of a GISTM audit. The aim of this audit is to develop a detailed base line, where gaps could be identified and quantified against the 77 specific requirements of GISTM, with the intent of developing formalised action plans as needed.

During FY25 Northern Star anticipates that the action plans will be fully considered, and all sites will have completed documentation reviews and updates. An area of high priority focus for Northern Star will be KCGM due to the scale of the tailings dam structures and their proximity to the populated Kalgoorlie-Boulder township.

Tailings Management & Recycling

Tailings are a combination of the fine-grained (typically silt-sized) solid materials remaining after the recoverable gold has been extracted from mined ore, together with the water used in the recovery process. Northern Star deposits tailings material into four different types of tailings facilities across its operations.

- Paddock style facilities: Most utilised in arid environments and consist of dams with walls constructed from compacted earthen material, slurry waste and water.
- In-pit facilities: These are used where open pit mining voids have been successfully mined of all ore and are then used for deposition and filling with tailings.
- Dry stack facilities: These facilities require water to be removed from the tailings before it is transported to the tailing's facility.
- Underground tailings backfill (or paste fill): Tailings material can be utilised on some sites as a component of cemented hydraulic backfill underground. Most of the fines and liquid are removed from the tailings at onsite paste backfill plants and the remaining paste is delivered underground for use in controlled conditions.

Facility Design & Operation

Northern Star has aligned the management of tailings storage facilities (TSF) with international requirements and complying with regulatory requirements. Our Tailings Management Standard¹ sets out the minimum requirements that all Operational sites must maintain in relation to the design, construction, operation and decommissioning of any TSFs.

The objectives of the Standard are to:

- Ensure that Northern Star effectively manages its TSFs through all phases of their life cycle in compliance with all applicable laws and regulations and in alignment with accepted industry practice.
- Establish the minimum geotechnical, hydrological, geochemical and environmental design and performance criteria for all facilities.
- Mandate the development, compliance and routine updating of key tailings management procedures and documents.
- Define the minimum resource requirements for effective management and critical review of all facilities.
- Promote transparent, fair and consistent tailings management approaches and practices across all sites and regions.
- Define readiness to respond to emergency events including necessary recovery action.

Each Operation site has a nominated person responsible for the management of tailings, and each site manages their individual facilities. Northern Star's corporate team provide the necessary governance and oversight to monitor that all tailings management processes and practices are meeting the Company standards. This oversight also includes regular third-party audits.

Tailings Recycling

Northern Star will continue to utilise tailings as backfill for underground. Tailings are neutralised to ensure cyanide is at a safe level and then we combine this material with cement. This mixture is then pumped underground and called backfill paste.

The paste is pumped into open voids and when it consolidates it provides support for the rest of the mine. This material can be driven on, ground support can be installed and can be mined against.

This is utilised at most of the Northern Star underground mines and is a great way of reducing the amount of material stored in the site's TSF.

At Pogo, paste fill is also utilised, however as part of the DSTF Potentially Acid Forming (PAF) waste rock is encapsulated with the filtered tailings. The waste rock is dumped at the DSTF and then it is covered with filtered tailings and compacted. This prevents water and air coming in contact with the PAF material. This prevents any chemical run off from the PAF material.

¹ Tailings Management Standard (NSR-TS-006-STA)

Non-Mineralised Waste Management & Recycling

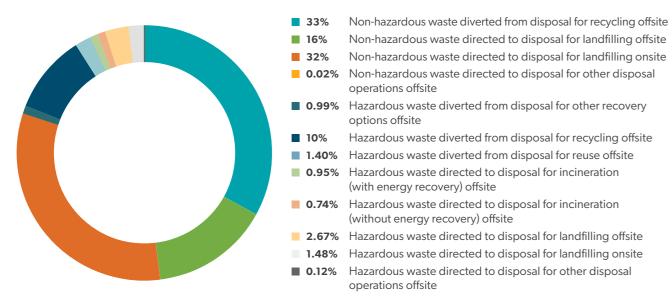
Northern Star adopts the Reduce-Reuse-Recycle approach to waste management and reviews opportunities to reduce waste volumes and recycle spent materials at our operating facilities. Our Waste Management Global Standard² outlines our planning, management and monitoring of waste material. The various waste streams are identified at each site and reviewed annually to ensure all wastes are identified and managed appropriately and in line with relevant legislation, regulations,

licences and permits. When new waste streams are identified, they are risk-assessed to identify the most appropriate disposal option.

All on-site disposal, be it in a purposebuilt landfill facility, within waste rock dumps or tailings facilities, is conducted in accordance with the relevant permits and approvals. Conditions associated with these permits and approvals are followed to ensure disposal is safe and without environmental impact. Hazardous wastes and hydrocarbons are segregated, stored, treated and disposed of in accordance with its hazardous properties and legal requirements³. Medical wastes are collected, stored and disposed of in a manner that complies with regulations and mitigates risk to human health. Cyanide wastes are treated, transported and disposed of in accordance with legal requirements and the Northern Star Cyanide Management Standard⁴.



Figure 4 Distribution of Waste in FY24 (Excluding Waste Rock & Tailings)



NSR-ENV-007-STA – Waste Management Global Standard. Refer to page 10 for more information

Cyanide & Hazardous Materials Management

Northern Star uses sodium cyanide in gold processing to dissolve gold and silver from the ore, enabling them to be extracted and recovered. Focused on protecting our workforce, surrounding communities and the environment from potential impacts associated with our use of sodium cyanide, Northern Star's Cyanide Management Standard provides guidance for our sites on how to manage the risks associated with the supply, handling, transport and storage of sodium cyanide.

The standard aims to ensure that both safety and environmental aspects are considered, and legislation is complied with. Each year a third-party audit is undertaken on each site against the Cyanide Management Standard. Any gaps discovered are assigned to a responsible person with a required action date and monitored through our reporting and action

systems. Any actions of significance are reported to the Board via the ESS Committee.

Due to its proximity to the City of Kalgoorlie-Boulder, Kalgoorlie Consolidated Gold Mines Pty Ltd (KCGM) became a signatory to the International Cyanide Management Code (Cyanide Code) in 2008. The Cyanide Code is a voluntary industry program focused on the safe and environmentally responsible management of cyanide. KCGM has since recertified its compliance with the Cyanide Code in 2012, 2015, 2019 and 2022. As a signatory to the Cyanide Code, KCGM demonstrates that all activities associated with the use of sodium cyanide comply with the Cyanide Code and are managed in accordance with industry best practice.

As part of KCGM's signatory status, the site completes a Cyanide Code audit every three years. In between a gap analysis is conducted against the Cyanide Code to ensure they are remedied as soon as practicable. The Cyanide Code has a high level of governance requirements and with the proximity of KCGM to Kalgoorlie-Boulder, Northern Star recognises the importance of stakeholder consultation within its governance structure.

Our other sites are not signatories to the Cyanide Code but are regularly assessed to ensure they are compliant with the Northern Star Cyanide Management Standard and are aligned with the principles and standards of the Cyanide Code.

Northern Star requires all suppliers and transporters of sodium cyanide to our operations to be signatories to the Cyanide Code, providing confidence that they are adequately managing the risks associated with their activities relevant to communities and the environment.



³ Offsite waste oil and DIBK disposal data from NST Thunderbox stores has been estimated for a portion of FY24, due to waste contractor reports being unavailable for that period (does not include offsite waste disposal or recycling from contractors or other categories where records were available)

⁴ NSR-TS-001-STA – Cyanide Management Standard

Waste Rock Management & Recycling

Waste rock is material mined from our Operations that does not contain gold at economic levels. This material must be disposed of to waste rock landforms or backfilled into open pits or underground voids. Northern Star undertakes waste optimisation and reduction programs continuously for our existing mining Operations as well as any proposed new mines. While the tonnes of waste rock produced per annum may appear to be large, they are significantly reduced by our waste optimisation programs.

Volumes of waste generated and placed in waste dumps is reduced through a number of different ways including application of optimal mining methodologies, underground versus open pit mining, waste rock recycling and in-pit waste rehandling. Where generation of waste rock is unavoidable, backfilling is Northern Star's first preference as

it eliminates the need to create permanent landforms in the environment, while decreasing safety risks associated with open voids. However, backfilling relies on availability and distance to barren voids and is not always practical.

Alternative uses may also include:

- utilisation for roadbase, stemming and backfilling at some sites (KCGM's Mt Charlotte underground mine backfill via a conveyor)
- Run of Mine (ROM) pad management used for demarcation, barriers and managing wet surface conditions
- Traffic management used for windrows, barriers, demarcation areas



Waste & Tailings Performance Metrics

Matteries (FY24	FY23	FY22	
Commonited Waste (T) 146 2.56 4.96 General Waste (T) 7,377 3,856 2,949 Scrap Metal (T) 7,377 3,856 2,949 Tyres (T) 336 1 100 Waste Colf (T) 10,609 5,938 5,130 Non-Mineralised Waste (T) Non-Mineralised Waste (T) 66 67 68 69 61 General Waste (T) Mon-Mineralised Waste (T) 487 1,999 12,413 1,924 1,124	Non-Mineralised Waste Recycled					
Serap Metal (1)	Batteries (T)		96	37	37	
Scrap Metal (f)	Co-Mingled Waste (T)		146	256	266	
Toner Cartridges (T) 3.36 — 10.00 Tyres (T) 2,4472 1,724 1,670 Total (T) Non-Mineralised Waste Disposed Co-Mingled Waste (T) Co-Mingled Waste (T) 653 682 612 Co-Mingled Waste (T) 653 682 612 Co-Mingled Waste (T) 10,809 8,991 12,413 Tyres (T) 487 1,694 1,623 Waste Oil (T) Total (T) Tylas,552 <th colspa<="" td=""><td>General Waste (T)</td><td></td><td>2</td><td>65</td><td>49</td></th>	<td>General Waste (T)</td> <td></td> <td>2</td> <td>65</td> <td>49</td>	General Waste (T)		2	65	49
Tyres (T) 3.36 1.60 Waste Oil (T) 2,472 1,724 1,670 Total (T) Non-Mineralised Waste Disposate Co-Mingled Waste (T) Co-Mingled Waste (T) 6.653 6.62 6.12 General Waste (T) 487 1.694 1.623 Waste Oil (T) 1.233 1.233 1.243 1.243 1.249 1.249 Total (T) Total (T) 2.333 1.169 3.36 3.31 1.495 Hazardous Waste Flazardous Waste 1.71 2.0 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36 3.36	Scrap Metal (T)		7,317	3,856	2,949	
Waste Oil (T) 2,472 1,724 1,670 Total (T) Non-Mineralised Waste Disposed Co-Mingled Waste (T) O 653 682 612 General Waste (T) 10,809 8,991 12,413 Tyres (T) 487 1,694 1,213 Waste Oil (T) 381 265 381 Total (T) 12,330 11,631 14,959 Hazardous Waster (T) 70 20 356 Directed to disposal (T) 70 20 356 Directed to disposal (T) 70 20 356 Maste Rock sent to Waster Dumps Kalgoorlie Production Centre (T) 30,273,413 30,613,636 19,803,016 Maste Rock Recycled for Backfill Fola (T) 101,777,924 11,723,0070 91,898,159 Waste Rock Recycled for Backfill Fola (T) 1,697,225 1,632,561 4,776,804 Total Waste Rock Generated Kalgoorlie Production Centre (T) 1,697,225 1,632,561	Toner Cartridges (T)		-	-	-	
Total (T)	Tyres (T)		336	-	160	
Non-Mineralised Waste (T)	Waste Oil (T)		2,472	1,724	1,670	
Co-Mingled Waste (T) 653 682 612 General Waste (T) 10,809 8,991 12,413 Tyres (T) 381 2c55 3,811 Total (T) 12,330 11,631 14,959 Hazardous Waste Directed to disposal (T) 71 20 356 Directed to recycling (T) 71 20 356 Waste Rock sent to Waste Dumps Kalgoorlie Production Centre (T) 70,449,509 86,553,507 70,816,917 Yandal Production Centre (T) 30,273,413 30,613,636 19,803,106 Waste Rock Recycled for Backfill 70 (10,107) 855,002 763,561 769,686 Total (T) 14,975,974 71,942,009 86,553,507 79,986,696 Waste Rock Recycled for Backfill 70 (10,107) 1,947,054 17,930,704 91,389,619 Waste Rock Recycled for Backfill 70 (10,107) 1,667,225 1,62,256 4,776,804 Rajoorile Production Centre (T) 1,947,056 87	Total (T)		10,369	5,938	5,130	
Separal Maste (T) 10,809 8,991 12,413	Non-Mineralised Waste Disposed					
Tyres (T) 1,694 1,623 1,631 1,695 311 1,095 1,005 1	Co-Mingled Waste (T)		653	682	612	
Waste Oil (T) 381 265 311 Total (T) Hazardous Waste Directed to disposal (T) No production Centre (T) 71 20 356 Directed to recycling (T) Mineralised Waste Waste Rock sent to Waste Rock sent to Waste Dumps Mineralised Waste Waste Rock Sent to Waste Rock Recycled for Backfill Kalgoorlie Production Centre (T) 30,273,413 30,613,636 19,803,016 Waste Rock Recycled for Backfill Kalgoorlie Production Centre (T) 11,497,547 1,422,218 3,895,509 Waste Rock Recycled for Backfill Yandal Production Centre (T) 169,678 210,343 881,295 Pogo Production Centre (T) 1,667,225 1,632,561 4,776,804 Yandal Production Centre (T) 71,947,056 87,975,724 74,712,426 Total (T) 1,3667,225 1,632,561 4,776,804 Rock Generated Kalgooriie Production Centre (T) 71,947,056 87,975,724 74,712,426 Tailings Sent to Tailings Kalgooriie Production Centre (T) 103,245,149 <td< td=""><td>General Waste (T)</td><td></td><td>10,809</td><td>8,991</td><td>12,413</td></td<>	General Waste (T)		10,809	8,991	12,413	
Total (T)	Tyres (T)		487	1,694	1,623	
Directed to disposal (T)	Waste Oil (T)		381	265	311	
Directed to disposal (T) 71 20 356 Directed to recycling (T) Mineralised Waste Waste Rock sent to Waste Dumps Majoorlie Production Centre (T) 70,449,509 86,553,507 70,816,917 Waste Rock sent to Waste Dumps Yandal Production Centre (T) 30,273,413 30,613,636 19,803,016 Total (T) 101,577,924 117,930,704 91,389,619 Waste Rock Recycled for Backfill Kalgoorlie Production Centre (T) 1,497,547 1,422,218 3,895,509 Total (T) 169,678 210,343 881,295 Pogo Production Centre (T) 1,667,225 1,632,561 4,776,804 Total Waste Kalgoorlie Production Centre (T) 71,947,056 87,975,724 74,712,426 Total Waste Pogo Production Centre (T) 855,002 763,561 769,686 Total Waste Kalgoorlie Production Centre (T) 1,343,409 119,563,2561 4,776,804 Total (T) 103,245,149 119,563,264 96,166,423	Total (T)		12,330	11,631	14,959	
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Total (T) 101,577,924 117,930,704 91,389,619		Yandal Production Centre (T)	30,273,413	30,613,636	19,803,016	
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Waste Rock Recycled for Backfill Yandal Production Centre (T) 169,678 210,343 881,295 Pogo Production Centre (T) - - - - Total (T) 1,667,225 1,632,561 4,776,804 Kalgoorlie Production Centre (T) 71,947,056 87,975,724 74,712,426 Total Waste Rock Generated Yandal Production Centre (T) 30,443,091 30,823,979 20,684,311 Pogo Production Centre (T) 855,002 763,561 769,686 Total (T) 103,245,149 119,563,264 96,166,423 Kalgoorlie Production Centre (T) 17,089,731 18,022,507 19,158,977 Yandal Production Centre (T) 6,489,744 6,190,053 5,458,936 Pogo Production Centre (T) 1,365,171 853,753 719,362 Total (T) 24,944,647 25,066,312 25,337,275 Kalgoorlie Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 18,048,911 18,962,280		Total (T)	101,577,924	117,930,704	91,389,619	
for Backfill Pogo Production Centre (T) -	•	Kalgoorlie Production Centre (T)	1,497,547	1,422,218	3,895,509	
Total (T)		Yandal Production Centre (T)	169,678	210,343	881,295	
Total Waste Rock Generated Facilities (TSFs) Total (T) Tot		Pogo Production Centre (T)	-	-	-	
Total Waste Rock Generated Yandal Production Centre (T) 30,443,091 30,823,979 20,684,311 Pogo Production Centre (T) 855,002 763,561 769,686 Total (T) 103,245,149 119,563,264 96,166,423 Kalgoorlie Production Centre (T) 17,089,731 18,022,507 19,158,977 Yandal Production Centre (T) 6,489,744 6,190,053 5,458,936 Pogo Production Centre (T) 1,365,171 853,753 719,362 Tailings Recycled for Pastefill Kalgoorlie Production Centre (T) 959,180 939,774 634,544 Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 2,558,541 2,147,910 1,261,002 Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Total (T) 2,558,541 2,147,910 1,261,002 Yandal Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 1,365,171 <td< td=""><td>Total (T)</td><td>1,667,225</td><td>1,632,561</td><td>4,776,804</td></td<>		Total (T)	1,667,225	1,632,561	4,776,804	
Rock Generated Pogo Production Centre (T) 855,002 763,561 769,686 Total (T) 103,245,149 119,563,264 96,166,423 Tailings Sent to Tailings Storage Facilities (TSFs) Kalgoorlie Production Centre (T) 17,089,731 18,022,507 19,158,977 Tailings Recycled for Pastefill Pogo Production Centre (T) 1,365,171 853,753 719,362 Total (T) 24,944,647 25,066,312 25,337,275 Kalgoorlie Production Centre (T) 959,180 939,774 634,544 Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 2,558,541 2,147,910 1,261,002 Total Tailings Generated Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,22		Kalgoorlie Production Centre (T)	71,947,056	87,975,724	74,712,426	
Total (T) 103,245,149 119,563,264 96,166,423 Tailings Sent to Tailings Storage Facilities (TSFs) Fogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total Tailings Generated Mineralised Waste (Waste Rock & Tailings) Total (T) 126,502,507 1,036,000 Total (T) 1,365,171 1,228,793 1,034,002		Yandal Production Centre (T)	30,443,091	30,823,979	20,684,311	
Tailings Sent to Tailings Se		Pogo Production Centre (T)	855,002	763,561	769,686	
Tailings Sent to Tailings Storage Facilities (TSFs) Yandal Production Centre (T) 6,489,744 6,190,053 5,458,936 Pogo Production Centre (T) 1,365,171 853,753 719,362 Total (T) 24,944,647 25,066,312 25,337,275 Kalgoorlie Production Centre (T) 959,180 939,774 634,544 Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) - 375,040 314,640 Total (T) 2,558,541 2,147,910 1,261,002 Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Taillings Composition Non-Cyanide Containing Tailin		Total (T)	103,245,149	119,563,264	96,166,423	
Pogo Production Centre (T) 1,365,171 853,753 719,362 Total (T) 24,944,647 25,066,312 25,337,275 Tailings Recycled for Pastefill Pogo Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 2,558,541 2,147,910 1,261,002 Total (T) 2,558,541 2,147,910 1,261,002 Total Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total (T) 130,748,337 146,777,487 122,764,700 Total (T) Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002 Tailings Composition 1,365,171 1,228,793 1,034,002 Total (T) 130,748,337 146,777,487 122,764,700 Total (T) 1,365,171 1,228,793 1,034,002 Total (T) 1,28,793 1,034,002 Total (T) 1,365,171 1,228,793 1,034,002 Total (T) 1,365,171 1,228,793 1,034,002 Total (T) 1,287,793 1		Kalgoorlie Production Centre (T)	17,089,731	18,022,507	19,158,977	
Total (T) 24,944,647 25,066,312 25,337,275 Ralgoorlie Production Centre (T) 959,180 939,774 634,544 Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) - 375,040 314,640 Total (T) 2,558,541 2,147,910 1,261,002 Ralgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002 Non-Cyanid		Yandal Production Centre (T)	6,489,744	6,190,053	5,458,936	
Kalgoorlie Production Centre (T) 959,180 939,774 634,544 Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) 375,040 314,640 Total (T) 2,558,541 2,147,910 1,261,002 Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Pogo Production Centre (T)	1,365,171	853,753	719,362	
Tailings Recycled for Pastefill Yandal Production Centre (T) 1,599,362 833,096 311,818 Pogo Production Centre (T) - 375,040 314,640 Total (T) 2,558,541 2,147,910 1,261,002 Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 (Waste Rock & Tailings) Total (T) 4,225,766 3,780,471 6,037,806 Tailings Composition Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Total (T)	24,944,647	25,066,312	25,337,275	
for Pastefill Pogo Production Centre (T) - 375,040 314,640 Total (T) 2,558,541 2,147,910 1,261,002 Total Tailings Generated Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Kalgoorlie Production Centre (T)	959,180	939,774	634,544	
Total (T) 2,558,541 2,147,910 1,261,002 Total Tailings Generated Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Yandal Production Centre (T)	1,599,362	833,096	311,818	
Kalgoorlie Production Centre (T) 18,048,911 18,962,280 19,793,521 Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Pogo Production Centre (T)	-	375,040	314,640	
Total Tailings Generated Yandal Production Centre (T) 8,089,106 7,023,149 5,770,754 Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Total (T)	2,558,541	2,147,910	1,261,002	
Mineralised Waste (Waste Rock & Tailings) Total (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002	Total Tailings Generated	Kalgoorlie Production Centre (T)	18,048,911	18,962,280	19,793,521	
Pogo Production Centre (T) 1,365,171 1,228,793 1,034,002 Total (T) 27,503,188 27,214,222 26,598,277 Mineralised Waste (Waste Rock & Tailings) Total Recycled (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Yandal Production Centre (T)	8,089,106	7,023,149	5,770,754	
Mineralised Waste (Waste Rock & Tailings) Total Sent for Disposal (T) 126,522,571 142,997,016 116,726,894 Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Pogo Production Centre (T)	1,365,171	1,228,793	1,034,002	
Mineralised Waste (Waste Rock & Tailings) Total Recycled (T) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Total (T)	27,503,188	27,214,222	26,598,277	
(Waste Rock & Tailings) Iotal Recycled (1) 4,225,766 3,780,471 6,037,806 Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Total Sent for Disposal (T)	126,522,571	142,997,016	116,726,894	
Total (T) 130,748,337 146,777,487 122,764,700 Non-Cyanide Containing Tailings (T) 1,365,171 1,228,793 1,034,002		Total Recycled (T)	4,225,766	3,780,471	6,037,806	
Tailings Composition		Total (T)	130,748,337	146,777,487	122,764,700	
Cyanide Containing Tailings (T) 26,138,017 25,985,430 25,564,275	Tailings Composition	Non-Cyanide Containing Tailings (T)	1,365,171	1,228,793	1,034,002	
		Cyanide Containing Tailings (T)	26,138,017	25,985,430	25,564,275	



About This Disclosure

Northern Star has reported in accordance with the GRI Standards for the period 1 July 2023 to 30 June 2024. This disclosure supports the Northern Star Annual Report FY24 in relation to environment and social responsibility.

Management has sought independent, third-party assurance by Bureau Veritas of all data relating to GRI core and material disclosures in this disclosure. These disclosures are identified in our GRI, SASB and UN SDG Alignment Index. Where partial assurance received, or a topic note assured, that information has been included in the Index.

A copy of the assurance statement is provided on Northern Star's website at: <u>Environment & Social</u> <u>Responsibility (ESR) Reporting</u>

This disclosure was reviewed and approved by Northern Star's Board of Directors and published on 22 August 2024. Monetary amounts in this Report are reported in Australian dollars unless otherwise stated.

Feedback

We welcome feedback and invite readers to send any comments or enquiries about this disclosure to us at esgperformance@nsrltd.com

Disclaimer

This disclosure contains forward-looking statements, including statements of current intention and expectation. These forward-looking statements are based on information available at the date of this disclosure.

While these forward-looking statements discuss Northern Star's expectations at the date of this disclosure, they are not guarantees or predictions of future performance, and by their nature, are subject to significant uncertainties, many of which are beyond Northern Star's control. Actual results and developments may differ materially from those expressed in this disclosure and Northern Star cautions readers against reliance on any forward-looking statements or guidance.

There are also limitations with respect to scenario analysis, and it is difficult to predict which, if any, of the scenarios might eventuate.

Scenario analysis is not an indication of probable outcomes and relies on assumptions that may or may not prove to be correct or eventuate.

Except as required by applicable laws or regulations, Northern Star does not undertake to publicly update or review any forward-looking statements, whether as a result of new information or future events.

Assumptions

Nil.

FY24 ESR Disclosure Suite

This disclosure, and our supplementary website disclosures, form part of a suite of documents that provide information and updates on Northern Star's FY24 environment and social responsibility disclosures and should be read as a supporting accompaniment to the Northern Star Resources Ltd FY24 Annual Report, FY24 Modern Slavery Statement and FY24 Corporate Governance Statement.

Throughout this disclosure there are references to supporting information on our website which the reader is encouraged to read. The Northern Star website contains significant additional supporting information including our annual ESR Performance Data Tables, GRI Index and references to our previous disclosures.

Glossary

ABN

Australian Business Number

ADEC

Alaskan Department of Environmental Conservation

ASX

Australian Securities Exchange, trading as ASX

ASX Corporate Governance Council Principles and Recommendations

Principles and Recommendations (4th edition) of the ASX Corporate Governance Council on the corporate governance practices to be adopted by ASX listed entities and which are designed to promote investor confidence and to assist listed entities to meet shareholder expectations

Au

The chemical symbol for gold

Audit & Risk Committee (ARC)

Audit and Risk Sub-Committee of the Board

B or bn

Billion

Board

Board of Directors

Company

Northern Star Resources Ltd ABN 43 092 832 892

CPTu

Cone penetration test unit allows for the analysis of the geotechnical behaviour of fine granular tailings and soils

contractors

Externally employed contracted workers engaged by the Company to support operations

Corporations Act

Corporations Act 2001 (Cth)

Cyanide

A chemical compound that consists of a group of compounds that contain a carbon atom triple bonded to a nitrogen atom.

Director

A director of the Company duly appointed under the Corporations Act

DSTF

Dry stack tailings facility

employees

Total number of employees of the Group including permanent, fixed term and part-time. Does not include contractors

EOR

Engineer of Record. A professional engineer who is engaged to be responsible for the design and construction of tailings storage facilities.

ESG

Environment, Social & Governance

ESS

Environmental, Social & Safety

ESS Committee

Environmental, Social & Safety sub-Committee of the Board

FY

Financial Year ending 30 June

GISTM

Global Industry Standard on Tailings Management

GRI

Global Reporting Initiative

Group

Northern Star Resources Ltd and all of its wholly owned subsidiaries

K or k

Thousand

KCGM

KCGM means Kalgoorlie Consolidated Gold Mines Pty Ltd, a wholly owned subsidiary of the Company, which operates the Super Pit and Mt Charlotte Underground Mines and Fimiston Processing Plant.

Kg or kg

Kilogram

kl

kilolitre; one thousand litres

KMP

Key Management Personnel

KPI

Key Performance Indicator

Limited Assurance

Audit and assurance undertaken by an external auditor on whether the data or statements made in this report have been prepared in accordance with GRI

$\mathbf{M} \ \mathbf{or} \ \mathbf{m}$

Million

ML

Mega-litre; one million litres

NSMS

Northern Star Mining Services

Officer

An officer of the Company defined under the Corporations Act

Oz

Ounce

PAF

A rock that the potential to form acid.

Phreatic surface

The position between the zone of saturation and the zone of aeration in the tailings dam

ROM

ROM or Run of Mine pad is an area where ore is stockpiled in preparation for feeding into the processing circuit, typically through a crushing and grinding circuit first.

SASB

Sustainability Accounting Standards Board

shareholder

A shareholder of Northern Star Resources Ltd

stakeholders

An individual, group or organisation that is impacted by the Company, or has an impact on the Company. Examples of stakeholders are investors, employees, suppliers and local communities

Tort

Tonnes; one thousand kilograms

TSF

Tailings Storage Facility

UN

United Nations

UN SDGs

The United Nations Sustainable Development Goals

US or USA

United States of America

WA

Western Australia

\$

Australian dollars, unless the context states otherwise. All A\$ to \$US currency conversions used in this ESR Disclosure Suite are at \$0.6556



Contact Information

Northern Star Resources Ltd

ABN 43 092 832 892

Corporate office

Level 4, 500 Hay Street, Subiaco WA 6008 Australia

Telephone

+61 8 6188 2100

Website

www.nsrltd.com

Email

ESG Enquiries <u>esgperformance@nsrltd.com</u>
Investor Relations <u>investorrelations@nsrltd.com</u>

General Enquiries <u>info@nsrltd.com</u>

 Media Officer
 mediaofficer@nsrltd.com

 Compliance
 compliance@nsrltd.com

ASX Code NS

Share Registry MUFG Corporate Markets

(formerly known as Link Market Services)

Additional Website ESR Disclosures:

Environment & Social Responsibility Approach

People & Culture at Northern Star

Safety & Critical Risk Control at Northern Star

Community Engagement & Support at Northern Star

Supply Chain Management at Northern Star

Environmental Management at Northern Star

Climate Change at Northern Star

Water Security at Northern Star

Waste & Tailings Management at Northern Star

FY24 Performance Data Tables

FY24 GRI, SASB and UN SDG Alignment Index

FY24 Tailings Disclosure Report

FY24 Biodiversity Values

