



Safety Performance

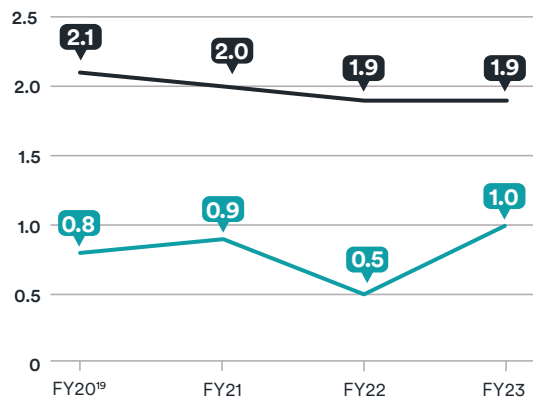
Safety Performance



Safety Snapshot

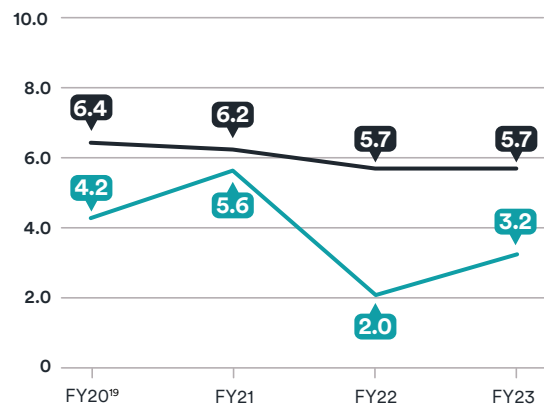
Safety – LTIs

LTIFR 1.0



Safety – LTIs + RWIs

TRIFR¹⁸ 3.2



Key — Northern Star — Industry average²⁰

FY23 Achievements

Critical Risk Management Program deployed across Australian Operations

99%

Percentage of hazards rectified (11,589 Hazard Identification Reports Closed out of 11,700 Hazard Identifications Reported)

25,571

Number of Active Field Leadership Interactions Reported

6,923

Number of Inspections Reported

744

Number of Risk Management Events Reported (e.g. risk assessments, alerts issued, change managements issued)

1,679

Critical Control Verifications completed across Australian Operations

18. Number of reportable injuries (Lost Time Injuries and Restricted Work Injuries) per million hours worked. Calculated on a 12-month rolling average.
 19. Inclusion of historical legacy data from Saracen assets prior to the Merger has resulted in restatement of data prior to February 2021.
 20. - FY23 Industry means the DMIRS Safety Performance in the Western Australian Mineral Industry – Accident and Injury Statistics 2020-21 Metalliferous total
 - FY22 Industry means the DMIRS Safety Performance in the Western Australian Mineral Industry – Accident and Injury Statistics 2020-21 Metalliferous total
 - FY21 Industry means the DMIRS Safety Performance in the Western Australian Mineral Industry – Accident and Injury Statistics 2019-20 Metalliferous total
 - FY20 Industry means the DMIRS Safety Performance in the Western Australian Mineral Industry – Accident and Injury Statistics 2018-19 Metalliferous total

Our Approach

At Northern Star, continuously improving the safety, health, and wellbeing of our workforce is our priority. This is reflected in our initiatives and programs during FY23.

Our Safety Management System, which comprises of 14 elements is aligned with continuous improvement models, applies to all employees, contractors and visitors to our Operations. It is displayed graphically in Figure 14 overleaf.

More on our website...

An overview of our safety management system, critical risk standards, incident reporting and investigation systems, emergency and crisis management, and health and wellness programs and services is available on our Company website at [Safety Performance](#)



Cameron Albertini, Truck Operator, Kanowna Belle, Kalgoorlie Production Centre, Western Australia

Leadership, Commitment & Policy

Leadership is key in a culture that prioritises safety. The Safety Leadership Training Program highlighted in our FY22 Sustainability Report is designed to ensure that safety principles are deeply embedded across all levels of our organisation.

This empowers leaders throughout our Company to advocate for safety, promote and communicate best practices, and reinforces our goal of ensuring a harm-free workplace for all our employees and contractors.

So far 52% of current leaders within Northern Star have completed our ongoing Safety Leadership Training Program, with training of other leaders continuing in FY24. The positive consequences have been acknowledged throughout our workforce.

Through this program, we continue to aim to:

- Establish a solid basis for cultivating safety leadership skills.
- Enhance the overall performance of safety leaders throughout the Company.

The Safety Leadership Training Program's implementation across our North American and Australian sites reflects our determination to continuously improve an organisation-wide culture of safety. The enthusiastic response and wide-ranging participation from our employees is a testament to the program's value and effectiveness.

Northern Star remains committed to fostering safety leadership across the Company.

Objectives, Targets & Plans

During FY23 Northern Star developed a Principal Mining Hazard Management Manual in compliance with the requirements under the Western Australian *Work Health and Safety (WHS) (Mining) Regulations 2022* to develop a Principal Mining Hazard Management Plan.

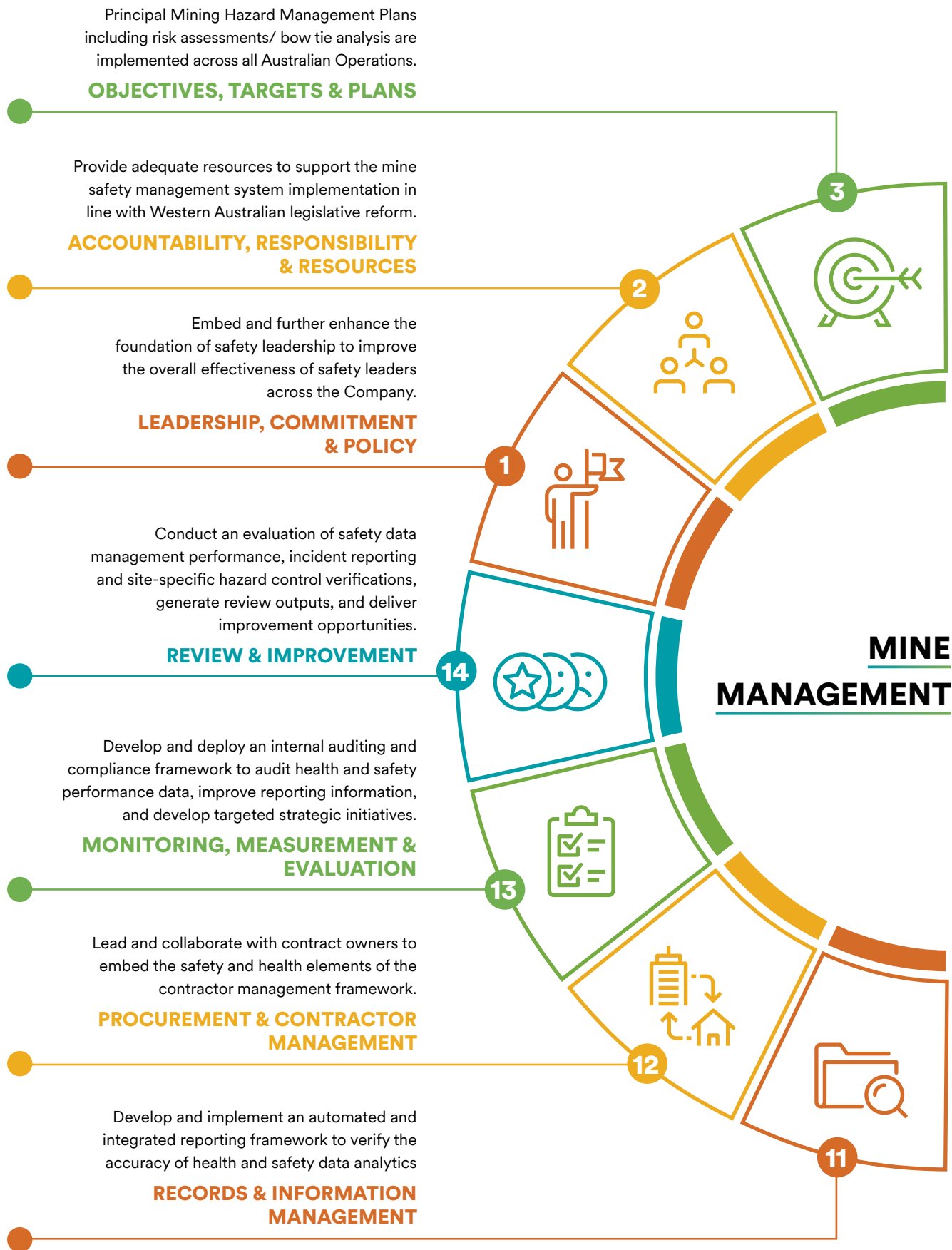
Principal Mining Hazard Management Plans were developed for the following nine Principal Mining Hazards:

- Geotechnical structure instability.
- Hazardous energy.
- Confined space.
- Roads and other areas where mobile plant operate.
- Mine shafts and winding systems.

- Hazardous substances.
- Explosives.
- Fire and explosion.
- Inrush of any substance.

The Principal Mining Hazard Management Plans form part of the Company's Mine Safety Management System and involves identification of all aspects of risk control relevant to the principal mining hazards present at Company mines, projects and exploration sites. The Principal Mining Hazard Management Plans are being integrated into our wider risk management system.

Figure 14 Health and Safety Strategic Plan FY24 Update



Training, Competency & Awareness

In FY23, Northern Star prioritised a comprehensive training program, reinforcing our commitment to ensuring high standards of safety, health, and performance among our employees and contractors.

We recognise the crucial role that training plays in developing a knowledgeable and competent workforce, and in maintaining a safe and efficient work environment. The training program for FY23 was focused on these key areas:

- Health and Safety Training aligning to WHS reform: The primary objective of this training was to educate our employees and contractors on the best practices

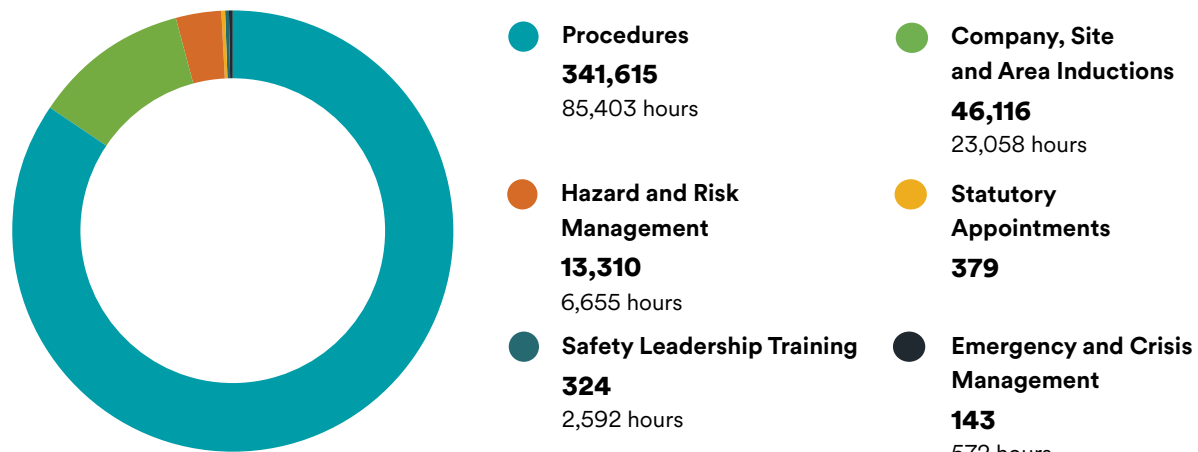
to identify, prevent, and manage workplace hazards and the applicable changes to WHS legislation commencing in Western Australia on 31 March 2022.

- Technical Skill Development: These training sessions were targeted at enhancing the technical skills of our workforce, which ranged from hazard identification and incident investigation to active field leadership.

In total, Northern Star recorded over 113,373 hours of safety training in FY23 across leaders and other levels in the business.

Northern Star continuously reviews and enhances our training programs as part of our Safety Management System processes.

Figure 15 Safety Training Completed in FY23 by Category



Communication & Consultation

Our safety engagement strategies continue to focus on effective communication and consultation. We place value on our workforce, understanding that they are central to our success and focus on alignment with our STARR Core Values.

In FY23, over 350 safety meetings were reported across Northern Star in our INX Leading Indicators, with 39 of these being Health & Safety Representative Committee Meetings. Health and Safety Committee Meetings are comprised of workforce representatives who have completed their HSR training as required by legislation and received an Appointment outlining their responsibilities from key management personnel at Northern Star. All actions arising from the meetings are registered in INX InControl for completion.

Over the past year, we have rolled out several programs designed to continue to cultivate a culture that embraces inclusivity, respect, and collective advancement including significantly enriching our Health and Safety communication platform.

Our Health and Safety Representatives (HSRs)²¹ play a key role in this, as representatives of work groups by both being part of the group and in communicating and embedding health and safety matters.

Highlight: Our Valuable Health & Safety Representatives

HSR Miguel Cepeda Cortes (Geology) said that “If I find any discrepancies in the way we do a specific task, I never hesitate to report it and start a follow up”.

By working with Supervisors and crew members our HSR’s help to identify solutions to improve our safety standards.

Miguel says that a key part of his role as a HSR is to engage in safety conversations with his team members, and other departments when needed.

“I also like to lead by example, by following safety procedures and making sure we have everything we need to perform the task safely”



Jesse Lewis, Mechanical Apprentice Fitter, Kanowna Belle, Kalgoorlie Production Centre, Western Australia

21. Referred to as Miners Representatives in Pogo Operations, Alaska.

Hazard Identification & Risk Management

Understanding the human factor at the heart of our Operations, we've instituted ten Critical Risk Standards designed to identify, assess, and manage potential risks that could impact the wellbeing of our workforce or the operational efficacy of our business. The scope of the Critical Risk Standards is broader than the legislated nine Principal Mining Hazards which are the subject of the Principal Mining Hazard Management Plans introduced at Northern Star. The risk assessment work in relation to the nine Principal Mining Hazards is well underway consistent with legislative requirements.

The core of this strategy is to anticipate and mitigate risks before they escalate by focusing on the individual needs and safety of each person within our organisation.

As we progress our initiative, we aim to embed our Mine Safety Management System further and execute a robust auditing schedule.

This includes:

- Finalising the implementation of the Mine Safety Management System across all sites.
- Embedding Critical Risk Standards throughout the Company.
- Enhancing the quality of key tools used company wide.
- Promoting safety leadership amongst our management teams.
- Encouraging our workforce to remove themselves from hazardous workplace conditions or tasks where there is a risk to health and safety, and ensuring these hazards are reported through our management systems to be rectified.

We have a systematic, risk-based, and person-centred approach to safety management and leadership.



Ben Jindrĭch, Emergency Response Coordinator and Jayme Te Puke, Occupational Health Nurse, Jundee, Yandal Production Centre, Western Australia

Emergency Preparedness & Response

Our Emergency Response Teams (ERT) are a crucial part of our peoples' safety and our business continuity plan. In addition to our employees' ongoing training requirements, the teams "compete" against other mine response teams at annual underground and surface emergency response competitions.

These competitions comprise a range of controlled scenarios where members are tested on all levels of skill. Scenarios put teams to the test in key areas, such as: how they work as a team; how their captains perform under stressful, evolving situations; overall team safety; and how they use the speciality equipment they are trained on to respond to a range of different potential incidents.

Northern Star promotes the active participation of our teams in these competitions as it provides controlled environments where team members can further enhance their skills while undergoing stress-inoculation. These competitions also provide exposure to industry leading technology, and experts in the emergency response community.

In FY23 Northern Star was represented at multiple inter-company and inter-site emergency response competitions held in Australia and North America.

- A combined ERT of members from both Kalgoorlie Operations and KCGM Operations represented the Company at the annual MERC (Mining Emergency Rescue Competition) in Perth in November 2022. Northern Star was again a platinum sponsor of the event.
- Thunderbox Operations, Kalgoorlie Operations and KCGM ERT represented the Company in Kalgoorlie at both the Western Australian Chamber of Minerals and Energy (CME) Underground Mine Emergency Response Competition (UMERC) in November 2022 and the CME Surface Mine Emergency Response Competition (SMERC) in May 2023.
- Pogo ERT represented the Company at the Central Mines Rescue Competition in Kellogg, Idaho, US in May 2023.



More on our website...

An overview of our emergency and crisis management processes is available on our Company website at [Safety Performance](#)

Highlight: Northern Star Resources Emergency Response Teams excel at the 2023 Surface Mine Emergency Response Competition

Emergency response teams are comprised of personnel who volunteer their time to ensure our sites are adequately resourced to respond if a safety incident should occur. These teams are a critical component of our incident de-escalation strategies, and play a vital role in reacting to an incident. Their training and thorough processes and inspections of hazardous environments and mitigation controls are pivotal in ensuring that our people are safe in the event of an incident.

When required, an emergency response team will have to turn out to an event and act quickly and decisively to maintain control of unpredictable situations to minimise damage and injury. Practicing these processes is operationally critical to business continuity and the health and safety of our people.

In May 2023, Emergency Response Teams from our Operations competed at the 2023 CME Surface Mine Emergency Response Competition in Kalgoorlie Western Australia.

The competition is designed to promote, encourage and improve mine site emergency response capabilities through providing ERTs with realistic scenarios to test the skills they have developed in training, receive feedback from experienced personnel in each emergency response discipline, and identify opportunities on how to improve their overall capabilities and skillset.

Our ERT members not only get the opportunity to focus on refining their emergency response skills in the lead-up to the competition, but they get exposure to many different scenarios beyond what the Company may be able to provide during on-site training days, as well as being able to network with many ERT volunteers and professionals from across the industry.

All of the teams performances were fantastic over the competition, with Kalgoorlie Operations, KCGM Operations & Thunderbox Operations earning several awards at the presentation night:

1st Place:

- Rope Rescue – KCGM Operations
- Team Safety - KCGM Operations
- Overall BA Skills – Thunderbox Operations
- Best New Team - Thunderbox Operations
- Best New Captain – Thunderbox Operations
- Incident Management Scenario – Leith Evans

2nd Place:

- Overall Best Team 2nd Place – KCGM Operations
- Hazardous Materials - KCGM Operations
- First Aid - KCGM Operations
- Fire Fighting - KCGM Operations
- Confined Space – Thunderbox Operations
- Team Skills – Thunderbox Operations
- Vehicle Extraction – KCGM Operations
- Best New Captain – KCGM Operations
- Overall BA Skills – KCGM Operations
- Best New Team – Kalgoorlie Operations

3rd Place:

- Overall Best Team 3rd Place – Thunderbox Operations
- Rope Rescue – Thunderbox Operations
- Theory – Kalgoorlie Operations
- Team Skills – KCGM Operations
- Overall BA Skills – Kalgoorlie Operations



KCGM Operations Emergency Response Team awarded first place for Team Safety



Thunderbox Operations Emergency Response Team awarded first place for Best New Team

Health & Wellness

We prioritise the health of our workforce as much as their safety. Comprehensive health surveillance is a critical component of our ongoing commitment to maintaining our high standards of occupational health and safety.

In FY23, the Northern Star occupational hygiene monitoring program team conducted a total of 2,967 samples across our employees and contractors.

Through these assessments, we can identify and quantify potential hazards, like chemical, physical, and biological agents, that our employees and contractors may be exposed to during their work activities. Sampling is conducted to:

- Assess the potential risks associated with exposure to hazardous substances or conditions.
- Ensure compliance with legal and regulatory requirements.
- Evaluate the effectiveness of existing control measures.
- Identify areas where additional preventive measures are needed.
- Create a healthier and safer work environment for our employees and contractors.

Our focus areas for FY23 included the monitoring of airborne contaminants, noise exposure, and ergonomic risks, with a particular emphasis on the underground operations sector. The sampling results obtained help us create a more comprehensive action plan.

Some of the key steps in this plan include:

- Implementing additional engineering controls to minimise exposure to potential hazards such as airborne contaminants.
- Introducing more efficient personal protective equipment (PPE) to safeguard employees from high noise levels.
- Conducting ergonomic assessments and introducing interventions to decrease the potential of musculoskeletal disorders.

We will continue our sampling program in FY24, enhancing our methods and broadening our focus areas as necessary, to continue to strive for a safer workplace.

Table 7 Number of Occupational Hygiene Samples Collected During Our FY23 Program

Contaminant	FY23	FY22
Ammonia	12	18
Calcium Oxide	4	1
Carbon Disulphide	-	17
Carbon Monoxide	29	74
Diesel Particulate Matter	325	316
Fibre	13	11
Gold Fumes	13	27
Hydrogen Cyanide	18	41
Inhalable Dust and Metals	570	639
Mercury Vapour	45	266
Nitrogen Dioxide	270	154
Noise	947	901
Respirable Dust and Silica	685	748
Sulphur Dioxide	-	1
Volatile Organic Compounds	-	5
Welding Fume and Metals	36	26
	2,967	3,245²²

22. FY22 numbers were higher than usual due to a number of targeted occupational hygiene sampling programs that were undertaken during that period.

Procurement & Contractor Management

Effective procurement and contractor engagement and management are critical aspects of safety in our Operations.

Our initiative initially focused on aligning departmental expectations with workplace health and safety legislative requirements, culminating in the creation of a robust 5-tier safety contractor management framework.

This framework establishes clear safety guidelines and protocols for managing contractor relationships and work processes, and prioritising safety and compliance.

Monitoring, Measurement & Evaluation

Our consistent approach to managing safety has been instrumental in maintaining a low rate of injuries among our workforce. The monitoring, measurement and evaluation of the safety management system data is critical to ensure the continued positive performance and in turn the overall safety of our people. When variances are identified, priority is given to these to ensure all safety practices align to our internal standards.

One key action undertaken has been providing comprehensive training to our contractors on our safety standards and protocols and encouraging a more robust dialogue between our staff and contractors about best safety practices. We believe that open communication promotes the shared understanding of safety norms.

To support our organisation-wide contractor management and improve effective communication, we've also developed a contractor management intranet page. This digital platform serves as a hub for the necessary resources, updates, and contact points, aiding in streamlining contractor communication across the Company.

As we move into FY24, our objective is to continue to embed the framework across Northern Star with full integration scheduled for completion by Q3 FY24.

The development of our 5-tier safety contractor management framework is also a significant part of this strategy. By defining clear safety protocols for our contractors and integrating them more seamlessly into our Operations, we expect to see an overall reduction in incident rates.

Our plan is to continue to monitor incident and near miss rates closely, assessing the effectiveness of our implemented measures, and refining our approach, as necessary. We aim to instil a culture where safety norms are not just guidelines, but are ingrained into our everyday Operations, regardless of whether the work is carried out by employees or contractors. Our goal is to decrease our incident rates, reflecting a uniformly safe work environment across Northern Star.

Table 8 Work Related Injury Frequency Rates for Employees and Non-Employees²³

		FY23	FY22	FY21
Exposure Hours		14,695,424	13,101,903	13,648,657
Total Workforce	LTIFR	1.0	0.5	0.9
	TRIFR ²⁴	3.2	2.0	5.6
Exposure Hours (Employees)		6,909,806	5,908,185	6,559,841
Employees	LTIFR	1.0	0.5	0.8
	TRIFR ²⁴	3.5	1.5	4.7
Exposure Hours (Contractors)		7,785,619	7,193,719	7,088,816
Contractors	LTIFR	0.9	0.6	1.0
	TRIFR ²⁴	3.0	2.5	6.6

23. In accordance with GRI 403-9.

24. Number of reportable injuries (Lost Time Injuries and Restricted Work Injuries) per million hours worked. Calculated on a 12-month rolling average.