

HEALTH AND SAFETY

Strategic Significance

The health and safety of employees and project contractors is a priority focus for Orocobre, particularly with concurrent Stage 1 production and Stage 2 Expansion activities at Olaroz Lithium Facility.

Orocobre maintains a “zero harm” mantra with a commitment to providing a robust management system, well-designed infrastructure and equipment, adequate personal protective equipment, effective tools for risk assessment and root cause analysis, and appropriate training for its employees and contractors.

The Company expects employees and contractors to be responsible for their actions and behaviors, to work competently and to be aware of factors affecting their own safety. The Company also expects our employees and contractors to follow our safety standards, policies and procedures, reporting any unsafe conditions, behaviours and/or incidents that might affect the Company’s workforce or facilities.

Given the Company’s commitment to engaging and developing a local workforce, the safety awareness and risk-aware culture requires great focus and leadership to ensure operators and contractors demonstrate adequate skills and competence in hazard identification, risk awareness and safe operating behaviours.

Impact Boundary

This management approach disclosure refers exclusively Orocobre’s Sales de Jujuy operation.

The impact boundary is defined based on the Company’s operational control. As such, Health and Safety data and information relates to all employees and contractors on site and the incidents incurred in the delivery of their assigned tasks and duties.

Vehicle incidents associated with employee transport to and from the Olaroz Lithium Facility are included; however, contractor vehicle incidents that do not occur on site or in the delivery of their specific task are not included in the Company’s reporting scope. Safety indicators for suppliers or contractors delivering work independently offsite, such as transport providers or suppliers of input materials is also not included in the Company’s scope. That said, the Company proactively addresses these risk factors in its engagement with suppliers and contractors and defines policies and standards that minimize the risk of such incidents occurring.

Orocobre endeavors to extend its Health and Safety commitments and approach to its business partners and to Joint Venture operations where this is not direct operational control. These actions and any associated health and safety data for any operations other than the Sales de Jujuy Olaroz Lithium Facility are outside the boundary of this Management Approach Disclosure.

Orocobre’s Health and safety initiatives are also offered within the local communities to build broader awareness of specific health and safety priorities. This information is captured and reported separately in [Community Management Approach Disclosures](#) and [Case Studies](#) published in the Company’s [Sustainability Report](#).

Management Approach

Commitment

The following policies outline Orocobre's approach and its commitments with regards to Health and Safety:

- [Health and Safety Policy](#)
- Employee Benefit Policy

Reinforcing its commitment to advancing the UN Sustainable Development [Goal 3: Health and Wellbeing](#), Orocobre promotes a safe work environment through robust health and safety protocols and advanced on-site health facilities. The Company also ensures access to quality essential healthcare services and medications for employees and their families through its employee-benefit policy.

Management Systems

The Company's operations have a certified Safety Management System (OHS18001) which sets out its approach to managing health and safety. This management system covers all employees, contractors and on-site activities associated with its operations and expansion.

Observations and recommendations for improvement are presented and reviewed regularly as part of Orocobre's continuous improvement system which allows all employees and site-based operators to propose opportunities for improved safety practices across all aspects of its operations. For the next management system certification, the Company will transition to the new ISO health and safety management system: ISO45001.

Hazard Identification

Job hazard assessments are completed by all workers before undertaking any task. Supervisors have been trained to evaluate and assess the job hazard assessments and to approve them with their teams and any contractors operating in their area.

New projects and initiatives on site that are not covered by standard operating procedures pass through a 'HAZOP' and/or a 'What if?' process to evaluate potential risks and impacts. A 'Management of Change' process is also in place to ensure risks, impacts and opportunities are considered across all areas and departments as a result of a change initiative.

In accordance with the Stop Work procedure all employees and contractors are encouraged and empowered to stop work should they observe unsafe activity either associated with their own work or in the observation of another.

Incident Reporting

Intelix - a cloud based environmental, health, safety and quality management system - has been introduced for the reporting of health and safety incidents, observation, medical treatment and health data. The system's incident reporting workflow includes a detailed investigation stage which incorporates various analyses and evaluations to identify root cause and determine corrective actions, as well as several process description and documents to enhance deeper learning and knowledge among employees. Cause tree analysis is the methodology currently being used in incident investigation.

Health Services

Health services on site provide quality preventive and responsive treatment to on-site staff and visitors: from hepatitis vaccines for operators working with effluents to oxygen and other vital checks for visitors when they arrive on site. All workers are informed about the location and services provided by the medical team. There are also direct mobile numbers and a radio channel for health staff to be contacted overnight and/or in case of emergency.

In addition to on-site health services, employees are provided with medical and healthcare services as part of their employee-benefit scheme. Vaccination programs and overall health periodic reviews are also conducted on an annual basis.

Health promotion initiatives are undertaken to address non-work-related health risks such as alcoholism, diabetes, flu, cancer and other forms of lifestyle related illnesses. The health awareness program is planned out annually by the medical team on site based on review of site-based health data and contextual risks. Given the large proportion of community employees, health promotion activities are delivered to employees, contractors and communities to ensure that health-related issues impacting the workforce are addressed not only at work, but also at home.

Participation and Consultation

Orocobre has a Health and Safety Committee made up of managers across key operational departments. There are also a series of sub-committees to monitor categorised topics such as behavioural observations, risk management, incident investigation, operational discipline and training.

Committee meetings are scheduled once a month, while sub-committees meet weekly or fortnightly. Participation and consultation meetings for operational teams are held up to twice a day to discuss safety issues relating to the work that is to be done or has been done that day. In accordance with health and safety related mining industry requirements, Orocobre also participates in monthly mixed committee meetings with operators, plant employees and trade union representatives to discuss key health and safety issues emerging both on site and within the industry more broadly.

Training

Orocobre's Health and Safety team conducts training programs on site on a monthly, half-yearly, and yearly basis depending on the topic being addressed. Work-related health and safety trainings are mandatory for employees and delivered during working hours. Employees can propose specific training programs such as fire protection, first-aid techniques or any other emergency control which are delivered by the local brigade and performed outside working hours in a voluntary basis.

Suppliers and Contractors

In accordance with the Supplier Code of Conduct all Orocobre's suppliers must comply with the Company's Health and Safety policies, standards and processes. The Company uses a supplier control system (SICOP) to ensure suppliers meet the mandatory requirements before they can enter, work in or leave the Olaroz Lithium Facility or specific operating areas. Controls also include standard specifications for contractor vehicles travelling to site. Health and safety consultation and participation meetings are conducted with site-based suppliers three times a week.

Altitude Sickness

Olaroz Lithium Facility is located at approximately 4,000 metres above sea level. As such, employees, suppliers and visitors to site are at risk of suffering altitude sickness due to lack of ambient pressure and relative oxygen. Symptoms of altitude sickness can include headache, vertigo, shortness of breath, nausea, and drowsiness.

All employees, suppliers and visitors to site are briefed on the signs and symptoms of altitude sickness prior to arrival. Oxygen-checks are conducted by the medical team on people who are new to site and/or feeling the effects of altitude.

Oxygen is readily available as an immediate response measure, with further observation and potential relocation of those who continue to experience symptoms.

The majority of our workforce is from the local region and therefore accustomed to living and working at high altitude. Workers, contractors or visitors from outside the region are the most at risk given that their bodies are not accustomed. These stakeholders are encouraged to allow sufficient time to adjust to the altitude prior to, and following, their arrival at site.

Monitoring and Reporting

The Company evaluates the effectiveness of its management approach through regular monitoring and reporting of key data and metrics, tracking progress against its predefined objectives and targets. Internal data and reporting processes include daily safety reviews, weekly safety performance updates and monthly reporting on progress against safety targets.

Orocobre reports on its health and safety performance annually in its [Sustainability Report](#) and in response to investor surveys such as S&P's Corporate Sustainability Assessment (formerly DJSI/RobecoSAM).

Safety targets are defined and monitored by operational management and the Orocobre Executive team with a firm focus internally on lead rather than lag indicators, and on report-based rather than outcome-based targets.

Responsibility

At Group level responsibility for safety performance sits with the Chief Operating Officer with direct support and engagement from the Chief Sustainability Officer.

At an operational level responsibility for safety performance resides with the Health, Safety and Environment Manager who reports directly to the Manager of Operations and indirectly to the Chief Operating Officer as Chair of the Operational Safety Committee.

Accountability

Health and Safety KPIs are integrated into the performance evaluation process for all executives, managers and employees across the organisation.

Orocobre's Executive and Board performance process also incorporates safety performance into short term and long-term incentive criteria.

FY19 Update

The construction phase of the Stage 2 Expansion is resulting in increased site activity and therefore an increased risk of safety incidents. During FY19, Orocobre remained focused on managing and mitigating these risks as effectively as possible through augmented training, engagement and control systems for employees and contractors.

The implementation of Intelx in FY19, which enables real-time reporting of safety observations and tracking of all incidents through cause-based investigations has enabled the Company to achieve greater operational efficiencies and improved safety performance.

Orocobre continued with DuPont's Safety Leadership and Culture program developing stronger ownership of safety responsibility across all levels of the business. As part of the program the central safety committee and five subcommittees were established to provide better control and follow-up of safety issues. It is anticipated that an additional subcommittee will be created in FY20 to treat contractor-related issues.

Orocobre maintains a Zero Harm approach when it comes to the safety of its employees and project contractors. During FY19, the Company recorded only a slight increase in incident frequency rates despite the increased activity on site.

Job hazard assessments are completed by all workers before undertaking any task. Supervisors have been trained to evaluate and assess the job hazard assessments and to approve them with their teams and any contractors operating in their area. New projects and initiatives on site pass through a 'HAZOP' and/or a 'What if?' process to evaluate potential risks and impacts. A 'Management of Change' process is also in place to ensure risks, impacts and opportunities are considered across all areas and departments as a result of any change initiative.

In FY20, the Company expects to strengthen health and safety reporting and performance, promote effective use of lead and lag indicators, and prepare for certification shift from OHS180001 to ISO450001.

INDICATOR (per million manhours)	CURRENT	PRELIMINARY TARGETS (to be finalised in FY20)		
	FY19	FY20	FY25	FY30
Workforce TRIFR	3.3	5.7*	1.5	0.5

* Given the higher risk of incidents during Phase 2 Expansion, both due to number of people on site and the activities being undertaken, the Company applied a TRIFR target which was appropriate and reflected best practice for that operating context. This Organizational TRIFR objective was based on forecast 1,750 people and 23 LTIs across Expansion and Operations to give a total Workforce TRIFR of 5.7 [Operations: 2.08; Expansion: 7.73] This has been incorporated into the performance objectives for all managers and employees.

For more Safety Data refer to [Health and Safety Performance Data](#)

DEFENSIVE DRIVING

Due to an observed increase in vehicular accidents within and around Sales de Jujuy's operations, the Company decided to deliver a defensive driving course for all employees required to manage a vehicle.

This Defensive Driving course introduced participants to defensive driving techniques that could be directly applied to enhance their safety on the roads. The course lasts 12 hours and consists of two components:

- **Theoretical:** addressed reaction timing, night driving, difficult terrain and the capabilities of 4x4s and other vehicle types.
- **Practical:** involved exercises on a designated driving course using standard Company vehicles, and simulations of extreme situations so that the driver can practice and apply defensive driving techniques.

The Defensive Driving course was delivered 3 times with a total of 102 people participating.

The Company also enlisted six employees in a Train-the-Trainer program so that they could continue to provide defensive driver training to Company employees and contractors.

The Train-the-Trainer course enhanced the theoretical knowledge and practical skills of participants through the application of different driving techniques. The course lasted 48 hours and included both theoretical and practical components. All six participants became CESVI approved instructors, a certification that lasts three years.

