



MANAGEMENT
APPROACH
DISCLOSURE

QUALITY
ASSURANCE

7 AFFORDABLE AND
CLEAN ENERGY



12 RESPONSIBLE
CONSUMPTION
AND PRODUCTION



Quality Assurance*

Related GRI Contents	103-1; 103-2; 103-3
Related Sustainable Development Goals	SDG 7 ; SDG 12
Related Performance Data	Value Chain
Related Management Approach Disclosures	Supply Chain
Future Commitments	Continue working on the best packaging alternatives, to minimize or avoid product handling, and ensure that quality is intact when product is received by customer.
Related Material topics	Product Price and Quality Assurance Responsible Supply Chain

Strategic significance

Quality assurance is a strategic priority for Orocobre. By focusing on the consistent delivery of high-quality products, we aim to achieve high performance processes, strong relationships with customers and secure long-term contracts. As customer specifications are constantly changing and evolving, Orocobre must continuously and efficiently adapt our products to meet their needs.

The Olaroz Lithium Facility currently produces purified and primary grades of lithium carbonate, which are sold into battery, technical and chemical markets.

Detailed chemical specifications for these products are defined by each client based on their specific needs. Quality assurance is about ensuring the Company systematically achieves the required purity in the final product and meets the agreed specifications.

Borax Argentina produces a wide range of boron compounds used for different industrial applications

such as paints, glass, ceramic, lighting, and fibreglass, and for fertilizers in the agricultural industry. The quality of the products and the service offered by Borax Argentina positions the company as a preferred borate supplier.

Impact boundary

Orocobre's quality assurance processes are focused on the application of policies and procedures to ensure high quality production and bagging of chemical products. The boundary of this management approach includes both the Sales de Jujuy S.A. (SDJ or Olaroz Lithium Facility) and Borax Argentina S.A. operations.

Management approach

As part of Orocobre's commitment to advancing the UN Sustainable Development Goals – in particular [SDG 7: Affordable and Clean Energy](#) and [SDG 12: Responsible Consumption and Production](#) – the Company seeks to meet the world's growing demand for clean energy technology, and to deliver quality products that meet clients' requirements whilst ensuring sustainable production practices.



(*) This Document is part of Orocobre's Sustainability Report and should be understood as part of itself. Understanding Sales de Jujuy as Sales de Jujuy S.A., SDJ or Olaroz Lithium Facility and Borax Argentina as Borax Argentina S.A or BRX.

Given the nature of the different products delivered by Orocobre, quality assurance procedures in Sales de Jujuy and in Borax Argentina are slightly different.

SALES DE JUJUY (Olaroz Lithium Facility)

We work with our partners and customers to respond to their changing needs and adapt our product specifications and reporting to meet their requirements.

Management Systems

The Olaroz Lithium Facility has an ISO certified Quality, Safety and Environmental Management System which ensures the management approach and quality assurance for the lithium produced at the facilities.

Opportunities for quality improvements are presented and reviewed regularly as part of the continuous improvement program, which allows all employees and site-based operators to propose ideas for improved process performance across all aspects of the operations.

All lithium carbonate produced, both primary grade and purified, is certified under standards ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007 (transitioning to ISO 45001).

Responsibility

At an operational level, responsibility for product quality and quality assurance processes sits with the Quality Superintendent who reports directly to the Operations and Quality Managers.

At a Group level, responsibility for product quality assurance sits with the Chief Operating Officer of Olaroz Lithium facility and Borax Argentina.

Orocobre Quality Manager ensures effective communication and liaison between Orocobre and Toyota Tsusho Corporation, together with the application of quality assurance from production through to final delivery to customer.

Accountability

Internal targets are clearly defined for quality performance, with KPIs integrated into the performance evaluation process for specific managers and employees at an operational level.

Orocobre's Executive and Board performance evaluation process also incorporates quality-related performance targets into short term and long-term incentive criteria.

BORAX ARGENTINA

Management Systems

Borax Argentina has a certified Quality Management System in place and processes are in line with ISO 9001:2015. This international standard ensures quality throughout the exploration, borate extraction process, dispatch, and delivery to the customer, offering traceability at all stages along this chain.

Monitoring

Borax Argentina has a management program in place, which includes annual objectives for each responsible area. Monthly reporting on management indicators highlight performance and improvement opportunities. Borax Argentina have an internal system aimed at investigating incident reports. Process indicators are reported daily to ensure continuous improvement.

Responsibility

At an operational level responsibility for production processes, quality assurance processes and product warranty sits with the Quality Superintendent who reports directly to the Operations Manager.

The Business Development Manager ensures effective communication and liaison between Borax Argentina and customers in the management of quality assurance from production through to customer delivery.

Accountability

Quality goals are defined in the annual management system, with indicators reported and evaluated across all company levels.

FY20 update

SALES DE JUJUY (Olaroz Lithium Facility)

Throughout FY20, at Olaroz Lithium Facility, we focused on improving communication and response times in view of customer complaints and needs. We repaired two main reactor vessels in the processing plant, and minimised metallic particle impurities to improve product quality and consistency.

We were able to reduce the content of magnetic particles in the micronised product by improving process equipment and controls. The stability and reliability of the plant has improved resulting in enhanced product process capability, as measured by the process capability index (CpK), and in fewer non-scheduled maintenance events and reduced repair response times.

In addition, lithium concentrations have continued to improve as compared to the same periods in previous financial years. The improved and more stable brine concentration has multiple advantages, which include higher lithium recovery, lower production cost and higher product quality and consistency.

One specific quality improvement project addressed by the quality team was the enhancement of the product packaging process: Specifications were established for packaging materials, new suppliers were added, and operating procedures were updated to meet client needs.

Toyota is providing direct support in the implementation of TPS (Toyota Production System) methodology and Kaizen, a very successful continuous improvement process used in the Japanese manufacturing industry. Even in the early stages of implementation, positive results are already noticeable with operating workers.

These quality improvements resulted in all deliveries to customers in FY20 meeting required specifications; 30% improvement in response times to complaints as compared with the previous year; daily communication among customers and operators, and eight new product specifications which will enable clients to receive products with less variability and higher purity.

The preliminary targets in place for Quality Key Performance Indicators at Olaroz Lithium Facility are outlined below.

INDICATOR	PRELIMINARY TARGETS	
	FY25	FY30
Number of claims / 1000 dispatches	8	2
Claim resolution time (days)	15	7
Claims index (%) (Claimed Product / Total Product Dispatched)	< 0.4%	< 0.2%
Process capability: % of Analytes with $C_{pk} > 1$	95% with $C_{pk} > 1.15$	95% with $C_{pk} > 1.3$

Further information relating to Quality Performance Indicators can be found in the [Value Chain](#) Performance Data.

BORAX ARGENTINA

At Borax Argentina we have worked hard during FY20 to increase the frequency of controls during the production process. Customer satisfaction was improved with continued contact and communication to meet the end use requirements of Borax products. For each new requirement, e.g. changes in granulation or impurity content, the Quality team developed new product development instructions.

During FY20, a high percentage of non-conformities related to problems with broken packaging. We have implemented packaging improvements for affected products and will be focusing on improved monitoring of product handling during transportation in FY21.

The preliminary targets in place for Quality Key Performance Indicators at Borax Argentina are outlined below.

INDICATOR	PRELIMINARY TARGETS	
	FY25	FY30
Number of claims / 1000 dispatches	14	12
Claim resolution time (days)	17	14
Claims index (%) (Claimed Product / Total Product Dispatched)	0.46	0.40
Global product index within specification (%)	98.8	99.0

Further information relating to Quality Performance Indicators can be found in the [Value Chain](#) Performance Data.