Challenge

Aguas Misioneras is a state company located in Misiones, a province of Argentina, wanted to create a traceability system so that bottled water delivered to supermarkets could be traced back to its actual well, in case of a recall.

Solution

Working closely with GS1 Argentina, Aguas Misioneras implemented GS1 standards to uniquely identify its water products, locations (e.g., wells and plants) and logistics units so that it could track and trace products throughout its supply chain—from well to supermarket.

Benefits

- Enabled the standardised identification of products.
- Documented all traceability information and procedures.
- Conducted an accurate and updated production circuit analysis.
- Created a risk committee with defined roles and responsibilities, in case of an emergency.
- Achieved an easier and more efficient stock management system.

Aguas Misioneras
Providing consumers with bottled and traceable Argentinian water
Quality drinking water

Aguas Misioneras’ mission is to not only package and distribute quality drinking water for its consumers, but also preserve water as a natural resource. Founded in 2009, the company has two industrial plants in San Javier and Santa Maria. Both are remotely located, far from human activities that might pollute the water, and comply with DRASTIC and GOD methodologies for assessing groundwater vulnerability. Neither plants capture water from the Guarani Aquifer System and both follow the Hazard Analysis Critical Control Point (HACCP).

Enhancing its traceability system

With a focus on consumer safety and satisfaction, the company wanted to develop a traceability system to track the production, packing, storage and distribution of its bottled water—from well to supermarkets—and then trace, if needed, delivered water back to the well where it originated.

Since supermarkets were its customers, Aguas Misioneras had used GS1 ITF-14 barcodes on their bottled water for many years. Yet, the company was to improve its traceability system to implement standards-based identification for its products, in case of a recall.

Aguas Misioneras called on GS1 Argentina for assistance. After attending a regional GS1 Traceability Workshop, the company established objectives and a plan for implementation, working alongside the GS1 Argentina traceability team.

Starting with GS1 identification standards

As a first step, Aguas Misioneras assigned each of its products a unique identifier—a GS1 Global Trade Item Number (GTIN). The product’s GTIN, batch number and expiration date are all encoded in a GS1-128 barcode, applied on the product’s package. Another GS1 identifier—the Serial Shipping Container Code or SSCC—is encoded in a GS1-128 barcode and applied on each logistics unit so that shipped individual pallets of water can be tracked and traced throughout the supply chain.

GS1 Global Location Numbers (GLNs) were assigned to identify each Aguas Misioneras’ location such as wells and production facilities. With the unique identification of products, places and logistics units, the company could now scan barcodes to capture data about products as they traveled from production plants to supermarkets.

In addition, the team incorporated traceability checklists and non-conformity detection forms along the production line. They also established a centralised database of master data associated with all its suppliers, customers and commercial partners.

An organisation chart outlined specific roles and responsibilities, enabling team members to work efficiently and as “one, unified team.” In case of an emergency, a risk committee was created along with a recall process, roles and responsibilities.

The traceability project also gave the team an opportunity to define the needs and requirements of a Good Manager System in order to achieve an effective and efficient traceability system—one that would support not only the business, but its customers, too.

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1 The Global Trade Item Number (GTIN) can be used by a company to uniquely identify all of its trade items. GS1 defines trade items as products or services that are priced, ordered or invoiced at any point in the supply chain.

2 The Serial Shipping Container Code (SSCC) can be used by companies to identify a logistic unit, which can be any combination of trade items packaged together for storage and/or transport purposes; for example a case, pallet or parcel.

3 The Global Location Number (GLN) can be used by companies to identify their locations, giving them complete flexibility to identify any type or level of location required.
Putting traceability to the test

With the traceability system in place, in case of a recall, a trace-back of water batches from different locations (wells) can now be executed, using the GS1 SSCC identifier.

Here’s how it works:

- At Aguas Misioneras, there are three wells where water is sourced from; the wells are identified as “lots” via lot numbers that are encoded along with the GTINs in the barcodes.

- Well/Lot 1 supplies the bottled water, Well/Lot 2 and Well/Lot 3 provide heterogeneous quantities of bulk water.

- The water from Lot 1 enters the production process first, is packaged and loaded on pallets.

- Pallet 1, identified by an SSCC, carries water from Lot 1, and depending on the entrance sequence to the process, a register of how lots were used can be developed.

In case of a recall, Aguas Misioneras knows which supermarkets received the recalled bottled water based on each pallet’s SSCC containing water from a certain lot/well, identified by the GTIN.

Managing risk and consumer safety

Aguas Misioneras has achieved a deeper understanding of the traceability concept as well as how to work well as a team. Based on the work needed to develop an effective traceability system, the team discovered many advantages about the GS1 system of standards—benefits that they previously did not know.

The company now has a standardised identification system for all of its products. An accurate and updated production circuit analysis was conducted. All traceability information and procedures have been well-documented, and a risk committee with defined roles and responsibilities is now in-place, in case of an emergency. What’s more: Aguas Misioneras now has a much more efficient stock management system.

More information

Find out more about Aguas Misioneras
www.aguasmisioneras.com

For more about GS1
Argentina and traceability standards,
Visit www.gs1.org.ar

Learn how GS1 standards can help your business achieve traceability, guard against counterfeiting and more. Visit www.gs1.org/standards/traceability