MAJOR NORTH AMERICAN PROCESSING PLANT EXCELS UNDER DAILY PRESSURE

MOTOTRBO™ DIGITAL RADIOS KEEP THEIR 24/7 OPERATION FLOWING

Aux Sable is one of the largest natural gas liquid (NGL) extraction and fractionation facilities in North America. A major player in the midstream gas processing business, Aux Sable operates facilities and pipelines in some of the most active shale positions on the continent, including Alberta, Canada and North Dakota.

For over 15 years, Aux Sable has been extracting and fractionating natural gas at its 70-acre facility in Channahon, Illinois at the terminus of the Alliance Pipeline. This operation processes 2.1 billion cubic feet per day of natural gas and can produce approximately 107,000 barrels per day of NGL products — including ethane, propane, butanes and pentanes.

Natural gas processing is a complex operation that involves large volumes of natural gas and NGLs transported in pipelines, process equipment and storage vessels. Safety is imperative for all plant employees, compliance with regulations and the well-being of the local community.

As Aux Sable expanded its Illinois facility to increase NGL production, it wanted to add to and enhance its MOTOTRBO digital radio system not only for regular employees, but for teams of outside contractors. MOTOTRBO’s platform offered a safe and productive way to meet their changing communication requirements.
**MANUFACTURING CASE STUDY**

**AUX SABLE**

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**THE CHALLENGE**

**Expand Radio Communications with the Operation**

Aux Sable’s operation involves the routine handling of flammable and explosive gases, vapors and liquids. Flawless safety is the constant priority, in particular minimizing the risk of fire or explosion.

Equipment on-site must be certified “HazLoc”: suitable for use in hazardous locations. MOTOTRBO HazLoc two-way radios and accessories are certified to international standards, and are carefully designed not to produce any source of ignition in operation - even the tiniest sparks.

With a major expansion of the Illinois facility to increase production by upwards of 29,000 barrels per day, Aux Sable needed to extend MOTOTRBO HazLoc radio communication to more contractors across the property.

**Connect Teams of Contractors, Instantly and Safely**

Teams of outside crews work daily on the expansion of Aux Sable’s Illinois site. Instant, reliable communications are imperative with so many people in the field. “We have contractors that are welding and performing hot work,” says Anselmo Hernandez, Jr., Process Supervisor. “They have fire watches to make sure if any sparks occur, they can call for help. We have an emergency plan prepared in advance, but it is only effective if they can communicate with us immediately so we know what’s happening.”

**Ensure the System Runs Without Interruption**

The amount of natural gas liquids Aux Sable processes is staggering. Take the 5-gallon tank of propane you’d find in a gas station and multiply that by 294,000 to reach the amount of just one product the plant produces each day.

“Without radio communication, we simply can’t succeed,” says Hernandez. Yet, watching different repeaters, making sure channels are open, and identifying issues can be a tedious task. “When our communication system is working well, no one pays attention. If we have a failure, then we notice,” he says. “We realized we were not using our system effectively. We’re not experts in communication equipment, and handling maintenance and monitoring is challenging and time-consuming.”

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THE SOLUTION

MOTOTRBO Digital Performs Under Pressure
Working with long-time Motorola channel partner, Chicago Communications LLC., Aux Sable supplemented their MOTOTRBO XPR 6550 radios with new MOTOTRBO XPR 7550 radios. Additionally, three dozen portables are loaned out daily to contractors doing critical work, such as welding, along with construction foremen.

Aux Sable personnel – from maintenance to railroad engineers – rely on more than 200 MOTOTRBO HazLoc radios, seven MOTOTRBO base stations in the company’s rail cars and trucks, and four MOTOTRBO repeaters operating in Capacity Plus. The single-site system makes adding new radio users easy.

“Aux Sable operates in a noisy environment and needs to be able to talk to their workers instantly. They rely extensively on MOTOTRBO radios every day,” explains Cathy Kulnig, Account Executive at Chicago Communications.

“Our operations personnel in the field act as the eyes and ears for our control room operators. They open and close valves, start and stop equipment, check pressures and fluid levels. Regular communication back and forth is absolutely critical. And MOTOTRBO radios are the right tool,” says Anselmo Hernandez, Jr., Process Supervisor.

MOTOTRBO Applications Prioritize Safety
Personnel safety is paramount in a sprawling outdoor site with high-pressure gases, hazardous conditions and extreme weather. That’s where the Teldio Man Down Notifier on MOTOTRBO radios plays a significant role. It proactively monitors workers to identify if they have suffered a fall or accident, anywhere in the 70-acre facility.

Having the Man Down function, radio IDs for personnel accountability, and always available communication is crucial to everyday operations. With so many personnel out in the field with a radio, anyone can call in or use the emergency button instantly. When incidents occur that require external support, local police and fire services use the MOTOTRBO radios on-site at the plant’s Emergency Operations Center to coordinate a rapid response with those in the field.

“MOTOTRBO all call and emergency channels enable us to reach everyone. We can listen in as an emergency unfolds, have accountability of personnel, communicate back and forth, and manage the situation effectively.”
Anselmo Hernandez, Jr., Process Supervisor, Aux Sable

GENESIS Application Promotes Greater Productivity
GENESIS GW3-TRBO offers another pathway for improving productivity. Aux Sable can monitor, manage and report on the radio network and its users from a single location. The integrated solution displays real-time activity, sends critical notifications and archives data for forensic reporting on any MOTOTRBO platform.

The GENESIS app significantly reduces the amount of time spent assembling or dissecting data while substantially increasing the amount of information that is readily available. It records every voice call on the MOTOTRBO network, so the company can generate reports, see which talk groups are most active and more productive, and even locate lost radios.

Service Contract Optimizes Uptime and Cost-Savings
“Since Aux Sable relies on MOTOTRBO radios for everyday operations, if they have an issue with a repeater, that really affects their uptime,” points out Cathy Kulnig of Chicago Communications. “They weren’t using the full capacity of the MOTOTRBO system or the latest upgrades and wanted 24/7 support to make sure they are up and running around the clock.”

The company recently initiated a service contract with Chicago Communications to conduct preventative maintenance and monitoring of the MOTOTRBO system. According to Process Supervisor Hernandez, they didn’t realize how important it was until they had a failure during an upgrade. “We had to cancel work for several hours and in that brief time, lost a significant amount of money. The service contract not only saves us money, it takes the burden of monitoring and maintaining the system off us,” he says.

“MOTOTRBO is very important to us for maintaining productivity and uptime. Our operators can get on the radio, understand what is needed, and confirm it quickly. That’s critical because minutes matter.”
Anselmo Hernandez, Jr., Process Supervisor, Aux Sable
Eliminates Downtime and Keeps Production Running
Reliability, uptime and productivity are major priorities for manufacturers, and Aux Sable is no exception. “We’ve been running for 15 years now and only had downtime of less than a week and a half where we took the whole plant down. We have to have radios that work under all kinds of extremes and hazardous conditions. It’s why we’ve been using MOTOTRBO digital radios since day one,” says Hernandez. “On a normal day, if we didn’t have MOTOTRBO, all our contractor work would have to stop. We would also have to minimize normal operations, including maintenance and other non-critical work.”

Clear, Continuous Communication in Tough Environments
Processing equipment in NGL facilities can be excessively loud. It’s why the MOTOTRBO XPR radios have operations-critical features such as noise-cancelling technology and Intelligent Audio to monitor background noise and automatically adjust speaker volume. Noise-cancelling headsets enable Aux Sable personnel to interact efficiently while protecting their hearing.

“MOTOTRBO radios are very durable,” adds Hernandez. “They get thrown on the truck, on the ground, into tool buckets. They’re used by contractors who are not as careful because it’s not their radio. We have personnel who work at heights and have accidentally dropped them 20 to 30 feet, and the MOTOTRBO radios hold up.”

Equipment Servicing Reduces Complexity and Risk
Aux Sable is maximizing its investment by ensuring the MOTOTRBO system is monitored to utilize it properly. Their recent service contract with Chicago Communications removes the complexity and responsibility of managing the network, increases the lifespan of equipment and helps them optimize the radio platform. “Aux Sable recognized the value of the service contract,” says Cathy Kulnig. “We monitor and do preventive maintenance on their equipment, such as repeaters, to ensure they are always up and running.”

Creating a Safer Environment for Every Worker
When Aux Sable conducts work out in the field which must be monitored by a person, they depend on voice communication. According to Hernandez, without MOTOTRBO, it would be difficult, inefficient and potentially unsafe. “If someone is at the end of the facility and you’re telling them to open a valve a bit more, it’s important to communicate that clearly and instantly,” he says.

MOTOTRBO digital radios offer many safety-focused options, such as Man Down, all call and emergency channels, along with the ability to send texts or messages to muster everyone during an incident. “It has all the features we need to keep our workplace productive and safe,” says Hernandez. “You know, we take the MOTOTRBO radios for granted, but I can’t imagine working without them.”

To find out how your plant can excel, visit www.motorolasolutions.com/manufacturing or contact your local Motorola representative.