



# RADIOS KEEP LIFEblood RUNNING AT MACKAY SUGAR



## Customer

Mackay Sugar

## Industry

Manufacturing

## Technology Partner

RCS Telecommunications

## Need

- Reliable communications to keep trains and production running

## Benefits

- Eradication of interference
- Increased safety
- Increased productivity
- Better coverage
- Audibility in noisy environments

**“[Reduction in interference] was the holy grail of the upgrade, and now interference has virtually disappeared. We can always talk via repeater towers to the mill, and no trains are delayed due to unintelligible messages. It’s rock solid.”**

Phil Axiak, Electrical Engineer, Mackay Sugar

## UNRELIABILITY DELAYS TRAINS

**Phil Axiak, electrical engineer, Mackay Sugar:** “The railway is the lifeblood, without it, there’s no cane. It’s critical that the railways are always running.”

“For four or five years we persisted without reliable communications, mainly due to interference. The track has multiple sections of single track, and the driver needs a transaction number from the communications tower before it can proceed into certain sectors. Without that number, the train can’t move.”

“But interference was making messages unintelligible, and the quality plummeted further when it rained because of electrical interference. There were several occasions when parts of the rail network were shut down for short periods, however, due to safety concerns we had reached a point where stopping the fleet during periods of severe interference would have been the only option if the problem was not resolved.”

## SAFETY AND EFFICIENCY UP

Mackay Sugar converted its entire fleet to MOTOTRBO DM3601 mobile radios – from maintenance vehicles through to trains and communications towers.

The benefits of the project are numerous, explains Axiak:

**Reduction in interference:** “This was the holy grail of the upgrade, and now interference has virtually disappeared. We can always talk via repeater towers to the mill, and no trains are delayed due to unintelligible messages. It’s rock solid.”

**Increased safety:** “Increasing safety was a predominant driver for the upgrade project. Most critical to us was improving worker safety and the upgrade certainly helped us in this respect.”

**Increased productivity:** “Previously senior staff had their time hijacked by communications problems, which was a major disruption. This is no longer the case. And on the train line, there’s no time wasted waiting for transaction numbers between sectors.”

**Better coverage:** “Coverage was adequate before but has been enhanced with extra repeaters, extending it into former dark spots.”

Working with RCS Communications was also smooth, says Axiak. “This was a capital project which ran to plan. The few teething problems were sorted out quickly by RCS. They guided us through the project with a well-coordinated installation, within tight windows of availability, while managing a large amount of gear.”

[www.motorolasolutions.com/mototrbo](http://www.motorolasolutions.com/mototrbo)



**MOTOROLA SOLUTIONS**

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2014 Motorola Solutions, Inc. All rights reserved.