



# PLEIN DISPOSAL PICKS UP ITS EFFICIENCY AND PRODUCTIVITY WITH **MOTOTRBO™ CONNECT PLUS** FROM MOTOROLA



**Across Kitchener and Waterloo, Ontario, Plein Disposal is staying connected with crews and tracking its trucks with Motorola's latest technologies.**

## SITUATION

**With 17 trucks and more than 1400 miles of road to cover, Plein Disposal needed the next generation of connectivity.**

The people of Plein Disposal have been serving the residents and businesses of southwest Ontario for years, managing their waste stream and providing vital recycling services. For decades, the company's dispatchers have stayed in touch with their mobile crews using two-way radio networks. But when it came time to replace their aging analog system, Plein recognized that new technologies could significantly improve its communications, efficiency, and ability to respond to customer calls.

## SOLUTION

**Plein chose the Motorola MOTOTRBO Connect Plus Multi-Site Trunking system, a two-way digital radio system that delivers fast connectivity and high-volume, localized and wide-area communications.**

Connect Plus is the professional digital trunking solution that provides enhanced performance, productivity, and value for two-way radio users. A scalable operation within one or up to six sites, Connect Plus Trunking can

manage as many as 29 talk paths and 2900 users per site. Its MOTOTRBO's digital technology that enables Connect Plus to deliver crystal-clear digital voice communications, seamless roaming, and fast access – even in high-traffic times.

## RESULT

**MOTOTRBO Connect Plus is keeping Plein crews on the move.**

With dynamic roaming that automatically switches to the strongest available signal as drivers travel from zone to zone, Plein dispatchers are using MOTOTRBO with Connect Plus to stay in touch with their crews no matter where they are. The system's TDMA digital technology means calls are crystal clear. Integrated applications, such as text messaging and GPS, are also delivering increased efficiency. A driver and dispatch can text each other with information when the truck is stopped. And the GPS functionality means Plein now knows exactly where all of their crews are at any time. Dispatchers can send one or more trucks to a pick-up location by the possible shortest route. And they can even keep track of how far a vehicle has travelled between scheduled maintenance.

## CUSTOMER PROFILE

### Users

- County Municipality: Roads, Parks, and Maintenance

### Applications

- Multi-site trunking, scalable for 1 to 6 sites
- Narrow- and wide-area connectivity
- Up to 29 talk paths and 2900 users per site
- Text messaging enabled
- Supports GPS tracking and locating

### Motorola Solution

- MOTOTRBO XRC 9000 Trunking Controller

### Solution Features

- TDMA 2:1 technology
- Supports IP dispatch console (third party application)
- Peer site controller based architecture
- Uses control channel (talk path)
- 15 repeaters per trunking site (29 voice/data talk paths)
- 6 trunking sites in a flexible system topology
- IP (Internet Protocol) site connectivity
- Supports XPR™ Series or MTR3000 repeaters
- Integrated GPS
- Text messaging
- Submersible in water
- Operates in both analog and digital, enabling easy migration
- Motorola's IMPRES™ technology enables longer talk time and clearer audio
- Built on proven MOTOTRBO platform

## CASE STUDY

WATERLOO, ONTARIO, CANADA

# NEXT GENERATION CONNECTIVITY ENABLES INCREASED PRODUCTIVITY

Plein Disposal is about getting the little things right. Picking up waste and recyclables on the right day, in the right place, and on time. Making every route as efficient and productive as possible. Keeping every customer happy. With trucks and crews spread out over hundreds of miles of hilly roads and valleys, the key to getting the “little things” right turned out to be one very big thing – enabling advanced two-way communications between dispatchers and mobile assets across Plein’s geographically diverse operating area.

## THE NARROWBANDING MANDATE

Most U.S. companies using 25kHz land-mobile radio systems today must migrate to 12.5kHz “narrowband” technology by January 2013. Canadian authorities have a similar requirement for companies like Plein Disposal, but the conversion dates are even more aggressive. The narrowband mandate is motivating businesses like Plein to take another look at their two-way radio systems and how they could be contributing to their productivity and bottom line. In addition to superior communications, their wish list includes the ability to seamlessly migrate from analog to digital; to connect quickly, without the extended lag time that’s so common with cell phones; to enable both local and wide-area communications; and to easily integrate new applications that can improve overall efficiency of the fleet.

## INNOVATIVE LEADERSHIP PLUS BREAKTHROUGH TRUNKING TECHNOLOGY

Plein Disposal wanted all that and more. They also wanted the proven reliability of Motorola, backed by the local expertise of a Motorola Channel Partner. And that’s why Plein chose a new MOTOTRBO radio system with Connect Plus Multi-Site Trunking. Now their crews are staying connected with TDMA digital technology that delivers increased capacity and clear audio. Whether they are on a hill outside Elmira, Ontario, or in a valley near Kitchener, Plein crews are instantly reachable by the company’s dispatchers. With high system availability, automatic channel access, and built-in system efficiencies, the Motorola system delivers digital clarity with automatic transfers and no interruptions across virtually any terrain.

## INTEGRATED DATA APPLICATIONS INCREASE EFFICIENCY

MOTOTRBO Connect Plus can expand a company’s communications far beyond voice alone. Integrated data applications such as GPS and text messaging can deliver essential information in real time to crews and dispatchers. The GPS module enables dispatch to locate any truck any time, any where. And any mobile asset can be tracked, helping the company find faster, more efficient ways to

cover a route. Text messaging is another efficient new way to communicate with mobile employees. Now, drivers can receive information hands-free and read it when they are safely stopped. Or they can send messages, such as confirmation upon completing a pick-up, quickly and easily. In case of an unexpected event or unplanned call, dispatch can locate and route the nearest vehicles while sending detailed instructions in a text message to the drivers.

## COMMUNICATIONS CLARITY IMPROVES SAFETY

Clearer and more comprehensive voice and text communications can also improve workplace safety. Clear audio is easier to understand and minimizes confusion. When assistance is needed, dispatchers using GPS tracking can quickly locate the closest vehicle or personnel, and supervisors and managers can be given priority access during an emergency. On typical days, instead of distracting drivers with a call, dispatchers can send a text message that crews can read when the truck is stopped. And seamless roaming keeps drivers’ attention focused on the road – not on switching radio channels as they travel throughout the coverage area.

## MOTOTRBO CONNECT PLUS MULTI-SITE TRUNKING: NEXT-GEN CONNECTIVITY

Built on the proven and robust MOTOTRBO platform, Connect Plus Multi-Site Trunking delivers next-generation voice and data communications today. With high system availability, automatic channel access, hassle-free roaming, and integrated applications, Connect Plus is bringing businesses like Plein Disposal new ways to pick up efficiencies and productivity.

**Motorola, Inc.** 1301 E. Algonquin Road, Schaumburg, Illinois 60196 U.S.A.  
**www.motorola.com/MOTOTRBO**  
**1-800-367-2346**

MOTOROLA, 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. © 2010 Motorola, Inc. All rights reserved.  
RO-99-2252



**“I have definitely noticed an increase in the quality of the overall signal and coverage area. We have a lot better communication.”**

– Jason Arnt, Supervisor  
Plein Disposal

**“The data from the GPS has been a benefit to our company by allowing us to analyze inefficiencies in drivers and in routes. And it’s also helped us to detect problems that may be happening with the trucks.”**

– Jason Arnt, Supervisor  
Plein Disposal