

EMERGENCY MANAGEMENT FOR REFINERIES

A refining facility producing various petroleum products uses several dangerous chemicals in its processing. There are several chemical spill response teams, each with its expertise in different chemicals. Depending on the time of day and location within the refinery, it can be a challenge to notify the appropriate response team members. Smart mobile devices can help to solve the challenge, but the refinery has recently invested in VoIP and is looking to standardize communication on one platform, not multiple.

Solving this challenge will benefit the refinery in the following ways:

- ◆ By notifying the correct team members with the appropriate expertise, the refinery will lessen response times as well as injuries in dealing with a chemical spill.
- ◆ By utilizing the VoIP infrastructure to improve emergency responses, the refinery increases its ROI beyond cost of ownership through potential reductions to plant damage and insurance costs.
- ◆ By extending its VoIP infrastructure to incorporate standard issue smart mobile devices, impact is extended to the cellular infrastructure, which follows employees throughout the plant site and off-site as well.
- ◆ By extending communication tools to smart mobile devices, the refinery can maintain communications with its response teams 24/7, allowing for more plant operations information to be shared before and after critical events and helping response team members be better prepared for emergency operations.



THE SOLUTION

The focus of this solution is to utilize the VoIP infrastructure to create an effective customer notification process that meets all federal regulations

- ◆ IPcelerate's solution receives an alert from monitoring systems at the plant; IPsession immediately sends out notifications to IP phones throughout the plant and to response team members' smart mobile devices.
- ◆ The notifications sent to the response teams contain location information provided by the monitoring system; members are able to verify each others' position and determine who is closest to the spill and can take the lead in responding to the emergency.
- ◆ The first responder hits an icon on their mobile device to initiate an instant conference call to report on the incident and coordinate activities between other team members.
- ◆ The conference calls are automatically recorded for later review and training as the refinery continues to improve on its response procedures; the recorded calls can be downloaded to the smart mobile devices so those response teams arriving later can listen to the recordings and be better informed of the current situation.
- ◆ Employees can update their status of involvement which is viewable by others as management looks to maintain the correct resources until the emergency is under control.