

TRANSPORTATION

Oil is used extensively in all types of transportation. Oil leaks can occur during fueling and maintenance, and also during regular operation. These oils include fuels and lubricants.

- **Trains:** Underground railways and railways in tunnels have drainage collecting sumps for water. The water is pumped out, but if oil is detected the water must be diverted for treatment. Oil cannot be left in such sumps as it can create an explosive atmosphere hazard. For example, 44 Leakwise ID-221 Oil Sheen Detectors inside 4 to 8 meters deep sumps, with 22 SLC-220 Digital Controllers, are being installed in a railway tunnel system in the UK.



- **Ships, Shipyards, and Ports:** Each of these should be monitored for oil spills. Ballast tanks on board ships must be monitored to ensure oily water is not discharged to sea. Ports should be monitored to immediately detect any oil spills during fueling and oil transfer operations. Storm water in shipyards may be monitored to detect oil spills during maintenance operations to prevent oil discharge to drains.



- **Airports:** A lot of storm water runoff is collected from the operational and maintenance areas in airports. This water can contain oil spills/leaks from planes, trucks and during refueling. These collecting sumps should be monitored before storm water being released to public water. Airports also have large jet fuel storage tanks that should be monitored like any other oil storage tank.



- **Buses, Cars:** Parking lots, garages, highways, gas stations. All have a potential of spills to public water. For example, three ID-223/2000 sensors and one SLC-220 controller are being installed in a Texas roadway tunnel to monitor the tunnel drainage sump pits and automatically turn off the pit pumps when oil is detected.



ID-221 Monitoring Runoff from a Highway Junction