

Improved Access To Rail Data

NEW TOOLS FOR FIRST RESPONDERS

Union Pacific Railroad helps America thrive by providing safe and efficient transportation of the products that power the country including crude oil, coal, ethanol, wind turbines and solar panels.

Crude oil represents about 1 percent of Union Pacific's overall freight revenue. Though accidents are extremely rare, all of us at Union Pacific work diligently to follow strict safety practices in an effort to keep trains moving safely with zero derailments.

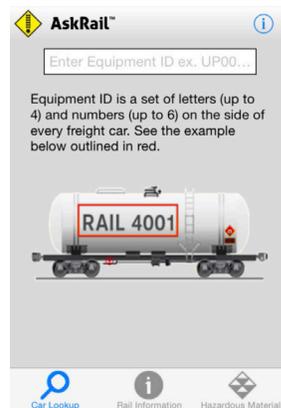
An important part of Union Pacific's efforts to move crude oil safely is the Union Pacific Hazardous Materials Management Group (HMM). This team of 30 consists of highly trained experts in hazardous material transportation safety, securement and response. The HMM Group has a four-part mission: prevention, preparedness, response and recovery.

Union Pacific is introducing first responders on its rail network to AskRail™, a new real-time mobile application produced by the Association of American Railroads (AAR). In addition, Union Pacific will soon launch its Emergency Preparedness Network Map (EPNM), a desktop application for state Emergency Operations Centers (EOC).

AskRail is a handheld tool for response and training purposes. The EPNM helps state and local emergency management professionals prepare for potential incidents by providing a current snapshot of the type and location of hazardous materials being transported in a state.

ASKRAIL RESPONSE TOOL

HMM team members will work with local emergency responders along Union Pacific rail lines to grant access to the AskRail app. Once first responders have downloaded the AskRail app onto their mobile device, they will simply enter the identification number located on a tank car into the app to identify what commodity is inside the car. AskRail will supplement the existing response process Union Pacific's HMM Group uses to collaborate and communicate with emergency responders during a hazardous materials-related incident.



AskRail's rail car ID query can be used to obtain rail car information, including:

- Loaded/empty status
- Contents' shipping name
- Contents' hazard class
- Railroad name
- Railroad emergency contact information

UNION PACIFIC'S PREPAREDNESS TOOL

Developed by Union Pacific, the EPNM will give emergency management professionals at state EOCs an hour-by-hour snapshot of hazardous materials moving on Union Pacific track within state boundaries. The tool will show the location of tank cars carrying hazardous materials, helping emergency response teams in their efforts to prepare for potential incidents. Each state EOC will be granted access to the EPNM upon signing a confidentiality agreement. The EPNM crude oil data is proprietary, and some EPNM data may include sensitive security information.

The EPNM illustrates the following information about the Union Pacific network within an EOC's state:

- Trains and rail cars carrying crude oil, ethanol and other hazardous materials
- Detailed information regarding the hazardous material in a rail car
- Rail car's waybill, recipient and special conditions
- Train and rail car ID numbers
- Train and rail car origin stations, including city/state
- Train and rail cars current city location
- Current train statistics (e.g., loaded cars, empty cars, weight, length and locomotives on the train)