

contents, and must placard hazmat shipments in accordance with the regulations. Shippers often apply security seals to both bulk and non-bulk containers. Security seals impede access to dangerous commodities and also provide evidence of tampering, if it occurs.

Once the hazardous materials shipment has been accepted for transportation by the railroad, the paperwork that describes the product must accompany the shipment. The HMR require the train crew to have a copy of this paperwork in the complete train consist, which must accurately list the placement of each hazmat shipment in the train. Once the product is delivered to its destination, the paperwork is transferred to the receiving party.

2. Unique Characteristics of Transporting Hazardous Materials Via Rail

There are many factors unique to the rail industry that minimize the degree to which an individual may affect the movement of hazardous materials, including explosives. Railroad employees have a very limited opportunity to gain access to or divert hazardous materials shipments they are transporting. Railroad operating employees do not load or unload hazmat from rail cars, and are not expected to enter the cars or handle their contents in any way. Furthermore, train crews that move these shipments are not issued the tools necessary to remove or break the seals of the hazardous material containers. Gaining access to the hazmat in closed containers, if possible at all, would likely attract the attention of other employees. The HMR prescribe requirements for the packaging of all placarded hazmat, including the type of package, the degree to which all closures must be secured prior to transport, and maintenance and testing requirements to ensure that valves and other closures are in good working condition.

Unlike a truck or aircraft, a train operates on a closed system. It is confined to the tracks it is on, and any deviation from its assigned route is either altogether impossible or difficult to accomplish without being detected quickly by railroad employees or officials. Train crews are expected to move their train along a pre-designated route and communicate with the railroad if any delays occur along the route. A train containing hazardous materials is monitored by a train dispatcher who oversees the movement, and in heavily trafficked areas, controls

the movement by a system of signals or mechanical and electronic control devices. Further, on large portions of major railroads, each car moving in a train is monitored by trackside sensors that report its location back to a centralized facility or broadcast its location over the railroad radio network every time it contacts one of a variety of equipment scanners.

Although railroads transport a large volume of hazardous materials, the number of annual explosives shipments via rail is very low. According to the AAR, there are approximately 27 million carloads of freight shipped by rail annually. Of these, 1.7 million are hazmat shipments and approximately 1,200 shipments contain explosives. Of the railroads TSA has surveyed, nearly all stated that explosives shipments are not a coveted product. There simply is not enough of it in the rail transportation network to produce good profit margins.

It is also important to note that, of the 660 small railroads operating in the United States, fewer than 10 are known to ship explosive material by rail at any given time. The incidence of explosives shipments on small railroads is nearly nonexistent.

The major railroads (or Class I railroads) handle 94 percent of the nation's rail freight traffic and employ approximately 90 percent of employees in the rail industry. Each of the Class I railroads employs a police force to guard rail yards and equipment to prevent unauthorized access to facilities, equipment, product, and paperwork. There are approximately 1,300 rail police in service today. The railroads conduct fingerprint-based CHRC on these individuals to ensure that persons with criminal or otherwise problematic backgrounds are not hired as part of the police force. Under 49 U.S.C. 28101, these employees are fully authorized to enforce laws of all states in which the railroad operates. *See also* 49 CFR part 207.

Furthermore, railroad police agents can be linked through extensive radio networks to virtually all railroad employees within their territorial jurisdiction, including train crews, train dispatchers, and railroad workers who maintain the tracks, signals and rolling stock. The railroad police can communicate directly with most railroad employees and can monitor the radio communications between many of the employees. Therefore, railroad employees operate in a setting where the employer is not dependent on state or local law enforcement to detect criminal activity; rather, it employs its own law enforcement officers, with

specialized knowledge of railroad operations, to ensure the security of those operations.

The Class I railroads require employees to complete an extensive application prior to employment, which includes criminal, employment, educational, and credit history; citizenship status; and military service and type of discharge. The application also provides that candidates will be disqualified or terminated if any of the information provided on the application is false.

As part of the application process, the Class I railroads conduct background checks on all new hires, although this does not include a fingerprint-based CHRC. The Class I railroads ask applicants to disclose any past criminal history. In addition, the major railroads complete a public records search for statewide criminal and outstanding debt information. Using records linked to the applicant's social security number, the major railroads also check the applicant's employment, credit, and address history. This is a significant evaluation, because it typically confirms a candidate's identity. Experienced investigators place great weight on these records to catch individuals who have adopted false identification, who often move beneath the criminal history radar screen. A number of terrorists involved in previous terrorist attacks would have successfully completed a fingerprint-based CHRC, but may have raised concerns as a result of the social security check.

The employment application also requires information concerning previous military service and citizenship status. If a candidate has served in the armed forces, the railroad requests a copy of the individual's discharge papers. An individual with a dishonorable discharge is not disqualified automatically, but the dishonorable discharge may become grounds for disqualification. The railroad considers the totality of the circumstances, such as the facts that gave rise to the discharge, any rehabilitation that is evident, and the results of the other background checks. Similarly, the railroads do not prohibit hiring aliens, but will not hire an alien unless the proper immigration forms and approvals have been obtained. Any person who has renounced his or her U.S. citizenship would be required to state that he/she is not a U.S. citizen on the application. In a general survey of the Class I railroads, the percentage of non-Canadian aliens working in the railroad industry is extremely small. Citizens of Canada, who typically work