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HAZMAT ROUTING: SAFETY AND SECURITY CHALLENGES

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ABSTRACT

The railroad industry is being challenged by recent state regulations requiring the disclosure of routing information of trains carrying hazardous materials (hazmat) to the general public. While there is a need to know, the dissemination of such information is contrary to both industry practice and Federal Railroad Administration (FRA) rules. The conundrum is that there needs to be disclosure to first responders, law enforcement, fusion centers and the like to ensure the security and safety of the public.

This paper addresses the rules regulating the movement and handling of hazmat, to include toxic inhalation hazard (TIH) material; government demands, particularly those at the state level to release the routes, commodities, and quantities to the general public; and the operational impacts and risks that could result. It then explores the security of how hazmat train routing information can be safeguarded while ensuring that first responders and affected communities have what is needed to address the risks and be able to effectively respond to incidents. The overlaps and conflicts found in the rules and regulations of the Transportation Security Administration (TSA) and the Pipeline and Hazardous Material Safety Administration (PHMSA) are also addressed.

INTRODUCTION

The railroad industry's challenge is, in part, the result of recent positions taken by states requiring that hazardous material (hazmat) routing be released to the general public. This is contrary to railroad industry practice and federal regulations, to include the Federal Railroad Administration's (FRA) hazmat routing rule (49 CFR Parts 172, 174 and 209) and U.S. Department of Transportation (USDOT) Emergency Restriction/Prohibition Order (FRA or Emergency Order) regarding the transportation of crude oil issued in May 2014.

Crude oil incidents have caused much concern to state and local governments. Although a concern for decades, the Lac-Megantic accident killing 47 people in July 2013 heightened the awareness. Subsequent incidents in/near Aliceville, AL, Casselton, ND and Lynchburg, VA caused the USDOT to issue an Emergency Restriction/Prohibition Order to all rail carriers hauling, in a single train, more than one (1) million gallons of Bakken crude[1]. The FRA Order requires that the railroad notify the state emergency response organizations in each state that the train moves through and provide pertinent and relevant information regarding the train movement. The intent of the FRA Order is to have the railroads provide the pertinent and relevant information to the states' emergency response commissions (SERC) for emergency planning and response and not for dissemination to the general public.

Subsequent to the FRA Order, several states have asserted that state law requires that the information required by the Emergency Order is to be made public. The states of Washington and Wyoming appear to be the most visible and vocal on this matter. Wyoming, however, has agreed to disclose the information only to those who need to know (i.e. emergency responders, law enforcement and fusion centers) and have signed a nondisclosure agreement with the Union Pacific Railroad (UP) on the matter. Washington State, however, has not been as agreeable and the issue with the Burlington Northern Santa Fe Railway Company (BNSF) appears to be, at this time, unresolved [1].

The railroads are challenged by and concerned that the recent efforts by several states to divulge hazmat routing information to the general public will compromise the safety and security of hauling hazmat. They feel it is prudent that the routing, commodities carried, to include quantities, and

[1] At an average of 30,000 gallons per car, this is ≥34 cars.

schedules be divulged on a "need to know" basis. To this end, the railroads have worked with SERCs, emergency responders, fusion and/or emergency operations centers, TSA and FRA in a visible effort of complying with appropriate rules and regulations and accepted industry practice. The challenge is exacerbated by the constraints placed on operations and unnecessary exposure to additional risk. Also, the costs associated with the heightened security beyond that for normal hazmat operations and higher levels of maintenance resulting from the wildly divulged information.

There are two temporally specific perspectives on the issue of hazmat transportation: prevention and recovery. Improved tank car standards and regulations for rerouting hazmat-carrying trains away from the population fall under the topic of prevention. Conversely, disclosure of train hazmat contents, routing, and timing have the intent of facilitating recovery operations by informing first responders of what they may be faced with in the event of a derailment thereby providing them with an assessment of incident magnitude and the types of resources that they will need to have available to them to efficiently, effectively, and more safely recover from the incident.

While some voices from the citizenry clamor for the railroads to disclose critical information thereby making it public for general consumption, there remains the security concern that such should be made available only to those with a bona fide need to know, specifically, the first responders.

BACKGROUND

The *Implementing Recommendations of the 9/11 Commission Act of 2007* (Act) required the railroads carrying hazmat to perform safety and security risk analyses and select appropriate routes, based on the analyses. Subsequent to this and in 2008, PHMSA and FRA promulgated the hazmat routing regulation. Section 1551 of the Act was the basis of the hazmat routing regulation (49 CFR 172, 174 and 209) and TSA's rail transportation security regulation (49 CFR 1580).

Subsequent accidents, incidents and the introduction of Bakken crude into the mix has raised the awareness of the heightened, but perceived potential of a catastrophic event, such as the ones at Aliceville, AL, Casselton, ND and Lynchburg, VA and Lac-Megantic. This led to the FRA Order.

Bakken crude, from North Dakota, differs from other crude oils in that additional handling requirements are warranted. This is because Bakken crude is more flammable than traditional heavy crude and poses a greater risk of fire. Further, expanded PHMSA lab testing has allowed for the proper characterization and classification such that the risks associated with the volatility, corrosiveness, hydrogen sulfide content, and composition/concentration of the entrained gases are more widely known [2].

Light volatile crude oil, such as Bakken crude, is perceived to be a cause of disastrous incidents and may be too hazardous to ship by rail. However and in comparison, equally hazardous material from other sources are regularly transported by rail and other modes, though not without incident. The question is whether or not Bakken crude oil is that hazardous that the risk of shipping by rail is equally or more dangerous than the risks associated with substandard maintenance practices, inadequate safety standards and human error.

Because of the properties, and perceived and potential risks associated with the rail transport of Bakken crude and recent incidents, the FRA issued the emergency order regarding the transportation of crude oil in May 2014. This led to the issue with the states and railroads regarding the disclosure of routing, commodity and quantities of Bakken crude and other hazmat and associated challenges to the railroads.

RULES AND REGULATIONS

The hazmat routing regulation (49 CFR 172, 174 and 209) satisfies the requirement of Section 1551 of the 8/11 Commission Act of 2007. This requires that railroads transporting security-sensitive materials determine the least impacted routes to minimize the risk to safety and security. There are seven (7) basic components of the regulation. They are simply stated as:

- Compiling commodity data by route and quantities.
- Identifying feasible alternate routes.
- Coordinating with local governments regarding risk to high-consequence targets.
- Considering interchange options when determining feasible alternate routes.
- Analyzing the primary and alternate routes for safety and security risks
- Determining remediation and mitigation measures addressing the risks of a catastrophic release along the routes.
- Selecting the most feasible route posing the least risk.

The regulation also requires that the route analysis, as described above, be updated annually. In-transit storage and on track time awaiting pick-up and delivery are also considerations in the process. Finally, it is the intent of the FRA that the information contained in the route analysis be considered as security sensitive information (SSI) in accordance with 49 CFR 15 and 1520 and be disseminated only to "covered persons" and on a "need to know basis" and may not be publicly disclosed.

The commodities covered by the regulation are not all encompassing, to include those covered in the FRA Order. They are specific quantities of Division 1.1, 1.2 and 1.3

explosives; bulk quantities of poison inhalation hazard material (PIH); and highway route controlled quantities of Class 7 radioactive material. Note that PIH and TIH are interchangeably used.

TSA addresses the handling of hazmat and in particular TIH in 49 CFR 1580 Rail Transportation Security. The regulation takes a risk-based approach to the handling of TIH and other security sensitive material in high threat urban areas (HTUA). This regulation is the result of a partnered effort among TSA, FRA and the railroads to enhance security. The essence of the regulation is to secure the chain of custody of rail cars carrying TIH by positive control from initial shipment, en-route and to the final destination. Communications and designated personnel (rail security coordinators), reporting thresholds and requirements, and location tracking are the foundation of the regulation. The systems, procedures and processes in place for compliance with 49 CFR 1580 can be dovetailed into the processes to enhance or complement the measure used to comply with FRA Order.

With regard to the above regulations and in general, TSA and FRA collaborate. There is a memorandum of understanding between the two (2) agencies that delineates the areas of responsibility and what each agency does when coming across an issue or violation of the other agencies regulations and responsibilities.

The tank cars hauling hazmat in North America are all[2] owned by private industry, whether the chemical manufacturers, their customers, or leasing companies, many of which are units of the tank car manufacturers. The Association of American Railroads (AAR), and this is confirmed with statistics found in the Official Railway Equipment Register, estimates that there are approximately 171,000 hazmat-hauling tank cars available; 93,000 of which are moving flammable liquids. Of these, less than ten percent (10%) are considered to be in compliance with the new standards [3].

The difference between the new and the old specifications are noteworthy and stem from the recent derailments involving cars carrying Bakken crude oil. Anyone ordering the new cars will be getting thicker steel for the tank vessel per se, but also head shields at both ends tha,t in the case of a derailment, will deflect adjacent cars hopefully reducing the probability of puncturing the vessel and causing release of material. Pressure relief valves are now required to vent potentially explosive vapors, a key issue with Bakken crude, which is known to have a Reid Index approaching that of gasoline.

Non-overriding couplers also intended to reduce tank puncturing, have been required for many years. Finally, the new specification requires better protection for valves and fittings[3] so that they are less liable to be sheared off in any derailment. These will be both relocated and shielded per the new specification.

In July 2014, USDOT issued a Notice of Proposed Rule Making (NPRM) that would adopt these standards for any new cars ordered after October 1, 2015, but would also require the retirement within five (5) years of the older cars now in service should their owners elect to not pursue the option of retrofits to bring them up to the new standards [4]. Recent estimates suggest that the cost of a retrofit would nearly equal the cost of building a new car. Moreover, the car building firms are reporting a robust business as their order books fill. Promised delivery dates for cars ordered in late 2014 are likely to be sometime in 2017.

DISCUSSION OF STATE AND RAILROAD POSITIONS

The dyadic manner in which several states and railroads will, in fact, become case studies of how disclosure of key information is handled. Given the number of continental states and Class I railroads there can be several hundred different arrangement possibilities, but this paper endeavors to establish a priority listing that ranges from good cooperation to standoff.

The BNSF, as do the other railroads, believes that the public disclosure of information concerning commodities handled, routing of the trains and quantitates carried are SSI and intended for “covered persons” only in accordance with 49 CFR 15 and 1520. Further, dissemination of routing information should be on a “need to know basis” in accordance with regulations promulgated by TSA and FRA. The purpose of not widely disseminating the routing and commodity information is to protect the transportation and storage of hazardous material that could have unwanted and catastrophic consequences and is not in the best interest of the railroad and all involved along the route. This reason is widely shared within the railroad industry and is supported by FRA and TSA. Keeping first responders, state or other emergency response commissions, fusion centers, etc. informed is prudent, as they are considered “covered persons”.

Both the BNSF and UP submitted confidentiality agreements to the State of Washington regarding the confidentiality (as SSI) of hazmat routing information and being disclosed only on a “need to know basis”. The State modified the agreements, as the requirement to withhold the information (from the general public) is a violation of its public-records act. An alternate agreement was drafted by the State requiring that the information be subject to disclosure, but giving the railroad prior notification. This is so that the railroads can seek a protective order or other remedy prior to disclosure [5]. The BNSF is reviewing the proposed

[2] This is a true statement as of November 2014; however, earlier this year BNSF placed an order for 5,000 units with the hopes that they could get ahead of this situation.

[3] Also referred to as “appliances” in some of the literature

agreement. The issue is not as significant to the UP in the State of Washington, since it does not handle Bakken Crude above the threshold of the FRA Order.

Events prompted the UP to enter into a nondisclosure agreement with the State of Wyoming regarding the dissemination of routing and commodity information for the crude oil shipments in the state. Unlike the State of Washington, Wyoming considers the hazmat routing and commodity information as SSI and is exempt from the public disclosure laws. This is because the Wyoming Director of Homeland Security considers that "should there be a sense of concern for a terroristic act, the law gives us the appropriate and lawful ability to deny a request, based on that concern" [6]. The BNSF and other railroads have not requested a nondisclosure agreement with the State of Wyoming. Wisconsin, Montana, Illinois, Illinois and Idaho, have also declined to enter into similar nondisclosure agreements, while Arkansas, Kansas, and Louisiana have [7,8].

It is noteworthy that the Pennsylvania Emergency Management Agency (PEMA) also had reached a three year accord with CSX Transportation (CSX), one of the three (3) Class I railroads operating within its borders, to make the disclosures. The result was that the railroad and the state would share information that could enable better planning and faster response in the event of an incident. Negotiations between PEMA and Norfolk Southern (NS) continue to take place; a development of some consequence since NS has just announced the acquisition of a major portion of the Delaware & Hudson Railway (D&H), a unit of Canadian Pacific [9], thereby eliminating the third Class I meaning that PEMA could ultimately have one hundred percent (100%) participation[4] [10].

During mid-2014, two railroads, the CSX and Canadian Pacific (CP) attempted to reach a non-disclosure agreement with the State of New York. While the railroads were prepared to release shipment information that included the names of hazmat being transported, their quantity, and the specific routings, New York State took the position that the disclosure of such information was not a security threat and that the public at large had every right to know. This disagreement has more far reaching implications than releasing such information only to first responder agencies. In compliance with the June 7, 2014 Emergency Order from the U.S. Department of Transportation, both railroads had begun the required filings with the New York State Emergency Response Commission, but continued to have serious misgivings about its potential illicit use should it fall into the wrong hands [11].

In summary, there is a variety of approaches utilized by the states in seeking compliance with the Emergency Order. While at first the railroads objected to any release of hazmat routing information and, in fact, exerted substantial pushback at the state levels, the industry realized that there was clear value in sharing with first responders. Where the railroads and the states are at odds where there is an unwillingness to treat hazmat train information as security sensitive.

Given that there are forty-eight (48) contiguous states with the potential of moving freight on an interstate basis, seven (7) Class I railroads, and hundreds of short line and regional railroads, the possible approaches to the hazmat information problem are many. In some cases there is what appears to be an impasse.

DISCUSSION OF CHALLENGES

There are two paradigms when it comes to transporting hazardous materials by rail. One is to keep people away from the material and the other, is to keep the material away from people [12]. The latter paradigm can be broken down into the technical standards and requirements for equipment and routing trains away from population centers. The problem becomes one of keeping people away from the hazmat to keep the hazmat away from people. In this case the first use of the word "people" denotes those looking to do harm for the purpose of hurting, if not killing the other "people", namely the local population.

Hazmat is not representative of a single item or commodity because it is indicative of a range of materials posing different risks and for which the railroads transport it in different forms. Risks, as incurred by the railroads are often defined by the quantity transported, a variable that represents the business opportunity and the principal challenge to the railroads. The classification would look like the following:

Package(s)	How Transported	Risk
Individual drum(s)	LTL trailer or container, intermodally	Minimal
Many drums	Full trailer or container intermodally,	Generally an isolated risk
ISO tank	Tank container, intermodally	Higher risk because of quantity in a single vessel
Tank car	Individual railcar	Slightly less than an ISO tank because of the integrity of the tank and car underframe
Cut of several cars*	Multiple cars coupled together in the same train consist	Significant risk because of the volumes involved
Unit train*	Many cars coupled together in the same train	Very significant

This paper, therefore, can address the issue from two perspectives: keeping hazmat away from people and keeping people away from hazmat. Inasmuch as transportation is a derived demand activity meaning that there is no demand for transportation services without an underlying demand for the goods per se, there is less concern over packaged chemicals in trailers and containers than there is for tank cars. Some of the

[4] Note that while there are only two Class I railroads, Pennsylvania has nearly 50 short lines operating in the state.

largest volumes of hazardous material transported by tank car are anhydrous crude oil, ethanol, vinyl chloride, chlorine, and ammonia [13][5]. Of these, those posing the greatest risk are the last two because of the common practice of transporting as unit trains or as significant cuts of cars as show (with an asterisk*) on the above matrix. .

In the post-Lac Mergantic era, the fixes for keeping hazmat from people is fourfold:

- Improved technical specifications for tank cars.
- Limiting trains speeds for those having 20 or more crude oil and/or ethanol carrying cars or even one car carrying hazmat that is considered old specification (designated *key trains* or alternatively *high hazard trains* or *HHFTs*).
- Increased frequency of track inspection.
- Rerouting hazmat trains away from population centers whether they are housing communities or significant assemblies such as major sporting or cultural events.

Moreover, key trains would be subject to a 50 mile per hour speed restriction as well as being required to participate in the Rail Corridor Risk Management System (RCRMS), a software tool that assists railroads with rerouting of trains carrying hazmat [14]. A twofold approach is through providing first responders with information concerning trains carrying hazmat passing through their jurisdictions (see below).

Keeping people away from hazmat is another initiative that remains a challenge for the railroads given that the U.S. rail system is a network that has many dichotomous characteristics. With 138.5K miles of railroad [15][6], some runs through dense forest and barren desert, while other lines run through urban areas. Some lines are shared with passenger operations, both Amtrak and regional commuter operators. Some are high density Class I railroad lines, while others are single line with only one or two trains a week. Keeping hazmat away from people can be a simple task for some, but a daunting one for others. Keeping people away from hazmat is a bigger challenge given the dichotomies above, but there are actions that can be taken.

One method of addressing the challenges is to vary the routes between the primary and alternates thereby creating a randomness that would compensate to some degree for the disclosure to the general public. Historically, routings were made with railroad efficiency (incurring the least cost and best utilizing network capacity), but will need to change with hazmat trains whereby minimized potential exposure and unpredictability becoming the primary objective.

[5] These commodities were drawn from a sample of waybills. The most hazardous were selected for this discussion.

[6] Miles of track exclusive of trackage rights

While much of the U.S. rail network does contain a modicum of redundancy thereby making rerouting feasible in some traffic lanes, such is not the case with the "final mile", whether that is at origins or destinations. Moreover, the planning of random routes may, in fact, need to be performed by multiple railroads in such instances where rerouting over a single railroads network is not possible. The information disclosure issue for informing first responders becomes even more compelling under these circumstances.

KNOWLEDGE OF TRANSPORTATION MOVES

Within the past two years, there has been an increasing desire for the railroads to disclose what they are transporting, in what quantities, and through what jurisdictions. In June 2014 the FRA issued an order compelling railroads to disclose routes and schedules along with the specific characteristics of the hazmat they are carrying. The railroads lobbied the states to not comply with the order with several agreeing to do so [16].

Two of the key issues at the heart of railroad reluctance to share hazmat information lie with the volume of data and the risk liability should it fall into the wrong hands and actually be used in the planning of a terrorist action. With the former rationale, there is some legitimacy given the numerous cars of a list of hazmat moving in a number of trains at any one point in time. To be effective there must be an information technology solution that takes the data and transforms it into actionable information. In the case of the latter concern, there continues the long-discussed argument between needing to communicate valuable information to first responders, not only to protect their respective communities, but to protect them as well. This is precisely why NS was criticized following derailment of hazmat carrying cars in Elmira, NY during Summer 2010 where not even the hazmat teams knew the contents of the cars in question [17]. The current argument is a newer incarnation of the discussion about disclosing hazmat on shipping papers and placards. That practice was initially promulgated in the 1970s it was the Chemical Manufacturers' Association that got ahead of the curve and actually established what in today's world would be considered an industry-based fusion center [18].

OBSERVATION OF CRITICAL POINTS

While observation of the entire network would be a near-impossible task, there are technologies that can be applied. Junction points and those areas where rail traffic may have the most density, especially where trains may idle, can be put under video surveillance. Conversely, remote parts of the network, where such monitoring would prove to be both expensive and of little real value, can be observed with drone aircraft, the commercial versions of those increasingly being used worldwide by the military.

The petroleum and chemical industries have their roles to play as well. Idle rail cars carrying hazmat may have more vulnerability than those moving in trains. Loaded cars awaiting

railroad pickup or loaded cars delivered and awaiting unloading pose considerable threats. The larger firms, such as DuPont, Dow, BASF, Exxon and others typically have fenced areas where such railcars are placed. However, it is the smaller and perhaps lesser known firms, or those receiving on the occasional rail car that often have the unprotected areas. Trespassing has been an age-old railroad problem, but extends to the adjacent shipper and consignee properties as well.

It is the railroads that are concerned about the liability of having hazmat on its property and the insurance premium component of their costs. NS's Wick Moorman feels that those firms using railroads for their transportation needs must also share this concern [19]. The case was made earlier about the need to retrofit tank cars and that the burden of doing so will rest with the non-railroad firms because they own or lease such equipment to facilitate their being in their core businesses. This issue touches on the financial matter of asset utilization because these firms own or lease tank cars because materials had become increasingly specialized thereby demanding cars with special linings, made of specific alloy steels, and often having industry-unique valves and fittings. All of these demands drove down the return on investment meaning that when the railroad companies failed to make the investment, the onus fell upon the shippers and consignees [20].

WAY FORWARD

As with any managerial decision, the obvious answer is to address those initiatives that have the greatest potential impact. The rail industry does need to improve the standards of the rail cars used for transporting hazmat. Shippers, particularly those of crude oil, need to address the differences between various crude oils and treat those that are the most dangerous. Third, the industry needs to continue on its initiative to reroute key trains to keep them away from the population to the greatest extent possible, but also to disclose when and where such key trains are moving and what their cargoes may be. While Pareto is known for the 80/20 rule, it is also likely that fewer than twenty percent (20%) of the trains represent more than eighty (80%) of the problem. The rail industry has an enviable track record when it comes to transporting hazardous material with the most recent year's statistics showing that 99.998 of all shipments reach their destination without any form of accidental release [21].

Given the overall record of the railroads with regard to the handling hazmat, serious consideration must be given to ways to compensate for the disclosure of the hazmat routing information to the general public, which is a widely debated issue. In this case, the railroads must be proactive and not reactive. The following paragraphs are just a few of the ways the railroads can be proactive and minimize, to the extent possible, an event arising from the wide dissemination of routing information.

One way of mitigating the risk of a terrorist attack, when the routing, commodities and quantities are known, is to minimize the time a train sits at an interlocking or passing siding or is unattended[7] because of operations. Holding the subject trains in secure locations and dispatching them when they have a clear run will help reduce the risk of an intrusion. This is accomplished by, among other things, higher speeds along the routes and minimizing stops and areas where speeds are reduced.

Grade crossings should be maintained to a level and monitored so that track and systems cannot easily be compromised. In Fort Lauderdale in 1993 a grade crossing collision between a tanker truck and Amtrak train killed six (6) people. If a collision of that type were to occur with a hazmat train, and in particular with Bakken crude, the resultant casualties could be far greater.

Routing should consider avoiding, as much as possible, routes that are shared with commuter and passenger operations. This is because passenger trains have dispatching priority often requiring freight train to be held on a siding. Also, a freight carrying hazmat train passing a commuter train or Amtrak could provide a "target of opportunity" to a terrorist.

Operations' planning is essential in route selection. This is so that, to the extent possible, areas of iconic value, high consequence targets, population densities, etc. should be avoided.

Potentially vulnerable locations, infrastructure and systems should be identified and prioritized so that high risk locations are considered as routes are planned and selected. The planners and designers of the railroad's infrastructure and systems should then look at failsafe systems, such as SCADA (supervisory control and data acquisition), to monitor system integrity and detect a compromise.

Infrastructure inspection and maintenance will be important to detect and mitigate potentially compromised infrastructure. Resilient design and construction will help the inspectors and maintainers monitor and restore potentially hazardous conditions in a timely manner. Further, track maintenance must be reflective of the increased frequency of trains and additional tonnage

Tank car integrity is an issue that has already been addressed by the industry and by proposed government regulation. The pertinent elements for improving tank car design have been discussed previously in this paper. Reference is made again here to emphasize that the solution involves many parties, will exact a very high cost with respect to new rolling stock, and will change both government and trade

[7] This refers to the chain of custody and handling of security sensitive material in accordance with TSA regulation 49 CFR 1580.

association (AAR and American Short Line and Regional Railroad Association - ASLRRA) involvement. If ever there was a public-private partnership to address a pressing problem, the issue of safely moving hazmat by rail may well be an example worth remembering.

Railroad police activities although traditionally reactionary, has evolved because of the threat of terrorism and need to become more proactive. Planning for disasters and terrorist events, maintaining surveillance and monitoring of problem areas, and obtaining and disseminating intelligence that impacts operations are paramount in the current environment. The latter role will be important if and when the routing information is widely disseminated. As the rights-of-way are open and easily accessible, methods and the frequency of monitoring and patrolling them should be commensurate with the threats; real or perceived. Also, a "see something say something" approach with the railroads' workers will help increase "eyes on" the right-of-way and ability to discern if there is something wrong that could lead to an incident. Further, sharing intelligence between and among the railroads, states and federal government agencies can help identify potential threats so that they can be addressed and appropriate actions taken to protect the operation and mitigate the risk.

The above represents some of the approaches that the railroads could use to address the challenges posed by the wide dissemination of the routing information. These approaches can be effective, but not one hundred percent (100%), and do not replace the need to disseminate the routing information on a "need to know basis" and only to "covered persons". In the case of widely disseminating the routing information, being proactive is of paramount importance.

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