Fw: Federal Gov't. Report On Crude-By-Rail - Phillips 66 project

Ryan Hostetter to: Ramona Hedges 03/10/2016 02:47 PM

Cc: Nicole Retana, Donna Hernandez, Ellen Carroll, Steve McMasters, Whitney McDonald

Ramona - Can you get this PDF'd and on our web with all our other letters?

Mrs. Ryan Hostetter, AICP, LEED AP
County of San Luis Obispo
Supervising Planner, Housing and Economic Development
(805) 788-2351

PLANNING & BUILDING
COUNTY OF SAN LUIS OBISPO

----- Forwarded by Ryan Hostetter/Planning/COSLO on 03/10/2016 02:46 PM -----

From: Eunice King <mrwcoord@gmail.com>
To: rhostetter@co.slo.ca.us
Date: 03/08/2016 03:31 PM
Subject: Fwd: Federal Gov't. Report On Crude-By-Rail

Hello Ryan,

MRWG is submitting the attached Office of Inspector General Audit Report on the Federal Railroad Administration's oversight of hazardous materials shipments issued on February 24, 2016 as relative to the Phillips 66 proposal currently under Planning Commission review.

A high level summary of some of the report's pertinent findings is provided in the article referenced below and sites insufficient safeguards of crude-by-rail.

Eunice

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Eunice King

Mesa Refinery Watch Group Administrator

http://www.post-gazette.com/opinion/editorials/2016/03/01/Trouble-on-the-rails-The-U-S-needs-better-oversight-of-crude-oil-cargo/stories/201603010021

Trouble on the rails: The U.S. needs better oversight of crude oil cargo

An alarming report issued by the federal Transportation Department's inspector general concluded that regulators are failing to adequately safeguard the nation's freight rail shipments of crude oil and other hazardous cargo.

This is of particular importance in Allegheny County where, every week, as many as 75 trains, each loaded with at least 1 million gallons of volatile crude oil, pass through on tracks close to Downtown and other densely populated communities.

The audit, released last week, concluded that while there had been a significant increase nationwide in rail shipments of crude oil — from 9,500 carloads in 2008 to 407,761 in 2013 — the Federal Railroad Administration did not conduct a comprehensive evaluation of the risks associated with the shipments. The report said the agency does not take into account such significant factors as the condition of the infrastructure, shippers' records of complying with regulations and how close the rails are to population centers.

Those findings are bad enough, but the audit also determined that, even when regulators go after violators, they don't do a good enough job.

The report said that, while regulators pursue civil fines for violations regarding hazardous materials, they do not adjust the sums based on the severity of the infractions or refer cases for criminal investigations. Based on a random sample of violations issued in a five-year period, the inspector general estimated that 20 percent of violations may have warranted but did not received those referrals.

That means even firms that were paying for violations might have been unjustly avoiding higher fines or, worse, criminal prosecution.

The audit's conclusion said it all: "Effective oversight of this risk prone area requires thorough, timely inspections as well as the application of deterrent penalties when violations occur." The agency agreed, but simply acknowledging the problems is not enough. Focused, forceful oversight is imperative.

FRA Oversight of Hazmat by Rail_Final Report^2-24-16.pdf

Office of Inspector General

Audit Report

FRA'S OVERSIGHT OF HAZARDOUS MATERIALS SHIPMENTS LACKS COMPREHENSIVE RISK EVALUATION AND FOCUS ON DETERRENCE

Federal Railroad Administration

Report Number: ST-2016-020

Date Issued: February 24, 2016

Memorandum

U.S. Department of Transportation
Office of the Secretary of Transportation
Office of Inspector General

Subject: **ACTION:** FRA's Oversight of Hazardous Materials Shipments Lacks Comprehensive Risk Evaluation and Focus on Deterrence
Federal Railroad Administration
Report Number ST-2016-020

Date: February 24, 2016

From: Mitchell Behm
Assistant Inspector General for Surface Transportation Audits

Reply to Attn. of: JA-30

To: Federal Railroad Administrator

In July 2013, a train carrying crude oil derailed in Lac-Mégantic, Quebec, Canada. While the accident was not caused by the oil, the fatalities and damage resulting from this incident highlight the importance of oversight of transportation of hazardous materials by rail. Significant increases in rail transport of crude oil—from 9,500 carloads in 2008 to 407,761 carloads in 2013—and recent incidents in Alabama, North Dakota, and Virginia also underscore the importance of mitigating the risk of a hazardous material release in the event of a train accident. Due to the public safety risks that transporting crude oil and other hazardous materials pose, we conducted this audit to assess the Federal Railroad Administration's (FRA) enforcement of hazardous materials regulations using inspections and other tools. Specifically, we determined whether FRA (1) uses appropriate risk factors to allocate hazardous materials inspection resources; (2) provides sufficient guidance, tools, and training to hazardous materials inspectors; and (3) pursues civil and criminal penalties for violations of hazardous materials regulations.

We conducted our work in accordance with generally accepted Government auditing standards. We reviewed documentation pertaining to FRA's hazardous materials oversight activities, risk factors, and data. At three FRA regional offices, we observed hazardous materials inspections and facility audits. We conducted interviews with two other regional offices, FRA headquarters officials, and representatives from the Association of American Railroads and the American

Short Line and Regional Railroad Association. See exhibit A for a full description of our scope and methodology.

RESULTS IN BRIEF

FRA has not conducted a comprehensive evaluation of risks associated with hazardous materials transportation that appropriately addresses national level risk. Neither the National Inspection Plan nor the hazardous materials staffing process—two nationwide tools provided to regional specialists—produces a complete evaluation of risk. For example, both models assess how much hazardous material is routed through a region, but not the proximity of those routes to population centers. Regional specialists supplement guidance provided to them by FRA Headquarters with additional information they consider important—such as non-accident release trends, knowledge of local operations, and National Safety Program Plan projects—to identify risk-prone operations or locations for inspection. However, because it focuses on regional planning, the Agency has no overall understanding of the national risk environment. As a result, FRA cannot be sure that the regions consider all appropriate risk factors when allocating hazardous materials inspection resources.

FRA provides written guidance and robust training to support inspectors responsible for enforcing hazardous materials regulations. However, inspectors do not have ready access to inspection data from other regions because pulling this information from FRA's system is complicated. Inspectors also frequently do not have accurate information on special permits from PHMSA because the related information in PHMSA's Web-based portal is outdated and incomplete. These limitations make tracking leaks or recurring compliance problems time consuming and limit the pre-inspection preparation inspectors can do.

FRA pursues limited civil penalties for violations of hazardous materials regulations and, despite departmental requirements in several DOT Orders, does not refer cases to our office for criminal investigation. According to FRA's Office of Chief Counsel staff attorneys, they base penalties on penalty guidelines[1] that primarily target average violations, but hazardous materials inspectors write violations for only serious incidents of non-compliance. Our analysis of a stratified random sample of violations from a five year period showed no deviation from the penalty guidelines and identified 17 cases that warranted referral to our office for criminal investigation. Additionally, our review revealed that Office of Chief Counsel policies and procedures focus on processing penalties in a timely manner

[1] 49 CFR § 209, Appendix B, Civil Penalty Assessment Guidelines.

and avoiding litigation. As a result, penalties have little deterrent effect, and criminal penalties are not being pursued.

We are making recommendations to improve the risk assessments associated with allocating hazardous materials inspection resources, and address concerns about FRA's use of civil penalties and lack of criminal case referrals to our office.

BACKGROUND

FRA is responsible for enforcing regulations promulgated by the Pipeline and Hazardous Materials Safety Administration (PHMSA)—the Hazardous Materials Regulations (HMR)—pertaining to safe transport by rail of hazardous materials such as ethanol, crude oil, and toxic or poisonous inhalation hazard (TIH/PIH) materials.[2] The inspectors that conduct these regulatory activities work in FRA's hazardous materials discipline, one of the Agency's five[3] inspection disciplines. The 54 hazardous materials inspectors,[4] along with State inspectors, in FRA's 8 regions examine railroads' and shippers' compliance with the HMR during inspections of trains, facilities, and accidents. During fiscal years 2013 and 2014, FRA inspectors inspected 695,765 items such as tank cars and shipper facilities. FRA also has specialists on its tank car quality assurance team that focus on inspections of tank car manufacturing and repair facilities.

Within FRA's Office of Railroad Safety, regional hazardous materials specialists are responsible for determining how to prioritize hazardous materials inspections in order to reduce non-accident releases of hazardous materials. See exhibit C for the Office of Railroad Safety's organizational chart. The specialists use tools and information from the Risk Reduction Program Division and the Hazardous Materials Division such as the hazardous materials staffing process and the National Inspection Plan. They also use the National Safety Program Plan.

- The hazardous materials staffing allocation process is designed to identify the number of hazardous materials inspectors each region receives annually. FRA's Risk Reduction Program Division makes this determination by running a series of calculations designed to compare risk measured in terms of the volume of hazardous materials, such as crude oil or ethanol, transported by region, the distance these materials travel in each region, and what percentage

[2] 49 CFR § 171-174 and § 178-180.
[3] FRA's five inspection disciplines are: track and structures, operating practices, motive power and equipment, signal and train control, and hazardous materials. Inspectors in these specializations focus on enforcing regulations specific to their areas.
[4] As of August 2015.

of the traffic is TIH/PIH.[5] Regions determined to be at greater risk are supposed to be allocated more inspectors.[6]

- The National Inspection Plan specifies annual goals for the percentage of effort[7] each regional inspection point should receive. The definition of a regional inspection point varies by context. In some circumstances an inspection point refers to a place—rail yard, chemical plant, etc.—visited for inspections regardless of the number of entities operating at that location, while in other circumstances a regional inspection point refers to every entity inspected at each location. The Risk Reduction Program Division generates baseline goals based on the number of inspection points in each region and the percentage of TIH/PIH traffic attributable to each inspection point. Once a baseline plan is produced, regional hazardous materials specialists work with their regional administrators to make adjustments to their plans based on additional factors such as recent accidents in the area, repeat violators, and new facilities.

- The National Safety Program Plan is an annual strategic plan that contains projects that Headquarters and regional staff develop to address specific safety concerns identified over the past year and achieve performance goals such as reducing non-accident related hazardous materials releases. For example, in fiscal year 2014, the National Safety Program Plan called for regions to conduct en-route inspections of trains carrying crude oil to assess whether tank cars are in compliance with regulations.

Hazardous materials specialists set inspection priorities based in part on these tools. Regional inspectors then perform inspections with oversight from their regional specialists. The inspectors can exercise considerable professional judgment in determining when, where, and what to inspect within their assigned areas and whether or not a problem warrants a violation report or other corrective actions which include, but are not limited to, the following: compliance orders, legal injunctions, railworthiness directives,[8] emergency orders, or pursuing enforcement action against an individual. For minor problems, inspectors may issue defect notices or give verbal warnings.

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[5] FRA considers PIH/TIH materials to be a type of hazardous material that poses a more immediate risk than other types because releasing clouds of these materials can harm populations miles away from the release.

[6] FRA leadership may make further adjustments to these allocations based on factors such as territory size and traffic patterns. Allocation plans may differ from actual allocations because the plans are implemented as positions become vacant.

[7] The National Inspection Plan does not specify how many inspections each regional inspection point should receive, but specifies the percentage of each region's overall inspections that should be devoted to a particular inspection point.

[8] FRA issues railworthiness directives that describe unsafe operating conditions, tank car defects, and tank car design defects, and require inspection or correction of the conditions and defects.

Inspectors submit violation reports to FRA's Office of Chief Counsel. The Office of Chief Counsel reviews the reports and either accepts the violations or declines to pursue them. For violations it accepts, the Office assesses civil penalties using penalty guidelines that FRA has developed in an appendix[9] to its railroad safety enforcement regulations and that align with the HMR. The Office conducts a settlement conference when the respondent is a major railroad. This conference generally entails a discussion of all pending violations involving the respondent and results in FRA's assessing a final penalty. Many penalties with other respondents such as shippers and small railroads are settled through informal discussions throughout the year. The Office of Chief Counsel does not have authority to investigate criminal cases, but under DOT Order 8000.8, is required to refer cases of suspected criminal activity to OIG for investigation.

FRA HAS NOT CONDUCTED A COMPREHENSIVE EVALUATION OF RISK FOR HAZARDOUS MATERIALS OVERSIGHT

FRA has not comprehensively evaluated risks associated with hazardous materials transportation for regional hazardous materials specialists to consider when prioritizing inspections. As a result, the Agency has no overall, national understanding of the risk environment and cannot be sure that the regions consider all appropriate risk factors.

GAO's *Standards for Internal Control in the Federal Government*[10] (Green Book) defines the minimum level of quality acceptable for internal control for Federal agencies. According to the Green Book, agencies need to comprehensively identify risks associated with achieving program objectives.[11] However, FRA's approach to risk assessment is focused on region-specific assessments conducted by regional specialists because of FRA officials' perception that each region faces different risks. The few nationwide tools that FRA provides are not based on a comprehensive identification and prioritization of risks, leaving open the possibility that FRA's resource allocation does not take into account important risk factors that appear at the national level or are the responsibility of FRA's other safety disciplines, such as operating practices at rail yards. For example, two of the tools provided to regional specialists, the hazardous materials staffing process and National Inspection Plan, do not take into account risk factors such as

[9] 49 CFR § 209, Appendix B, Civil Penalty Assessment Guidelines.
[10] GAO, *Standards for Internal Control in the Federal Government*, November 1999. This audit is based on information collected and analyzed in fiscal year 2015, during which time the November 1999, edition of the Green Book was in effect.
[11] Requirements for program managers to understand and manage risk will become more demanding when the Green Book's 2014, edition becomes effective in fiscal year 2016. The new edition requires that, in addition to comprehensively identifying risks, each agency consider the correlations among risks.

the condition of transportation infrastructure, the shippers' compliance histories, or the proximity of transportation routes to population centers.

The regional specialists supplement the resource allocation goals in the Plan with additional information they consider important for identifying risk-prone operations or locations for inspection—such as non-accident release trends, knowledge of local operations, and National Safety Program Plan projects. This approach gives specialists flexibility to tailor inspections to problem areas specific to their regions but does not reflect the comprehensive understanding of risk that the Green Book requires. Regional specialists are focused on risks that affect shipments in their own regions but may not know what specific risks those shipments are subject to once they cross into other regions. For example, they may not know whether carriers in other regions check for seals that have become loose from wear and tear.

Faced with challenges in identifying risks associated with rail transport of hazardous materials, FRA's Hazardous Materials Division is developing a new tool for shipper risk assessments. This tool will employ an algorithm based on relevant and available data, including the date of a shipper's last inspection, its compliance history (the number of identified defects and violations), its incident history (how often packages have been involved in non-accident releases or other incidents), and emerging issues identified by regional managers and specialists. However, the algorithm is limited to these risk factors and will not account for other risk factors including the routes a shipper's package travels or the class of hazardous materials. Therefore, this new tool will not provide a process that comprehensively identifies risks or determines which risks are the most important to factor into prioritization decisions.

FRA PROVIDES GUIDANCE AND TRAINING, BUT INSPECTORS HAVE LIMITED ACCESS TO SOME DATA

FRA provides support to inspectors with guidance and training. However, the inspectors do not have access to some information that would facilitate their work, including inspection data from other FRA regions and complete information from PHMSA.

FRA Provides Guidance and Training to Inspectors

FRA provides guidance for inspectors and regular training. The Agency provides compliance manuals on safety inspection and investigation activities. Inspectors also receive feedback from their regional hazardous materials specialists and annual training on inspection standards and updates.

The Agency maintains general and hazardous materials-specific compliance manuals that establish procedures and standards for inspections. The general manual describes the basic principles and responsibilities for each inspection discipline, and various safety oversight and enforcement tools they may use, including emergency orders, safety advisories, and civil penalties. The hazardous materials discipline compliance manual provides detailed guidance on inspection and investigation procedures. It includes clarifications of the HMR and guidance from the Association of American Railroads (AAR) to help inspectors interpret and apply the regulations during inspections.

FRA also provides annual training to ensure inspectors continue to meet standards and keep up with the latest regulatory changes. Inspectors are required[12] to attend training every year to address problem areas identified by regional specialists and inspectors in the field. For example, the required course in fiscal year 2013 covered tank car valve and fitting analysis and interpretation of various AAR tank car records. In fiscal year 2014, the course discussed recent hazardous materials regulatory changes and root-cause analysis investigations. The technical specialist for the hazardous materials discipline from FRA's Railroad Safety Technical Training Standards Division informed us that he regularly works with regional specialists to identify the topics that should be addressed in the next year's training.

Each new inspector receives classroom training and participates in a year-long on-the-job training program with an experienced inspector that is tailored to his or her railroad experience level. Classroom training covers topics for hazardous materials inspections, such as the HMR, types of inspections and procedures, and the reporting process. New hires with limited or no railroad experience must attend additional classes on general railroad operations and hazardous materials transport. In the on-the-job program, each new inspector practices various inspection and investigation activities under the supervision of an experienced inspector. This training follows standards set in the FRA's compliance manuals, which inspectors are required to master before conducting independent inspections.

In responses to our questions regarding their oversight of and training for inspectors, regional hazmat specialists described several approaches. One of the specialists informed us that he routinely reviews inspectors' inspection reports and audits their performance. One Deputy Regional Administrator also noted that the regional hazardous materials specialists evaluate performance and provide

[12] In fiscal year 2013, 46 Federal hazardous materials inspectors attended the annual training. In fiscal year 2014, 52 inspectors attended. FRA provided the total number of inspectors employed by the Agency, but the timeframes for these employment records and the training rosters were different. Consequently, we could not compare them without significant work beyond the scope of this audit.

feedback by joining inspectors on inspections. Two specialists stated they also communicate with inspectors through regular conference calls when changes to regulations, processes, or standards occur. Two of the inspectors informed us that this support helps clarify standards and expectations and provides useful feedback.

Inspectors Have Limited Access to Inspection Data from Other Regions and Accurate Data on PHMSA's Special Permits

FRA inspectors do not have ready access to inspection data from other regions, and inspectors cannot access accurate data on PHMSA's special permits.

While the Agency provides each inspector access to his or her region's inspection data and nationwide statistics through FRA's secure site, one specialist and three inspectors informed us that FRA does not provide inspectors access to inspection information from other regions stored in its database. The three inspectors stated that it would be helpful to have access to this database to track problem tank cars and other issues from other regions. Instead, inspectors from different regions must call or e-mail each other to ask about problem shippers and non-compliant tank cars from outside their assigned regions. An FRA official stated that inspectors actually do have access to the database on FRA's secure site but do not know how to retrieve information from it. We also experienced difficulties with retrieving data on nationwide inspection reports from the secure site. The official in charge of the system acknowledged that the best way to obtain the data is to work with FRA's data query expert, not to try to retrieve the information ourselves. The three inspectors stressed that it is important for inspectors to have access to all inspection data in order to trace root causes of problems and identify patterns of noncompliance since trains carrying hazardous materials travel across regions.

Two hazardous materials specialists also informed us that special permit data for companies in PHMSA's database is often outdated or incorrect.[13] PHMSA issues special permits that waive or modify compliance with regulatory requirements when shippers demonstrate need and that their activities will be consistent with hazardous materials standards. PHMSA stores special permits and other certifications in its Hazmat Portal database. We have previously reported that it is difficult to accurately identify companies and their operating locations in this database. This problem was also identified by the specialists we interviewed. One of the specialists explained that inspectors have to know the exact certificate number or facility code to find a permit in the database. Instead, FRA inspectors

[13] We reported on this issue in 2014 (*PHMSA Has Addressed Most Weaknesses We Identified in Its Special Permit and Approval Processes*, OIG Report Number MH-2014-064, July 17, 2014). OIG reports are available at https://www.oig.dot.gov/.

rely on hard copies of permits at shipper and loading facilities for accurate information. As a result of these limitations, inspectors are limited in the document review they can do to prepare for an inspection and tracing problems to their origins is time consuming.

FRA ISSUES FEW VIOLATIONS, PURSUES LOW CIVIL PENALTIES, AND DOES NOT REFER POSSIBLY CRIMINAL VIOLATIONS TO THE OFFICE OF INSPECTOR GENERAL

Inspectors submit violation reports to the Office of Chief Counsel only for serious problems. The Office of Chief Counsel, however, does not address the violations' severity, but imposes uniform penalties that FRA's regulations state are intended to be starting points. As a result, penalties and their deterrent effects are limited. The Office also does not refer to our office violations that may warrant criminal investigation.

Inspectors Report Violations Only for Serious Problems

Six inspectors and specialists we spoke with said they request civil penalties only for serious problems, such as loose tank car closures or repeated infractions. For less serious issues, such as a missing signature or an error in training record paperwork, FRA's manual states inspectors may write a defect and give a verbal warning or request corrective action. We analyzed regional hazardous materials inspection data from fiscal years 2013 and 2014 and found that of the 33,864 infractions[14] inspectors identified, they forwarded 1,355 to the Office of Chief Counsel as violations.[15] That means that for every 100 infractions identified, only 4 were recommended for civil penalties.

Inspectors may be dissuaded from writing violations by the time consuming process for reporting and justifying violations, concerns that the Office of Chief Counsel may reject their reports, and the lack of knowledge about outcomes of their work (see figure 1).

[14] This number includes both defects and violations.
[15] According to FRA's compliance manual, an inspector recommends a violation when he or she determines that the best method of gaining compliance with the applicable regulation is levying a civil penalty.

Figure 1. FRA Inspectors' Process for Recommending Civil Penalties (Simplified)

Source: OIG analysis of data in FRA's Railroad Inspection Reporting System, FRA regulations, and FRA procedures

Before writing reports on violations, inspectors must consider seven factors.[16] FRA's Hazardous Materials Compliance Manual states that because of the time required to properly document violations and prepare violation reports, inspectors should carefully choose which violations most need enforcement actions due to seriousness, frequency, and other factors. The Manual also tells inspectors which enforcement tool to use based on perceived seriousness.[17]

Another factor that may discourage inspectors from submitting violation reports is the possibility that the Office of Chief Counsel will not agree with a violation and decline to proceed with it. The Office of Chief Counsel declines violations for which inspectors have not included sufficient evidence to show how the HMR was violated. FRA's manual is not clear on how much detail inspectors should provide to support violations whose penalties should exceed the guidelines but are not maximum, aggravated, or extraordinary.[18] As a result, an inspector may not clearly communicate the severity of the violation he or she is recommending.

Furthermore, the Office of Chief Counsel does not routinely inform inspectors of the outcomes of violations, such as penalties collected and notifications when violations are closed, and inspectors cannot access this information directly. One inspector noted that the Office of Chief Counsel has effectively "numbed" a large portion of inspectors into not writing violations and stated that some inspectors have preconceived notions that violations will not get through the process.

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[16] In general terms, the factors are (1) inherent seriousness of the condition or action; (2) the kind and degree of potential safety hazard the condition or action poses; (3) any actual harm to persons or property already caused; (4) the offending person's—a railroad or individual—level of current compliance with regulations; (5) the person's recent history of compliance, especially at the specific location or division of the railroad involved; (6) whether a remedy other than a civil penalty—ranging from a warning to an emergency order—is more appropriate; and (7) such other factors as the immediate circumstances make relevant.

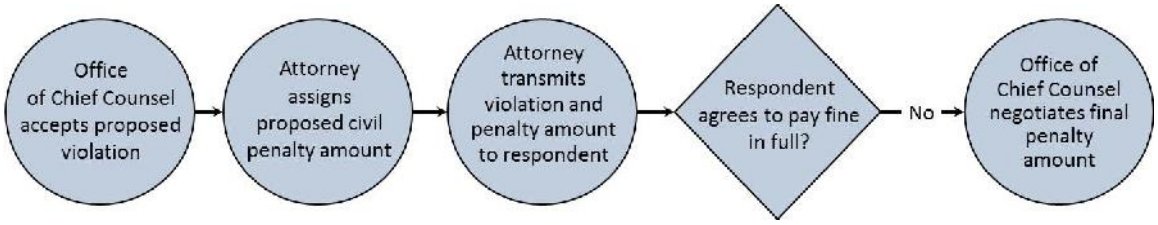
[17] Enforcement tools include violation reports, emergency orders, compliance orders, rail worthiness directives, or "extraordinary" civil penalties.

[18] Extraordinary penalties may be a maximum penalty, a multiple-day penalty, or a total fine of $100,000 or more for a related set of violations. To recommend an extraordinary penalty, inspectors must prepare and submit additional memoranda explaining the rationale for the recommendation to the Office of Chief Counsel that must be approved by several FRA officials.

FRA's Office of Chief Counsel Does Not Adjust Penalties Based on Violation Seriousness

The Office of Chief Counsel is responsible for assessing initial penalties and either assessing final penalties or settling penalties for hazmat violations (see figure 2).

Figure 2. Process for Assessing Civil Penalties (Simplified)



Source: OIG analysis of FRA regulations and procedures

However, our review determined that the Office of Chief Counsel does not adjust penalties based on the seriousness of violations. Policies and procedures focus on processing penalties in a timely manner and avoiding litigation rather than adjusting penalties—as the law governing transportation of hazardous materials[19] requires—to account for the severity and circumstances of individual violations reported by inspectors. This law establishes the basis for FRA's authority to set civil penalties for violations of hazardous materials regulations and requires the Department, when determining penalty amounts, to consider the following assessment factors: the nature, circumstance, extent, and gravity of each violation; the degree of the violator's culpability, history of prior offenses, and ability to pay a fine; the effect on the violator's ability to continue in business; and other factors. For average violations involving hazardous materials with medium levels of hazard and violators with average compliance histories, guidelines in an appendix to FRA's regulations[20] set penalties in specific dollar amounts ranging up to $15,000. Moreover, the regulations emphasize that penalties should reflect case circumstances, including the respondent's violation history. The regulations allow FRA to assess a fine of up to $75,000 for a serious violation and up to $175,000 if the violation results in death, serious illness, severe injury, or substantial destruction of property.

None of the penalties in our statistical sample of 72 violations[21] of the HMR approved by the Office of Chief Counsel in fiscal years 2010 through 2014 exceeded guidelines despite the flexibility to apply higher penalties. For example:

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[19] 49 USC § 5123.
[20] 49 CFR § 209, Appendix B, Civil Penalty Assessment Guidelines.
[21] One of these violations did not have an assessed penalty at the time of our analysis. As a result, we evaluated the 71 remaining penalty assessments.

- In one case, two workers were hospitalized after exposure to a leak of sulfuric acid. The inspector found that a tank car cover was not positioned to seal properly, and that the gasket around the cover was damaged. The Office of Chief Counsel assessed a penalty of $15,000, matching the regulation's guideline amount for leaks that allow product, fumes or vapors to contact human beings. The Office could potentially have assessed a much higher penalty due to the bodily injuries the workers suffered.

- Two companies received $5,000 fines for offering an unsafe tank car for transportation. However, one company had a much worse compliance history than the other with 25 violations versus 2 violations over the same 5-year period.

The Office of Chief Counsel's enforcement procedures direct staff attorneys to be careful when departing from the penalty guidelines and direct FRA attorneys to ordinarily assess the amounts listed in the guidelines. While Office procedures instruct attorneys to review cases for aggravating or mitigating factors that could affect penalty levels, the Office has no procedures requiring staff attorneys to document how they weigh the penalty assessment factors. The Office confirmed that it rarely varies from the guidelines, and highlighted that having the penalty schedule in its database makes it easy to determine which penalty to apply, describing penalties as "pre-loaded." Consequently, FRA is not using the guidelines as starting points for penalty amounts based on violations' specific circumstances; instead, it is treating them as standards and requiring justifications for deviations. For example, a 2009 Office of Chief Counsel memorandum requires staff to explain the basis for recommended penalties above guideline amounts.

FRA's process further limits the Office's use of flexibility granted in the regulations by bundling a respondent's violations and leading attorneys to assess penalties that are not responsive to the violation's particular circumstances. Specifically, over the past 5 years, FRA proposed civil penalties for 1,777 violations and settled 1,408 of these violations[22] for approximately $5.4 million—an average penalty of $3,800 per violation and 22 percent less than the total assessed amount. FRA's regulations provide flexibility to respond to the individual circumstances of each violation by assessing the penalty between the guidelines' figures (ranging from $500 to $15,000, depending on violation type) and the regulatory maximum of $75,000. While the specific circumstances of all of these violations may not have warranted maximum penalties, FRA settled for

[22] The 369 violations FRA did not close or settle had either not yet been sent to the respondents or were sent and are awaiting action by the respondents.

5.1 percent of the roughly $105.6 million dollars in penalties it could have levied (a calculation that does not take into account further penalties—ranging up to $175,000—that can be assessed for violations resulting in injury, illness, death or significant property damage). This gap between the penalties for which FRA settled and the possible penalty amounts shows the flexibility FRA is not using to respond to the violations' particular circumstances. Inspectors expressed concerns over the deterrent impact of the current penalty levels, with one noting that respondents "just smile and cut the check."

By applying the same penalty to all violations of a regulation, FRA is distancing its enforcement actions from the context of the behaviors they are meant to rectify, thus weakening penalties' deterrent effect. Furthermore, by bundling violations, FRA's settlement process removes penalty enforcement from the context of each violation and low penalties diminish the potential deterrent effect of the penalties set in the guidelines and the regulatory maximums.

FRA Does Not Refer Violations to OIG for Criminal Investigation

The Office of Chief Counsel does not refer violations to our office for investigation. Several DOT Orders outline the Operating Administrations' responsibility to report any issues that appear to present circumstances that may warrant criminal investigations.

FRA processes hundreds of hazardous materials violation reports each year, but neither FRA nor our office has any record of referrals for criminal investigation. In our sample of 72 of 1,812 violations reported during fiscal years 2010 and 2014, plus 3 additional cases, we identified several possible criminal violations of the HMR. Seventeen reports warranted referral because they showed potentially criminal activities such as repeat or egregious offenses, falsifications, bodily harm, or environmental impact. For example:

- A company produced valves that had not been put through a required design approval process and caused leaks on tank cars carrying hazardous materials. The Office of Chief Counsel pursued civil penalties and, in March 2015, released a rail worthiness directive on valve replacement but did not refer the case to our office for criminal investigation.

- Another company released overweight tank cars for use several times without rectifying the weight problems and after they were certified as underweight. These circumstances indicate possible false statements by a repeat violator, but the Office did not refer the case to our office for criminal investigation.

- Another company may have made a false statement when it did not include in a bill of lading the radioactive containers located on a flat rail car in the train, but the Office again did not refer the matter to our office.

Based on our sample, we project[23] that 20.2 percent, or 227 out of 1,126 violation reports, may have warranted referral to our office for criminal investigation.

The Office's enforcement procedures direct attorneys to refer cases to our office when they have reason to believe that a criminal penalty should be considered. However, some attorneys we interviewed did not know what the procedures require them to do. They informed us that they do not go out of their way to refer cases to OIG because it is their job to pursue civil penalties and it is not their responsibility to be familiar with the criminal statutes that interest criminal enforcement agencies. They further explained that the Office has made no referrals in recent years because there is no formal process to do so. The attorneys also told us that they would informally refer cases and that inspectors, in consultation with the Office, also informally refer cases to regional OIG staff. However, several inspectors stated that it is their understanding that referrals for criminal investigation have to go through the Office of Chief Counsel. FRA's guidance instructs inspectors to notify the Office of Chief Counsel and directs the Office to contact our office promptly. Opportunities for criminal enforcement are limited when there are no referrals to our office from the Office of Chief Counsel.

CONCLUSION

Shippers continue to rely on rail as an important method for transporting hazardous materials throughout the United States. Effective oversight of this risk prone area requires thorough, timely inspections as well as the application of deterrent penalties when violations occur. FRA has the authority and tools it needs to address violations, but its planning and resource allocation processes and penalty process are not part of a comprehensive, risk based approach to identifying and correcting problems and preventing future ones.

RECOMMENDATIONS

We recommend that the Federal Railroad Administrator:

1. Require the Office of Railroad Safety to periodically perform a comprehensive hazardous materials transportation risk assessment that identifies and assesses

[23] This projection has a precision of +/-82 at the 90-percent confidence level.

the relationship among the regional and national risks associated with achieving program objectives.

2. Issue guidance to regions that provides detailed information on the tools available to guide resource allocation decisions and the data feeding each tool and sets expectations for how regions should incorporate these tools, including the comprehensive risk assessment conducted by the Office of Safety, into resource allocation decisions.

3. Develop new FRA secure site reports or other tools that meet hazardous materials inspectors' needs for access to inspection data from other regions and provide training on their use.

4. Update guidance to inspectors on writing violation reports to include detailed information on how and when to recommend a penalty that differs from the guidelines and what to include in the violation report to support the recommendation.

5. Strengthen Office of Chief Counsel procedures for processing penalties at the penalty assessment stage to require attorneys to document their considerations of the penalty assessment factors in 49 USC § 5123 for every violation of hazardous materials regulations.

6. Require the Office of Chief Counsel to provide to regional hazardous materials specialists an annual report or regular access to information on penalty amounts for each violation in closed cases.

7. Amend Agency policy and procedures to require all staff, including inspectors, to directly report to OIG all suspected criminal violations and instances of fraud, waste, and abuse.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided FRA with our draft report on January 6, 2016, and received its response, which is included as an appendix to this report, on January 29, 2016. FRA concurred with all of our recommendations and proposed appropriate actions and completion dates. Accordingly, we consider all recommendations resolved but open pending appropriate action.

We appreciate the courtesies and cooperation of FRA's representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-1995, or Wendy Harris, Program Director, at (202) 366-2794.

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cc: DOT Audit Liaison, M-1
FRA Audit Liaison, ROA-03

EXHIBIT A. SCOPE AND METHODOLOGY

We conducted our work between October 2014 and January 2016, in accordance with generally accepted Government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Our audit objectives focused on reviewing FRA activities and programs engaged in enforcement of the HMR. Our audit did not ascertain the quality of hazardous materials inspections or whether regulations were cited appropriately in violation reports.

To conduct our work, we reviewed laws, regulations, policies, procedures, and guidance pertaining to FRA's oversight and enforcement of the HMR. We also mapped FRA's processes for allocating hazardous materials inspectors and administering the National Inspection Plan goals. OIG's Senior Statistician reviewed FRA's algorithm for developing the National Inspection Plan's baseline goals for the hazardous materials discipline.

We interviewed officials from five divisions within the Office of Railroad Safety (the Hazardous Materials Division, Risk Reduction Program Division, Railroad Safety Information Management Division, Railroad Safety Program Management Division, and the Railroad Safety Technical Training Standards Division) and five of FRA's eight regions—Regions 1, 4, 5, 6, and 8. We conducted interviews by telephone with officials in Regions 1 and 6 because data analysis revealed significant variations in inspection activity in these regions. We visited Regions 5 and 8 to conduct in-depth interviews with inspection staff and to observe inspection activities first hand because these regions, which include Texas and North Dakota respectively, are important oil producing regions. We visited Region 4, which includes Chicago, because Bakken oil bound for east coast refineries passes through the city. We spoke with officials collecting rail shipping data at the Surface Transportation Board and rail industry stakeholders representing both large and small companies. We also interviewed staff attorneys from the Safety Law Division of the Office of Chief Counsel and the Deputy Assistant Chief Counsel for Safety.

As part of determining how FRA prioritizes hazardous materials inspections, we analyzed hazardous materials inspection goals, adjustments to goals, and actual inspection percentages in fiscal years 2013 and 2014. We also analyzed inspection data from all inspection reports that inspectors wrote during those 2 years to further understand field inspectors' activities and inspection approach. For this

analysis, we limited the scope to Regions 1 through 8 because we wanted to compare only regular hazardous materials inspections, not the special facility audits and other types of activities conducted only by headquarters staff. However, to capture as many hazardous materials violations as possible for our violations analysis, we included violations that were reported by headquarters staff. As part of our civil violation analysis, we worked with our Senior Statistician to select a random, stratified sample of 72 out of 1,812 hazardous materials violations from 1,126 violation reports accepted by Office of Chief Counsel between fiscal years 2010, and 2014. We reviewed and analyzed violation reports from this sample and additional reports identified with our investigative staff to determine which reports warranted referral to our office. Our sample design allowed us to project the number of violation reports that warranted referral with a precision of plus or minus 82 reports at the 90 percent confidence level.

EXHIBIT B. ENTITIES VISITED OR CONTACTED

FRA's Hazardous Materials Division

FRA's Risk Reduction Program Division

FRA's Railroad Safety Information Management Division

FRA's Railroad Safety Program Management Division

FRA's Railroad Safety Technical Training Standards Division

FRA's Office of Chief Counsel Safety Law Division

FRA Region 1

FRA Region 4

FRA Region 5

FRA Region 6

FRA Region 8

FRA's Tank Car Quality Assurance Team

U.S. Department of Transportation's Surface Transportation Board

Association of American Railroads

American Short Line & Regional Railroad Association

EXHIBIT C. ORGANIZATIONAL CHART OF FRA'S OFFICE OF RAILROAD SAFETY

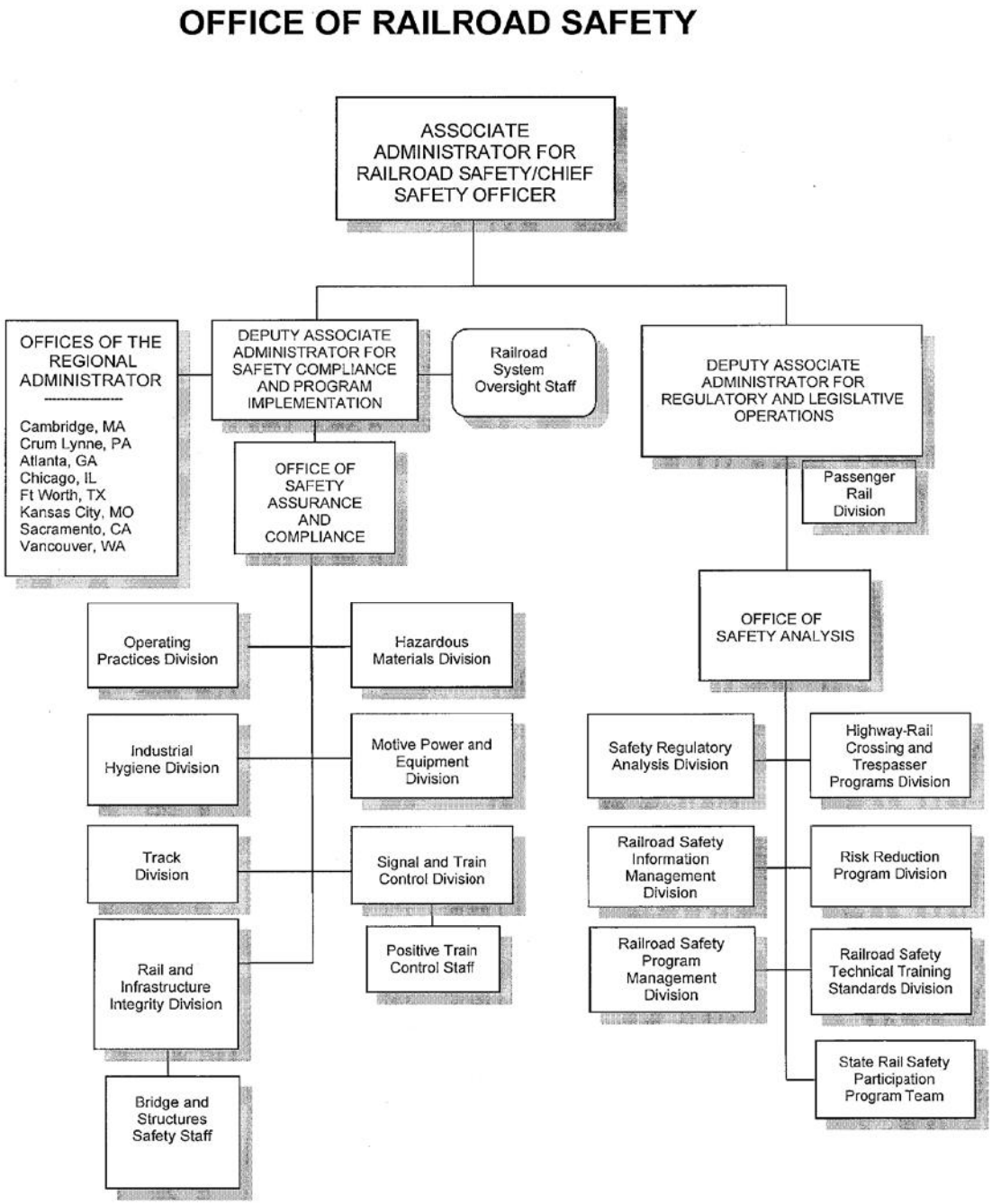

Exhibit C. Organizational Chart of FRA's Office of Railroad Safety

EXHIBIT D. MAJOR CONTRIBUTORS TO THIS REPORT

Name	Title
Wendy M. Harris	Program Director
Regan M. Goldstein	Project Manager
Michael English	Senior Analyst
Dawn Fratrin	Senior Analyst
Addison Lee	Auditor
Nicholas Coates	Senior Counsel
Charles Dionne	Senior Special Agent
Susan Neill	Writer-Editor
Petra Swartzlander	Senior Statistician
Makesi Ormond	Statistician
William Savage	IT Specialist

APPENDIX. AGENCY COMMENTS

Memorandum

U.S. Department of Transportation

Federal Railroad Administration

Date: January 29, 2016

Subject: INFORMATION: Management Comments – Office of Inspector General (OIG) Draft Report on FRA's Oversight of Hazardous Materials Shipments

From: Sarah Feinberg
Administrator

SARAH E. FEINBERG Digitally signed by SARAH E. FEINBERG DN: c=US, o=U.S. Government, ou=DOT Headquarters, ou=OSTHQ, cn=SARAH E. FEINBERG Date: 2016.01.29 15:06:04 -05'00'

To: Mitchell L. Behm
Assistant Inspector General for Surface Transportation Audits

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The Federal Railroad Administration (FRA) manages a broad, comprehensive, and extensive safety program to reduce accidents, casualties, loss of property, and threats to the environment. Part of FRA's safety program is enforcing the Pipeline and Hazardous Materials Safety Administration's (PHMSA) regulations for hazardous materials transported by rail. Our proactive efforts to promote the safe rail transportation of hazardous material has reduced the rate of non-accident releases of hazardous material by almost 38 percent—from 1.08 in fiscal year (FY) 2011 to 0.67 in FY 2014.[1] These results are especially noteworthy because the tonnage of hazardous material shipped by rail increased almost 75 percent during the same time period.

While this is encouraging and noteworthy progress, more can and should be done to continue to keep the transportation of hazardous materials by rail safe. That is why we are pursuing new technologies, such as Positive Train Control and electronically controlled pneumatic brakes, and urging railroads and shippers to build stronger safety cultures.

[1] Per 200 million hazardous national ton-miles based on FRA analysis of stafety data.

FRA reviewed OIG's draft report and provides the following comments on its findings and recommendations:

- We carry out a comprehensive safety inspection and enforcement program, utilizing a range of enforcement tools, from civil penalties to compliance and emergency orders. These tools, often used in combination with each other, have proven effective in improving safety outcomes—133 fewer deaths (15 percent) and 612 fewer injuries (7 percent) over the last 10 years. Congress has recognized FRA's approach and provided FY 2016 appropriations for additional inspectors and safety staff.

- FRA's Office of Chief Counsel assesses millions of dollars of civil penalties each year. In FY 2015, FRA assessed or settled violations for $15.1 million, compared to $13.5 million in FY 2014 (a 12 percent increase). The penalty guidelines we use reflect the relative severity of the violations routinely presented for enforcement and enable us to achieve our enforcement mission efficiently.

- As noted in our recent Fiscal Year 2015 Enforcement Report,[2] we have taken significant steps to increase penalty amounts paid by regulated entities as part of a renewed focus on enforcement to increase the consequences of violations that negatively impact safety. In FY 2015, FRA closed civil penalty cases for approximately 75 percent of initial assessments—the highest settlement percentage in the history of FRA's enforcement program.

- We are currently assessing our new workload and related resource requirements, arising from the enactment of the Fixing America's Surface Transportation Act. FRA will address the hazardous material provisions we are responsible for while taking into account ongoing activities and OIG recommendations.

Several of OIG's recommendations augment efforts FRA already initiated. For example, we developed and implemented secure reports that provide inspectors and specialists access to data from other FRA regions. Based on our review of the draft report, we concur with OIG's recommendations as written. Our target action dates for completing the recommendations are as follows: recommendations 3 and 7 by August 15, 2016, and recommendations 1, 2, 4, 5, and 6 by March 15, 2017.

We appreciate the opportunity to comment on OIG's draft report and related issues. Please contact Rosalyn G. Millman, FRA Planning and Performance Officer, at (202) 384-6193 or Rosalyn.Millman@dot.gov, with any questions regarding these comments or requests for additional assistance.

[2] https://www.fra.dot.gov/Elib/Document/15583