

**Response to Office of Management and Budget
Request to Evaluate Single Electronic Reporting
System**

December 2016

Prepared Jointly by

**PIPELINE AND HAZARDOUS MATERIALS SAFETY
ADMINISTRATION**

&

FEDERAL RAILROAD ADMINISTRATION

**Prepared in response to OMB Approval Nos. 2130-0500 (FRA,
Accident/Incident Reporting & Recordkeeping), 2137-0039
(PHMSA, Hazardous Materials Incident Report), and 2137-0047
(PHMSA, Accident Report—Hazardous Liquid Pipeline Systems)**

I. Executive Summary

In 2015, the Office of Management and Budget (OMB) extended its approval of data collection via two Pipeline and Hazardous Materials Safety Administration (PHMSA) forms and one Federal Railroad Administration (FRA) form pursuant to the Paperwork Reduction Act (PRA)¹ of 1995. See Table 1.

| Agency | Form | Control Number | Expiration |
|---|---|-----------------|------------|
| PHMSA, Office of Pipeline Safety | PHMSA Form 7000-1 “Accident Report—Hazardous Liquid Pipeline Systems” (OPS Form 7000-1) | OMB # 2137-0047 | 12/31/16 |
| PHMSA, Office of Hazardous Materials Safety | DOT Form 5800.1 “Hazardous Materials Incident Report” (DOT Form 5800.1) | OMB # 2137-0039 | 12/31/16 |
| FRA | FRA Form 6180.54 “Rail Equipment Accident/Incident Report” (FRA Form 54) | OMB # 2130-0500 | 2/28/17 |

However, OMB approved PHMSA’s and FRA’s continued collection of information using these forms for one-year and provided specific “terms of clearance” for each form. Each term of clearance, in part, required the Department of Transportation (DOT):

[T]o provide OMB by no later than the date this approval expires one of the following: a joint PHMSA-FRA plan, coordinated with OST, to create a single system for electronically reporting accident information involving trains, pipelines, and hazardous materials and eliminates duplicative reporting requirements and redundant agency IT systems to the extent feasible OR a joint PHMSA-FRA report, coordinated with OST, indicating the reasons why developing such a plan is neither consistent with the PRA’s purposes nor otherwise in the public’s interest, the process used to arrive at this conclusion, and the extent public stakeholders were consulted. As part of the plan, PHMSA and FRA may explore whether additional or modified information should be collected to improve execution of agency missions and the utility of the information collected, consistent with the PRA. OMB plans to add these terms of clearance to all relevant PHMSA and FRA accident reporting collections, as appropriate.^{2,3}

PHMSA and FRA use these forms to gather information about events (i.e., train accidents, releases of hazardous material, etc.). The agencies then use this information to track safety trends (and subsequently for regulatory and enforcement purposes). In rare instances, based

¹ <http://www.reginfo.gov/public/reginfo/prapra.pdf>

² OMB’s terms of clearance contained additional, specific requirements for PHMSA and FRA. The requirements specific to either agency individually are not addressed in the body of this report. OMB requested PHMSA create a plan to address data quality problems identified in the Regulatory Impact Analysis for the enhanced tank car standards final rule. Appendix A of this report addresses this request.

³ OMB’s deadline for the production of this report is the expiration date for the forms. However, each of these forms has a different expiration date. PHMSA and FRA are submitting the report at the earliest expiration date, December 31, 2016.

upon the specific circumstances of an event, a reporting entity may need to complete more than one of these three forms for the same event and submit them to the respective agency. PHMSA and FRA currently provide reporting entities with the opportunity to submit the forms in hard copy or electronically.

Staff from both agencies evaluated a proposal to implement a single electronic accident/incident reporting system.⁴ PHMSA and FRA's joint evaluation concluded that adopting a single electronic reporting system would neither reduce the burden on industry, nor be in the public interest. According to PHMSA and FRA's data, a reporting entity very rarely has to complete multiple forms for a single event. A comparison of the fields on these forms also shows minimal duplicative information requests. In addition, PHMSA and FRA found that the use of a single electronic reporting system heightened the potential for additional paperwork burdens on industry and the opportunity for error in the data collection (e.g., the difficulty of tailoring a response to the circumstances of each incident using a universal form, and knowing which data points are required for each type of incident). As result of these findings, PHMSA and FRA concluded that the benefit of a single electronic reporting system would be insignificant. Set forth below is a discussion of PHMSA's and FRA's data and analysis.

II. The Paperwork Reduction Act

Federal agencies often request information from the public and regulated community that relates and informs their statutory and regulatory missions.

The PRA requires agencies obtain OMB's approval before requesting most types of information from the public. The PRA requirements arose, in part, in response to public concerns about the burden of responding to Federal information requests. In addition, agencies are required to seek OMB's approval to continue collecting information on a recurrent basis. The PRA requires OMB to consider, in part, the following factors when reviewing a request for approval: minimizing the paperwork burden on the public; ensuring the public benefit from the collected data; maximizing the use of the information; improving the quality of the data; increasing the utility of the information; minimizing the cost to the Federal government; and maintaining the integrity and quality of information. While this report primarily focuses on the paperwork burden to the reporting entity, PHMSA and FRA also considered the other PRA approval criteria when evaluating the need for a single electronic reporting system.

III. Current Information Collection & Submission Process

a. Office of Hazardous Materials Safety Incident Reporting

⁴ Staff from FRA's Office of Railroad Safety's Railroad Safety Information Management Division and Office of Chief Counsel, as well as staff from PHMSA's Office of Hazardous Materials Safety, Office of Pipeline Safety, and Office of Chief Counsel, participated in preparing this report. This report was developed with input from the data analysts, statisticians, and division directors that are responsible for implementing and supporting the electronic reporting systems and analyzing data in addition to enforcing the laws requiring the submission of the data. Following completion of this report, both PHMSA and FRA Chief Counsel and Senior Leadership reviewed the report and concurred on the findings.

PHMSA's Office of Hazardous Materials Safety (OHMS) collects data about hazardous material releases. OHMS solicits information about the material released, the packaging involved, and the consequences to stakeholders. OHMS's regulatory authority covers the transportation of hazardous materials (or hazmat) in commerce by any mode, except via pipelines. When a hazardous material release occurs during rail transportation, OHMS requires the submittal of DOT Form 5800.1.

Agency Authority - Entities regulated by OHMS include any person who transports hazmat in commerce. In accordance with 49 CFR § 171.1(c)(1), transportation includes the movement of hazmat by rail car, aircraft, motor vehicle, and vessel, and the loading, unloading, and storage incidental to that movement. These entities are required to report to OHMS any incidents that meet or exceed the established reporting criteria in 49 CFR § 171.16.

What Is the Purpose of the Form - OHMS uses reported incident data provided on DOT Form 5800.1 to assess safety trends and guide the development of new initiatives to enhance hazardous materials transportation safety. DOT Form 5800.1 captures relevant data about each reported incident, including the location, cause, and consequences of the hazmat release. The data collected is specific to OHMS's regulatory authority and primarily focuses on the material, packaging, and the consequences of a package failure.

Who Must Report - If a hazmat incident occurs that meets the reporting threshold, any entity in physical possession of the hazmat during transportation—including loading, unloading, and storage incidental to transportation—must report the incident if certain conditions are met. The entity with physical control of the shipment is responsible for completion and submission of DOT Form 5800.1.

When Must a Form Be Filed - Section 171.16 requires a written report for certain types of hazmat incidents within 30 days of the incident, and a follow-up written report within one year of the incident in certain circumstances specified in § 171.16(c), such as when death results from injury caused by a hazardous material or additional information regarding incident damages is identified or finalized.

Reporting Threshold - Subpart B of 49 CFR Part 171 specifies the criteria constituting a reportable incident and provides the thresholds at which a reporting entity must complete a DOT Form 5800.1.⁵ A reporting entity must submit a DOT Form 5800.1 to OHMS for incidents on any transportation mode meeting the statutory criteria.⁶ In summary, the reporting criteria include incidents when:

- A person is killed;
- A person receives an injury requiring admittance to the hospital;
- The general public is evacuated for one hour or more;

⁵ See <http://www.ecfr.gov/cgi-bin/text-idx?SID=b9568c78cdea5c309d4962bcece6bd97&mc=true&node=sp49.2.171.b&rgn=div6>

⁶ See 49 CFR § 171.16 (using the modal-agnostic term “transportation in commerce” as a statutory requirement for a DOT Form 5800.1 filing). In addition, an incident must be reported if it meets any of the circumstances described in 49 CFR § 171.15(b).

- A major transportation artery or facility is closed or shut down for one hour or more;
- The operational flight plan or routine of an aircraft is altered;
- Fire, breakage, spillage, or suspected radioactive contamination occurs involving radioactive material;
- An unintentional release of hazardous material occurs during transportation including loading, unloading, and temporary storage related to transportation;
- A hazardous waste is released;
- An undeclared shipment, with no release, is discovered;
- A specification cargo tank with a capacity of 1,000 gallons or greater containing any hazardous material suffers structural damage to the lading retention system or damage that requires repair to a system intended to protect the lading retention system, even if there is no release of hazardous material; or
- A fire, violent rupture, explosion, or dangerous evolution of heat (i.e., an amount of heat sufficient to be dangerous to packaging or personal safety to include charring of packaging, melting of packaging, scorching of packaging, or other evidence) occurs as a direct result of a battery or battery-powered device.

Form Content - PHMSA currently collects information about time and location of the incident, as well as qualitative and quantitative information, by requiring each person in physical possession of a hazardous material when an incident occurs during transportation to submit a DOT Form 5800.1.⁷ When a reporting entity's DOT Form 5800.1 submission indicates that a death or hospitalization occurred, PHMSA investigates and collects additional information.

Information Collection Burden - DOT Form 5800.1 is an eight-part form with an OMB-established burden of 96 minutes for the reporting entity.⁸ As previously noted, the reporting entity is the entity in physical possession of the hazmat during transportation. DOT Form 5800.1 and a guide to completing the form are available on the PHMSA website.⁹

b. Office of Pipeline Safety Accident Reporting

PHMSA's Office of Pipeline Safety (OPS) requires the submittal of OPS Form 7000-1 for certain hazardous liquid or carbon dioxide pipeline accidents. OPS collects data about the hazardous liquid or carbon dioxide released, the pipeline failure, and the consequences to stakeholders. OPS regulations provide reporting exceptions for hazardous liquid or carbon dioxide transported by rail, vessel, aircraft, tank truck, or other non-pipeline modes of transportation as well as loading and unloading operations (49 CFR § 195.1(b)(9)(i-ii)).

Agency Authority - OPS is responsible for carrying out duties regarding pipeline safety under 49 U.S.C. 60101, et seq. (the pipeline safety laws) as codified in 49 CFR Parts 190-199. Part 195 prescribes safety standards and reporting requirements for pipeline facilities used in the transportation of hazardous liquids or carbon dioxide (49 CFR § 195.0). OPS's regulations have explicit exceptions for transportation of hazardous liquid or carbon dioxide by vessel, aircraft, tank truck, or other non-pipeline mode of transportation (49 CFR § 195.1(b)(9)(i)) or during

⁷ See 49 CFR § 171.16

⁸ While there are over 40 questions, not all questions are applicable to all modes of transportation.

⁹ http://www.phmsa.dot.gov/staticfiles/PHMSA/DownloadableFiles/Files/reporting_instructions_rev.pdf

loading and unloading, as the exception list covers facilities located on the grounds of a materials transportation terminal if the facilities are used exclusively to transfer hazardous liquid or carbon dioxide between non-pipeline modes of transportation or between a non-pipeline mode and a pipeline (49 CFR § 195.1(b)(9)(ii)).

What Is the Purpose of the Form - OPS and its State partners use the accident information in conjunction with other pertinent information (such as overall infrastructure, compliance history) to target risk informed inspections and accident investigations. Information collected via OPS Form 7000-1 also plays a significant role in identifying short- and long-term accident trends in the Nation's hazardous liquid and carbon dioxide pipeline infrastructure, identifying safety issues, and if necessary, promulgating regulation to ensure safety of pipeline operations nationally. The information collected via this form is routinely used by PHMSA's industry partners (such as American Petroleum Institute and American Association of Oil Pipelines), public interest groups (such as Pipeline Safety Trust), and individual researchers. OPS is the only Federal agency that collects comprehensive pipeline safety data nationally.

Who Must Report - If a pipeline accident occurs that meets the reporting threshold, the pipeline operator is the reporting entity as per 49 CFR § 195.54.

When Must a Form Be Filed - Pipeline operators are required to submit written reports to OPS within 30 days of the incident. Under 49 CFR § 195.58, pipeline operators submit the accident reports electronically to PHMSA, unless an alternative method is authorized.

Reporting Threshold - Under 49 CFR § 195.54(a), pipeline operators submit OPS Form 7000-1 within 30 days of the incident for each failure in a pipeline system subject to 49 CFR Part 195 in which there is a release of the hazardous liquid or carbon dioxide transported resulting in any of the following (49 CFR § 195.50):

- Explosion or fire not intentionally set by the operator.
- Release of 5 gallons (19 liters) or more of hazardous liquid or carbon dioxide, except that no report is required for a release of less than 5 barrels (0.8 cubic meters) resulting from a pipeline maintenance activity if the release is:
 - (1) Not otherwise reportable under this section;
 - (2) Not one described in 49 CFR § 195.52(a)(4);
 - (3) Confined to company property or pipeline right-of-way; and
 - (4) Cleaned up promptly;
- Death of any person.
- Personal injury necessitating hospitalization.
- Estimated property damage, including cost of clean-up and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000.

The reporting requirement in 49 CFR § 195.54 is interdependent on other regulatory requirements of Part 195. For example, in an effort to collect comprehensive and consistent safety and infrastructure information over time and across operators, OPS issued 49 CFR § 195.64, which requires each operator of a hazardous liquid pipeline or pipeline facility to

obtain from PHMSA an Operator Identification Number (OPID). An OPID is assigned to an operator for the pipeline or pipeline system for which the operator has primary responsibility. Further, 49 CFR § 195.64(d) requires that an operator must use the OPID issued by PHMSA for all reporting requirements covered under this subchapter and for submissions to the National Pipeline Mapping System. OPS also requires operators to submit each report electronically (§ 195.58), unless an alternative reporting method is authorized. Therefore, every operator that submits OPS Form 7000-1 has an OPID as per § 195.64 and must comply with electronic submission requirements per § 195.58. The mandatory electronic submission enables OPS to have substantial quality control at the point of data entry and to design an intelligent form. In turn, operators are able to use the reporting form to tailor their data entry to their circumstances and responses.

Form Content - OPS collects information on the physical, operating condition of the pipeline, as well as the geographical location, cause, and consequence of a hazardous liquid or carbon dioxide pipeline failure in OPS Form 7000-1. All OPS forms and associated instructions to complete the forms are available at the OPS website.¹⁰

OPS Form 7000-1 is divided into ten key sections that include information such as the operator's name, address, time of accident, location, consequence of accidents, and facility information, such as interstate or intrastate (which would determine the inspection and enforcement jurisdiction). The form further includes physical and operational characteristics of the pipeline system and the item involved in the accident, as well as critical information pertaining to OPS regulations, such as whether the accident affected a High Consequence Area and whether a Leak Detection System was in place. OPS does collect information on whether an accident occurred in a crossing, such as a bridge crossing, railroad crossing, road crossing, or water crossing; however, the questions are focused on the pipeline itself (e.g., material and operating condition of the pipeline system).

Information Collection Burden - OPS Form 7000-1 is currently approved under OMB # 2137-0047 with an estimated burden of ten hours per response. OPS's strategic approach to improve the quality of the pipeline safety data minimizes the paperwork burden. For example, once an OPID is issued, the operator no longer needs to provide the name or contact information on any of the OPS forms, including OPS Form 7000-1.

c. Federal Railroad Administration Train Accident Reporting

FRA's mission is to promulgate and enforce rail safety regulations, administer railroad assistance programs, and conduct research and development in support of improved railroad safety and national rail transportation policy. FRA's regulations require railroads (defined as "persons providing railroad transportation" and also referred to as "railroad carriers" in the applicable statutes) to report certain train accidents and incidents (49 CFR Part 225).

FRA requires a railroad to complete and submit an FRA Form 54 for any collision, derailment, fire, explosion, act of God, or other event involving operation of railroad on-track equipment (standing or moving) that results in reportable damages greater than the current reporting

¹⁰ <http://phmsa.dot.gov/pipeline/library/forms>

threshold to railroad on-track equipment, signals, track, and track structures (train accident) (49 CFR § 225.5).

Agency Authority - In 1910, Congress enacted the Accident Reports Act, Pub. L. No. 165, recodified at 49 U.S.C. §§ 20901–20903, as amended. The Accident Reports Act, as amended, required, in part, that railroad carriers file with the Secretary of Transportation reports on “all accidents and incidents resulting in injury or death to an individual or damage to equipment or a roadbed arising from the carrier’s operations during the month.” The Secretary of Transportation subsequently delegated the authority to carry out the Accident Reports Act to the FRA (49 U.S.C § 103(c)(1); 49 CFR § 1.89). FRA issued the accident/incident reporting regulations at 49 CFR Part 225 pursuant to the Accident Reports Act of 1910. Sixty years later, Congress enacted the Federal Railroad Safety Act of 1970, Pub. L. No. 91-458, recodified primarily at 49 U.S.C. Chapter 201, with penalty provisions in 49 U.S.C. Chapter 213, as amended. FRA’s accident/incident reporting requirements (49 CFR Part 225) are currently issued under the dual statutory authority of the Accident Reports Act of 1910 and the Federal Railroad Safety Act of 1970.

To provide regulated entities with further guidance, FRA developed and published the FRA Guide for Preparing Accident/Incident Reports (Guide) containing detailed instruction on how to complete each form that is available on FRA’s website.¹¹

What is the Purpose of the Form - The purpose of the regulations in Part 225 is to provide FRA with accurate information concerning the hazards and risks that exist on the Nation’s railroads. See 49 CFR § 225.1. FRA needs this information to effectively carry out its regulatory and enforcement responsibilities under the Federal railroad safety statutes. FRA also uses this information for identifying trends in railroad equipment and operations safety and to inform enforcement, outreach initiatives, policies, and regulatory strategies.

FRA uses the data from FRA Form 54 to identify safety performance trends on railroads. The information is used to allocate resources and to develop focused inspection needs, enforcement strategies, and regulatory programs.

Who Must Report - A railroad involved in a train accident is required to complete and submit a Form 54. When joint operations are involved, multiple railroads may be required to complete and submit an FRA Form 54. An FRA Form 54 must be completed for each train consist involved in a train accident. The railroad responsible for the on-track equipment at the time of the accident, and only that railroad, is required to report that consist (49 CFR § 225.23(c)). See Guide Chapter 7.

When Must a Form Be Filed - A railroad must complete an FRA Form 54 within 30 days after the end of the month in which the train accident occurred.

Reporting Threshold - FRA requires a railroad to complete an FRA Form 54 for any collision, derailment, fire, explosion, act of God, or other event involving operation of railroad on-track equipment (standing or moving) that results in reportable damages greater than the current

¹¹ www.fra.dot.gov/Page/P0001

reporting threshold to railroad on-track equipment, signals, track, and track structures (train accident).

Form Content - As discussed above, the fields contained on the FRA Form 54 capture information about the conditions and events involved in a train accident. In addition, the FRA Form 54 contains fields about the primary and contributing causes of the accident.

Although FRA Form 54 contains three fields capturing information about hazardous material, this information is ancillary information. Fields 8, 9, and 10 on FRA Form 54 request information about the number of cars carrying hazardous material, the number of cars carrying hazardous material that derailed or were damaged, and the number of cars that released hazardous material. The narrative and special study blocks on that form ask for additional information about hazardous material, specifically requesting detailed information about any releases and damage, as well as about crude oil involvement. With each of these requests, FRA is capturing information about the outcome of any train collision rather than collecting information about the primary and/or contributing factors.

Information Collection Burden - FRA Form 54 is a 55-question form with an OMB-established burden of 120 minutes. This form mainly asks for information about the train consist, the locomotive, and the train's operation.

Table 2: Hazardous Materials Transportation Incident Reporting Comparison

| | Office of Hazardous Materials Safety | Federal Railroad Administration | Office of Pipeline Safety |
|-------------------------|--|--|---|
| Report Name | DOT Form 5800.1 | FRA Form 6180.54 (FRA Form 54) | PHMSA Form 7000-1 (OPS form 7000-1) |
| CFR Citation | 49 CFR § 171.16 | 49 CFR § 225.12 | 49 CFR Part §§ 195.50 and 195.54 |
| Reporting Entity | Entity in physical possession of the hazmat during transportation incident (except pipeline operators) | Railroad | Pipeline Operators |
| Threshold | See 49 CFR §§ 171.15 and 171.16 | See 49 CFR § 225.19(c) | See 49 CFR §§ 195.50 and 195.54 |
| When | 30 days via DOT Form 5800.1. | Within 30 days after expiration of the month during which the accident occurred via Form 54. | Within 30 days of the accident, via OPS Form 7000-1. |
| Report Content | <i>Potential Shared Content:</i> Data fields describing identifying information of the reporting entity and location and time of the incident. See analysis for the frequency. ¹² | <i>Potential Shared Content:</i> Data fields describing identifying information of the reporting entity and location and time of the incident. See analysis for the frequency. | <i>Potential Shared Content:</i> None. |
| | <i>Unique Content:</i> Data about the hazardous material released, the packaging, and the consequences to stakeholders. | <i>Unique Content:</i> Data about the conditions at the time of the train accident, primary and contributing causes, and the outcome of the train accident. | <i>Unique Content:</i> Data about the hazardous liquid released, the pipeline failure, and the consequences to operator, public, and environment. |
| Burden | Eight-part form with an OMB-established burden of 96 minutes | Fifty-five questions with an OMB-established burden of 120 minutes | Estimated burden of ten hours per response |

¹² This section of the table looks at compared duplicative information requests when a reporting entity is required to complete more than one form for the same event. As noted, the only instance an entity would need to complete two of these forms is when the reporting requirements are met for DOT Form 5800.1 and FRA Form 54.

IV. Quantitative Analysis

a. Scope of Analysis

PHMSA and FRA examined the information collection burden on reporting entities by examining the number of instances that required a reporting entity to submit more than one of the three forms for the same event. PHMSA and FRA also examined the number of duplicative fields on the forms.

The agencies reviewed ten years of incident/accident data (forms completed and submitted to the agencies). The timeframe for analysis, 2005–2014, was chosen as updates of incident report submissions may be submitted to OHMS and OPS up to one year after the initial report and to FRA for up to five years after the initial report. Therefore, 2014 is the last complete data set available. In addition, 2005 was chosen due to the significant changes OHMS made that year to DOT Form 5800.1.¹³

As an overview, PHMSA and FRA found the following factors key to the analysis:

- A single reporting entity would never complete DOT Form 5800.1 and OPS Form 7000-1 for the same event. Only a pipeline operator is required to complete the OPS Form 7000-1, and pipeline operators are exempt from completing the DOT Form 5800.1.
- A single reporting entity would never complete OPS Form 7000-1 and FRA Form 54 for the same event. If there is a release involving a pipeline and a railroad, the pipeline operator is the only entity required to complete the OPS Form 7000-1 and the railroad is the only entity required to complete the FRA Form 54.
- The only instance a reporting entity may be required to complete more than one of the three forms is when an event requires the completion of DOT Form 5800.1 and FRA Form 54, which as explained below, occurs rarely.
- DOT Form 5800.1 and FRA Form 54 share only a few data fields describing identifying information about the reporting entity in addition to location and time of the accident.

PHMSA and FRA found the instances in which a reporting entity was required to complete both DOT Form 5800.1 and FRA Form 54 were infrequent, and when both forms were required, each form collected primarily separate and distinct information. Consequently, the use of a single electronic reporting system would not meaningfully reduce the number of forms an entity is required to complete and, because the forms primarily collect such distinct information, would not meaningfully reduce the number of fields the reporting entity completes. Set forth below is a discussion of PHMSA's and FRA's data and analysis.

¹³ See <http://www.phmsa.dot.gov/portal/site/PHMSA/menuitem.6f23687cf7b00b0f22e4c6962d9c8789/?vgnnextoid=640f25516489b110VgnVCM1000009ed07898RCRD&vgnnextchannel=6750d3516bce9110VgnVCM1000009ed07898RCRD>

b. FRA Form 54 & DOT Form 5800.1 Analysis

PHMSA and FRA reviewed their regulations and historical data to determine when and how often a reporting entity would need to complete both a DOT Form 5800.1 and an FRA Form 54 for the same event (situations in which a train accident met FRA's Part 225 reporting threshold^{14,15} and a resulting hazardous materials release triggered PHMSA's reporting requirement). While a reporting entity (in this case a railroad) is required to complete both forms, the data shows that historically this has occurred relatively few times, and when it did occur, each form collected almost entirely separate and distinct information.

As indicated in Table 3 below, in the period of analysis from 2005 through 2014, there were a total of 151 events requiring railroads to complete both forms (this is out of 190,828 forms in total).¹⁶ If the data collection systems were combined, only 0.08% of the reporting entities would experience a reduction in burden.¹⁷

Table 3: OHMS / FRA Incident / Accident Reporting Comparison

¹⁴ 49 CFR § 225.19(c) (establishing the Form 54 damage threshold for reporting as \$6,700 in 2005; \$7,700 in 2006; \$8,200 in 2007; \$8,500 in 2008; \$8,900 in 2009; \$9,200 in 2010; \$9,400 in 2011; \$9,500 in 2012; \$9,900 in 2013; and \$10,500 in 2014)

¹⁵ PHMSA collects four damages fields: material loss, property damage, carrier damage, and response cost. FRA collects two damage fields: Equipment Damage and Track Damage, which are comparable to the PHMSA sum of material loss, property damage, and carrier damage only.

¹⁶ PHMSA Hazmat Incident Database, available online at <http://www.phmsa.dot.gov/hazmat/library/data-stats/incidents> (counting unique Report Numbers where mode = rail and ((material loss + property damage + carrier damage) >= 10500 and year = 2014) OR ((material loss + property damage + carrier damage) >=9900 and year = 2013) OR ((material loss + property damage + carrier damage) >=9500 and year = 2012) OR ((material loss + property damage + carrier damage) >=9400 and year = 2011) OR ((material loss + property damage + carrier damage) >=9200 and year = 2010) OR ((material loss + property damage + carrier damage) >=8900 and year = 2009) OR ((material loss + property damage + carrier damage) >=8500 and year = 2008) OR ((material loss + property damage + carrier damage) >=8200 and year = 2007) OR ((material loss + property damage + carrier damage) >=7700 and year = 2006) OR ((material loss + property damage + carrier damage) >=6700 and year = 2005)).

¹⁷ Calculated by dividing incidents for which the one entity was required to submit more than one form by the sum of DOT Form 5800.1 and FRA Form 54 submissions.

| Year | Number of events requiring the submission of: ¹⁸ | | | Number of DOT Form 5800.1 incidents meeting the FRA Form 54 accident criteria ¹⁹ | Percent of incident/accident filings eliminated by combining the DOT Form 5800.1 and FRA Form 54 ²⁰ |
|--------------|---|---|---------------------------|---|--|
| | DOT Form 5800.1 (All) ²¹ | DOT Form 5800.1 (Rail Only) ²² | FRA Form 54 ²³ | | |
| 2005 | 15,927 | 743 | 3510 | 16 | 0.08% |
| 2006 | 20,336 | 703 | 3251 | 16 | 0.07% |
| 2007 | 19,302 | 753 | 2953 | 21 | 0.09% |
| 2008 | 16,929 | 748 | 2667 | 10 | 0.05% |
| 2009 | 14,818 | 642 | 2083 | 17 | 0.10% |
| 2010 | 14,795 | 747 | 2091 | 17 | 0.10% |
| 2011 | 15,029 | 745 | 2,209* | 12 | 0.07%* |
| 2012 | 15,445 | 661 | 1,937* | 22 | 0.13%* |
| 2013 | 16,053 | 667 | 2,050* | 14 | 0.08%* |
| 2014 | 17,400 | 717 | 2,043* | 6 | 0.03%* |
| Total | 166,034 | 7,126 | 24,794* | 151 | 0.08%* |

* FRA has a five-year reporting and modification window for FRA Form 54 submissions; therefore, counts for 2011, 2012, 2013, and 2014 may be amended as necessary.

¹⁸ This analysis uses incident/accident as identified by unique Report Numbers as the most basic unit of analysis. In some instances, multiple DOT Form 5800.1 filings can occur for each Report Number due to multiple packaging or hazardous materials being involved. Similarly, multiple FRA Form 54 filings can occur for each Report Number due to multiple railroads being involved in an accident. For these counts, all Report Numbers are only counted once, regardless of how many filings that incident/accident required.

¹⁹ *Supra* note 12.

²⁰ *Supra* note 13.

²¹ PHMSA Hazmat Incident Database, (counting unique Report Numbers by year).

²² *Id.* (counting unique Report Numbers by year where mode = rail).

²³ FRA's Office of Safety Analysis, Accident Data as reported by railroads, hereinafter as FRA Accident Data, available online at http://safetydata.fra.dot.gov/OfficeofSafety/publicsite/on_the_fly_download.aspx (counting unique Report Numbers by year).

c. OPS Form 7000-1 & DOT Form 5800.1 Analysis

The reporting entities for OPS Form 7000-1 are pipeline operators and the reporting entities for DOT Form 5800.1 are entities in physical possession of the hazmat during transportation incidents (except pipeline operators). Even if both forms were required for the same event, different entities need to complete the forms. This point is reflected in the fact that from 2005 through 2014, not a single reporting entity was required to complete both forms for the same event. Because the entities subject to the reporting requirements are different (i.e., railroad and pipeline operator), no reporting entity needs to complete an OPS Form 7000-1 and a DOT Form 5800.1 for the same event. As such, the use of a single reporting system for these two forms would not have had, nor will have, any reduction in paperwork burden for a reporting entity.

d. OPS Form 7000-1 & FRA Form 54 Analysis

The reporting entities for OPS Form 7000-1 are pipeline operators and the reporting entities for FRA Form 54 are railroads. Even if both forms were required for the same event, different entities would need to complete the forms. This point is reflected in the fact that from 2005 through 2014, not a single reporting entity was required to complete both forms for the same event. As such, the use of a single reporting system for these two forms would not have had, nor will have, any reduction in paperwork burden for a reporting entity (as they will still submit the same number of forms).

Ultimately, the only event for which an entity would need to complete more than one form is when an event requires both a DOT Form 5800.1 and an FRA Form 54.

V. Qualitative Analysis

While PHMSA and FRA determined that reporting entities rarely need to complete multiple reports for one event, PHMSA and FRA also examined other factors including the burden placed on reporting entities by duplicative fields (specifically between DOT Form 5800.1 and FRA Form 54), the ramification of a single reporting system on data quality, and the necessary changes required by the reporting entities to create a single electronic system.

a. Duplicative Fields

A reporting entity may be required to complete both the DOT Form 5800.1 and the FRA Form 54. Therefore, PHMSA and FRA compared the fields of these two forms. Out of the approximately 40 fields on the DOT Form 5800.1 and the 55 fields on the FRA Form 54, only eight fields require the submission of the same information. These fields include:

- Date of Incident;
- Time of Incident;
- City;
- County;

- State;
- Mile Marker/Mile Post;
- Name of Carrier; and
- Name of Person Who Prepared the Document.

Consolidating these eight fields through the use of one reporting system would not meaningfully decrease the paperwork burden associated with these incidents due to the limited number of incidents requiring both forms and the simplicity of the information required to be reported in these fields.²⁴

b. Adverse Impacts

Developing a single reporting system for electronically reporting data would not provide a meaningful benefit to the entities submitting the information as it would unnecessarily complicate the current reporting requirements. The industries PHMSA and FRA regulate have developed internal systems tailored to their unique reporting needs (e.g., the rail or the pipeline industries), and developing a new, consolidated system would require them to modify their current systems or develop entirely new systems. In addition, PHMSA and FRA would need to develop and resource a single electronic system, which would require a significant information technology investment. This would adversely impact investments each agency has made to their current reporting systems, including the success of on-going data improvement projects (e.g., Appendix A describing OHMS's SMART reporting system). These factors led PHMSA and FRA to conclude that combining the OPS, FRA, and OHMS forms into a single electronic reporting system would potentially complicate form completion and prolong the submission process for reporting entities.

VI. Conclusion

PHMSA and FRA coordinated this report with the Office of the Secretary of Transportation (OST). PHMSA, FRA, and OST reviewed and analyzed their regulatory responsibilities and regulating entities, as well as information they collect through their individual information collection process, to assess the feasibility of a single system for electronically reporting accident information involving trains, pipelines, and hazardous materials that eliminates duplicative reporting requirements and redundant agency information technology systems to the extent possible.

Combining the data collection systems is not in the public's interest and would result in nominal burden reduction because only a fraction of a percent of reporting entities are subject to the reporting requirements for the DOT Form 5800.1 and the FRA Form 54. In addition, combining these data collections would provide little relief for the reporting entity due to the fact that there are very few duplicative fields. No reporting entity submits an OPS Form 7000-1 with either the DOT Form 5800.1 or FRA Form 54. Additionally, these forms have different purposes, applicability, and regulatory frameworks governing their submissions. PHMSA and FRA, with

²⁴ To determine whether an information request is duplicative, PHMSA and FRA did not simply look at the title of the field. Rather, they looked at the specific information requested and whether that data collection was duplicative.

concurrence from OST, jointly conclude that the DOT Form 5800.1, OPS Form 7000-1, and FRA Form 54 should not be combined.

Appendix A - Office of Hazardous Materials Safety Data Quality Improvements

Upon the latest approval of DOT Form 5800.1, OMB inserted in the terms of clearance a request specific to PHMSA's OHMS. Specifically, OMB noted that in the next Information Collection Record (ICR), PHMSA is asked to include a plan to address data quality problems identified in the Regulatory Impact Analysis for the enhanced tank car standards final rule.²⁵ This request was not included as terms of clearance on OPS Form 7000-1 or FRA Form 54.

PHMSA understands the importance of data quality. PHMSA, and specifically OHMS, currently have a number of projects that address the issue of data quality and process improvements related to incident and accident reporting. OHMS provides the following summary of the current data quality and process improvement projects. These efforts include organizational changes, information technology enhancements, procedures documentation and process improvements, and DOT Form 5800.1 reevaluation. OHMS will be available to discuss each of the following in more detail.

- **Information Technology Enhancements** – OHMS is currently in the development and testing stages of a complete re-design of our internal and external incident report submission and processing system (currently known as the Smart incident reporting system). This new reporting system will guide incident reporting entities through an intuitive process that will ensure data quality by building business rules²⁶ into the submission process. Internally, the new system will improve efficiency and better track workflow. Overall, we believe the implementation of this effort will: reduce Government resources by decreasing processing time; improve data correctness, data quality, and completeness, while allowing users to provide as much information as possible; and enhance the internal and external user experience by simplifying the processes and improving efficiencies.
- **Process Improvements** – OHMS is in the process of developing a Data Operations Quality Management System (QMS) and seeking International Organization for Standardization (ISO) 9001 Certification. To facilitate continuous improvement in support of PHMSA's mission, the OHMS Program Development Division is establishing an ISO 9001 compliant QMS. The ISO 9001 standard is based on a number of quality management principles, including a strong customer focus, the motivation and implication of top management, the process approach, and continual improvement through audits for nonconformities. As part of this certification process, OHMS is analyzing the current state of operations to identify gaps related to standard operating procedure documentation and adequacy. OHMS is working with expert contractors to use this information to develop and implement an ISO 9001 compliant QMS that will

²⁵ OMB did not identify or provide examples of any specific data quality issues.

²⁶ For example, newly incorporated business rules would ensure that reporting entities respond to the questions and fields applicable to the appropriate mode of transportation and do not respond to those questions and fields that are not relevant to the incident.

include a quality manual, standard operating procedures and business processes, process maps, and responsibility matrices. OHMS expects this effort to improve processing times and efficiencies, resource use, stakeholder and customer satisfaction, and data quality and consistency.

- **Form Evaluation** – Pending available funding, OHMS is planning a complete review and analysis of the DOT Form 5800.1 to identify the value and vitality of each data element collected on the current Hazmat Incident Report Form. Given OHMS is implementing a Smart Form and an ISO-9001 compliant QMS, we expect it will be necessary to perform a complete review of the programmatic value of the data elements on DOT Form 5800.1. This would involve a meta-analysis and review of how data elements are used, confidence issues with data fields, and recommendations for improvements for DOT Form 5800.1 content and design, including potential changes requiring rulemaking that would provide a measurable benefit over and above the status quo. In addition, this effort would consider input from all stakeholders via notice with request for comments in the *Federal Register* and other outreach to industry groups.