

SUPPORTING JUSTIFICATION
EMERGENCY ESCAPE BREATHING APPARATUS STANDARDS
OMB No. 2130-XXXX; RIN 2130-AC14

Summary of Submission

- The collection of information associated with this Notice of Proposed Rulemaking (NPRM) is a new submission.
- FRA is publishing a Notice of Proposed Rulemaking (NPRM) in the **Federal Register** regarding its Emergency Escape Breathing Apparatus Standards on October 5, 2010. See 75 FR 61386. The published NPRM amends 49 CFR 227. As always, FRA plans to respond to any comments received in response to the NPRM both in the final rule and the associated information collection. FRA normally does not get very many comments pertaining to the collection of information associated with rulemakings, but will be glad to upload any such comments in its final rule submission.
- It should be noted that this collection of information is solely associated with the proposed rulemaking and the relevant text for each information collection requirement is included in the answer to question number 12.
- Total number of burden hours requested for this **new** submission is **162,892 hours**.
- Total number of responses requested for this **new** submission is **287,114**.
- ****The answer to question number 12 itemizes the hourly burden associated with each requirement of this rule (See pp. 15-27).**

1. Circumstances that make collection of the information necessary.

Section 413 of the Rail Safety Improvement Act of 2008 (RSIA), Pub. L. 110-432, Div. A, 122 Stat. 4848, October 16, 2008 (49 U.S.C. 20166) requires the Secretary of Transportation (Secretary) to adopt regulations no later than April 16, 2010, governing the provision of emergency escape breathing apparatus (EEBAs) by railroads for the train crews in the locomotive cabs of freight trains transporting a hazardous material that would present an inhalation hazard in the event of release. Specifically, the statute instructs the Secretary to prescribe regulations requiring railroad carriers to – (1) ensure that EEBAs affording suitable “head and neck coverage with respiratory protection” are provided “for all crewmembers” in a locomotive cab on a freight train “carrying hazardous materials that would pose an inhalation hazard in the event of release”; (2) provide a place for convenient storage of EEBAs in the locomotive that will allow “crewmembers to access such apparatus quickly”; (3) maintain EEBAs “in proper

working condition”; and (4) provide crewmembers with appropriate instruction in the use of EEBAAs. The Secretary has delegated the responsibility to carry out his responsibilities under this section of the RSIA to the Administrator of FRA. See 74 FR 26981, 26982, June 5, 2009, 49 CFR 1.49(oo). Additionally, this proposed rule is being put forth under the authority of 49 U.S.C. 20103 and 49 U.S.C. 20701-20703, as delegated to the Administrator of FRA pursuant to 49 CFR 1.49(c) and (m).

In this proposed rule, hazardous materials posing an inhalation hazard (termed “asphyxiants and poison inhalation hazard (PIH) materials”) fall into two, sometimes overlapping, categories defined in the Pipeline and Hazardous Materials Administration’s (PHMSA) Hazardous Materials Regulations (49 CFR parts 171-180). In particular, asphyxiants and PIH materials are (1) the gases classified by 49 CFR 173.115 as a “Class 2, Division 2.1 (Flammable gas)”; Class 2, “Division 2.2 (non-flammable, nonpoisonous compressed gas – including compressed gas, liquefied gas, pressurized cryogenic gas, compressed gas in solution, asphyxiant gas and oxidizing gas)”; or Class 2, “Division 2.3 (Gas poisonous by inhalation)” and (2) the gases, liquids, and other materials defined as a “material poisonous by inhalation” by 49 CFR 171.8. Under 49 CFR 171.8, [m]aterial poisonous by inhalation means:

- (1) A gas meeting the defining criteria in § 173.115(c) of this subchapter [i.e., Division 2.3 (Gas poisonous by inhalation)] and assigned to Hazard Zone A, B, C, or D in accordance with §173.116(a) of this subchapter;
- (2) A liquid (other than as a mist) meeting the defining criteria in §173.132(a)(1)(iii) of this subchapter [regarding inhalation toxicity] and assigned to Hazard Zone A or B in accordance with § 173.133(a) of this subchapter; or
- (3) Any material identified as an inhalation hazard by a special provision in column 7 of the §172.101 table.

Asphyxiants and PIH materials that are regularly carried by railroads include, for example, carbon dioxide, chlorine gas, and anhydrous ammonia. Such commodities should be easily identifiable for train crews because a “rail car transporting any quantity of a hazardous material (including either a load or the residue of one of these covered materials) must be placarded on each side and each end” pursuant to the requirements of 49 CFR 172.504 with certain specified placards. A car containing a Class 2, Division 2.1 material must have “FLAMMABLE GAS” placards. See section on placard design at 49 CFR 172.532. Class 2, Division 2.2 materials must have “NON-FLAMMABLE GAS” placards. See section on placard design at 49 CFR 172.528. A car moving a Class 2, Division 2.3 material, must have “POISON GAS” placards. See section on placard design at 49 CFR 172.540. Meanwhile, a car carrying any of the subset of Class 6, Division 6.1 materials that is a “material poisonous by inhalation,” must have “POISON INHALATION HAZARD” placards, except that “[f]or domestic transportation, a POISON INHALATION HAZARD placard is not required on a transport vehicle

[including a rail car] or freight container that is already placarded with the POISON GAS placard.” See section on placard design at 49 CFR 172.555 and exception at 49 CFR 172.504(f)(8). In summary, when a train crewmember observes a car placarded FLAMMABLE GAS, NON-FLAMMABLE GAS, POISON GAS, or POISON INHALATION HAZARD while the car is part of his or her train, the crewmember will know that EEBAs must be provided in the locomotive cab prior to the train beginning its movements.

The historical data suggest that crew injuries and fatalities related to the catastrophic release of a rail shipment (i.e., release of all or nearly all of a rail shipment, usually a loaded rail tank car or a placarded empty rail tank car, which contains a residue of the original shipment) of an asphyxiant or a PIH material are rare; however, such incidents have the potential to be deadly. For example, in the 42 years between 1965 (the year for which the earliest data are available) and 2006, there were approximately 2.2 million tank car shipments of chlorine. Out of these 2.2 million tank car shipments, there were only 788 accidents (0.036 percent of all tank car chlorine shipments), 11 instances where there was catastrophic loss (i.e., a loss of all or nearly all) of the chlorine lading (0.0005 percent of all tank car chlorine shipments), and four of these incidents resulted in fatalities (0.00018 percent of all tank car chlorine shipments). See Written Statement of Joseph H. Boardman, Administrator, FRA, before the Committee on Transportation and Infrastructure, United States House of Representatives, June 13, 2006. Of the four incidents with fatalities, only two resulted in the fatalities of crewmembers. One occurred in Macdona, Texas, in June of 2004, and the other in Graniteville, South Carolina, in January of 2005. These two fatalities involving crewmembers will be discussed below.

While even one death due to inhalation of an asphyxiant or a PIH material is too many, it is important to recognize that there have been dramatic improvements in the safety performance of rail operations since 1970. Accidents and casualty rates declined significantly during the 1970s, 1980s, and 1990s, with the past decade experiencing a leveling off of safety performance. These improvements in rail safety have resulted in the safer transportation of hazardous materials. The Association of American Railroads (AAR) has found a significant decrease in hazardous material incidents since 1980. According to AAR, hazardous material incident release rates are down 71 percent from 1980 and 56 percent from 1990, while hazardous material accident rates are down 90 percent from 1980 and 49 percent from 1990. Not surprisingly, there also has been a corresponding reduction in the number of accidents with a hazardous material release. Such incidents have fallen 76 percent since 1980 and 17 percent since 1990. Robert Fronczak, “U.S. Railroad Safety Statistics and Trends,” AAR, May, 2005.

FRA has analyzed the casualty data in its possession for on-duty employees in train and engine service (T&E) for the 10-year period from 1997 to 2006. During this time frame, a total of 25,941 non-passenger T&E on-duty casualties were reported, with 25,904

injuries and 37 fatalities. Table 1 (below) examines those casualties resulting from collisions, derailments, and inhalation.

Table 1. Non-Passenger T&E Employees - On-duty Casualties

Source: FRA Safety Database - 4.02 Casualty Data Reports

Report- ing Year	Total Casual- ties	Collision Casual- ties	Collision Fatalities	Derailment Casualties	Derailment Fatalities	Inhalation Casualties	Inhala- tion Fatalities
1997	2834	96	8	38	0	58	0
1998	3004	86	1	37	0	86	0
1999	3211	76	7	54	1	73	0
2000	3169	82	2	44	0	63	0
2001	2872	86	4	50	0	68	0
2002	2405	84	2	46	1	50	0
2003	2281	75	2	44	1	63	0
2004	2211	73	5	55	0	70	1
2005	2102	84	0	27	0	69	1
2006	1852	60	1	28	0	64	0
10-year Average per Year	2594.1	80.2	3.2	42.3	0.3	66.4	0.2

The table includes casualties from derailments and collisions because derailments and collisions represent the most likely events leading to a catastrophic hazardous material release with T&E personnel present. Similarly, these events also have the most potential for property damage or injury or death to members of the general public caused by the release of a hazardous material that renders an unprotected crew ineffective. As can be seen from the table, the overwhelming majority of injuries to T&E personnel are not attributable to the causes of inhalation, collision, or derailment. The 10-year average of about 193 T&E casualties (injured and killed) per year due to inhalation, collision or derailment ($80.2+3.2+42.3+0.3+66.4+0.2$) represents just 7.4 percent of the average number of 2,594 T&E on-duty casualties per year during the same period. When just inhalation casualties are considered ($66.4+0.2$), the number falls to 2.6 percent. Moreover, based on a review of the inhalation casualty data available to FRA, it appears that a large majority of the inhalation casualties identified involve (a) employees who were not performing T&E service or (b) environments that fall outside the congressional mandate.

The information compiled in Table 1 suggests that collisions are the most life-threatening event experienced by T&E employees. Of the 37 T&E fatalities identified in the table, 86.4 percent (32 out of 37) involved a collision. This compares to 8.1 percent (3 out of 37) involving a derailment. Only 5.4 percent (2 out of 37) of T&E employee fatalities resulted from inhalation.

To get a better understanding about the relative danger of inhalation fatalities, the number of deaths resulting from inhalation of a hazardous material can also be compared to the

average yearly train-miles and number of hazardous material shipments. For the period 1997-2006, the average for annual train-miles was 734.6 million. The 2 on-duty T&E employee deaths resulting from the inhalation of hazardous material therefore can be expressed as a rate of 1 death per 3.67 billion train-miles. Over the same period, this equates to one (1) fatality per 5.7 million shipments of the top 125 hazardous materials. See “Annual Report of Hazardous Materials Transported by Rail, Calendar Year 2006” AAR, Bureau of Explosives, Report BOE 06-1, October 2007.

The two inhalation fatalities in Table 1 represent the only two known T&E employee deaths resulting from a hazardous material release. These inhalation casualties, both involving the release of chlorine, arose out of two separate incidents. The first occurred in 2004 near Macdona, Texas. The second occurred in 2005 in Graniteville, South Carolina.

The incident near Macdona, Texas, occurred on June 28, 2004. A westbound Union Pacific Railroad Company (UP) train was traveling on the same mainline track as an eastbound Burlington Northern Santa Fe Railway Company (BNSF) train. The UP train was struck at its midpoint as the BNSF train was entering a parallel siding. The collision caused four locomotive units and the first 19 cars of the UP train to derail as well as 17 cars on the BNSF train. The 16th car in the UP train, a tank car loaded with liquefied chlorine, was punctured as a result of the derailment. The chlorine vaporized and engulfed the area surrounding the accident site. Three people, including UP’s conductor and two local residents, died from the effects of chlorine gas inhalation. See National Transportation Safety Board’s (NTSB) report on the accident, “Collision of Union Pacific Railroad Train MHOTU-23 With BNSF Railway Company Train MEAP-TUL-126-D With Subsequent Derailment and Hazardous Materials Release, Macdona, Texas, June 28,2004,” Railroad Accident Report NTSB/RAR-06/03, Washington, DC.

The Graniteville, South Carolina, incident occurred on January 6, 2005, when a Norfolk Southern Railway Company (NS) freight train encountered a switch that had been improperly lined. The improperly lined switch diverted the train from the main line onto an industry track. Once on the industry track, the train struck an unoccupied, parked train. The collision resulted in the derailment of two locomotives and 16 freight cars on the diverted train, as well as the locomotive and one of the two cars of the parked train. There were three tank cars containing chlorine among the derailed cars on the diverted train. One of the cars containing chlorine was breached causing a release of chlorine gas. As a result, the train engineer and eight other people died from the effects of inhaling chlorine gas. See NTSB’s report on the accident, “Collision of Norfolk Southern Freight Train 192 With Standing Norfolk Southern Local Train P22 With Subsequent Hazardous Materials Release at Graniteville, South Carolina, January 6, 2005,” Railroad Accident Report NTSB RAR-05/04, Washington, DC.

Following the Macdona and Graniteville fatalities, the NTSB issued a recommendation that FRA –

[d]etermine the most effective methods of providing emergency escape breathing apparatus for all crewmembers on freight trains carrying hazardous materials that would pose an inhalation hazard in the event of unintentional release, and then require railroads to provide these breathing apparatus to their crewmembers along with appropriate training.

(R-05-17). FRA responded to the NTSB recommendation by initiating a study of potential emergency escape breathing devices for use by crewmembers on freight trains transporting hazardous material that would pose an inhalation hazard if released. Commissioned by FRA and conducted in cooperation with the railroad industry and railroad labor, the study compiled factual information, performed technical, risk, and economic analyses, and made recommendations on “the use of [EEBAs] by train crews who may have exposure to hazardous materials [that] would pose an inhalation hazard in the event of unintentional release.” See “Emergency Escape Breathing Apparatus,” FRA Office of Research and Development, Final Report, May 2009, which is posted at <http://www.fra.dot.gov/downloads/Research/ord0911.pdf> and included in the docket of this rulemaking. On further consideration of the issues involved and on further consultation with representatives of the railroad industry and railroad labor, FRA has come to different conclusions on a number of matters. These matters include the minimum breathing time that EEBAs should provide, the analysis of different methods of distribution of the devices, and the costs and benefits of various EEBA alternatives.

FRA’s investigation into the Graniteville accident found that the concentration of the toxic chlorine cloud over the accident site area was estimated to be approximately 2,000 parts per million (ppm). See R. L. Buckley, Detailed Numerical Simulation of the Graniteville Train Collision, Savannah River National Laboratory, Report WSRC-MS-2005-00635 October 2005. OSHA classifies chlorine as having an IDLH (i.e., immediate danger to life or health, or immediately dangerous to life or health) level of 10 ppm. FRA roughly estimated the distance between the final resting spot of the breached chlorine tank car in relation to the train crew, as well as the wind speed and size of breach, to determine that the chlorine plume reached the T&E crew within two minutes. The coroner’s report on the eight civilian fatalities in the Graniteville incident indicated that the primary cause of death was asphyxia, or lack of oxygen. The coroner listed the engineer’s primary cause of death as lactic acidosis. Exposure to chlorine gas was attributed as the secondary cause of all deaths in the incident. Under the circumstances presented, it appears that both NIOSH selection criteria existed. There may have been an oxygen-deficient atmosphere, and there certainly was toxic-gas concentration exceeding IDLH levels. The National Institute for Occupational Safety and Health (NIOSH), located within the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services, has worked with government and industry partners to develop certification standards for respirators. The NIOSH regulations codified at 42 CFR Part 84 establish the requirements for NIOSH-certification of respirator equipment.

In light of the above, FRA is proposing to prescribe regulations that would require railroads to provide a type of respirator, specifically, an appropriate atmosphere-supplying emergency escape breathing apparatus (EEBA), in proper working order, to members of train crews, their direct supervisors, deadheading employees, and certain other employees while they are occupying the locomotive cab of a freight train transporting a hazardous material that would pose an inhalation hazard if released during an accident. The proposed requirements for EEBA's are intended to protect these employees from the risk of exposure to such hazardous materials in the train consist that may result from an accident, while the employees are preparing to escape, or escaping, from the train's locomotive cab.

The proposed regulations would also require railroads that transport an asphyxiant or a PIH material on the general railroad system of transportation to establish and carry out a series of programs for the following purposes: selection, procurement, and provision of the devices; inspection, maintenance, and replacement of the devices; and instruction of employees in the use of the devices. Railroads would be required to identify individual employees or positions to be placed in their general EEBA programs so that a sufficient number of EEBA's are available and to ensure that the identified employees or incumbents of the identified positions know how to use the devices. Finally, the proposed regulations would require that convenient storage be provided for EEBA's in the locomotive to enable employees to access such apparatus quickly in the event of a release of a hazardous material that poses an inhalation hazard.

2. How, by whom, and for what purpose the information is to be used.

This is a new collection of information, and the following response is based on the individual requirements spelled out in the table accompanying this NPRM. The information to be collected will be used by FRA to ensure that the Congressional mandate for railroads to provide all locomotive crewmembers with emergency escape breathing apparatus (EEBA's) affording suitable "head and neck coverage with respiratory protection" is fulfilled and to ensure compliance with other provisions of this proposed regulation. Railroads must provide all train crew members, their direct supervisors, deadheading employees, and certain other employees with EEBA's while they are occupying the locomotive cab of a freight train transporting a hazardous material that would pose an inhalation hazard if released during an accident/incident.

As stipulated by this proposed rule, FRA will review waiver information provided by railroads under § 227.13 to determine whether it is appropriate, safe, and in the public interest to allow an exception from all or some of the requirements of this regulation. Waivers will be granted where it is safe and in the public interest do so, and where the health and well being of railroad train and engine employees is not jeopardized.

FRA will review the information collected under § 227.201 to ensure that all rail

employees stipulated under this section and any other employee designated by the railroad in writing and at the discretion of the railroad are provided with EEBA's that meet the EEBA selection criteria of § 227.203. EEBA's must have been inspected and must be in working order pursuant to the requirements of § 227.207 and the employing railroad's program under § 227.207 at the time that the EEBA is provided to the employee.

FRA will review the information collected under § 227.203 to ensure that railroads select EEBA's that meet the requirements of this section. Railroads must provide EEBA's that are appropriate for their employees and are required to document the rationale for these EEBA selections. EEBA's selected must allow escape from an atmosphere containing any and all asphyxiants and PIH materials and must be certified for an escape only purpose by the National Institute for Occupational Safety and Health (NIOSH) pursuant to 49 CFR Part 84 or by the International Organization for Standards. FRA will review railroads' EEBA written justifications to determine that they show the adequacy of protection for all potential hazardous atmospheres reasonably expected to be encountered by train crew members. FRA will closely scrutinize written EEBA justification documents to see that three critical criteria are met. The first is breathing time. Each EEBA must be fully charged, and contain a minimum breathing capacity of 15 minutes at the time of the pre-trip inspection required under § 227.207(a)(1). The second is face and neck protection. The EEBA selected must provide a means of protecting the individual's face and neck to facilitate escape. The third is accommodation for eyeglasses and a range of facial features. The EEBA selected must provide a means of protecting each covered employee, including those who wear glasses, and allow for the reasonable accommodation of each such employee's facial features.

FRA will use the information collected under § 227.205 to ensure that railroads comply with the applicable EEBA manufacturer's instructions for storage of each device and that a copy of the EEBA manufacturer's instructions is kept at its system headquarters for FRA inspection. The copies of the EEBA manufacturer's instructions will also be used by railroad employees as a reference document to answer questions that they may have and to become more familiar with the use/operation of that particular device.

FRA will use the information collected under § 227.207 to confirm that railroads establish and carry out procedures intended to ensure that EEBA required to be kept in the locomotive cab are fully functional. FRA will also use the information collected under this section to verify that pre-trip and periodic inspections of EEBA's are conducted and records of these inspections are kept by railroads. These inspection records must be kept for one (1) year. Additionally, railroads must also create and maintain an accurate record of all EEBA turn-ins, maintenance, repair, and replacement. FRA will use the information collected to corroborate that these records too are kept. EEBA maintenance/replacement records must be kept for three years, and will provide a valuable current and historical resource to FRA inspectors concerning the status and care of each EEBA device.

FRA will use the information collected under § 227.209 to ensure that railroads establish and carry out instruction/training on the operation, care, and limitation of the railroad selected EEBA device so that the employees can avoid circumstances that would lead to reliance on the EEBA for conditions or time frames beyond that EEBA device's capabilities. FRA will use required employee instruction records under this section to confirm that freight train and engine employees receive both initial and periodic instruction/training on the EEBA selected by their railroad.

FRA will use the information collected under § 227.211 to assure that railroads adopt and comply with a comprehensive, written, general program to implement this Part and to verify that this general EEBA program is maintained at the railroad's system headquarters. Each general EEBA program must include the selection and distribution of EEBA's, which is to be done in a technically appropriate, sustainable manner, and supported by a comprehensive set of policies and procedures.

The notification information required under § 227.213 will be used by railroads to ascertain when EEBA devices fail or have use incidents as reported by train and engine employees. This information will allow railroads to have a current and accurate status of their EEBA supplied devices, and will enable them to take necessary actions to maintain, repair, or replace an EEBA device as necessary.

Finally, FRA will use the information collected under § 227.215 to ensure that railroads' electronic recordkeeping systems meet agency standards and are able to maintain the integrity and authenticity of each record for the required period of time. This description of how FRA will use the information to be collected is fully consistent with how it is characterized in the NPRM, but a more specific explanation is provided here.

3. Extent of automated information collection.

Over the years, FRA has strongly encouraged and highly endorsed the use of advanced information technology, wherever possible, to reduce burden. In particular, FRA has greatly encouraged electronic recordkeeping by railroads for many years. In keeping with the requirements of the Paperwork Reduction Act (PRA) and the Government Paperwork Elimination Act (GPEA), the minimum standards imposed by this regulation are sufficiently broad to permit a railroad to comply through the use of improved technology and commercial off the shelf word processing software.

Proposed § 227.215(b) permits required records to be kept in electronic form. These requirements are almost identical to the electronic recordkeeping requirements found in FRA's existing Track Safety Standards, 49 CFR 213.241(e). Section 227.215(b) allows each railroad to design its own electronic system as long as the system meets the specified criteria in § 227.215(b)(1) through (5), which are intended to safeguard the integrity and authenticity of each record. Thus, approximately 58 percent of responses

required under this proposed rule may be kept electronically, if railroads so choose. It should be noted that railroads not only have the option to maintain required records electronically, but also have the same option regarding reporting requirements and submission of such reports to FRA.

4. **Efforts to identify duplication.**

The information collection requirements to our knowledge are not duplicated anywhere.

Similar data are not available from any other source.

5. **Efforts to minimize the burden on small businesses.**

The U.S. Small Business Administration (SBA) stipulates in its “Size Standards” that the largest a railroad business firm that is “for-profit” may be, and still be classified as a “small entity,” is 1,500 employees for “Line-Haul Operating Railroads,” and 500 employees for “Switching and Terminal Establishments.” “Small entity” is defined in the Act as a small business that is not independently owned and operated, and is not dominant in its field of operation. SBA’s “Size Standards” may be altered by Federal agencies after consultation with SBA and in conjunction with public comment. Pursuant to that authority, FRA has published a final policy that formally establishes “small entities” as railroads which meet the line haulage revenue requirements of a Class III railroad. The revenue requirements are currently \$20 million or less in annual operating revenue. The \$20 million limit (which is adjusted by applying the railroad revenue deflator adjustment) is based on the Surface Transportation Board’s (STB) threshold for a Class III railroad carrier. FRA uses the same revenue dollar limit to determine whether a railroad or shipper or contractor is a small entity.

There are 567 freight railroads. FRA estimates that approximately 95 railroads that meet the definition of “small entity” would be impacted. However, FRA does not anticipate that the proposed rule would impose a significant impact on these small entities because they would be able to manage their EEBA programs in such a way as to minimize costs. Given their smaller size and limited territory in which they operate, they can develop a management system that allows them to optimally allocate EEBA without necessarily having to purchase one for each locomotive or train and engine crewmember. In addition, many of these small railroads are subsidiaries of large short line holding companies with the expertise and resources comparable to larger railroads. The number of EEBA a small railroad would have to install would vary in proportion to the number of locomotives used for transporting PIH materials or asphyxiants. Thus, FRA believes that there will not be significant impact on a substantial number of small entities both cost wise and paperwork wise.

It should be noted that FRA has provided staggered compliance dates to ease the burden on medium and small railroads (Class II and Class III). Class II railroads subject to this

subpart are required to comply with this subpart beginning no later than 30 months from the effective date of the final rule. Class III railroads subject to this subpart and any other railroads subject to this subpart are required to comply with this subpart beginning no later than 36 months from the effective date of the final rule.

6. Impact of less frequent collection of information.

If FRA did not collect this information or collected it less frequently, FRA would not be able to fulfill the RSIA Congressional mandate and the safety and health of train crews, their direct supervisors, deadheading employees, and certain other employees occupying the locomotive cab of freight trains transporting hazardous materials might be directly and adversely impacted. Without the information collected, FRA would have no way to know whether it is safe, appropriate, and in the public interest to grant waivers to all or some of the requirements of this proposed rule. FRA must have necessary and sufficient information to evaluate railroads' requests regarding rule exceptions in order to render fair and sensible decisions while, at the same time, ensuring that the health and safety of covered employees are fully considered and necessary protections provided. *[Note: Although FRA has not provided specific sectional references of the NPRM in this response, FRA will do so in the final rule submission.]*

Without the information collected, FRA would not know whether other employees had been designated to receive/use EEBA's. Without this information, agency inspectors would not be able to follow up to confirm that these employees too had received an EEBA device or that they understood where to find them in the event of an accident/incident where there was exposure to hazardous materials. Also, without these designations, these other employees might be unaware that they were entitled to use/should use an EEBA in an emergency situation where there is exposure to hazardous materials. Serious injuries and fatalities could result without the proper communication of employee designations.

Without the information collected, FRA would have no data concerning the basis of a railroad's decision to select a particular EEBA or type of EEBA for its employees. Without this information, FRA would not know whether EEBA's met the rule's criteria (for NIOSH-certified or ISO-certified devices) and whether they would provide the necessary breathing time and face and neck protection to facilitate employees escape in the event of exposure to various asphyxiants and poisonous-by-inhalation (PIH) materials released in an accident/incident. EEBA's that did not meet the rule's requirements could result in serious injuries and fatalities to covered railroad employees.

Without a copy of the manufacturer's EEBA instructions at each railroad's system headquarters, FRA inspectors would have no way to determine whether railroads were complying with necessary EEBA storage instructions. Also, without this copy of the manufacturer's EEBA instructions, covered railroad employees would be deprived of a most valuable reference document relating to the proper location and storage of EEBA's.

In the event of an emergency, improper EEBA storage could result in more employee injuries and possibly fatalities.

Without the information collected, FRA would have no way to verify that railroads have devised and carried out a program for the inspection, maintenance, and replacement of EEBA's and would have no way to know that they were actually implementing their own programs. Without the required records in this section, FRA would not be able to confirm that railroads have conducted necessary pre-trip and periodic EEBA inspections to ensure that they are/were properly functional and would not have an accurate documentary trail of all EEBA turn-ins, maintenance activities, repairs, and replacements. In the event of an accident/incident that released hazardous materials and employee injuries/fatalities resulted, these records would be essential for agency investigators to review to determine EEBA functionality and the cause of any employee injury/fatality.

Without railroads' general program to implement the requirements of this proposed rule/Part, FRA could not be assured that railroads have adopted and complied with a general EEBA program that ensures that the selection and distribution of the EEBA is done in a technically appropriate and sustainable manner, and is supported by a comprehensive set of policies and procedures. Also, without this information, FRA would have no way to ascertain that covered employees are properly instructed/trained in the use, inspection, and maintenance of an EEBA. Without such programs and without such training, the health and lives of train and engine and other employees would be directly jeopardized. There is no question that employees will be injured and die if they have no recourse to suitable and properly functioning EEBA's during a hazardous materials release similar to the ones that occurred at the Macdona, Texas, and Graniteville, South Carolina, accidents.

In sum, the proposed information collection enables FRA to carry out the RSIA Congressional mandate, and facilitates the agency mission, which is to promote and enhance rail safety throughout the Nation.

7. **Special circumstances.**

All information collection requirements are in compliance with this section.

8. **Compliance with 5 CFR 1320.8.**

FRA is publishing a Notice of Proposed Rulemaking (NPRM) in the **Federal Register** regarding Emergency Escape Breathing Apparatus Standards on October 5, 2010. See 75 FR 61386. In this publication, FRA is soliciting public comments on the proposed rule and its accompanying information collection requirements. FRA will respond to any comments it receives in the agency final rulemaking and accompanying Supporting Justification.

Background

Representatives of both the railroad industry and railroad labor cooperated with the FRA-sponsored study on the feasibility of providing EEBA's to train crews, the report of which was published in May 2009. More recently, the Association of American Railroads (AAR), the United Transportation Union (UTU), and the Brotherhood of Locomotive Engineers and Trainmen (BLET) have exchanged information and ideas with FRA on issues related to this rulemaking.

In July 2009, representatives of the AAR briefed FRA with information on the AAR's exploration of alternative ways by which the rulemaking mandate under section 413 of the RSIA might be carried out. The AAR has also offered recommendations to FRA on issues related to this rulemaking, including the type of EEBA and the mode of providing it that FRA should accept as satisfying the statutory mandate.

Subsequently, in a letter to FRA dated January 13, 2010, an AAR representative said that--

the railroads' Industrial Hygienists have finalized a specification for a device that meets the objective of the RSIA which is to provide for escape from the area where a release of hazardous materials has occurred that may pose an inhalation hazard. One of the important features of this specification is the provision for the device to have a 15 minute functional rating. Investigations and studies by the railroads' Industrial Hygienists have found that the area of destruction following a release is such that 15 minutes is a more than adequate time period to escape the area. Requiring a device with a greater capacity would result in one that is larger and heavier than called for in this specification. Real estate in the locomotive cab is already at a premium. It is problematic for the railroads to install brackets or holders for the [emergency escape breathing device] called for in this specification. Requiring a larger device in the regulation would complicate this issue by taking more space. Similarly, requiring a device with a greater functional rating would necessitate crew members to manage a device easily twice the size and weight of the six (6) pound unit preferred by the Industrial Hygienists.

Further, the letter said that the specification referenced earlier, "M-1005, is presently being worked through the approval process for AAR Standards. It is this specification that we recommend FRA include by reference in the forthcoming regulation." A copy of the January 20, 2010, draft of that specification as provided by the AAR is at Appendix A to this NPRM.

The draft specification would establish guidelines for vendors of EEBA's that would be used by Class I railroads. It requires that the EEBA provided by the vendor be certified by NIOSH as a Self-Contained Breathing Apparatus (SCBA) – Escape Only, or comply with some other National/International standard, such as ISO 23269-1:2007(E):

Emergency Escape Breathing Device (EEBD). AAR's draft specification allows for EEBA's that are either Closed Circuit Escape Respirators or Open Circuit Escape Respirators. Each EEBA must have at least a 15-minute approval rating, meaning that the device must function for at least 15 minutes during 3-mph treadmill tests and 30 minutes for stationary tests. The materials used in each EEBA must be resistant to IDLH levels of gaseous chlorine, anhydrous ammonia, and other toxic inhalation hazard (TIH) substances. Additionally, each EEBA shall provide respiratory, head, and neck protection when tested at challenge concentrations of 10,000 ppm anhydrous ammonia and chlorine gas with a hood that is sufficient in size to cover head and neck of larger than average head size. To facilitate transferability, under the proposed specification, the escape system used by each Class I must "interchange with all" Class I railroads.

AAR's draft specification also establishes requirements for mounting EEBA's on locomotives. The EEBA's and the mounting devices must be sufficiently small (5" deep by 8" wide by 10" high) and light (6 lbs. or less), so that they can be easily mounted in a locomotive cab and be easily accessible in an emergency situation. Each wall mount case must be bright safety orange and contain a photo luminescent label marked with the text stating "Emergency Escape Breathing Device." The draft specification further requires that the mount device contain a clear window that allows a train employee to easily view the oxygen gauge. For security purposes, the draft specification provides that the mount device shall contain a time-stamped seal and plastic tamper tie that is easily identifiable when broken. Additionally, each EEBA must have a small radio frequency indicator (RFID) tag that is attached to the EEBA and faces outward while in the mount device, which facilitates the use of an RFID handheld reader during inspections. Moreover, AAR's draft specification requires that the EEBA provided by a vendor to any Class I railroad must have undergone accelerated random vibration test using a typical locomotive cab profile and there must be evidence of impact and vibration resistance resulting from such testing. Assuming a 50-percent duty life cycle, the device must have a 15-year service life based on escape device performance and mounting device structural integrity tests. Finally, the proposed specification requires that each EEBA be attachable to a train employee's belt and that the EEBA not be activated solely by its removal from wall mount case.

Lastly, AAR's draft specification requires training support. The training shall include a video of various locomotive models and video portions including each Class I railroad. Subjects that must be covered during instruction include discussion about the proper techniques for donning the EEBA, requirements for maintenance, requirements for inspections, typical scenarios where an EEBA will be used, and requirements for training. The draft specification further requires seminars that allow train service trainers to be involved in "hands-on" and face-to-face "train-the-trainer" situations.

Furthermore, FRA representatives also met with UTU and BLET representatives on March 31, 2010, to be briefed on issues related to the provision of EEBA's. AAR was also in attendance at this meeting. Prior to the meeting, UTU provided a discussion

document, which is Appendix B to this NPRM, outlining some of its concerns about the provision of EEBAs on locomotives. UTU felt that EEBAs should be “placed on all occupied locomotives which operate over a corridor where freight trains carry hazardous materials that pose an inhalation hazard in the event of a release.” Under UTU’s recommendation, each occupied locomotive would be required to have working EEBAs – even if the occupied locomotive is not part of a train carrying asphyxiants or PIH materials – as long the locomotive is operating over a rail line that carries such materials. During the March 31st meeting, UTU indicated that it opposed issuing EEBAs as personal items. UTU felt that adding an additional item to each train employee’s required personal equipment would unnecessarily burden crewmembers. UTU was concerned with not only the added weight, but also the extra responsibility for care and maintenance that would fall to train employees in the event that EEBAs are provided as personal equipment. It contended that railroads are in a better position than the employees to maintain the devices and stated that treating EEBAs as personal equipment would not satisfy the intent of Congress in passing the legislation.

Finally, UTU stressed that there must be sufficient training of train employees in the use of EEBAs. Such training would ensure that train employees would know how to use EEBAs if presented with a situation in the field where their use was required. UTU expressed a strong desire for regular, hands-on training with devices selected by the railroads to achieve these ends.

9. Payments or gifts to respondents.

There are no monetary payments or gifts made to respondents associated with the information collection requirements contained in this regulation.

10. Assurance of confidentiality.

Information collected is not of a confidential nature, and FRA pledges no confidentiality.

11. Justification for any questions of a sensitive nature.

There are no questions of a sensitive or private nature involving this regulation.

12. Estimate of burden hours for information collected.

Note: Based on the latest FRA data, there are approximately 728 railroads currently operating in the United States. There are approximate 200 railroads affected by this proposed rulemaking. Estimated total number of train and engine employees is 70,000. Estimated total number of EEBAs is 78,750. Again, it bears mentioning that this collection of information is solely associated with this rulemaking. Also, the requirements in this rulemaking are fixed for railroads in terms of compliance, although

railroads have flexibility relating to the most economical way to fulfill these requirements in terms of choosing a paper or electronic option.

§ 227.13 Waivers

A person subject to a requirement of this part may petition the Administrator for a waiver of compliance with such requirement. The filing of such a petition does not affect that person’s responsibility for compliance with that requirement while the petition is being considered. Each petition for waiver must be filed in the manner and contain the information required by Part 211 of this chapter.

FRA estimates that approximately thirteen (13) waiver petitions will be filed each year due to this requirement. It is estimated that it will take approximately sixteen (16) hours to complete and mail each petition. Total annual burden for this requirement is two hundred and eight (208) hours.

Respondent Universe:	200
	railroads
Burden time per response:	16 hours
Frequency of Response:	annually
Annual number of Responses:	13 petition letters
Annual Burden:	208 hours

Calculation: 13 petition letters x 16 hr. = 208 hours

§ 227.201 Criteria for requiring availability of EEBA’s in the locomotive cab.

(a)(1)(i) Except as specified in paragraph (b) of this section, a railroad is required to provide an EEBA to each of the following of its employees while the employee is located in the cab of a locomotive of an in-service freight train transporting an asphyxiant or a PIH material, including a residue of an asphyxiant or a PIH material: (A) Any train employee; (B) Any direct supervisor of the train employee; (C) Any employee who is deadheading; and (D) Any other employee designated by the railroad in writing and at the discretion of the railroad. (ii) Each EEBA provided to an employee identified in paragraph (a)(1) of this section must meet the EEBA-selection criteria of § 227.203 and must have been inspected and be in working order pursuant to the requirements of § 227.207 at the time that the EEBA is provided to the employee. [Note: Vis-à-vis this entire requirement and others in this NPRM, FRA will take public comments into account for the requirements included in the final rule. However, it should be pointed out that this particular requirement to keep the EEBA in the locomotive cab (and others as well) is not likely to change because the health and safety of locomotive cab employees throughout the nations is at stake. Train crew safety is the top priority and goal of this rulemaking.]

(2) Except as specified in paragraph (b) of this section, a railroad shall not use a

locomotive to transport an asphyxiant or a PIH material, including a residue of an asphyxiant or a PIH material, in an in-service freight train unless each of the employees identified in paragraph (a)(1)(i) of this section while in the cab of the locomotive of the train has access to an EEBA that satisfies the EEBA-selection criteria in § 227.203 and that has been inspected and is in working order pursuant to the requirements in § 227.207.

Note: The burden for railroads' programs of inspections, maintenance, and replacement of EEBA's, EEBA inspections and required records is included under that of § 227.207 below. Consequently, there is no other or additional burden associated with these requirements.

FRA estimates that other employees designated by the railroad will affect approximately 700 railroad employees every year. It is estimated that each written designation will take approximately three (3) minutes. Total annual burden for this requirement is 35 hours.

Respondent Universe:		200
		railroads
Burden time per response:	0.05 hours (3 minutes)	
Frequency of Response:	on occasion	
Annual number of Responses:	700 designations	
Annual Burden:		35
		hours

Calculation: 700 designations x 3 min. = 35 hours

§ 227.203 Criteria for selecting EEBA's.

In selecting the appropriate EEBA to provide to an employee, the railroad shall do the following:

(a) Select an appropriate atmosphere-supplying EEBA that protects against all asphyxiants or PIH materials (including their residue) that are being transported by the freight train while in service.

(b) Ensure that the type of respirator selected has been certified for an escape only purpose by the National Institute for Occupational Safety and Health pursuant to 49 CFR Part 84 or by the International Organization for Standardization pursuant to ISO 23269-1:2008(E).

(c) Document the adequacy of protection for all potential hazardous atmospheres reasonably expected to be encountered and provide such documentation for inspection by FRA upon request.

(d) Document, and provide such documentation for inspection by FRA upon request, the rationale for the final selection of an EEBA by addressing each of the following concerns:

(1) Breathing time. Each EEBA must be fully charged and contain a minimum breathing capacity of 15 minutes at the time of the pre-trip inspection required under § 227.207(a) (1).

(2) Face and neck protection. The EEBA selected must provide a means of protecting the individual's face and neck to facilitate escape.

(3) Accommodation for eyeglasses and a range of facial features. The EEBA selected must provide a means of protecting each employee who is required to be provided with the EEBA, including those who wear glasses, and allow for the reasonable accommodation of each such employee's facial features, including facial hair.

FRA estimates that approximately sixty seven (67) adequacy/selection justification documents will be filed each year due to the above requirements. It is estimated that it will take approximately two (2) hours to complete each document. Total annual burden for this requirement is one hundred and thirty four (134) hours.

Respondent Universe:

200
railroads

Burden time per response:	2 hours
Frequency of Response:	occasionally
Annual number of Responses:	67 written justifications
Annual Burden:	134 hours

Calculation: 67 written justifications x 2 hr. = 134 hours

§ 227.205 Storage facilities for EEBA's.

(a) A railroad may not use a locomotive if it is part of an in-service freight train transporting an asphyxiant or a PIH material, including a residue of an asphyxiant or a PIH material, and the locomotive cab is occupied by an employee identified in § 227.201(a)(1)(i)(A)-(D) (subject employee), unless the locomotive cab has appropriate storage facilities to hold the number of EEBA's required to be provided.

(b) The storage facility for each required EEBA must –

- (1) Prevent deformation of the face piece and exhalation valve, where applicable;
- (2) Protect the EEBA from incidental damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals;
- (3) Provide each subject employee located in the locomotive cab with ready access to the EEBA during an emergency; and
- (4) Provide a means for each subject employee to locate the EEBA under adverse conditions such as darkness or disorientation.

(c) A railroad must comply with the applicable manufacturer’s instructions for storage of each required EEBA and must keep a copy of the instructions at its system headquarters for FRA inspection.

FRA estimates that approximately 26,250 units will be required annually, and necessitate instruction copies. It is estimated that it will take approximately three (3) minutes (or .05 hour) to document copy and file the required instructions at its system headquarters. Total annual burden for this requirement is 1,313 hours.

Respondent Universe:	200 railroads
Burden time per response:	0.05 hour
Frequency of Response:	occasionally
Annual number of Responses:	26,250 instruction copies
Annual Burden:	1,313 hours

Calculation: 26,250 instruction copies x .05 hr. = 1,313 hours

§ 227.207 Railroad's program for inspection, maintenance, and replacement of EEBA's.

(a) General. Each railroad must establish and comply with a written program for inspection, maintenance, and replacement of EEBA's that are required under this subpart. The program for inspection, maintenance, and replacement of EEBA's shall be maintained at the railroad's system headquarters and shall be amended, as necessary, to reflect any significant changes. This program shall include the following procedures:

- (1) Procedures for performing and recording a pre-trip inspection of each EEBA that is required to be provided on a locomotive being used to transport an asphyxiant or a PIH

material and procedures for cleaning, replacing, or repairing each required EEBA, if necessary, prior to its being provided under § 227.201(a);

(2) Procedures for performing and recording periodic inspections and maintenance of each required EEBA in a manner and on a schedule in accordance with the manufacturer's recommendations; and

(3) Procedures for turning in and obtaining a replacement for a defective, failed, or used EEBA and for recording those transactions.

The burden for a written program for inspection, maintenance, and replacement of EEBA's is included in that of the General Program implementing this Part under § 227.211 below. Consequently, there is no additional burden associated with this requirement.

(b) Inspection procedures and records. (1) A railroad's procedures for pre-trip and periodic inspections of EEBA's shall require that the following information about each pre-trip and periodic inspection be accurately recorded on a tag or label that is attached to the storage facility for the EEBA or kept with the EEBA or in inspection reports stored as paper or electronic files: (i) The name of the railroad performing the inspection; (ii) The date that the inspection was performed; (iii) The name and signature of the individual who made the inspection; (iv) The findings of the inspection; (v) The required remedial action; and (vi) A serial number or other means of identifying the inspected EEBA.

(2) A railroad must maintain an accurate record of each pre-trip and periodic inspection required by this section and retain each of these records for one year.

FRA estimates that approximately 73,000 pre-trip and periodic inspections/records will be completed each year due to the above requirement. Inspections are done visually, and involve a simple determination that a green light is on. It is estimated that it will take approximately one (1) minute (.0167 hour) to complete each inspection/record. Total annual burden for this requirement is 1,217 hours.

Respondent Universe:

200
railroads

Burden time per response: 1 minute (.0167 hours)

Frequency of Response: annually

Annual number of Responses: 73,000 inspections/records

Annual Burden: 1,217 hours

Calculation: 73,000 inspections/records x 1 minute = 1,217 hours

Paragraph (d) of this section requires railroads to create and maintain an accurate record of each return, maintenance, repair, or replacement of each EEBA required by this subpart; and retain each of these records for three years.

FRA estimates that approximately 233 records will be created/retained each year due to the above requirement. It is estimated that it will take approximately five (5) minutes to complete each record. Total annual burden for this requirement is 19 hours.

Respondent Universe:		200 railroads
Burden time per response:	5 minutes	
Frequency of Response:	occasionally	
Annual number of Responses:	233 records	
Annual Burden:		19 hours
Calculation:	233 records x 5 minutes = 19 hours	

Total annual burden for this entire requirement is 1,332 hours (1,313 + 19).

§ 227.209 Railroad’s program of instruction on EEBA’s.

(a) General. (1) A railroad shall adopt and comply with its written program of instruction on EEBA’s for all of its employees in its general EEBA program under § 227.211 (subject employees). The program of instruction must be maintained at the railroad’s system headquarters and must be amended, as necessary, to reflect any significant changes.

(2) This program may be integrated with the railroad’s program of instruction on operating rules under § 217.11 of this chapter or its program of instruction for hazmat employees under § 172.704 of this title. If the program is not integrated with either of these programs, it must be written in a separate document that is available for inspection by FRA.

(b) Subject matter. The railroad’s program of instruction shall require that the subject employees demonstrate knowledge of at least the following:

- (1) Why the EEBA is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the EEBA.
- (2) The capabilities and limitations of the EEBA, particularly the limited time for use.
- (3) How to use the EEBA effectively in emergency situations, including situations in which the EEBA malfunctions.

(4) How to inspect, put on, remove, and use the EEBA, and how to check the seals of the EEBA.

(5) Procedures for maintenance and storage of the EEBA that must be followed.

(6) The EEBA-selection criteria in § 227.203.

(7) The requirements of this part related to the responsibilities of employees and the rights of employees to access to records.

(8) The hazardous materials classified as asphyxiants and PIH materials.

(c) Dates of initial instruction and intervals for periodic instruction. (1) The instruction must be provided for current subject employees on an initial basis no later than 30 days prior to the date of compliance identified in § 227.217 or, for new subject employees, before assignment to jobs where the deployment of EEBA's on a locomotive is required. (2) Initial instruction must be supplemented with periodic instruction at least once every three years.

The burden for a written program of instruction on EEBA's for all employees is included in that of the General Program implementing this subpart under § 227.211 below. Consequently, there is no additional burden associated with this requirement.

FRA estimates that approximately 70,000 employees will be initially instructed or trained in the use of EEBA's under the above requirement. It is estimated that it will take approximately two (2) hours to initially train each employee. Total annual burden due to this requirement is 140,000 hours.

Respondent Universe:	200 railroads
Burden time per response:	2 hours
Frequency of Response:	One-time
Annual number of Responses:	70,000 initially trained employees
Annual Burden:	140,000 hours

Calculation: 70,000 trained employees x 2 hr. = 140,000 hours

Additionally, FRA estimates that approximately all 70,000 employees will be receive periodic training/re-training once every three years under the above requirement. Thus, approximately 23,333 employees will receive periodic training. It is estimated that it will take approximately 15 minutes to periodically train each employee. Total annual burden due to this requirement is 5,833 hours.

Respondent Universe:	200 railroads
Burden time per response:	15 minutes

Frequency of Response:	On occasion
Annual number of Responses:	23,333 periodically trained employees
Annual Burden:	5,833 hours

Calculation: 23,333 periodically tr. employees x 15 min. = 5,833 hours

(d) Records of instruction. A railroad must maintain a record of employees provided instruction in compliance with this section and retain these records for three years.

FRA estimates that approximately 70,000 records will be kept regarding initial EEBA training under the above requirement. It is estimated that it will take approximately five (5) minutes (or .083 hour) to keep each record. Total annual burden due to this requirement is 5,833 hours.

Respondent Universe:	200 railroads
Burden time per response:	5 minutes (.083 hours)
Frequency of Response:	One-time
Annual number of Responses:	70,000 employee records
Annual Burden:	5,833 hours

Calculation: 70,000 employee records x 5 min. = 5,833 hours

Additionally, FRA estimates that approximately 23,333 records will be kept regarding periodic training under the above requirement. It is estimated that it will take approximately two (2) minutes (or .033 hour) to keep each record. Total annual burden due to this requirement is 778 hours.

Respondent Universe:	200 railroads
Burden time per response:	2 minutes (.033 hours)
Frequency of Response:	One-time
Annual number of Responses:	23,333 employee records
Annual Burden:	778 hours

Calculation: 23,333 employee records x 2 min. = 778 hours

Total annual burden for this entire requirement is 152,444 hours (140,000 + 5,833 + 5,833 + 778).

§ 227.211 Railroad’s general program to implement a general EEBA program; criteria for placing employees in the general EEBA program.

(a) In general. A railroad must adopt and comply with a comprehensive, written, general program to implement this subpart that shall be maintained at the railroad's system headquarters. Each railroad shall amend its general EEBA program, as necessary, to reflect any significant changes.

(b) Elements of the general EEBA program and criteria for placing employees in program. A railroad's general EEBA program must:

(1) Identify the individual that implements and manages the railroad's general EEBA program by name, title, and contact information. The individual must have suitable training and sufficient knowledge, experience, skill, and authority to enable him or her to manage properly a program for provision of EEBA's. If the individual is not directly employed by the railroad, the written program must identify the business relationship of the railroad to the individual fulfilling this role.

(2) Describe the administrative and technical process for selection of EEBA's appropriate to the hazards that may be reasonably expected.

(3) Describe the process used to procure and provide EEBA's in a manner to ensure the continuous and ready availability of an EEBA to each of the railroad's employees identified in § 227.201(a)(1)(i)(A)-(D) (while actually occupying the locomotive cab of a freight train in service transporting an asphyxiant or a PIH material). This description must include – (i) A description of the method used for provision of EEBA's, including whether the EEBA's are individually assigned to employees, installed on locomotives as required equipment, or provided by other means. If EEBA's are installed on locomotives as required equipment, the means of securement must be designated. (ii) The decision criteria used by the railroad to identify trains in which provision of EEBA's is not required. (iii) A description of what procedures will govern the railroad at interchange to ensure that the locomotive cab in each in-service freight train transporting an asphyxiant or a PIH material has an EEBA accessible to each of the employees identified in § 227.201(a)(1)(i)(A)-(D) while in the cab of the locomotive, including what procedures are in place to ensure that the EEBA's provided satisfy the EEBA-selection criteria in § 227.203, satisfy the EEBA-storage criteria in § 227.205, and have been inspected and are in working order pursuant to the requirements in § 227.207.

(4) Ensure that each of the following employees, except those excluded by § 227.201(b), whose duties require regular work in the locomotive cabs of in-service freight trains transporting an asphyxiant or a PIH material, including a residue of an an asphyxiant or a PIH material, has the required EEBA available when he or she does occupy the cab of such a train and knows how to use the EEBA: (i) Employees who perform service subject to 49 U.S.C. 21103 (train employees) on such trains; (ii) Direct supervisors of train employees on such trains; (iii) Deadheading employees on such trains; and (iv) Any other employees designated by the railroad in writing and at the discretion of the railroad.

FRA estimates that approximately 67 railroads will establish written programs that will include all the above requirements as well as those specified in § 2XX.107 and § 2XX.109. It is estimated that it will take approximately eighty (80) hours to develop each written program. Total annual burden for this requirement is 5,360 hours.

Respondent Universe:	200 railroads
Burden time per response:	80 hours
Frequency of Response:	occasionally
Annual number of Responses:	67 written programs
Annual Burden:	5,360 hours

Calculation: 67 written programs x 80 hrs. = 5,360 hours

(c) Records of positions or individuals or both in the railroad's general EEBA program. A railroad must maintain a record of all positions or individuals, or both, who are designated by the railroad to be placed in its general EEBA program pursuant to § 227.211(b)(4). The railroad must retain these records for the duration of the designation and for one year thereafter.

The burden for this requirement is already included above under § 227.209.

Consequently, there is no additional burden associated with this requirement.

(d) Consolidated programs. A group of two or more commonly controlled railroads subject to this part may request in writing that the Associate Administrator for Railroad Safety/Chief Safety Officer (Associate Administrator) treat them as a single railroad for purposes of adopting and complying with the general EEBA program required by this section. The request must list the parent corporation that controls the group of railroads and demonstrate that the railroads operate in the United States as a single, integrated rail system. The Associate Administrator will notify the railroads of his or her decision in writing.

The burden above for the 67 written programs includes consolidated programs as well. Consequently, there is no additional burden associated with this requirement.

Total annual burden for this entire requirement is 5,360 hours.

§ 227.213 Employee's responsibilities.

(a) An employee to whom the railroad provides an EEBA must:

(1) Participate in training under § 227.209;

(2) Follow railroad procedures to ensure that the railroad's EEBA's : (i) Are maintained in

a secure and accessible manner; (ii) Are inspected as required by this subpart and the railroad's program of inspection; and (iii) If found to be unserviceable upon inspection, are turned in to the appropriate railroad facility for repair, periodic maintenance, or replacement; and

(3) Notify the railroad of EEBA failures and of use incidents in a timely manner.

(b) No employee shall willfully tamper with or vandalize an EEBA that is provided pursuant to § 227.201(a) in an attempt to disable or damage the EEBA.

The burden for EEBA training of employee is included under that of § 227.209. Consequently, there is no additional burden associated with this requirement.

Concerning EEBA failures and of use incidents, FRA believes that there will be no failures of these devices within the first three years (since they have a long projected lifetime – 15 years, if wall mounted and five (5) years, if belt mounted as in the mining environment). FRA estimates that there will be approximately 100 use incidents each year and thus 100 notifications to railroads will be made to railroads by employees under the above requirement. It is estimated that it will take approximately one (1) minutes to complete each notification. Total annual burden for this requirement is two (2) hours.

Respondent Universe:	200 railroads
Burden time per response:	1 minute
Frequency of Response:	On occasion
Annual number of Responses:	100 notifications
Annual Burden:	2 hours

Calculation: 100 notifications x 1 min. = 2 hours

Total annual burden for this entire requirement is two (2) hours.

§ 227.215 Recordkeeping in general.

(a) Availability of records. (1) A railroad must make all records required by this subpart available for inspection and copying or photocopying to representatives of FRA, upon request.

(2) Except for records of pre-trip inspections of EEBA's under § 227.207, records required to be retained under this subpart must be kept at the system headquarters and at each division headquarters where the tests and inspections are conducted.

The burden for records is included under that of § 227.207 and § 227.209. Consequently, there is no additional burden associated with this requirement.

(b) Electronic records. All records required by this subpart may be kept in electronic

form by the railroad. A railroad may maintain and transfer records through electronic transmission, storage, and retrieval provided that all of the following conditions are met:

(1) The electronic system is designed so that the integrity of each record is maintained through appropriate levels of security such as recognition of an electronic signature, or other means, which uniquely identify the initiating person as the author of that record. No two persons have the same electronic identity.

(2) The electronic system ensures that each record cannot be modified in any way, or replaced, once the record is transmitted and stored.

(3) Any amendment to a record is electronically stored apart from the record that it amends. Each amendment to a record is uniquely identified as to the individual making the amendment.

(4) The electronic system provides for the maintenance of records as originally submitted without corruption or loss of data.

(5) Paper copies of electronic records and amendments to those records that may be necessary to document compliance with this subpart are made available for inspection and copying or photocopying by representatives of FRA.

FRA believes that approximately 18 railroads may be affected by the above requirements. These railroads will be impacted to the extent that they are already storing records electronically using systems that do not meet the above standards. FRA estimates that it will take approximately 120 hours per railroad to make any necessary changes to its electronic recordkeeping system. Total annual burden for this requirement is 2,160 hours.

	18 railroads	
Burden time per response:		120 hours
Frequency of Response:		One-time
Annual number of Responses:	18 modified electronic recordkeeping systems	
Annual Burden:		2,160 hours

Calculation: 18 modified electronic recordkeeping systems x 120 hrs. = 2,160 hours

Total annual burden for this entire information collection submission is 162,892 hours.

13. Estimate of total annual costs to respondents.

As noted above under § 227.215, FRA believes that 18 railroads will be affected by the requirements for electronic recordkeeping systems. Conforming electronic recordkeeping systems will involve a one-time cost. FRA estimates that the time required to make any additional changes necessary to build an archive subroutine and comply with the electronic recordkeeping requirements, including testing and documenting, would average approximately 120 hours per system. FRA estimates that the cost of a journeyman programmer is \$100 per hour (including fringe benefits). Thus, the cost would be approximately \$12,000 per affected railroad. For the 18 estimated railroads that will need to modify their electronic recordkeeping systems to be compliant with this final rule, the total additional costs would be \$216,000.

Calculation: 18 electronic recordkeeping systems x \$12,000 = \$216,000

Additional costs to respondents outside of the burden hour costs above and those provided in the regulatory impact analysis (RIA) accompanying this proposed rule are as follows:

\$ 2,000	Supplies (paper, etc.)
8,000	Miscellaneous (training materials, etc.)

\$ 10,000	Total

GRAND TOTAL COST = \$226,000

14. Estimate of Cost to Federal Government.

There is no cost to the Federal Government in connection with these information collection requirements. Railroad carrier records are examined by FRA inspectors on a routine basis as part of their regular enforcement activities that monitor carrier compliance with Federal rail safety regulations.

15. Explanation of program changes and adjustments.

The collection of information associated with this proposed rule is **new**. It results from Section 413 of the Rail Safety Improvement Act (RSIA) of 2008. By definition, the entire estimated hourly burden of 162,892 hours is the result of a **program change**.

The cost to respondents of \$226,000 would also be a **program change** for the same reason.

16. Publication of results of data collection.

FRA has no plans to publish this information. However, as with any agency information collection the agency undertakes covered by the Paperwork Reduction Act of 1995, the general public and other interested parties may request a copy of the information collection submission and FRA will promptly provide it (as it has done numerous times in the past).

17. Approval for not displaying the expiration date for OMB approval.

Once OMB approval is received, FRA will publish the approval number for these information collection requirements in a Federal Register Notice.

18. Exception to certification statement.

No exceptions are taken at this time regarding this information collection. FRA does not expect that there would be circumstances in the future where the agency would take an exception to one of the certification criteria. However, FRA cannot categorically state that the agency would never take an exception because there may be circumstances (such as legislative mandate by Congress) that might warrant FRA taking an exception. In such a case, FRA would provide a full explanation to OMB for it to evaluate and comment on.

Meeting Department of Transportation (DOT) Strategic Goals

This information collection supports the top DOT strategic goal, namely transportation safety. This collection of information furthers national rail safety by protecting the health and lives of train and engine and other covered employees in the event of a release of hazardous materials that are asphyxiants or poisonous-by-inhalation (PIH). Specifically, the collection of information supports rail safety by ensuring that other employees – besides locomotive train and engine employees – have been duly designated to receive/use EEBA's. With this information, agency inspectors can confirm that these employees too had received an EEBA device and that they understand where to find them in the event of an accident/incident where there is exposure to hazardous materials.

With the information collected, FRA will have necessary data concerning the basis of a railroad's decision to select a particular EEBA or type of EEBA for its employees. With this information, FRA will know whether EEBA's meet the rule's criteria (for NIOSH-certified or ISO-certified devices) and whether they will provide the necessary breathing time and face and neck protection to facilitate employees escape in the event of exposure to various asphyxiants and poisonous-by-inhalation (PIH) materials released in an accident/incident. EEBA's that did not meet the rule's requirements could result in serious injuries and fatalities to covered railroad employees.

With a copy of the manufacturer's EEBA instructions at each railroad's system headquarters, FRA inspectors can determine whether railroads were complying with necessary EEBA storage instructions so that employees will have access to them when needed. Also, the copy of the manufacturer's EEBA instructions, covered railroad employees will have a very valuable reference document relating to the proper location and storage of EEBA's selected by their railroad. Proper storage of EEBA's and knowledge of the EEBA devices storage place will help save lives and reduce/eliminate serious injuries.

With the information collected, FRA can verify that railroads have devised and carried out a program for the inspection, maintenance, and replacement of EEBA's and can confirm that railroads are actually implementing their own programs. With the required records in this section, FRA can be confident that railroads have conducted necessary pre-trip and periodic EEBA inspections to ensure that these devices are/were properly functional and will have an accurate documentary trail of all EEBA turn-ins, maintenance activities, repairs, and replacements. In the event of an accident/incident that released hazardous materials and employee injuries/fatalities resulted, these records will be essential for agency investigators to review to determine EEBA functionality and the cause of any employee injury/fatality.

With the railroads' general program to implement the requirements of this proposed rule/Part, FRA can be assured that railroads have adopted and complied with a general EEBA program that ensures that the selection and distribution of the EEBA is done in a

technically appropriate and sustainable manner, and is supported by a comprehensive set of policies and procedures. Also, the information collected enables FRA to fully ascertain that covered employees are properly instructed/trained in the use, inspection, and maintenance of an EEBA. Without such programs and without such training, the health and lives of train and engine and other employees would be directly jeopardized. There is no question that train and engine employees will be injured and die if they have no recourse to suitable and properly functioning EEBA's during a hazardous materials release similar to the ones that occurred at the Macdona, Texas, and Graniteville, South Carolina, accidents.

In sum, by ensuring that railroads establish and implement general Emergency Escape Breathing Apparatus (EEBA) programs, by confirming that EEBA devices meet the requirements of this rule, and by verifying that covered employees have properly functioning EEBA's and are fully trained in their maintenance and use, the collection of information promotes safety by increasing the survivability of train crew members during the release of hazardous and PIH materials and thus reducing the number of injuries and fatalities caused by such releases.

In this information collection, as in all its information collection activities, FRA seeks to do its utmost to fulfill DOT Strategic Goals and to be an integral part of One DOT.