

Dated: March 25, 2002.

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[FR Doc. 02-7881 Filed 4-3-02; 8:45 am]

BILLING CODE 6718-05-P

## DEPARTMENT OF TRANSPORTATION

### Federal Railroad Administration

#### 49 CFR Part 229

[Docket No. FRA 2000-8545, Notice No. 3]

RIN 2130-AA89

#### Locomotive Cab Sanitation Standards

**AGENCY:** Federal Railroad Administration (FRA), Department of Transportation (DOT).

**ACTION:** Final rule.

**SUMMARY:** FRA amends its regulations by adding standards that address toilet and washing facilities for employees who work in locomotive cabs. This rule provides exceptions for certain existing equipment and operations, and establishes servicing requirements.

**DATES:** This final rule will become effective on June 3, 2002.

**ADDRESSES:** Any petition for reconsideration should reference FRA Docket No. FRA 2000-8545, Notice No. 3, and be submitted to the Department of Transportation Central Docket Management Facility located in Room PL-401 at the Plaza level of the Nassif Building, 400 Seventh Street, SW., Washington, DC 20590. All docket material related to this proceeding will be available for inspection at this address and on the Internet at <http://dms.dot.gov>. Docket hours at Nassif are Monday-Friday, 10 a.m. to 5 p.m., except on federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Lou Klein, Office of Safety Assurance and Compliance, Federal Railroad Administration, 1120 Vermont Avenue, NW., Mail Stop 25, Washington, DC 20590, (telephone: 202-493-6235); or Christine Beyer, Office of Chief Counsel, Federal Railroad Administration, 1120 Vermont Avenue, NW., Mail Stop 10, Washington, DC 20590, (telephone: 202-493-6027).

#### SUPPLEMENTARY INFORMATION:

##### I. Background

In 1992, Congress enacted Section 10 of The Rail Safety Enforcement and Review Act (RSERA) (Pub. L. 102-365, September 3, 1992, codified at 49 U.S.C. 20103, note) in response to concerns

raised by employee organizations, congressional members, and recommendations of the National Transportation Safety Board concerning working conditions in locomotive cabs. In this legislation, Congress issued mandates concerning locomotive crashworthiness and cab working conditions. Section 10 of RSERA, entitled Locomotive Crashworthiness and Working Conditions, required FRA "to consider prescribing regulations to improve the safety and working conditions of locomotive cabs' throughout the railroad industry. In order to determine whether regulations would be necessary, Congress asked FRA to

assess the extent to which environmental, sanitary and other working conditions in locomotive cabs affect productivity, health and the safe operation of locomotives.

In response to Section 10 of RSERA, FRA studied a variety of working conditions in locomotive cabs, including sanitation, noise, temperature, air quality, ergonomics, and vibration. In September 1996, FRA submitted its Locomotive Crashworthiness and Cab Working Conditions Report ("Report") to Congress, which describes the results of these studies. The Report is available for review in the docket of this matter and was discussed in detail in FRA's Notice of Proposed Rulemaking (NPRM) on Locomotive Cab Sanitation Standards. See, 66 FR 136, January 2, 2001.

In short, FRA surveyed in excess of 200 locomotives to assess cab sanitation facilities. FRA found a wide range of conditions, which varied due to weather, type of sanitation system in place, carrier maintenance and service programs, locomotive model, and economic status of the railroad. In addition, some locomotives were not equipped with sanitation facilities. FRA found dirty floors and toilet seats, missing toilet seats, poor ventilation, offensive odors, and lack of toilet paper. In very cold weather, some units tend to freeze and become inoperable. Of the cabs surveyed, approximately thirty percent were deficient in some manner related to the use of sanitation facilities.

The Report noted that employees and rail management play a role in the condition of sanitary facilities; poor sanitary conditions aboard locomotives are caused by inadequate maintenance and/or heavy use or misuse by operating crews. Nearly all railroads had programs in place to service toilet and washing units, although the program requirements vary from property to property depending on degree of use, toilet system in place, and weather

conditions. In addition, FRA found that adherence to the servicing programs was uneven throughout the industry, and that poor servicing was often the primary cause of unsanitary facilities.

The Report also explained that there was disparity in the legal treatment of locomotive cab sanitation among state and federal regulatory and enforcement bodies and confusion existed among industry members concerning applicable standards and guidelines. See NPRM, 66 FR 136-7.

The Report concluded that, given the significant role that servicing and use play in maintaining a sanitary workplace and the relative ease with which servicing and use may be modified, the issue of locomotive sanitation could best be resolved through rail management and labor cooperation.

Following publication of the Report, FRA continued to receive employee complaints about the state of sanitation in locomotive cabs, and the health and safety risks associated with working in an unsanitary area. FRA also received complaints from employees of one railroad concerning the disposal method used in a particular sanitation system. By design, this system requires temporary storage of untreated waste in sealed waste containers, which gave rise to perceived health and safety concerns. There were also concerns about the expansion of this system as the railroad's territory increased, the increase of "power sharing" arrangements among the carriers, and the administrative difficulties that would arise in maintaining and mixing different systems. Finally, some State agencies expressed frustration with FRA concerning federal preemption of certain state sanitation regulations, and the uneven treatment given locomotive sanitation by the state and federal courts.

In light of these concerns, FRA determined that cab sanitation must be revisited and addressed so that cab employees would have access to adequate sanitary facilities, and to ensure uniform application of the law. Despite the considerable acrimony that had developed in the industry surrounding this issue, FRA remained convinced that it should be addressed cooperatively, with the assistance of the stakeholders who possess the knowledge and expertise to resolve the problem effectively. Therefore, on June 24, 1997, FRA presented the subject of locomotive cab working conditions, including sanitation, to the Railroad Safety Advisory Committee (RSAC).

RSAC was formed by FRA in March 1996 to provide a forum for consensual

rulemaking and program development. The Committee includes representation from all of the agency's major customer groups, including railroads, labor organizations, suppliers, manufacturers, and other interested parties. FRA typically assigns a task to RSAC, and after consideration and debate, RSAC may accept or reject the task. If accepted, RSAC establishes a working group that possesses the appropriate expertise and representation to develop recommendations to FRA for action on the task. These recommendations are developed by consensus. If a working group comes to consensus on recommendations for action, the package is presented to the full RSAC for a vote. If the proposal is accepted by a simple majority of the RSAC, the proposal is formally recommended to FRA. If the working group is unable to reach consensus on recommendations for action, FRA may, as necessary, move ahead to resolve the issue through traditional rulemaking proceedings.

When FRA presented the subject of locomotive cab working conditions to RSAC, the agency stated the purpose of the task as follows: to safeguard the health of locomotive crews and to promote the safe operation of trains. RSAC accepted this task, formed a Locomotive Cab Working Conditions Working Group ("Working Group"), and designated this assignment Task No. 97-2. As to sanitation, RSAC asked the Working Group to research comparable workplace requirements in an effort to develop minimum acceptable regulations, guidelines, or standards as appropriate for the locomotive cab environment.

The Working Group consists of representatives of the following organizations, in addition to FRA:

- American Association of State Highway & Transportation Officials
- American Public Transportation Association
- American Short Line and Regional Railroad Association
- Association of American Railroads
- Brotherhood of Locomotive Engineers
- Brotherhood of Maintenance of Way Employees (Nonvoting Member)
- International Brotherhood of Electrical Workers
- National Railroad Passenger Corporation (Amtrak)
- Railway Progress Institute
- Sheet Metal Workers' International Association
- Transport Workers Union of America
- United Transportation Union.

The Working Group's goal was to produce recommendations for locomotive cab sanitation standards

warranted by an assessment of the available information, including the FRA survey of sanitary facilities and complaint information. The Working Group met several times for over a period of nearly two years to discuss locomotive cab sanitation in the railroad industry. The discussions covered all aspects of sanitation facilities in the locomotive cab, including toilet systems, washing facilities, potable water, ventilation, lighting, trash disposal, provisions for toilet paper and bottled water, servicing, and unique operations or characteristics that might require specialized regulatory treatment.

The Working Group reached consensus on a series of recommendations for a proposed sanitation standard, referred them to the full RSAC, and RSAC approved them on December 7, 2000. On January 2, 2001, FRA published the NPRM, which incorporated many of the Working Group's recommendations. FRA held a public hearing on April 2, 2001, to gather comments from interested parties, and then reconvened the Working Group on August 22, 2001. The Working Group considered all comments received, and again reached consensus on recommendations for a final standard. These recommendations were presented to the full RSAC and on December 10, 2001, RSAC voted by simple majority to forward the recommendations to FRA as the basis for a final sanitation standard.

The discussion that follows outlines the nature of each comment, the Working Group's recommendation for addressing the comment, and how FRA resolves the comment in this final rule.

## II. Summary of Comments and Conclusions Reached

FRA received comments to the cab sanitation NPRM from approximately 13 organizations and individuals, and these are available to the public for review in DOT's electronic docket (<http://dms.dot.gov>). Some of the commenters expressed appreciation that the subject of locomotive sanitation would now be addressed by a federal standard, many expressed broad support for the basic principles and approach taken in the NPRM, and some of the commenters raised issues they believe are not addressed appropriately in the proposed standard. Some of these are not difficult to cure, and some will require additional investigation.

The American Public Transportation Association (APTA) has been a member of the Working Group, participated in developing recommendations for the NPRM, and is generally supportive of the proposed standard. However, when

its member organizations reviewed the NPRM, they identified an issue concerning commuter work trains that is not addressed in the NPRM. Commuter railroads and their contractors use work trains to maintain the right-of-way along their routes, and typically use older locomotives that are not equipped with sanitary facilities to power these work trains. The operation of these trains is very similar to switching, transfer, and some Class III service, in which employees are not captive in the cab for an entire work shift, and have access to toilet facilities along the right-of-way. APTA states in its comments that all of the commuter railroads that own and maintain their rights-of-way provide alternate access to sanitation facilities if the locomotives are not equipped with toilets. There are a variety of methods used to accomplish access: portable toilets are placed at the work site; cabooses with toilet facilities are attached to the work train; crews are provided with keys to passenger station facilities; portable toilets are placed on flat cars and attached to the work train; a passenger coach equipped with facilities is attached to the work train; and highway vehicles are provided to shuttle employees to the nearest facility.

The basis for the exceptions provided in the NPRM for switching, transfer service and Class III service is that employees must be given adequate access to sanitation facilities, even though the locomotive on which they work is not equipped with a toilet. Retrofitting locomotive cabs with new toilet facilities is extremely costly and labor-intensive. Therefore, the Working Group recommended that FRA provide an exception in the final rule to address commuter work trains in which the locomotives are not equipped with toilet facilities, so long as the employees are given appropriate access to facilities. FRA agrees that such an exception is appropriate.

APTA also requested a new definition for the final rule to properly identify the trains covered by this exception: a non-revenue service train used in the administration and upkeep of the railroad. The proposed definition is very similar to one published in the revised power brake rule (*See*, 49 CFR 232.407(a)(4)), except that it does not include a reference to the train's tonnage. The issue of tonnage has no bearing on access to sanitation facilities, and therefore, FRA concurs that there is no reason to include this in the new definition. However, FRA believes the definition should be clarified to indicate that only *commuter* work trains are covered by the exception. The Working Group and FRA did not contemplate

such an exception for freight railroads, whose facilities are often much more dispersed geographically; and therefore, the definition and exception as they appear in the final rule apply only to commuter work trains. Section 137(b)(1)(i) of the final rule now includes commuter work trains in the exception that previously applied only to commuter service.

The National Railroad Passenger Corporation (Amtrak) participated in the Working Group meetings and submitted comments to the docket following publication of the NPRM. Amtrak initially raised three issues in need of attention, but subsequently notified FRA that its concerns regarding two of the issues were no longer significant. However, Amtrak noted that the definition for "switching service" in the NPRM did not include passenger operations, as it traditionally has in other regulations and in practice. FRA and the Working Group agreed that the NPRM was in error, and the definition of "switching service" now includes passenger, as well as, freight operations.

In the course of the Working Group discussions in August 2001, Amtrak raised concerns about cab cars used in push-pull in which the lead unit may not be equipped with toilet facilities in a few areas of the country. This practice is restricted to very few cars and the employees working on these trains have access to facilities in the passenger coaches of the train. In addition, cars that do not possess toilets are decreasing in the Amtrak system, and will not be replaced with unequipped units. The traditional Amtrak locomotives and cab cars are equipped with compliant toilet facilities for the cab crew. Amtrak requested and the Working Group recommended that FRA insert a narrow exception in the rule text to permit Amtrak to run these cab cars so long as employees have adequate access to sanitation facilities in the passenger coaches of the train or at passenger stations along the route. FRA agrees that, given the limited circumstances in which these cars are used in the lead position and that the employees have access to facilities elsewhere, a narrow exception is appropriate. Therefore, FRA adds a new exception in this final rule, in § 229.137(b)(1)(vi).

The Association of Railway Museums (ARM) is a member of the full RSAC Committee, representing tourist, scenic, historic and excursion railroads. ARM commented on the NPRM and supports the approach it takes, particularly with respect to tourist railroads. However, ARM notes that some of its members do not operate on the general system of railroad transportation and suggests that

FRA should clarify in this document that this sanitation standard does not apply to non-general system railroads.

This sanitation standard will become part of the locomotive safety standards, 49 CFR part 229. Section 229.3 states that the locomotive standards do not apply to "a railroad that operates only on track inside an installation which is not a part of the general system of transportation \* \* \*". As used here, the phrase "on track inside an installation" includes entities such as tourist, scenic, historic and excursion railroads. Therefore, if these railroads operate only within installations that are not part of the general system of transportation, they are not covered by part 229 and will not be covered by the sanitation standard. This is true regardless of whether the railroad is insular or not; insularity is not an issue in part 229. (See, e.g., 49 CFR 234.3(c).)

The Tourist Railroad Association (TRAIN) is a member of the full RSAC Committee and represents approximately 300 tourist railroads and railroad museums. TRAIN submitted comments to the NPRM which suggest one minor change to the rule text. TRAIN states that their members may not be "carriers" pursuant to certain federal law, and therefore that term should be removed from the exception that relates to tourist railroads, § 229.137(b)(1)(v). As used here, of course, "carrier" has the meaning conveyed by the railroad safety laws (See, 49 U.S.C. 20102) which clearly cover tourist operations. Nevertheless, to avoid any implication with regard to other statutes, FRA has omitted the word "carrier" from the rule. The rule text now states that employees must have access to "railroad-provided sanitation facilities," rather than "railroad carrier-provided facilities" as stated in the NPRM.

Two individual locomotive engineers submitted comments to the NPRM. Mr. P.R. Wilcox, Local Chairman of the Brotherhood of Locomotive Engineers Division 848, wrote to underscore the unsanitary conditions that are present on many locomotives and to encourage FRA and the Working Group to complete the task with a final standard. Mr. E.M. Hendricks, an engineer in Tucson, Arizona, also stated that the conditions are at times egregious and that a federal regulation is necessary to correct these problems. Mr. Hendricks believes that lack of proper servicing is typically the problem and that sanitation facilities should be added to the locomotive daily inspection so that employees in the lead locomotive begin their shift with sanitary facilities. FRA and the Working Group concur with

these commenters and the final standard addresses their concerns.

The Legislative Board of Arizona of the Brotherhood of Locomotive Engineers (BLE) submitted a comment concerning the juxtaposition of difficult working conditions resulting from poor sanitation facilities and the difficult working conditions that result when cabs in the Southwest are not air conditioned. The Arizona BLE states that most engineers would prefer to work in an air conditioned unit during the summer months, so long as the consist includes one locomotive with operating, sanitary facilities. If given a choice, engineers would most often work in an air conditioned locomotive without a proper sanitation facility, so long as one locomotive in the consist possessed appropriate facilities. The Arizona BLE suggests that the crew should have the discretion to determine if a noncompliant, air conditioned unit would be taken out of the lead position in favor of a non-air conditioned unit that possesses a compliant sanitation facility.

The Working Group and FRA grappled with this issue in discussions prior to and following publication of the NPRM. The choice would be a difficult one to make and cannot be resolved in the context of this rulemaking procedure. FRA cannot issue a final sanitation standard that includes requirements concerning air conditioning, because it would exceed the scope of this rulemaking as established in the NPRM. Even assuming FRA could address air conditioning in this final rule, a very complicated list of considerations would have to be reviewed in order to determine which locomotive should be placed in the lead position. A highly subjective hierarchy of "palatable" working conditions would have to be devised; the age, condition and power of each locomotive would have to be assessed in relation to the load carried; power sharing arrangements between the major carriers would have to be examined to prevent interruptions in service; and weather conditions and geography would have to be anticipated. This sort of "consist management" requirement, though desirable, is extremely difficult to contrive on a national basis given the enormity of variation among railroads, operations, regions, and personal preferences across the industry. FRA will continue to seek methods to minimize safety and health hazards for cab employees with the assistance of the Working Group, but the issue of cab temperature cannot be addressed in this final standard.

The United Transportation Union (UTU) participated in all of the Working Group discussions and made a statement at the public hearing. The UTU stated that the Working Group worked hard to reach appropriate solutions for existing problems concerning sanitation and the the NPRM, if adopted as a final rule, would improve the level of safety in the industry. The UTU encouraged FRA to move forward with a final standard.

The Association of American Railroads (AAR) participated in the Working Group discussions, submitted comments to the NPRM, and took part in the public hearing. The AAR's comments respond to requests for input that FRA issued in the NPRM. First, FRA invited comment on the policy of permitting locomotives with defective toilets to be used as trailing units in a train or in other limited circumstances. The AAR supports this proposal, stating that the condition of toilets in trailing units is not relevant so long as the lead, occupied unit possesses a compliant unit.

FRA asked whether two types of sanitation systems currently in use, the dry hopper and the bogan, which must be phased out pursuant to the new rule, are used pervasively throughout the industry. The AAR states that these systems are isolated to the two carriers the Working Group and FRA were aware of when preparing the NPRM. FRA was concerned that the temporary exception proposed in the NPRM for continued use of these systems, although they do not comply with the new definition of "toilet facility," would be more widespread than anticipated when the exception was proposed. As is explained in greater detail below, each of these systems is being phased out over time and replaced with compliant toilets.

FRA also asked for assistance in clarifying § 229.137(c), which permits use of a lead unit with a defective toilet when several conditions exist that make it impossible to move the train without use of that locomotive. FRA thought that the language of the exception might be refined to appear less complicated. The AAR notes that the carriers will rely on this section rarely, but that the need for the exception is inevitable on occasion. The AAR concurs that the proposal accurately captures all conditions that must be present in order to take advantage of the exception and that shortening or refining the language in § 229.137(c) is not possible.

FRA also asked for comment on how § 229.137(c) would affect push-pull operations. The AAR states that push-pull service is used only in commuter

service, not in freight railroading. The proposal and the final rule provide an exception for commuter service so that § 229.137(c) will never come into play where push-pull service is used.

FRA stated in the NPRM that it would consider reducing the 10-day period during which a railroad can use a defective toilet in switching or transfer service to reflect common practice (§ 229.139(d)). The AAR argues in its comments that shortening this 10-day period would not provide the railroads with sufficient time to repair defective units, and as written in the NPRM, would provide no health benefit because employees must be given access to facilities during the 10-day period. Based on this information, the fact that the Working Group consented to this time period, and an absence of evidence that the 10-day period is excessive or harmful, FRA has retained this provision in § 229.139(d) of the final rule.

Finally, the AAR responded to FRA's request for information on the Microphor toilet system. This system has been used pervasively throughout the industry for at least twenty years, and several questions concerning its maintenance and operation surfaced during the Working Group discussions and in comments to the NPRM. The Microphor is a biological treatment system in which waste is flushed into a chamber where biological agents reduce the waste to harmless by-product. Then the by-product is chemically treated to neutralize the biological agent, and the solution is slowly released into the atmosphere. When working properly, the effluent is clear liquid, or liquid with small amounts of inert material dissolved or suspended in it. The U.S. Food and Drug Administration (FDA) has statutory authority to regulate the disposal of human waste in interstate transportation, and has issued standards that prohibit disposing untreated waste and permit discharging waste that has been treated to prevent disease. See 21 CFR part 1250. In 1973, the FDA examined the Microphor system pursuant to its authority and determined that it meets the standard if operating as intended.

The AAR stated in its comments and at the public hearing that more than one thousand Microphor systems are in use in the industry today. The AAR is not aware of any injury or illness caused by the use of the Microphor system. In addition, the AAR states that the Microphor flushes and processes waste without exposing employees to contact with the waste or chemicals. The system works on water, air pressure, and chlorine; no electricity is needed.

Finally, the AAR notes that the system has been improved over time. The AAR believes that the chemical configuration and delivery methods used to process waste have been improved for efficiency and safety in handling. Also, more efficient flushing designs have been developed to lower water and chlorine consumption and increase capacity.

FRA asked commenters to consider the need for explicit servicing requirements for the Microphor, which might include following the manufacturer's recommended maintenance plan or periodically testing the effluent to determine whether the treatment process is working properly. In its written comments, the AAR stated that these changes are not necessary because the carriers follow specific maintenance programs that suit local conditions and the system has not resulted in any known injuries or illnesses.

Following the Working Group meeting in August 2001, the AAR reconsidered its view that testing the discharge was not necessary. Based on persistent complaints from labor organizations that the Microphor often discharged untreated waste along the right-of-way, the railroads agreed to conduct testing under a variety of operational conditions. The initial testing indicated that some units perform as intended, but some apparently do not. According to the AAR, the testing results revealed inconsistencies in the operation of the Microphor system, which may be due to design changes, maintenance, usage, or other factors. In September 2001, the AAR notified FRA that certain freight and passenger carriers and the manufacturer developed a test plan to validate the effectiveness of the Microphor system. The test plan would begin in the fall of 2001 and continue for approximately three months. Under the test plan, the carriers would gather usage patterns and operating conditions, such as weather, across the industry, and then subject a large number of the toilets to these "real world" conditions. The AAR will consult with FRA when the test results have been gathered.

The Brotherhood of Maintenance-of-Way Employees (BMWE) and the Brotherhood of Railroad Signalmen (BRS) submitted written comments and participated in the public hearing of this matter. Both organizations are members of the full RSAC, and the BMWE is a non-voting member of the Working Group. These organizations represent railroad employees who work along the railroad right-of-way and are directly impacted by discharge from the Microphor system.

The BRS and the BMWWE assert that the discharge is often untreated or poorly treated waste, which exposes employees to the risk of illness or, at the very least, a highly unpleasant work environment. The organizations state that waste treatment in the Microphor is time-dependent, and suggest that waste is not always in contact with the chlorine for a sufficient length of time. This problem may arise when very frequent flushing occurs, when the chlorine concentration has diminished substantially, when the flushing mechanism lacks sufficient water, or when the bowl is clogged. In addition, the BRS and BMWWE state that the manufacturer's design changes over the last twenty years have reduced the efficiency of the treatment process.

Both organizations urge the FRA to prohibit any discharge from the Microphor system along the right-of-way until more information has been gathered to determine the nature of the discharge. If FRA chooses not to prohibit discharge (as is the case in the final rule), they urge FRA to require the railroads to engage in an active testing program to ensure that the system and maintenance plan are working properly. The BRS also suggested that the railroads install holding tanks beneath the Microphor that would hold any discharge until the locomotive is at a location where the waste can be emptied into a larger container or treatment process. The BRS and BMWWE representatives on the full RSAC Committee did not concur with the Working Group's recommendation to the full RSAC that FRA publish a final rule substantially consistent with the NPRM. Instead, these organizations voted to send the work product back to the Working Group for further analysis.

FRA agrees with the BRS and BMWWE that this issue is serious and in need of investigation and analysis. However, FRA has determined that the final rule should not include a strict prohibition on discharge from the Microphor. The subject matter of this rulemaking is sanitary conditions in the locomotive. FRA does not have primary responsibility over discharges from interstate conveyances, and even if it becomes necessary for FRA to regulate in this area to protect employee health, there is no reason to delay the present final rule in order to address the issue of discharges. Further, given the number of units currently in use throughout the country, the adverse impact of such a prohibition would be enormous. Most likely, there would be a substantial increase in the number of unsanitary toilet compartments, clogged commodes, and unhealthy conditions

for cab employees, who are often required to be present in the cab for 8 or more hours. If the railroads took all of these locomotives out of service, the industry and the economy it generates could not function.

However, FRA has added language to the rule text in § 229.139 to more fully describe the conditions that must be present in order for the toilet to be "operating as intended." FRA and the Working Group believe that this change from the NPRM will help to resolve some of the issues surrounding the Microphor and the composition of its discharge.

FRA has been testing the Microphor system and its discharge at selected locations during the last several months, and plans to do additional testing. Thus far, FRA has not collected enough data on which to draw reliable conclusions concerning the system and its ability to treat human waste prior to discharge. When FRA has completed the testing, FRA will consult with the industry concerning any questions or conclusions reached, and to compare results with the tests completed by the AAR member organizations. Further, FRA will consult with the FDA to determine what actions that agency deems appropriate under its current rules or through further rulemaking. At that point, FRA will be in a better position to determine whether the FRA sanitation standard should address the characteristics of the effluent.

The Working Group was asked to address sanitation facilities for locomotive cab employees and worked tirelessly for three years to develop workable solutions that cab employees and rail management can support. FRA believes it is very important to publish the standard now to correct ongoing problems that affect cab employees, to hasten the retirement of older systems, and to remedy the uneven state and federal treatment of this issue in the state legislatures and the courts.

### III. Section-by-Section Analysis

It is important to note that FRA's final rule text set forth below differs in some respects from the other federal and state sanitation standards because of the unique characteristics of the railroad operating environment. The working environment for railroad cab employees is quite different than the typical American worker. Existing locomotive toilet systems and corresponding maintenance needs are not uniform throughout the industry. Employees may work on a different locomotive and a variety of routes each day of the week. Employee assignments and actual time spent in the cab may vary significantly

during a typical week, and toilet systems might vary significantly on each of these occasions. The time it takes to complete a particular route might vary greatly from day-to-day, due to traffic, load, and weather conditions. Small operators typically possess older equipment, and some units may not be equipped with toilet facilities at all. On these properties, employees may generally have access to adequate sanitation facilities along the right-of-way, but there may be occasions when that is difficult to achieve.

As FRA discussed in the NPRM, there are significant economic and operational barriers to requiring a "one-size-fits-all" sanitation standard, given all of these factors, and consequently FRA has made every effort in this proceeding to be flexible. The basic requirement set forth in the rule is that each cab employee should have access to clean, operable toilet facilities, as the need arises for each individual. There may be instances where that basic principle is frustrated, but FRA believes the rule minimizes that likelihood to the fullest extent possible.

### Definitions

The final rule provides definitions for key terms used in this amendment, and these will be placed in § 229.5 with the other definitions established for part 229. The definitions are set forth alphabetically.

For the terms "commuter service", "other short-haul passenger service", "switching service", and "transfer service", please see the detailed discussion of the exceptions to the general requirements, discussed in conjunction with § 229.137(b) below. FRA has defined the term "commuter service" to track the agency's definition in 49 CFR part 209, Appendix A. FRA has added a definition of "other short-haul passenger service" to track the definition put forth in Appendix A, as well. This term was used in the NPRM within the exception for commuter service, and had not been previously defined in part 229.

FRA added a definition for the term "commuter work train", in response to comments received from APTA. FRA agrees that a definition should be provided and uses the definition that has been used for work trains on freight railroads, without any restriction on tonnage. The definition of work train developed for freight railroads involves power brake application, and so tonnage in the work train is extremely important. In this rule, tonnage has nothing to do with sanitation facilities on commuter lines, and so FRA did not include any restriction on tonnage.

The definition of the term “modesty lock” relates to a rudimentary lock that would be required on the door of the sanitation compartment. The modesty lock is a lock or latch that is operated by the occupant of the sanitation compartment to provide privacy while in use. The rule does not require the modesty lock to be designed to prevent deliberate forced entry. For example, some locks could be designed to provide emergency access, to accommodate carrier concerns that access may be required in the event of an accident or health problem. Such access could be gained, for example, by using a coin to turn a slotted pin or using a pencil inserted into a hole to slide a latch. Such simple measures would prevent inadvertent intrusion, thereby maintaining privacy while allowing prompt emergency access. Most locomotives are now equipped with a modesty lock that meets the definition, and these existing locks vary from property to property. In addition, there are a variety of products available on the market that would meet the requirements of this definition, which vary in price, sophistication, and size. For example, a very simple surface-applied slide latch may be employed to meet the requirements of the definition. At this time, FRA sees no need to prescribe more specific requirements for the modesty lock, so that each railroad may choose the best device among the variety of products available to suit their equipment and cost needs, and so that existing locks which serve the intended purpose of privacy may remain in place.

The definition of “potable water” references the requirements of the U.S. Environmental Protection Agency drinking water standards, which are widely recognized as the pertinent reference standards. This definition also states that commercially available bottled water is deemed to be potable water for purposes of the sanitation standards. So long as employees have potable water available in adequate supply for drinking and washing purposes that is bottled and a recognized commercial product, the running water that might be present in the sanitation facility on some locomotives does not have to strictly meet the EPA drinking water guidelines. On many older locomotives in use, tanks of water are present, and may have been used at one time for drinking and washing purposes. Nothing in the rule requires removing these water tanks. However, with the advent of bottled water, and the knowledge that it is sometimes difficult to maintain “potable” water in the large, on-board

tanks, carriers typically now provide packs of bottled water to cab employees. Also, on many of the newer locomotives, there is no large water holding tank for employee use, and carriers with these units also utilize the convenience and safety aspects of commercially available bottled water. FRA sees no adverse consequences associated with this usage, and believes it may decrease the risk of illness to cab employees.

The final rule includes definitions for the terms “sanitary” and “unsanitary,” which involve the absence or presence of filth, trash, and waste that cause a reasonable person to believe that the condition might constitute a health hazard; and persistent odor sufficient to deter normal use of the facility or to give rise to a reasonable concern with respect to exposure to hazardous fumes. FRA believes that providing these definitions adds clarity to this issue and ultimately helps the industry comply with the standard. These terms when used in ordinary discussion are somewhat subjective, and might produce different inferences among different people. Therefore, FRA’s definition incorporates the perceptions of a reasonable person, or the average reaction to sanitation facilities, and includes specific examples that would constitute unsanitary conditions. Sanitary conditions are thus defined as the absence of those conditions. The list provided in the definition is illustrative, not exhaustive, and serves as guidance to the industry of what FRA will consider compliant. Undoubtedly, FRA inspectors and the industry will have to utilize on-the-spot judgments in order to distinguish conditions that are acceptable from those that are not. These definitions are inserted to guide those local decisions in an area that can be very subjective. The Working Group and FRA generally accept that immaculate conditions cannot be expected, any more than one would expect such conditions in a public rest room in an airport or office building. However, sanitation compartments are expected to be clean and orderly following periodic servicing and cleaning. Since the duty to remedy an unsanitary condition arises only at the daily inspection, it is particularly appropriate to specify a standard that describes conditions most people would find unacceptable.

As stated in the NPRM, the Working Group discussed what perception the “reasonable person” must have before a condition is deemed unacceptable. For instance, what amount of filth, trash, or human waste is considered significant by the reasonable person? FRA’s

approach to this is governed by the need to encourage use of sanitary facilities on a regular basis as a matter of good health. Even if a condition is objectively harmless (as determined by later laboratory analysis), the fact that it gives the appearance of possible unhealthfulness could discourage use of the facility and contribute to degraded health.

To limit disruption of service because of conditions over which the carrier has limited control, the railroads suggested that certain conditions be treated as unsanitary only if “caused by mechanical or maintenance failure in the compartment.” This language would present enforcement difficulties for FRA in determining whether a mechanical or maintenance failure has occurred. This raises issues that could legitimately bear on the exercise of FRA enforcement discretion, yet FRA believes such issues shouldn’t serve as a defense to failure to address unsanitary conditions at the daily inspection. No railroad employee should have to contend with unsanitary conditions left behind by a trespasser or prior employee user of the facility.

With the exception of branch lines discussed below, as of the daily inspection, railroads should be prepared to clean a sanitation compartment and service a toilet facility or to place the unit in a trailing position if the sanitation compartment is no longer sanitary or operative.

The final rule defines “sanitation compartment” as an enclosed compartment on a locomotive that contains a toilet for employee use. Depending on the type of locomotive, these compartments may be located in the nose of the unit or at the back of the cab behind the engineer’s seat. Further discussions below explain in detail what each sanitation compartment must contain.

FRA defines “toilet facility” as a system that automatically or on command of the user removes waste to a place where it is treated, eliminated, or retained such that no solid or non-treated liquid waste is thereafter permitted to be released into the bowl, urinal, or room and that prevents harmful discharges of gases or persistent offensive odors. FRA developed this definition with the assistance of the Working Group. There are a variety of toilets available for use on locomotives, and FRA did not wish to exclude the use of any of the systems that effectively meet human sanitation needs. Therefore, this definition attempts to establish performance criteria that all of the adequate facilities meet when operating as intended.

To clarify FRA's intent concerning some of the terms in the definition, "automatically \* \* \* removing the waste" does not mean that waste is removed by gravity. Rather, this language is meant to cover systems that possess sensors that flush when the occupant leaves the toilet area. It is FRA's understanding that some toilets that may be used on locomotives utilize this feature, and FRA believes it is an effective method. However, FRA does not intend that systems without a device to separate the waste tank from the user (such as a deflector), which simply permit waste to flow to holding tanks below the toilet bowl and remain there until emptied, meet this definition. These systems are prone to overflowing and noxious odors, and may go uncleaned for some time because the cleaning or emptying process is very unpleasant and hence doesn't get accomplished. The term "on command of the user" means that a flush mechanism is present and functions as intended.

The definition for toilet facility also includes the terms "harmful" and "offensive," which may give rise to differing subjective interpretations. FRA and the Working Group discussed these words and ultimately determined that a certain amount of subjectivity is inevitable when personal preferences for cleanliness are involved. Individuals may differ as to what seems "offensive" or even "harmful." FRA intends that the toilet system must effectively remove or treat waste so that odors generated in the toilet area do not linger and penetrate the cab working environment. FRA will use its reasonable judgment in determining whether odors rise to the level of offensiveness or harmfulness.

The final rule defines "washing system" as a system for use by employees to maintain personal cleanliness. As defined here, the facility may include a secured sink, water, antibacterial soap and paper towels; or antibacterial waterless soap; or antibacterial moist towelettes and paper towels; or any combination of antibacterial cleansing agents. It is critical that all employees have available to them a system in which they are able to clean and sanitize their hands after using the toilet. There are a variety of antibacterial agents available on the market that effectively sanitize and disinfect after toilet use. In addition, there are many locomotive units that do not possess sinks and running water for employees to use as washing facilities. As a result of discussions with the Working Group, FRA understands that most cab crews receive a package of items for use on

each trip, and this "crew pack" typically includes the sort of washing system that is permitted by this definition. Therefore, so long as employees are provided with one of the options included in the definition, or others that may be developed in the future that provide an equivalent level of sanitation, this portion of the sanitation requirement has been met.

Members of the Working Group expressed concern about restrictions on the placement of "crew packs." Some items in these packages are used by employees while in the sanitation compartment, but these packages also include items that employees use while working or eating in the cab, such as paper towels. In addition, crew packs are available for pick up by locomotive crews at on-duty points throughout the railroad network, and employees often grab several of them to keep in the cab. It is likely that some of these packs won't be placed in the sanitation compartment when brought on board, and will be placed, as a convenience, near the employee cab stand for use throughout the work shift. For these reasons, FRA sees no reason to require by regulation that crew packs remain at all times in the sanitation compartment and so, the rule does not restrict the placement or contents of crew packs issued by the railroad.

The only comment FRA received concerning the definitions involves the term "commuter work train" as discussed above. Therefore, FRA did not make changes to the definitions set forth in the NPRM, with the exception of adding "commuter work train." FRA added this term to the definitions, in order to incorporate these trains in the exception for "commuter service" as discussed above. In addition, FRA changed the definition "transfer train" which was used in the NPRM, to "transfer service" here in the final rule, in order to avoid any confusion between the meaning intended in this rule and the meaning intended for "transfer train" in the power brake rules (49 CFR 232.5). "Transfer train" in the power brake context expressly includes trains that pick up or set out cars at industries while en route, and "transfer service" in this rule refers to trains that travel from a point of origin to a point of destination that do not engage in switching. Finally, FRA added a definition for "other short-haul passenger service" because this term, which had previously been incorporated in the definition of commuter service, but is now expressly included in the same exception as "commuter service" requires a definition in accordance with the one FRA has previously published in its

interpretive statement in 49 CFR part 209, Appendix A. This addition does not represent any substantive change from the NPRM.

#### *Amendment to § 229.9, Movement of Non-Complying Locomotives*

The final rule adds paragraph (g) to § 229.9, which prescribes requirements for the movement of non-complying locomotives. The purpose of this addition is to clarify that the provisions set forth in the new §§ 229.137 and 229.139 establish criteria for the movement or handling of locomotives that are discovered to have defective or unsanitary sanitation compartments at the time of the daily inspection. These new criteria for units with defective sanitation compartments supercede those set forth in paragraphs (a)–(c) of § 229.9, which require moving designated locomotives as lite or dead, under certain circumstances, and sometimes require enroute failures to be addressed at the nearest forward point where the necessary repairs can be accomplished. These new criteria for units with defective sanitation compartments also supercede the language in § 229.21(a) and (b), that requires defective items to be repaired prior to departure. As FRA and the Working Group examined the issue of sanitation on locomotives, it was determined that alternative requirements would be more appropriate for the handling of locomotives that are otherwise fit for service, but possess a defective toilet or ventilation system in the sanitation compartment. The power available in these units can be utilized in the train consist, without introducing safety and health hazards associated with the equipment and train movement. The hazards employees face in the presence of defective or unsanitary facilities are addressed by the requirements set forth in the new §§ 229.137 and 229.139.

#### *Amendment to § 229.21, Daily Inspection*

The final rule revises § 229.21 to be consistent with the new requirements in §§ 137 and 139. As currently written, § 229.21 requires railroads to repair all items noted on the daily inspection report prior to using the locomotive. However, the new §§ 137 and 139 permit locomotive units with certain non-complying conditions to remain in service beyond the date on which the daily inspection occurs. For instance, carriers may use a locomotive with a defective toilet facility in switching service for a period of up to 10 days, at which time the unit must be repaired or used in the trailing position. Also, the

railroad may continue to use a locomotive that possesses a defective modesty lock until the next 92-day inspection, at which time the modesty lock must be repaired.

The fourth sentence of paragraphs (a) and (b) have been revised to note this change as a result of the new requirements in §§ 137 and 139. In addition, the fifth sentence of paragraphs (a) and (b) has been modified to note that the railroads may choose to record repairs of conditions that don't comply with §§ 229.137 and 229.139 electronically, rather than on the daily inspection report. Some of the carriers have stated that they have electronic repair reporting systems in place that work more efficiently than paper records. FRA sees no reason to thwart these ongoing programs, so long as they are capable of being audited and effectively track repairs.

#### *Section 229.137(a) Sanitation, General Requirements*

This portion of the sanitation standard sets forth the primary requirements for equipping lead locomotives in use with sanitation facilities. FRA's primary concern is providing locomotive crews in the lead units with access to private toilet and washing facilities, that are equipped with adequate ventilation, toilet paper, and trash containers. Paragraph (a)(1) requires each lead locomotive in use to contain a sanitation compartment, except as indicated in paragraph (b) where exceptions to this requirement are set forth, or where a unit is designed such that no sanitation compartment exists. For instance, certain locomotive units used by Amtrak have toilet facilities located in the engine room, which is enclosed by a door and otherwise meet the requirements of this paragraph. For purposes of this standard, the engine room on these Amtrak units constitutes the sanitation compartment.

The sanitation compartment must be adequately ventilated; equipped with a door that closes and possesses a modesty lock; equipped with a toilet facility that meets the requirements of the definition described above; equipped with a washing system that meets the requirements of the definition described above, unless the railroad otherwise provides the washing products to employees when they report for duty or occupy the cab for duty (typically in crew packs), or where the locomotive possesses a stationary sink that is located outside the sanitation compartment; equipped with sufficient toilet paper to meet employee needs, unless the railroad otherwise provides

toilet paper to employees when they report for duty or occupy the cab for duty (typically in crew packs); and equipped with a trash receptacle, unless the railroad otherwise provides portable trash receptacles for use in the sanitation compartment to employees upon reporting for duty or occupying the cab for duty (typically in crew packs).

The Working Group and FRA determined that ventilation in the sanitation compartment on much of the existing equipment is a simple vent in the wall that opens to facilitate the exchange of fresh air with air in the toilet area sufficiently addresses ventilation. According to discussions with the Working Group, which consists of parties who use and maintain locomotives, these vents adequately diffuse offensive odors, so long as the toilet is sanitary and operating. This vent must be capable of opening or closing on command or control of the user in order to meet the requirement of "adequately ventilated." Other ventilation systems on older locomotive equipment must operate as intended, evacuating the air in the sanitation compartment, in order to meet the proposed standard.

The ventilation systems on new locomotive equipment are more complex. The cab's air flow is controlled and pressurized to maximize air flow and equipment performance, and minimize noise levels in the cab. In order to comply with the requirement concerning ventilation for these newer units, that portion of the ventilation system required to provide air movement in the sanitation compartment must be operative, or other, effective alternative provisions for ventilation of the sanitation compartment must be made.

If the ventilation system for the sanitation compartment is defective as of the daily inspection, the railroad may not use the unit in the lead position, unless repaired. If not repaired, the railroad may use the locomotive in trailing position, in switching service consistent with the requirements of section 137, paragraph (b)(1)(ii), or in transfer service consistent with the requirements of section 137, paragraph (b)(1)(iii). The rationale for permitting this usage when the ventilation system is inoperative is that trailing units are unoccupied, and so no harm would come from utilizing the locomotive in that position, and the exceptions set forth in section 139(b)(1)(ii) and (iii) require the carriers to provide access to adequate facilities elsewhere.

It is important to note that a clean, operable toilet facility will prevent

harmful gases or persistent, offensive odors from developing in the first place, and so the most productive way to eliminate the risk of noxious air in the cab is to focus attention on maintaining the toilet facility properly. It is also important to note that if the toilet room door is designed to be equipped with seals, when the seals are maintained and replaced as needed, odors are less likely to migrate to the interior of the cab. If applicable, replacing faulty sanitation compartment door seals would be advisable to further protect the cab occupants from offensive odors, although the final rule does not require such replacement.

Section 137(a)(2) requires the sanitation compartment to possess a door that closes, and the door must be equipped with a modesty lock. A door which closes is one that, by design or device, stays shut when the user closes it. For instance, a typical interior, residential door with a door knob is a door that closes. Also, a door that possesses a spring device that pulls the door closed after opening constitutes a door that closes. Similarly, doors used to enclose bathrooms on airplanes close when pulled shut, by way of a device similar to a door knob, and would meet the standard set forth here. (These doors also possess modesty locks to prevent unwanted intrusion). FRA does not mandate the type of closing door the locomotive must possess, so long as the door closes by design or on command of the user. This requirement is necessary to provide basic privacy to employees using the sanitation facilities. A modesty lock is a device operated by the occupant from inside the toilet compartment that prevents entry by a person who is not aware that the compartment is occupied. A modesty lock can typically be disabled from the outside in the event of an emergency that requires entry from outside the toilet compartment. FRA believes employees should have the expectation of privacy when using toilet facilities, consistent with similar standards issued by other regulatory bodies and common sense. A door that closes and that possesses a modesty lock provides that privacy.

The railroads on the Working Group expressed some concerns about a modesty lock that would prevent entry in the event of an emergency, such as an accident or health problem. As defined in the rule, the railroads may utilize modesty locks that can be disabled in an emergency, so long as the lock prevents an accidental or unnecessary intrusion. FRA does not prescribe specific requirements concerning the form of the modesty lock. Some of the railroads



utilize fairly sophisticated expensive devices, and some utilize an inexpensive, rudimentary slide device. These achieve the desired level of privacy, and also provide the employer with the ability to enter the compartment in the event of an emergency. Either meet the requirement. As FRA understands it, most locomotives are currently equipped with closing doors that have modesty locks, and if not, the costs associated with adding modesty locks to unequipped units are minimal. In the Working Group discussions, the industry representatives indicated that all units could be equipped with modesty locks by October 6, 2003.

The rule requires all sanitation compartments to be equipped with a closing door as of the daily inspection. However, if the modesty lock is defective as of the daily inspection, the railroad is not required to remove a locomotive from service. The railroad is required to repair the modesty lock on or before the next 92-day inspection required by part 229.

Section 229.137(a)(3)–(a)(4) require toilets and washing systems in lead locomotives in use. FRA understands that there are many varieties of toilet facilities that function effectively on board locomotives, and there are likely to be technological improvements that will bring about new units in the future. The rule takes a performance approach to toilet and washing systems, rather than specifying units by name in the definition, so that effective existing systems and systems not yet developed, are not unintentionally excluded.

As discussed above, FRA does not wish to prescribe a particular type of washing system. However, each lead locomotive must have one of the systems outlined in the definition available for employee use. This paragraph states that the washing system must be located in the sanitation compartment, unless it is otherwise provided to employees when they report for duty, enter the cab for duty, or where the locomotive possesses a stationary sink that is not located in the sanitation compartment. Based on discussions with the Working Group, FRA understands that on some locomotives, washing systems are located in the toilet compartment, but in many cases they are provided to employees in crew packs. Many railroads give crew packs to employees as they begin each work shift, and they typically contain antibacterial soap, paper towels or moist towelettes, toilet paper, and perhaps bottled water. As stated above, FRA sees no need to require the railroad to maintain washing products in the

sanitation compartment, so long as employees receive them in crew packs at the beginning of their shift. The crew packs will be made available to crews at their reporting point or onboard the locomotive. The employer must provide these items to employees.

This paragraph also permits sinks located adjacent to the sanitation compartment to remain outside the sanitation compartment. According to information received from the Working Group, at least one Class I railroad maintains locomotives with stationary sinks that are not in, or capable of being placed in, the sanitation compartment. FRA sees no safety or health risk associated with this configuration and, therefore, the standard does not prohibit this.

Section 229.137(a)(5) states that the sanitation compartment must contain toilet paper in sufficient quantity to meet employee needs, unless the railroad otherwise provides employees with toilet paper when they report for duty or occupy the cab for duty. FRA chose not to prescribe a specific amount of toilet paper for each employee in the cab, believing that this issue is best handled through common sense decision making at the local level. As FRA understands it, some railroads maintain toilet paper in the sanitation compartment, and some rely on crew packs for dissemination of toilet paper. FRA believes either method is adequate, so long as reasonable amounts of toilet paper are provided to meet typical daily needs. If it is determined during the daily inspection that a locomotive is not equipped with sufficient toilet paper, the unit must be equipped prior to departure. For most railroads, this requirement will be accomplished by the use of crew packs, which contain ample toilet paper for each employee's work shift.

Section 229.137(a)(6) requires each sanitation compartment to contain a trash receptacle, unless the railroad provides portable trash receptacles in the employee crew packs. This requirement attempts to provide flexibility to the railroad where space limitations in locomotive sanitation compartments prevent an across-the-board requirement for permanent trash cans or similar fixtures in all sanitation compartments. Therefore, the trash receptacle may be a permanent trash can or similar fixture in the sanitation compartment, or the trash receptacle may be a small plastic bag that hangs from the door handle or is posted to an interior wall. In addition, where the space limitations in the sanitation compartment prohibit placing any sort of trash receptacle in the sanitation

compartment, portable trash bags that can be included in the employee crew packs may be placed outside the sanitation compartment. In these instances, the Working Group and FRA expect that the trash bags will be placed at a location that is as far from the cab stand as possible, such as in the nose of the cab. FRA and members of the Working Group wish to segregate sanitation-related trash from the area where employees work and often eat during the course of the work shift. In large measure, the location of the portable trash bags will be controlled by the employees working in the cab, who have a natural interest in keeping the sanitation-related trash away from the work and eating areas of the cab.

If it is determined during the daily inspection that the sanitation compartment is not equipped with a trash receptacle, or the crew has not been provided one in a crew pack, the railroad must equip the locomotive with a trash receptacle prior to departure. This may be accomplished by placing a trash receptacle in the sanitation compartment, or by providing portable trash receptacles to employees in their crew packs when they report for duty or occupy the cab for duty.

#### *Section 229.137(b) Exceptions*

Paragraph (b) of § 229.137 sets forth exceptions to the general requirements proposed in paragraph (a), discussed above. Paragraph (b)(1)(i)–(v), set forth exceptions to the general requirement of a sanitation compartment in each lead locomotive in use. These exceptions accommodate unique circumstances.

Paragraph (b)(1)(i) exempts locomotives used in commuter service or other short-haul passenger service where employees have access to sanitation facilities at frequent intervals, either at stations or elsewhere on the train. “Commuter service” and “other short-haul passenger service” are defined at length in 49 CFR part 209, Appendix A. Most commuter and other short-haul runs are relatively short in duration, and provide many opportunities during a work shift to use facilities at downtown or outlying terminals. Typically, cab crews in commuter service may use sanitation facilities in the stations they service in the course of their route, or in the passenger cars they are hauling. Therefore, FRA sees no need to require the locomotive cabs in commuter operations to also possess a sanitation facility. In most cases, the configuration of commuter locomotives differs from traditional freight locomotives. Most do not currently possess sanitation compartments and there may be no

additional space to add such a compartment.

This exception makes clear that the sanitation facilities employees use must be provided by the railroad. In other words, the employer may not utilize this exception to the general requirement if employees are forced to use sanitation facilities in businesses along the right-of-way that have no connection to the employer, such as restaurants, plants, or convenience stores. The rule requires each commuter railroad operation subject to these standards to provide sanitation facilities, and employees must not be placed in situations where they are forced to request permission to use the sanitation facilities of foreign establishments during the workday. So long as these conditions are met, and because the nature of commuter operations affords employees the opportunity for frequent access throughout the shift, FRA sees no reason to impose a new, costly requirement for cab toilets on commuter railroad locomotives.

Paragraph (b)(1)(ii) permits all locomotives engaged in switching service, where employees have access to railroad-provided sanitation facilities outside of the cab, to operate without a sanitation compartment in the cab. "Switching service" is defined as the classification of freight and passenger cars according to commodity or destination; assembling cars for train movements; changing the position of cars for purposes of loading, unloading, or weighing; placing locomotives and cars for repair or storage; or moving rail equipment in connection with work service that does not constitute a train movement. This definition is taken from the power brake regulations (49 CFR 232.5) and will be construed as the term is used in those rules.

The exception for switching service is similar to and based on the same general principle as the exception provided for commuter service. Employees engaged in switching service are typically in the cab for relatively short periods of time, and have access to sanitation facilities in rail yard buildings or railroad facilities along the right-of-way. Generally, these employees are not captive in a locomotive cab for long time periods, where a sanitation facility clearly must be provided. Therefore, the rule permits locomotives used in switching service to operate without a toilet in the cab, so long as employees have ready access to railroad-provided sanitation facilities along the right-of-way or in yard facilities at frequent intervals during the work shift. If a railroad is unable to provide the alternate access, this exception cannot

apply. If the switching activity places cab employees at locations where railroad sanitation facilities are not accessible to employees, then the carrier must provide a locomotive that is equipped with all of the items required by paragraph (a) of this section.

Paragraph (b)(1)(iii) relates to transfer service, and tracks the same logic as the exceptions proposed for commuter operations and switching service. Transfer service involves trains that travel between a point of origin and a point of final destination not exceeding twenty miles and that do not perform switching service. Because the cab employees engaged in transfer service generally have the opportunity to use railroad-provided sanitation facilities, as needed during the course of their work shift, the existing locomotives used in transfer service do not have to contain a sanitation compartment. These employees are less likely to face long periods of time in the locomotive without access to sanitation facilities in rail yard buildings or at railroad-owned facilities along the right-of-way. If the railroad is unable to provide such facilities to accommodate employee needs, then the carrier must utilize locomotives that possess toilet facilities that otherwise meet the requirements of this proposal. (It is important to note that these requirements prohibit removal of toilet facilities from locomotives engaged in transfer service, if the locomotives are equipped with a toilet on the effective date of the final standards. Also, all locomotives manufactured after the effective date of the final rule must be equipped with a toilet facility accessible without going outside the locomotive. These requirements are discussed in greater detail below.) Finally, it is important to note that "transfer service" has a different meaning than the term "transfer train" as used the freight power brake regulations (49 CFR 232.5). In the power brake rules, trains that pick up or deliver cars at industries before arriving at the point of destination are nevertheless transfer trains. However, in this rule, made clear by the NPRM definition of "transfer train" FRA and the working group did not intend to include in the exception trains that stop en route to perform switching, because employees on such trains often are captive in the cab for long periods of time without an opportunity to use bathroom facilities.

Paragraph (b)(1)(iv) exempts locomotives of Class III railroads that are not equipped with toilet facilities, and that are not engaged in switching or transfer service, from the requirement of having a toilet facility in the cab.

However, these Class III railroads must provide or arrange for sanitation facilities along the right-of-way. (It is important to note that these requirements prohibit removing toilet facilities from locomotives, if those locomotives are equipped with a toilet on the effective date of the final standards. This is discussed in detail below.)

Most Class III railroads are small businesses with limited capital margins. (The current definition of these entities, as established by the Surface Transportation Board, is a railroad that earns \$20 million or less in annual operating revenues.) Typically, purchasing new locomotives would be out of the question for these companies, and spending considerable funds to retrofit old units could mean that critical safety programs in other disciplines would suffer. The older locomotive equipment generally cascades down to the Class III railroads, and over time the Class III railroads will acquire toilet-equipped locomotives. Currently, many of the older locomotive units are not equipped with toilet facilities, and some of the units actually lack space for toilet facilities, depending on the purpose it was originally intended to serve. FRA believes that it would create great financial hardship for these entities to require sanitation retrofits or new locomotive purchases. Some of the small operators might simply opt out of the industry, and for others, the diversion of funds could create safety problems elsewhere. Therefore, this exception should help to ensure that the sanitation standards do not give rise to additional safety concerns or destroy otherwise productive business concerns. However, the Class III railroads that choose to avail themselves of this exception must provide or arrange for adequate sanitation facilities, which means they must be available to employees readily, frequently, and as needed along the right-of-way.

This exception does not permit a Class III railroad to advise employees to use sanitation facilities at restaurants and other public establishments that have no business connection to the carrier. These Class III employers may not assume that employees will locate sufficient sanitation facilities on their own. The Class III railroad must take affirmative action to see that the cab employees have frequent access, as needed, to adequate sanitary facilities. If it is not possible for the railroad to provide adequate sanitary facilities along the right-of-way, then it will consult with customers or other businesses along the route for the

specific purpose of garnering access to adequate sanitation facilities for employees. In addition, the Class III railroad must communicate to employees the locations and, as appropriate, hours of availability of access to the sanitation facilities provided by the carrier via customers or other businesses along the route. FRA and the Working Group expect that the Class III railroad will consider 24-hour railroad operations in these determinations, and which facilities will be available during every work shift.

Paragraph (b)(1)(v) states that locomotives of scenic, tourist, historic, or excursion railroads, which are not steam-powered, which operate on the general system, and are otherwise covered by the locomotive safety standards set forth in 49 CFR part 229, are not required to be equipped with compliant toilet facilities, so long as employees working in these locomotives have access to appropriate facilities at frequent intervals during their work shift. The rationale for this proposal is similar to the proposed exceptions for Class III entities. The railroads addressed by this paragraph have limited profit margins and utilize older equipment that may not possess sanitation facilities on board. The costs to retrofit these units would adversely impact the viability of these operations, and on some of the present equipment, may not be possible. FRA believes that so long as the employees who work on these units are provided appropriate facilities throughout the course of the work shift, there would be no reason to require these locomotives to be equipped with sanitation facilities.

Representatives of tourist and excursion railroads suggested that this paragraph should be changed to state that the tourist operator or employer is responsible for providing access to adequate toilet facilities rather than the "railroad carrier." Some tourist operations may not be "carriers" under other federal laws. Also, as written in the NPRM, there may be confusion concerning whether the tourist operator or the owner of the track on which the tourist organization travels is responsible for providing access to facilities. FRA has changed the final rule to state that the tourist railroad must arrange for sanitary facilities.

It is difficult to define with specificity the terms "ready access" and "frequent intervals," which are used in paragraphs (b)(1)(i)–(b)(1)(vi). FRA and the Working Group spent a great deal of time discussing the terms and the concepts they convey. All struggled with appropriate language that would capture

the concepts accurately and still provide sufficient flexibility to accommodate the changeable nature of railroad operations. The Working Group discussed establishing specific time periods or distances traveled that might equate to a satisfactory and concise definition of these terms. However, members of the Working Group recognized that individuals' access needs vary greatly from person-to-person and from day-to-day. Further, the Working Group noted that it may take 5 hours to traverse 5 miles on a given day, depending on traffic, weather, load, and other considerations. Therefore, the Working Group rejected the notion of a hard and fast time or mileage limit as an appropriate solution to this question.

Instead, the Working Group offered an explanation of the concept of adequate access to sanitation facilities, where locomotives covered by these exceptions are not equipped with a toilet facility: on reasonable demand or need by a crew member, the local railroad officials would make immediate accommodations to provide access to the railroad's sanitation facilities at frequent intervals during the course of their work shift. As used here, the term "immediate accommodations" means that the employer would begin the process of providing access to sanitation facilities when the employee requests it.

The general principle that FRA and the Working Group intend to capture with these terms is that employees would have access to sanitation facilities, as the need arises, that are located in close proximity to the work site, and that are owned or operated by the railroad. In many circumstances, these terms simply mean an employee could disembark from a locomotive in a yard, use a toilet in a nearby building, and then return to the locomotive. However, if employees work in remote locations where sanitation facilities do not exist, the railroad would be required to provide employees with alternate transportation to a nearby site, in order to make use of one of the exceptions listed above. These terms follow the logic of standards promulgated by the U.S. Occupational Safety and Health Administration (OSHA) and its recent interpretation, which place priority on access as the need arises. This principle is important because of the adverse health effects that may occur if access is denied. Also, this principle enhances an employee's ability to focus on the work being done, and improves the likelihood that safe train movements will occur.

It is important to note that each of these exceptions require the carriers to provide facilities that "meet otherwise

applicable sanitation standards." This means that the alternate sanitation facilities offered by the carrier must meet the state or federal standards for sanitation equipment and servicing that apply to that workplace. For instance, if the alternate facility is located in an office building along the right-of-way that falls within the authority of OSHA for purposes of sanitation, this rule requires the railroads to select facilities that meet OSHA standards concerning the presence and condition of toilet and washing facilities. FRA is exercising jurisdiction over cab employee access to sanitary facilities, specific sanitation equipment on rolling stock, and the servicing and use of that equipment on rolling stock. FRA does not intend to oust OSHA's existing authority with respect to sanitation equipment, or its maintenance, where it exists elsewhere. Of course, FRA will not enforce the "otherwise applicable standards;" the agency with enforcement authority (OSHA in the example set forth here) must do so. In addition, FRA will not determine the applicability or correct interpretation of another agency's sanitation standards or whether those standards have been violated. That will also fall within the authority of the agency that promulgated the applicable standard and FRA will rely on the determinations of those other agencies.

Paragraphs (b)(2)(i) and (b)(2)(ii) provide exceptions to the requirement of a toilet facility that conforms with the definition of toilet facility, until those nonconforming toilet facilities have been replaced with compliant ones. Paragraph (b)(2)(i) addresses a specific type of toilet facility that a Class I railroad possesses on approximately 500 locomotive units. This toilet, referred to as a "bogan," is similar to portable toilets that are often used at outdoor events, where the need for mobile, basic toilet facilities exists. This toilet does not meet the requirements of the definition for toilet facility, has no flush mechanism and simply permits waste to fall to a tank below the toilet seat for storage, treatment, and periodic disposal. Chemicals are placed in the storage tank to treat waste and minimize odors that would otherwise accumulate. Maintenance of these toilets may be a greater challenge than is the case with more contemporary technology, and failure to properly maintain them could result in unacceptable conditions.

The Class I railroad owner of the bogan toilets is replacing these units as they become defective, and is retiring them as the locomotives on which they are situated are retired. The bogan toilets are being replaced with toilets that incorporate advanced technology.

For that reason, the Working Group recommended that FRA permit these toilets to remain in use until they are retired by the carrier as part of the railroad's plan for replacing them. The rule text permits the bogan toilets to remain in service on this Class I railroad until they become defective or are replaced with conforming units, whichever occurs first. Although FRA would prefer more modern systems in place on all locomotives, FRA is not presently aware of an imminent, serious safety or health risk associated with the bogan that calls for immediate removal. Given the costs associated with toilet retrofit and the carrier's own plan to replace the units, FRA believes that an exception is appropriate. Finally, it is important to note that this carrier objects to and disagrees with any inference or statement that the current systems in place are inadequate or are not properly maintained.

This exception applies only to the Class I railroad that FRA knows possesses these toilet systems. FRA is unaware of any other railroads that use this toilet, and after requesting comments, believes the unit is isolated on this particular railroad.

In connection with this exception and the exception set forth in paragraph (b)(2)(ii), it is important to note that certain state standards may require flush toilets for cab employees, and this final rule preempts those standards. Therefore, FRA wishes to make every effort to minimize the use of non-flush systems. FRA and the Working Group have no desire to issue or recommend standards that ultimately permit the use of systems that are more rudimentary than those permitted by existing state standards. However, FRA understands that certain accommodations may be necessary in the short term in order to achieve that goal.

Paragraph (b)(2)(ii) addresses a similar situation that exists on another Class I railroad, in which the toilet facility in place on a majority of the carrier's locomotives does not comply with the proposed definition of toilet facility. These toilet facilities use railroad-provided plastic liners to collect human waste; these liners are then sealed, placed in sealed waste containers, and delivered by the employees to the railroad for disposal. Although the carrier believes this system adequately addresses sanitation needs for cab employees, concerns about the system have been raised by employees, landowners along the right-of-way, and certain State agencies. Further, as the carrier recognizes, proper administration of this system off the carrier's home lines sometimes is not

practicable, and "power sharing" arrangements in the railroad industry are growing. FRA agrees that this system should be retired, but also recognizes the significant capital and labor costs associated with a massive retrofit campaign. The railroad has initiated a replacement program in which approximately 30 locomotives per month are being retrofitted with new toilet facilities that comply with the rule. In addition, this carrier has decided not to deliver locomotives with the older toilet facilities in the lead position to other railroads in interchange, and the final rule incorporates that restriction for the period of retrofit. Finally, this carrier has stated its intention to make every reasonable effort to place compliant locomotives in the lead position on its system wherever possible. FRA and the Working Group are satisfied at this point in time that the retrofit program and the carrier's commitment to place locomotives with compliant toilets in the lead where possible, is the best solution to the problem presented.

Based on the number of units in need of retrofit, FRA and the Working Group estimate that all of the railroad's locomotives are capable of being in compliance with the final rule by July 1, 2003. Therefore, the rule permits the Class I railroad to operate locomotives in the lead position on its lines with non-compliant units until July 1, 2003. After that date, all lead units must possess compliant toilet facilities. Finally, it is important to note that this carrier objects to and disagrees with any inference or statement that the current systems in place are inadequate or are not properly maintained.

This exception applies only to the Class I railroad that FRA knows possesses these toilet systems. FRA is unaware of any other railroads that utilize this toilet, and the AAR has confirmed that in its comments.

Paragraphs (b)(2)(i) and (b)(2)(ii) relate only to the type of toilet facility in use. The other requirements set forth apply to these railroads and their equipment according to their terms. For instance, the requirements set forth in paragraphs (a)(1)–(2), and (a)(4)–(6) apply to these locomotives. Similarly, § 229.139, which relates to servicing and operative equipment, requires the units covered by paragraphs (b)(2)(i) and (b)(2)(ii) to operate as intended and be located in sanitation compartments that are ventilated and free of debris and waste.

Paragraph (c) of section 137 prohibits a railroad from placing a locomotive with an unsanitary or defective toilet facility in the lead position. This determination is made as of the time of

the daily inspection required by 49 CFR 229.21. En route failures that occur after the daily inspection impose no burden on the railroad, until the next daily inspection is due. However, according to Working Group members, the current railroad practice concerning en route toilet failures is to move defective toilet units into a trailing position, where it is possible to do so. Although the final rule does not require such movement, the enhanced focus on sanitation facilities that will naturally occur as a result of this standard should increase the likelihood that the practice will proliferate.

The requirement set forth in paragraph (c) reflects the fundamental need to provide employees with a clean, safe workplace. It is inconsistent with notions of decency and the minimum requirements for workplaces in other industries to expect employees to work effectively and safely if unsanitary waste or deplorable odors are present. The Working Group agrees with this principle and believes that the final rule is appropriate for the railroad industry. In order for a locomotive to be placed or remain in the lead position as of the daily inspection, all aspects of the toilet facility must be operating as intended and it must be clean. The chemicals required by certain systems must be supplied in the appropriate amount so that the toilet will operate properly; if the system calls for antifreeze, it must be present during winter months to prevent freezing; any integral flush mechanisms or sensors must operate as intended; and all components of the system intended to be present must be present.

As discussed above, the rule defines the terms "unsanitary" and "sanitary" to help the industry and FRA inspectors determine which conditions may be noncompliant. FRA believes that most individuals have a general sense of conditions that constitute unsanitary facilities, and FRA inspectors will utilize that sensible approach to enforcing this standard. The definitions should provide additional clarity to that process.

In discussions prior to publication of the NPRM, members of the Working Group raised concerns about the difficulties of providing a substitute locomotive that possesses a sanitary, operable toilet facility on branch lines in remote locations. Although rare, these instances might occur where no compliant locomotives are available, and so a defective unit and its freight could not move for repair. Therefore, FRA and the Working Group developed an exception for these instances, proposed it in the NPRM, and placed it

in the final rule in paragraph (c). All of the conditions listed below must be present in order for the exception to apply:

- The defective or unsanitary condition must be discovered at a location where there are no other suitable (i.e., having sufficient power to complete the haul) locomotives available for use. Where it is not possible to switch another locomotive into the lead position due to space or track limitations, or where the location is not equipped to repair or clean the locomotive, there are ‘no locomotives available for use’;
- The locomotive, while noncompliant, has not traveled through a location where it could have been cleaned, repaired or switched with a compliant locomotive since its last required daily inspection;
- Upon reasonable request, the carriers must arrange for access to toilet facilities for employees assigned to work on the locomotive during the time they must work on it;
- If unsanitary conditions exist, the sanitation compartment door must be closed and sufficient ventilation provided to the cab compartment so that employees aren’t exposed to strong, persistent chemical or human waste odors sufficient to deter use of the facility or to give rise to a reasonable concern with respect to exposure to hazardous fumes; and
- The locomotive must be repaired, cleaned or switched with a compliant unit at the next daily inspection or the next location at which such service can take place, whichever occurs first.

This exception cannot be used where a second locomotive exists, but it also contains a defective or unsanitary sanitation compartment. The rule does not encourage deferral of necessary maintenance and cleaning where locomotives can reasonably be expected to be pressed into service as lead units at any time. This exception is available only where there is just one locomotive available and it possesses a defective or unsanitary sanitation compartment, or where there is no additional track to use to facilitate switching a compliant locomotive into the lead position, and all of the other conditions listed in the rule text are present.

In order to fall within this exception, the rule requires the railroad to arrange for access to a toilet facility outside the lead locomotive, upon reasonable request of an employee assigned to work onboard the locomotive. While it remains the responsibility of the railroad to provide access to a toilet facility, FRA expects that access will be

achieved by a means as simple as the crew making use of a toilet facility at a known place of business, such as a restaurant, that is regularly frequented by the crew during their breaks. However, access to a toilet facility outside the locomotive that meets otherwise applicable sanitation standards may not be available to the crew during the work shift for reasons such as personal safety while not on railroad property, or simply because the time required for to walk to a toilet facility may impede railroad operations. In these situations, the railroad may meet a reasonable request by providing transportation to a toilet facility during the work shift.

This exception is distinct from the other exceptions in paragraph 137(b) that use the terms “ready access to railroad-provided sanitation facilities outside of the locomotive, that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift.” Because the branch line situation typically involves remote locations where “ready access” is not possible and should occur rarely, the rule imposes a different standard than is required in other operational settings.

Paragraph (d) of section 137 requires that when a railroad finds a toilet facility defective or unsanitary at the time of the daily inspection, the carrier may utilize the unit in a trailing position. However, if the unit is subsequently used to haul employees, it must be cleaned prior to occupancy and defective toilet facilities must be clearly marked as unavailable for use. This paragraph and others that follow establish the requirement that occupied locomotives should not expose employees to unsanitary conditions. FRA recognizes that locomotive toilets periodically malfunction. The railroad should not be penalized for these events, and under prescribed circumstances, should be able to utilize the available power in the equipment. However, the railroad must minimize employee exposure to the hazards of untreated waste and other unsanitary conditions. Therefore, the carrier must clean any trailing units if they will be occupied, and must mark defective toilet facilities so that employees understand the toilet facility cannot be used.

During this process, the Working Group did not believe it necessary to require a standard method for identification of defective sanitation units, and FRA sees no reason to do so either. Some carriers use a red tag to indicate defective conditions, and some railroads tape the toilet seat so that it

cannot be used. Either method, and others that may be in use, are sufficient, so long as a reasonable person entering the cab would understand that the toilet facility is defective and should not be used.

Paragraph (e) states that when it is determined during the daily inspection that a road locomotive toilet facility is defective, but sanitary, the railroad may move the locomotive into switching or transfer service for a very brief period of time, consistent with the requirements for that service, as discussed above. The unit may be used in this service for a period not to exceed 10 days, at which time it must be repaired or used in trailing position. If the railroad chooses to utilize the equipment in this manner prior to its repair, the carrier must clearly mark the defective toilet facility so that a reasonable person would know not to use the toilet facility. The Working Group and FRA do not expect the railroads to reassign locomotives from road to yard service solely for the purpose of circumventing any part of this regulation. FRA understands that there are overriding incentives for railroads to keep road units with defective toilets in trailing road service until the next periodic inspection, rather than reassigning them to yard service.

Paragraph (f) of this section requires that if a carrier discovers during the daily inspection that a lead locomotive is not equipped with sufficient toilet paper, washing facilities, or a trash receptacle, the carrier must equip the unit prior to departure. This reflects FRA’s belief that it would be unwise to require a railroad to change the consist makeup due to a lack of toilet paper, washing facilities, or a trash bag. These items are relatively easy to locate and supply to cab crews, and so should be provided before any employee is expected to depart. Therefore, the railroad must simply equip the locomotive with these items prior to departure. Most railroads supply these items to cab employees as they begin their work shift, and so this requirement should not impose burdens on the industry.

Paragraph (g) states that when it is discovered during the daily inspection that the sanitation compartment ventilation is defective, the carrier must repair it prior to departure, or place the locomotive in trailing position, in switching service consistent with the requirements of paragraph (b)(1)(ii), or in transfer service consistent with the requirements of (b)(1)(iii). As discussed earlier, the rationale for permitting this usage when the ventilation system is inoperative is that trailing units are

typically unoccupied, and so no harm would come from utilizing the locomotive in that position. In addition, the exceptions set forth in section 137(b)(1)(ii) and (iii) require the carriers to provide access to adequate facilities elsewhere, and so employees would be using ventilated facilities in those circumstances.

Paragraph (h) of section 137 provides that if the sanitation compartment is not equipped with a door that closes when pulled shut as of the daily inspection, the door must be repaired prior to departure, or the locomotive must be moved from lead position to trailing, transfer service, or switching service. In addition, this paragraph states that if the modesty lock, required to be present in order to prevent unintended intrusion, is defective as of the daily inspection, the locomotive may remain in use in the lead so long as the lock is repaired by the date on which the next 92-day inspection is due. (See discussion for § 229.139(e) below.) The rationale for this requirement is that the first priority for cab employees is to have the benefit of a door that closes while using toilet facilities for each assignment in a lead locomotive in use. Therefore, the door must close as designed, as of the daily inspection. So long as the compartment door closes as it should, a unit with a defective modesty lock may remain in service until the date on which the next 92-day inspection is required. FRA believes that affirming an employee's expectation of privacy while using toilet facilities will contribute to appropriate use of the facilities and consequent good health. The rule balances legitimate employee privacy needs, by requiring a door that closes, and the legitimate difficulties associated with making use of a locomotive while moving it to the correct repair facility, by permitting the locomotive with a defective modesty lock to remain in service for a limited time period.

Paragraph (i) provides that all locomotives which are equipped with a toilet facility on the effective date of the final sanitation rule must retain and maintain those toilet facilities, even where the locomotive units might be relegated to switching service or transfer service where toilet facilities are not always required by this proposal. There is a small exception to this proposed requirement, which involves cabs that are not occupied. If a railroad downgrades a locomotive to "booster" or "slug" service, removing many of the interior appurtenances so that the unit is no longer intended to be occupied in movement, the carrier may also remove the toilet facility. Railroads must retain toilets in equipped units in order to

provide the most accommodating access to sanitation facilities available—an operable toilet on board the locomotive. A toilet facility on the locomotive is preferable to one along the right-of-way. Employees can utilize it as the need arises, which diminishes the risk of health problems. They would not be forced to leave running equipment on the track or slow planned operations, which can create safety risks. Also, as older locomotives cascade down to the Class III railroads, this requirement enhances the likelihood that small entities will inherit locomotives equipped with toilet facilities.

Paragraph (j) requires all locomotives manufactured after the effective date of this rule to include a toilet facility accessible to cab employees without walking outside. The design may require walking out of the cab into other compartments of the locomotive, but walking outside to use the toilet is disfavored. This paragraph prohibits railroads from using any locomotive built after the rule's effective date unless it is so designed. This paragraph reflects FRA's desire that all cab employees will work in a locomotive equipped with a toilet facility in the future.

There are two narrow exceptions to this standard relating to switching units that are built exclusively for switching service and commuter locomotives designed exclusively for commuter service. With respect to the switching service exception, the Working Group and FRA recognize that units that are created exclusively for yard service are often too small and oddly shaped to accommodate a toilet facility. Also, because of their size and configuration, these units are not used on long hauls over the road on which employees would need toilet facilities in the cab. Under all circumstances, these units would be used in yard service, where railroad-provided sanitation facilities exist along the right-of-way, and are available for employee use. New units used in transfer service would be required to be fitted with toilet facilities.

Similarly, the Working Group and FRA believe that commuter operations provide cab employees with sufficient access to sanitation facilities, along the right-of-way and elsewhere on the train. Therefore, FRA believes that the new construction requirements proposed in this paragraph need not include commuter locomotives.

With this requirement, FRA does not wish to chill innovation in the design of new equipment, but believes that toilet facilities should be located in close proximity to cab employees in lead locomotives, switching service, and transfer service. Members of the

industry agree that this requirement is appropriate.

Finally, § 229.137(k) requires that where the washing system in place on the lead locomotive includes the use of water, the water must be potable. This requirement is consistent with the principle that nonpotable water should not be used by humans for personal cleanliness, due to bacteria that may be present. As discussed above, railroads may use waterless soaps, now available commercially, that do not require water; they may use bottled water that is potable; or they may use water in holding tanks located in the toilet compartment, so long as it meets the safe drinking water standards.

#### *Section 229.139 Sanitation, Servicing Requirements*

Section 229.139 establishes minimum servicing standards to ensure that sanitation compartments in occupied locomotives are not unsanitary or defective. Paragraph (a) states that the railroad must service the sanitation compartments of lead locomotives in use so that they are sanitary. This requirement means that the floors, toilet facility, and washing system must be free of trash and waste. It is reasonable to expect that, as a locomotive is used, some amount of dust and trash would accumulate. However, in order to meet the requirements of paragraph (a), the trash must be removed at regular intervals, and used, soiled paper products or human waste may not be present on the floor.

As drafted in the NPRM, paragraph (b) of section 139 required that all components required by paragraph (a) of section 137 for the lead locomotive must be present consistent with the requirements of sections 137 and 139, and must be maintained so that they operate as intended. FRA did not dictate when and how railroads must empty, clean, and service toilets. Members of the Working Group initially recommended that these decisions vary greatly from property to property, and depend on weather conditions, degree of use, and the toilet system in place. These members further advised that a federal standard establishing specific thresholds and time limits could result in unnecessary costs for some entities, and could actually reduce the level of safety and sanitation on others. Based on that information, FRA proposed language that required each railroad to develop an effective servicing program that suits the traffic, use, weather, equipment and other needs of the system so that cab employees would not be exposed to full toilet bowls, missing seats, offensive odors, frozen units, dirty

floors, ineffective ventilation systems, or any other condition that could reasonably be deemed unsanitary. As for mandating specific servicing requirements, FRA and the Working Group determined that the railroads, in consultation with their labor forces, are in the best position to determine when toilet facilities must be emptied and cleaned. These decisions are based on a variety of factors, including degree of use, length of trip, weather conditions, size of crew, and the specifications of the system in place. However, FRA stated that it would consider more specific requirements for servicing the toilets and invited comments.

When FRA reconvened the Working Group in August 2001 to discuss comments to the NPRM, members raised several questions about this paragraph and how the phrase "operating as intended" would be enforced. It became clear in the course of the discussion that there were a variety of interpretations for the phrase. Therefore, the railroads would differ in their determinations of which locomotives could remain in the lead position, cab employees would have a difficult time determining what constituted a defect to be listed on the daily inspection report, and FRA inspectors would probably apply different standards across the industry in enforcing the rule. Given this confusion, FRA and the Working Group worked to list general factors that must exist in order for a toilet to "operate as intended". This list has been added to the rule text in this paragraph, and applies to any compliant toilet system in use in the industry. The conditions are: All mechanical systems must function as designated; water must be present in sufficient amounts to permit flushing; for systems that use chemicals for treatment, such as the Microphor, the chemicals (chlorine tablets or any comparable oxidizing agent) must be present; and the bowl must be free of blockage that prevents the waste from evacuating the bowl. Paragraph (c) of section 139 states that any unit used in switching service, transfer service, or in the trailing position that is equipped with a toilet facility must be sanitary if the locomotive is occupied. This requirement addresses the units that might fall within the exceptions proposed in § 229.137(b)(1)(ii) and (b)(1)(iii) because of the operations they are engaged in, but nonetheless possess a toilet facility on board. If that is the case, employees may opt not to use the toilet facility, preferring to utilize other facilities along the right-of-way. However, carriers must not expose these employees to unsanitary conditions

while they are in the units. Therefore, the toilet facilities may actually be defective while the unit is occupied, but they cannot be unsanitary.

Paragraph (d) states that where a locomotive is equipped with a toilet facility that has become defective, and the locomotive is utilized briefly in switching or transfer service consistent with the requirements of §§ 229.137(b)(1)(ii) and (b)(1)(iii), the railroad must mark the toilet facility as defective. The locomotive with the defective, but sanitary, toilet facility can be used in switching or transfer service for a period not to exceed 10 calendar days from the date on which it became defective, at which time it must be repaired. However, the facility must remain sanitary in this short period while the locomotive is occupied. The date on which the toilet facility became defective must be noted on the daily inspection report, so that the unit will be repaired within the prescribed time period. The carriers may need to institute new internal procedures to ensure that these defects are corrected within the required time frame, because (as some members of the Working Group have suggested), defects that need not be repaired on a daily basis, as § 229.21 requires with many defective conditions, may be forgotten. This final rule amends § 229.21(a) and (b) to permit the railroads to record repairs electronically, rather than on the daily inspection report. Several carriers noted that they currently employ an electronic tracking system of defects and repairs, and would like to include violations of §§ 229.137 and 229.139 in the existing electronic program. FRA wishes to facilitate this process, and so long as the system is capable of being audited, FRA does not believe it is necessary to regulate this internal mechanism with great specificity.

During this 10-day period, the exceptions set forth for switching and transfer service apply, and so the railroad is required to provide the affected cab employees access to sanitation facilities that meet otherwise applicable sanitation standards. (As discussed previously, these defective units may also be utilized in trailing position where there is less likelihood that employees will be affected at all.)

Providing that these defective units can remain in service for a period not to exceed 10 calendar days, at which time they must be repaired or used in trailing position, is consistent with FRA's and the Working Group's desire to preserve optimum access to sanitation facilities where they currently exist. If a locomotive is equipped with a toilet facility, FRA recognizes that it

may become defective and yet the locomotive can continue to operate without jeopardizing the employee's health. However, the toilet facility should not be allowed to remain defective indefinitely. The Working Group and FRA do not expect the railroads to reassign locomotives from road to yard service solely for the purpose of circumventing any part of this regulation. FRA understands that there are overriding incentives for railroads to keep road units with defective toilets in trailing road service until the next periodic inspection, rather than reassigning them to yard service.

The 10-day period was selected as a result of Working Group discussions, in which the carriers noted that a period of 10 days may be required to get appropriate parts needed for repair to remote locations where these defective units may be situated. FRA invited comment on this time period, and the AAR stated that shortening it might impede the railroad's ability to correct defective units. Depending on where a locomotive is situated in relation to a repair point and the nature of the repair needed, the carriers believe ten days is an appropriate window of time. There were no other comments on this issue.

Paragraph (e) requires the railroad to repair a defective modesty lock prior to the next 92-day inspection that the locomotive is subject to, pursuant to the requirements of part 229. This was recommended by all members of the Working Group and balances the privacy concerns that led to the modesty lock requirement, against the industry's interest in keeping otherwise fit locomotives in service. FRA believes that this paragraph reaches a reasonable accommodation of both aims.

In addition to the foregoing issues, the Working Group discussed blue signal protection for railroad employees involved in servicing the sanitation compartment, and the substance of those discussions should be illuminated here. FRA issued regulations that require protections for employees engaged in the inspection, testing, repair, and servicing of rolling equipment, where those activities require employees to work on, under, or between equipment, and where the danger of personal injury exists. See 49 CFR part 218. These regulations state that "servicing" does not include supplying locomotives with sanitary supplies. See definition of "worker" at 49 CFR 218.5. Therefore, employees engaged in replenishing toilet paper in the sanitation compartment would not be "servicing" the locomotive for purposes of part 218, and would not

require blue signal protection. However, other duties that employees may be engaged in relating to the repair, service, maintenance or emptying of the locomotive toilet facility likely would fall within the scope of part 218 and would require the protections set forth there. This determination may depend on the toilet system in place, and so each railroad must assess the need for blue signal protection on its property based on the configuration of the system in place and the functions employees perform relative to it.

Finally, this rule does not establish lighting requirements for the sanitation compartment. The existing locomotive safety standards require that "Cab passageways and compartments shall have adequate illumination." See, 49 CFR 229.127(b). This existing requirement effectively addresses the need for lighting in the sanitation compartment. The compartment must be illuminated so that occupants can clearly see all appurtenances, fixtures, and items present within the toilet area.

#### Appendix

FRA amended appendix B to part 229, Schedule of Civil Penalties, to include penalties for violations of the provisions as set forth in this rule. Please note that reading this or any penalty schedule may be confusing without first reading the corresponding rule text. There is very limited space in the penalty schedule to describe the action or omission that constitutes a violation of a particular section or paragraph. Generally, the penalty schedule is provided to give notice of the typical penalty that will be assessed for a violation. When there is not enough space to list the way(s) in which a paragraph has been violated, summaries of the requirement or forbidden act is provided. If in doubt, the rule text clearly states what is required, and the penalty schedule is provided to indicate what penalty is typically assessed.

#### Environmental Impact

FRA has evaluated this rule in accordance with its procedures for ensuring full consideration of the potential environmental impacts of FRA actions, as required by the National Environmental Policy Act (42 U.S.C. 4321, *et seq.*) and related directives. The regulation of sanitation facilities on locomotives gives rise to two potential environmental concerns. The first relates to handling chemicals used to treat human waste while in transit or in storage awaiting permanent disposal. These chemical substances and employee exposure to them are currently regulated by EPA and OSHA,

respectively, in order to prevent degradation of the environment and harm to employees. Nothing in this final rule alters those regulations, which protect the environment and employees from the hazards associated with regulated chemicals.

The second concern relates to the disposal of untreated waste along the railroad right-of-way, which would give rise to potential environmental and employee health hazards. As FRA understands it, nearly all locomotives utilize sanitation systems that either treat or burn the waste on board and release products that do not introduce environmental or personal safety hazards; or haul the waste in treatment containers to a site where it is removed and stored for approved processing. In any event, regulations promulgated by the FDA prohibit the release of untreated human waste along the railroad right-of-way, and nothing in this proposal alters that requirement. Therefore, FRA has determined that this rule will not have a deleterious impact on the environment.

#### Regulatory Impact

##### *Executive Order 12866 and DOT Regulatory Policies and Procedures*

This rule has been evaluated in accordance with existing policies and procedures, and determined to be non-significant under both Executive Order 12866 and DOT policies and procedures. 44 FR 11034; February 26, 1979. FRA has prepared and placed in the docket a regulatory analysis addressing the economic impact of this final rule. These documents may be reviewed and downloaded from the Department's electronic docket system or photocopies may be obtained by submitting a written request to the FRA Docket Clerk at Office of Chief Counsel, Federal Railroad Administration, 400 Seventh Street, SW., Washington, DC 20590.

As part of the regulatory impact analysis FRA has assessed quantitative measurements of costs and a qualitative discussion of the benefits expected from the adoption of this final rule. Over a twenty year period, the Present Value (PV) of the estimated costs is \$70.1 million.

The major costs anticipated from adopting this final rule include: the on-going maintenance and servicing of toilet facilities that are not currently being serviced properly; an increase in the daily inspection burden to include additional components of the sanitation compartment; and providing for a separate trash receptacle in the sanitation compartment and the removal

of the trash receptacles in regular intervals.

The major benefits anticipated from implementing this final rule include: guaranteed access to sanitary facilities; assurance that toilet facilities are maintained in a clean and sanitary manner; and the assurance that cab employees will have potable water to use. In addition, railroads should incur some savings from having a national and uniform regulation governing sanitation facilities. In the long-term the FRA should see a decrease in complaints and correspondence related to toilet facilities.

#### *Regulatory Flexibility Act*

The Regulatory Flexibility Act of 1980 (the Act) (5 U.S.C. 601 *et seq.*) requires a review of proposed and final rules to assess their impact on small entities. FRA has prepared and placed in the docket a Regulatory Flexibility Assessment (RFA) which assesses the small entity impact. These documents may be reviewed and downloaded from the Department's electronic docket system or photocopies may be obtained by submitting a written request to the FRA Docket Clerk at Office of Chief Counsel, Federal Railroad Administration, 400 Seventh Street, SW., Washington, DC 20590.

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 concern that is 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 an interim policy which formally establishes "small entities" as being railroads that meet the line haulage revenue requirements of a Class III railroad. Currently, the revenue requirements are \$20 million or less in annual operating revenue. The \$20 million limit is based on the Surface Transportation Board's (STB's) threshold of a Class III railroad, which is adjusted by applying the railroad revenue deflator adjustment. See, 49 CFR part 1201. In its policy statement, FRA applied this same dollar limit to determine when a railroad shipper or contractor is a small entity for purposes of the Act and the RFA. FRA proposed to use this alternative definition of



“small entity” for this rulemaking in the NPRM. FRA received no comments on the definition, and so FRA continues to apply this definition to the final rule.

In this proceeding, there are over 550 small railroads that could potentially be affected by these standards. FRA estimates that small railroads own approximately 3,500 locomotives. In addition, the Agency estimates that only about one-third of these or less have a toilet facility on them. FRA does not expect this final rule to impose a significant burden on small railroads. This is because these railroads are provided an exemption from the requirement to have a functioning toilet in any lead occupied locomotive, if the railroad provides employee access to facilities at frequent intervals.

The impacts from this final rule are primarily a result of some of the compliance requirements for locomotives that have functioning toilet facilities. The most significant impacts arise from complying with the sanitation compartment requirements, including providing a trash receptacle, marking defective toilet facilities, and conducting the daily inspection. Most small railroads own locomotives that never had toilet facilities on them, or previously had them removed. FRA estimates that only six percent of the Regulatory Impact Analysis’ (RIA) total cost over 20 years would impact small railroads.

The requirement in the final rule that will impact small railroads the most is providing cab employees ready access to appropriate toilet facilities. This standard means that small railroads must arrange for en route access to toilet facilities for cab employees. The RIA has estimated that there would be a 2-hour burden per affected railroad during the first year of implementation. In aggregate, this burden is estimated to cost approximately \$22,000. The burden for the following years is only 30 minutes per railroad per year to modify the toilet facility arrangements. FRA understands that it is common practice today for Class III railroads to comply with the general requirements of providing ready access. Currently, it is customary for a small railroad to transport a crew member from a

locomotive without a toilet to sanitary facilities upon request. Hence, the concept of providing ready access to toilet facilities is not a new or significant burden for most Class III railroads.

The Class III exemption from the requirement to have a toilet facility in the lead occupied locomotive is provided to ensure that a feasible lower cost alternative is available for affected small entities that need it. FRA and the Working Group understood the difficulties of retrofitting older locomotive units and saw no reason to unduly burden small railroads so long as access can be provided by alternative means. The Working Group believed that this alternative is both necessary and acceptable.

In order to determine the significance of the economic impact for the final rule’s RFA, FRA invited comments from all interested parties concerning the potential economic impact on small entities caused by this final rule during the notice of proposed rulemaking stage. The Agency has considered the lack of comments and data it received in making a decision on the RFA for the final rule. Thus, FRA concludes and certifies that this final rule is not expected to have an “significant” economic impact on a “substantial” number of small entities.

**Federalism**

FRA analyzed this rulemaking proceeding according to the principles of Executive Order 13132 (“Federalism”), which was in effect when the final rule was prepared. FRA has determined that this final rule may have federalism implications. FRA’s final sanitation standards preempt all state efforts to regulate the nature and type of access to sanitation facilities for cab employees. Further, FRA’s final sanitation standards preempt the maintenance of sanitation facilities located on board trains. As was discussed in the NPRM (See, 66 FR 137), the Locomotive Inspection Act has been interpreted to occupy the field of locomotive safety, including the regulation of appurtenances in locomotives, such as toilets. Nonetheless, some state regulatory

bodies have promulgated and enforce state standards that require toilet facilities in locomotive cabs. FRA’s sanitation standards preempt those state standards. FRA believes this regulatory action is warranted, however, based on principles of interstate commerce and the need for uniformity of national standards. In addition, some State agencies have expressed the need for federal regulation in this area to provide uniform treatment and to prevent situations in which employees work without sanitation facilities where the State is powerless to enforce its requirements, due to operation of the occupational safety and health and railroad safety laws.

Consistent with the requirements of Executive Order 13132, FRA has consulted with State agencies during the course of this rulemaking. This was achieved primarily through the full RSAC Committee, which includes representatives of State interests. FRA briefed the RSAC members on several occasions concerning this standard, published notices concerning it, and held a public hearing. None of the States or their representative organizations raised concerns about any aspect of this standard. FRA made every effort to cover the subject matter comprehensively so that the federal standard does not provide less protection than any of the individual state standards, and to prevent preemption of a state law or rule without replacing it with a comparable federal standard. The States have supported FRA’s rulemaking proceeding on sanitation facilities for locomotive cab employees.

**Paperwork Statement—Locomotive Cab Sanitation Standards**

The information collection requirements in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 *et seq.* The sections that contain the new information collection requirements and the estimated time to fulfill each requirement are as follows:

CFR section	Respondent universe	Total annual responses	Average time per response (in seconds)	Total annual burden hours	Total annual burden cost
229.137(d)—Sanitation—Locomotive Defective or Unsanitary Toilet Facility Placed in Trailing Service—Clear Markings—Unavailable for Use.	Class I & II railroads	15,600 notices .....	90	390	\$9,750
229.137(e)—Sanitation—Locomotive Defective Toilet Facility—Clear Markings—Unavailable for Use.	Class I & II railroads	15,600 notices .....	90	390	9,750

CFR section	Respondent universe	Total annual responses	Average time per response (in seconds)	Total annual burden hours	Total annual burden cost
229.139(d)—Servicing—Locomotive Used in Transfer/Switching Service with Defective Toilet Facility—Date Defective.	Class I & II railroads	93,600 notations .....	30	780	19,500

All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. Pursuant to 44 U.S.C. 3506(c)(2)(B), the FRA solicits comments concerning: whether these information collection requirements are necessary for the proper performance of the function of FRA, including whether the information has practical utility; the accuracy of FRA's estimates of the burden of the information collection requirements; the quality, utility, and clarity of the information to be collected; and whether the burden of collection of information on those who are to respond, including through the use of automated collection techniques or other forms of information technology, may be minimized.

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to the Office of Management and Budget, FRA Desk Officer, Washington, DC 20503. OMB is required to make a decision concerning the collection of information requirements contained in this final rule between 30 and 60 days after publication of this document in the **Federal Register**. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

FRA hereby provides notice that it cannot impose a penalty on persons for violating information collection requirements (ICRs) which do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new ICRs resulting from this rulemaking action prior to the effective date of the agency's final rule. The OMB control number, when assigned, will be announced by separate notice in the **Federal Register**.

**List of Subjects in 49 CFR Part 229**

Locomotives, Penalties, Railroad safety, Sanitation.

For the reasons set forth in the preamble, 49 CFR part 229 is amended as follows:

**PART 229—RAILROAD LOCOMOTIVE SAFETY STANDARDS**

1. The authority citation for part 229 continues to read as follows:

**Authority:** 49 U.S.C. 20102–03, 20133, 20137–38, 20143, 20701–03, 21301–02, 21304; 49 CFR 1.49.

2. Section 229.5 is amended by adding in alphabetical order new definitions of “Commuter service”, “Commuter work train”, “Modesty lock”, “Other short-haul passenger service”, “Potable water”, “Sanitary”, “Sanitation compartment”, “Switching service”, “Toilet facility”, “Transfer service”, “Unsanitary”, and “Washing system”.

**§ 229.5 Definitions.**

\* \* \* \* \*

*Commuter service* means the type of railroad service described under the heading “Commuter Operations” in 49 CFR part 209, Appendix A.

\* \* \* \* \*

*Commuter work train* is a non-revenue service train used in the administration and upkeep service of the commuter railroad.

\* \* \* \* \*

*Modesty lock* means a latch that can be operated in the normal manner only from within the sanitary compartment, that is designed to prevent entry of another person when the sanitary compartment is in use. A modesty lock may be designed to allow deliberate forced entry in the event of an emergency.

\* \* \* \* \*

*Other short-haul passenger service* means the type of railroad service described under the heading “Other short-haul passenger service” in 49 CFR part 209, Appendix A.

*Potable water* means water that meets the requirements of 40 CFR part 141, the Environmental Protection Agency’s Primary Drinking Water Regulations, or water that has been approved for drinking and washing purposes by the pertinent state or local authority having jurisdiction. For purposes of this section, commercially available, bottled drinking water is deemed potable water.

\* \* \* \* \*

*Sanitary* means lacking any condition in which any significant amount of filth,

trash, or human waste is present in such a manner that a reasonable person would believe that the condition might constitute a health hazard; or of strong, persistent, chemical or human waste odors sufficient to deter use of the facility, or give rise to a reasonable concern with respect to exposure to hazardous fumes. Such conditions include, but are not limited to, a toilet bowl filled with human waste, soiled toilet paper, or other products used in the toilet compartment, that are present due to a defective toilet facility that will not flush or otherwise remove the waste; visible human waste residue on the floor or toilet seat that is present due to a toilet facility that overflowed; an accumulation of soiled paper towels or soiled toilet paper on the floor, toilet facility or sink; an accumulation of visible dirt or human waste on the floor, toilet facility, or sink; and strong, persistent chemical or human waste odors in the compartment.

*Sanitation compartment* means an enclosed compartment on a railroad locomotive that contains a toilet facility for employee use.

\* \* \* \* \*

*Switching service* means the classification of railroad freight and passenger cars according to commodity or destination; assembling cars for train movements; changing the position of cars for purposes of loading, unloading, or weighing; placing locomotives and cars for repair or storage; or moving rail equipment in connection with work service that does not constitute a train movement.

*Toilet facility* means a system that automatically or on command of the user removes human waste to a place where it is treated, eliminated, or retained such that no solid or non-treated liquid waste is thereafter permitted to be released into the bowl, urinal, or room and that prevents harmful discharges of gases or persistent offensive odors.

*Transfer service* means a freight train that travels between a point of origin and a point of final destination not exceeding 20 miles and that is not performing switching service.

*Unsanitary* means having any condition in which any significant amount of filth, trash, or human waste is present in such a manner that a

reasonable person would believe that the condition might constitute a health hazard; or strong, persistent, chemical or human waste odors sufficient to deter use of the facility or to give rise to a reasonable concern with respect to exposure to hazardous fumes. Such conditions include, but are not limited to, a toilet bowl filled with human waste, soiled toilet paper, or other products used in the toilet compartment, that are present due to a defective toilet facility that will not flush or otherwise remove the waste; visible human waste residue on the floor or toilet seat that is present due to a toilet facility that overflowed; an accumulation of soiled paper towels or soiled toilet paper on the floor, toilet facility, or sink; an accumulation of visible dirt or human waste on the floor, toilet facility, or sink; and strong persistent chemical or human waste odors in the compartment.

*Washing system* means a system for use by railroad employees to maintain personal cleanliness that includes a secured sink or basin, water, antibacterial soap, and paper towels; or antibacterial waterless soap and paper towels; or antibacterial moist towelettes and paper towels; or any other combination of suitable antibacterial cleansing agents.

3. Section 229.9 is amended by adding paragraph (g) to read as follows:

**§ 229.9 Movement of non-complying locomotives.**

\* \* \* \* \*

(g) Paragraphs (a), (b), and (c) of this section shall not apply to sanitation conditions covered by §§ 229.137 and 229.139. Sections 229.137 and 229.139 set forth specific requirements for the movement and repair of locomotives with defective sanitation compartments.

4. Section 229.21 is amended by removing the fourth and fifth sentences of paragraph (a) and adding in their place three new sentences and by removing the fourth sentence of paragraph (b) and adding in its place three new sentences to read as follows:

**§ 229.21 Daily inspection.**

(a) \* \* \* Except as provided in §§ 229.9, 229.137, and 229.139, any conditions that constitute non-compliance with any requirement of this part shall be repaired before the locomotive is used. Except with respect to conditions that do not comply with § 229.137 or § 229.139, a notation shall be made on the report indicating the nature of the repairs that have been made. Repairs made for conditions that do not comply with § 229.137 or

§ 229.139 may be noted on the report, or in electronic form. \* \* \*

(b) \* \* \* Except as provided in §§ 229.9, 229.137, and 229.139, any conditions that constitute non-compliance with any requirement of this part shall be repaired before the locomotive is used. Except with respect to conditions that do not comply with § 229.137 or § 229.139, a notation shall be made on the report indicating the nature of the repairs that have been made. Repairs made for conditions that do not comply with § 229.137 or § 229.139 may be noted on the report, or in electronic form. \* \* \*

5. Sections 229.137 and 229.139 are added to subpart C to read as follows:

**§ 229.137 Sanitation, general requirements.**

(a) *Sanitation compartment.* Except as provided in paragraph (b) of this section, all lead locomotives in use shall be equipped with a sanitation compartment. Each sanitation compartment shall be:

- (1) Adequately ventilated;
- (2) Equipped with a door that:
  - (i) Closes, and
  - (ii) Possesses a modesty lock by [18 months after publication of the final rule];
- (3) Equipped with a toilet facility, as defined in this part;
- (4) Equipped with a washing system, as defined in this part, unless the railroad otherwise provides the washing system to employees upon reporting for duty or occupying the cab for duty, or where the locomotive is equipped with a stationary sink that is located outside of the sanitation compartment;
- (5) Equipped with toilet paper in sufficient quantity to meet employee needs, unless the railroad otherwise provides toilet paper to employees upon reporting for duty or occupying the cab for duty; and
- (6) Equipped with a trash receptacle, unless the railroad otherwise provides portable trash receptacles to employees upon reporting for duty or occupying the cab for duty.

(b) *Exceptions.* (1) Paragraph (a) of this section shall not apply to:

(i) Locomotives engaged in commuter service or other short-haul passenger service and commuter work trains on which employees have ready access to railroad-provided sanitation facilities outside of the locomotive or elsewhere on the train, that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift;

(ii) Locomotives engaged in switching service on which employees have ready access to railroad-provided sanitation

facilities outside of the locomotive, that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift;

(iii) Locomotives engaged in transfer service on which employees have ready access to railroad-provided sanitation facilities outside of the locomotive, that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift;

(iv) Locomotives of Class III railroads engaged in operations other than switching service or transfer service, that are not equipped with a sanitation compartment as of June 3, 2002. Where an unequipped locomotive of a Class III railroad is engaged in operations other than switching or transfer service, employees shall have ready access to railroad-provided sanitation facilities outside of the locomotive that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift, or the railroad shall arrange for enroute access to such facilities;

(v) Locomotives of tourist, scenic, historic, or excursion railroad operations, which are otherwise covered by this part because they are not propelled by steam power and operate on the general railroad system of transportation, but on which employees have ready access to railroad-provided sanitation facilities outside of the locomotive, that meet otherwise applicable sanitation standards, at frequent intervals during the course of their work shift; and

(vi) Except as provided in § 229.14 of this part, control cab locomotives designed for passenger occupancy and used in intercity push-pull service that are not equipped with sanitation facilities, where employees have ready access to railroad-provided sanitation in other passenger cars on the train at frequent intervals during the course of their work shift.

(2) Paragraph (a)(3) of this section shall not apply to:

(i) Locomotives of a Class I railroad which, prior to [the effective date of this section], were equipped with a toilet facility in which human waste falls via gravity to a holding tank where it is stored and periodically emptied, which does not conform to the definition of toilet facility set forth in this section. For these locomotives, the requirements of this section pertaining to the type of toilet facilities required shall be effective as these toilets become defective or are replaced with conforming units, whichever occurs first. All other requirements set forth in this section shall apply to these locomotives as of June 3, 2002; and

(ii) With respect to the locomotives of a Class I railroad which, prior to June 3, 2002, were equipped with a sanitation system other than the units addressed by paragraph (b)(2)(i) of this section, that contains and removes human waste by a method that does not conform with the definition of toilet facility as set forth in this section, the requirements of this section pertaining to the type of toilet facilities shall apply on locomotives in use on July 1, 2003. However, the Class I railroad subject to this exception shall not deliver locomotives with such sanitation systems to other railroads for use, in the lead position, during the time between June 3, 2002, and July 1, 2003. All other requirements set forth in this section shall apply to the locomotives of this Class I railroad as of June 3, 2002.

(c) *Defective, unsanitary toilet facility; prohibition in lead position.* Except as provided in paragraphs (c)(1) through (5) of this section, if the railroad determines during the daily inspection required by § 229.21 that a locomotive toilet facility is defective or is unsanitary, or both, the railroad shall not use the locomotive in the lead position. The railroad may continue to use a lead locomotive with a toilet facility that is defective or unsanitary as of the daily inspection only where all of the following conditions are met:

(1) The unsanitary or defective condition is discovered at a location where there are no other suitable locomotives available for use, i.e., where it is not possible to switch another locomotive into the lead position, or the location is not equipped to clean the sanitation compartment if unsanitary or repair the toilet facility if defective;

(2) The locomotive, while noncompliant, did not pass through a location where it could have been cleaned if unsanitary, repaired if defective, or switched with another compliant locomotive, since its last daily inspection required by this part;

(3) Upon reasonable request of a locomotive crewmember operating a locomotive with a defective or unsanitary toilet facility, the railroad arranges for access to a toilet facility outside the locomotive that meets otherwise applicable sanitation standards;

(4) If the sanitation compartment is unsanitary, the sanitation compartment door shall be closed and adequate ventilation shall be provided in the cab so that it is habitable; and

(5) The locomotive shall not continue in service in the lead position beyond a location where the defective or unsanitary condition can be corrected or replaced with another compliant

locomotive, or the next daily inspection required by this part, whichever occurs first.

(d) *Defective, unsanitary toilet facility; use in trailing position.* If the railroad determines during the daily inspection required by § 229.21 that a locomotive toilet facility is defective or is unsanitary, or both, the railroad may use the locomotive in trailing position. If the railroad places the locomotive in trailing position, they shall not haul employees in the unit unless the sanitation compartment is made sanitary prior to occupancy. If the toilet facility is defective and the unit becomes occupied, the railroad shall clearly mark the defective toilet facility as unavailable for use.

(e) *Defective, sanitary toilet facility; use in switching, transfer service.* If the railroad determines during the daily inspection required by § 229.21 that a locomotive toilet facility is defective, but sanitary, the railroad may use the locomotive in switching service, as set forth in paragraph (b)(1)(ii) of this section, or in transfer service, as set forth in paragraph (b)(1)(iii) of this section for a period not to exceed 10 days. In this instance, the railroad shall clearly mark the defective toilet facility as unavailable for use. After expiration of the 10-day period, the locomotive shall be repaired or used in the trailing position.

(f) *Lack of toilet paper, washing system, trash receptacle.* If the railroad determines during the daily inspection required by § 229.21 that the lead locomotive is not equipped with toilet paper in sufficient quantity to meet employee needs, or a washing system as required by paragraph (a)(4) of this section, or a trash receptacle as required by paragraph (a)(6) of this section, the locomotive shall be equipped with these items prior to departure.

(g) *Inadequate ventilation.* If the railroad determines during the daily inspection required by § 229.21 that the sanitation compartment of the lead locomotive in use is not adequately ventilated as required by paragraph (a)(1) of this section, the railroad shall repair the ventilation prior to departure, or place the locomotive in trailing position, in switching service as set forth in paragraph (b)(1)(ii) of this section, or in transfer service as set forth in paragraph (b)(1)(iii) of this section.

(h) *Door closure and modesty lock.* If the railroad determines during the daily inspection required by § 229.21 that the sanitation compartment on the lead locomotive is not equipped with a door that closes, as required by paragraph (a)(2)(i) of this section, the railroad shall repair the door prior to departure, or

place the locomotive in trailing position, in switching service as set forth in paragraph (b)(1)(ii) of this section, or in transfer service as set forth in paragraph (b)(1)(iii) of this section. If the railroad determines during the daily inspection required by § 229.21 that the modesty lock required by paragraph (a)(2)(ii) of this section is defective, the modesty lock shall be repaired pursuant to the requirements of § 229.139(e).

(i) *Equipped units; retention and maintenance.* Except where a railroad downgrades a locomotive to service in which it will never be occupied, where a locomotive is equipped with a toilet facility as of [the effective date of the final rule], the railroad shall retain and maintain the toilet facility in the locomotive consistent with the requirements of this part, including locomotives used in switching service pursuant to paragraph (b)(1)(ii) of this section, and in transfer service pursuant to paragraph (b)(1)(iii) of this section.

(j) *Newly manufactured units; in-cab facilities.* All locomotives manufactured after June 3, 2002, except switching units built exclusively for switching service and locomotives built exclusively for commuter service, shall be equipped with a sanitation compartment accessible to cab employees without exiting to the out-of-doors for use. No railroad may use a locomotive built after June 3, 2002, that does not comply with this subsection.

(k) *Potable water.* The railroad shall utilize potable water where the washing system includes the use of water.

#### § 229.139 Sanitation, servicing requirements.

(a) The sanitation compartment of each lead locomotive in use shall be sanitary.

(b) All components required by § 229.137(a) for the lead locomotive in use shall be present consistent with the requirements of this part, and shall operate as intended such that:

(1) All mechanical systems shall function;

(2) Water shall be present in sufficient quantity to permit flushing;

(3) For those systems that utilize chemicals for treatment, the chemical (chlorine or other comparable oxidizing agent) used to treat waste must be present; and

(4) No blockage is present that prevents waste from evacuating the bowl.

(c) The sanitation compartment of each occupied locomotive used in switching service pursuant to § 229.137(b)(1)(ii), in transfer service pursuant to § 229.137(b)(1)(iii), or in a

trailing position when the locomotive is occupied, shall be sanitary.

(d) Where the railroad uses a locomotive pursuant to § 229.137(e) in switching or transfer service with a defective toilet facility, such use shall not exceed 10 calendar days from the

date on which the defective toilet facility became defective. The date on which the toilet facility becomes defective shall be entered on the daily inspection report.

(e) Where it is determined that the modesty lock required by § 229.137(a)(2)

is defective, the railroad shall repair the modesty lock on or before the next 92-day inspection required by this part.

6. Appendix B of part 229 is amended by adding entries for §§ 229.137 and 229.139 to the Schedule of Civil Penalties to read as follows:

APPENDIX B TO PART 229.—SCHEDULE OF CIVIL PENALTIES

Section	Violation	Willful violation <sup>1</sup>
* * * * *		*
<b>Subpart C—Safety Requirements</b>		
* * * * *		*
229.137 Sanitation, general:		
(a) Sanitation compartment in lead unit, complete failure to provide required items .....	\$5,000	\$10,000
(1) Ventilation .....	2,500	5,000
(2) Door missing .....	2,000	4,000
(2)(i) Door doesn't close .....	1,000	2,000
(2)(ii) No modesty lock .....	1,000	2,000
(3) Not equipped with toilet in lead .....	5,000	10,000
(4) Not equipped with washing system .....	1,000	2,000
(5) Lack of paper .....	1,000	2,000
(6) Lack of trash receptacle .....	1,000	2,000
(b) Exceptions:		
(1)(i) Commuter service, failure to meet conditions of exception .....	2,500	5,000
(1)(ii) Switching service, failure to meet conditions of exception .....	2,500	5,000
(1)(iii) Transfer service, failure to meet conditions of exception .....	2,500	5,000
(1)(iv) Class III, failure to meet conditions of exception .....	2,500	5,000
(1)(v) Tourist, failure to meet conditions of exception .....	2,500	5,000
(1)(vi) Control cab locomotive, failure to meet conditions of exception .....	2,500	5,000
(2) Noncompliant toilet .....	5,000	10,000
(c) Defective/unsanitary toilet in lead unit .....	2,500	5,000
(1–5) Failure to meet conditions of exception .....	2,500	5,000
(d) Defective/unsanitary unit; failure to meet conditions for trailing position .....	2,500	5,000
(e) Defective/sanitary unit; failure to meet conditions for switching/transfer service .....	2,500	5,000
(f) Paper, washing, trash holder; failure to equip prior to departure .....	2,500	5,000
(g) Inadequate ventilation; failure to repair or move prior to departure .....	2,500	5,000
(h) Door closure/modesty lock; failure to repair or move .....	1,000	2,000
(i) Failure to retain/maintain of equipped units .....	2,500	5,000
(j) Failure to equip new units/in-cab facility .....	2,500	5,000
(k) Failure to provide potable water .....	2,500	5,000
229.139 Servicing requirements:		
(a) Lead occupied unit not sanitary .....	2,500	5,000
(b) Components not present/operating .....	2,500	5,000
(c) Occupied unit in switching, transfer service, in trailing position not sanitary .....	2,500	5,000
(d) Defective unit used more than 10 days .....	2,500	5,000
(e) Failure to repair defective modesty lock .....	1,000	2,000

\* \* \* \* \*

Issued in Washington, DC, on March 22, 2002.

Allan Rutter,  
Administrator.

[FR Doc. 02–8077 Filed 4–3–02; 8:45 am]

BILLING CODE 4910–06–P

**DEPARTMENT OF TRANSPORTATION**

**National Highway Traffic Safety Administration**

**49 CFR Part 533**

[Docket No. NHTSA–2001–11048]

RIN 2127–AI68

**Light Truck Average Fuel Economy Standard, Model Year 2004**

**ACTION:** Final rule.

**SUMMARY:** This final rule establishes the average fuel economy standard for light

trucks manufactured in the 2004 model year. Chapter 329 of Title 49 of the United States Code requires the issuance of this standard. The standard for all light trucks manufactured by a manufacturer is set at 20.7 mpg for the 2004 model year.

**DATES:** The amendment is effective May 6, 2002. Petitions for reconsideration must be submitted within 30 days of publication.

**ADDRESSES:** Petitions for reconsideration should be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590.