49 CFR Parts 171, 172 and 174

[Docket No. HM-180, Amdt. Nos. 171-88 172-104 and 174-60]

Placarding of Tank Cars Which Contain Hazardous Material Residue; Disposition of Petitions for Reconsideration

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final rule; disposition of petitions for reconsideration.

SUMMARY: This final rule amends the Department's Hazardous Materials Regulations (HMR) by changing the definition of "residue" which was promulgated in a final rule under Docket HM-180 on September 26, 1985 [50 FR 39005]. Other changes are also being made to the final rule of HM-180 and the HMR for clarification and to promote compliance. The amendments contained in this rule serve as RSPA's response to eight petitions for reconsideration which were filed as a result of the HM-180 final rule.

EFFECTIVE DATE: October 1, 1986. However, compliance with the regulations as amended herein is authorized immediately.

FOR FURTHER INFORMATION CONTACT: Lee Jackson, Standards Division, Office of Hazardous Materials Transportation, Department of Transportation, 400 Seventh Street, SW., Washington, DC 20590. Telephone (202) 755-4990.

SUPPLEMENTARY INFORMATION:

I. Background

On March 17, 1986, RSPA published a notice of proposed rulemaking pertaining to disposition of petitions for reconsideration [51 FR 9079]. This notice was prepared in response to eight petitions for reconsideration which were filed as a result of a final rule issued under Docket HM-180 that was published on September 26, 1985 [50 FR 39005]. That final rule amended by the HMR by changing the placarding and shipping paper requirements for "empty" tank cars which contain residues of hazardous materials. Under the final rule of Docket HM-180, a quantitative definition of what constitutes a residue was adopted. Further, the applicable regulations in Parts 172 and 174 were also revised to reflect other amendments which were made in that final rule.

In the March 17, 1986 notice, RSPA proposed to redefine "residue" by restricting the applicability of the definition to liquids and expanding the quantitative limitation from 3% to 4% with a measurement tolerance of plus or minus one percent. RSPA believed that by raising the percentage of residue which may remain in a tank car and providing a tolerance of plus or minus one percent, shippers should have less difficulty in complying with the rule. RSPA also believed that adopting a quantitative limitation was important in order to make the rule effective. RSPA invited the public to submit comments concerning the expanded "residue" definition. RSPA requested that comments, as a minimum, address the maximum amount of residue which can safely remain in a tank car placarded with the RESIDUE placard.

In addition to requesting comments regarding the definition of "residue", RSPA stated in the notice that some of the comments received from the petitioners pointed out how inconsistent it was to require tank cars which contain combustible liquid residue to remain placarded as full loads. Currently, tank cars which contain residue of hazardous material must display the appropriate RESIDUE placards unless (1) the tank car contains the residue of a combustible liquid, or (2) the tank car is reloaded with a non-hazardous material, or (3) the tank car is sufficiently cleaned of residue and purged of vapor to remove any potential hazard. Tank cars which contain residue of a combustible liquid must continue to display COMBUSTIBLE placards. In view of the comments received by the petitioners and to promote consistency in the regulations, RSPA proposed in the notice to require the use of RESIDUE placards on those tank cars which contain combustible liquid residue. RSPA also proposed to amend § 174.93 so that tank cars containing combustible liquid residue would be excepted from the train placement requirements.

RSPA proposed to revise paragraph (c) of § 172.334 to prohibit the display of identification numbers on subsidiary placards such as the POISON placard required by § 172.505. Commenters were also asked to address the placarding requirements for tank cars that carry residues of hazardous materials which meet the criteria specified in the new

§ 173.3a pertaining to inhalation toxicity. As of May 1, 1986, tank cars loaded with hazardous materials which exhibit that criteria must display the POISON placards required by § 172.505 as well as the primary placards required by § 172.504. When unloaded, all tank cars containing residues, except explosives, poison gas, or radioactive material, must have all placards, including the POISON placards required by § 172.505, reversed or changed, as appropriate, to RESIDUE placards. RSPA requested comments and suggestions on alternate or preferred placarding methods that could be employed when placarding tank cars that contain a residue of materials which exhibit inhalation toxicity. RSPA also proposed to make other changes to the regulations for clarification and consistency.

II. Response to Comments Made to the Notice

RSPA received twenty four comments to the NPRM. Comments were received from various chemical companies, several oil companies, two railroads and their association and the Hazardous Materials Advisory Council. A large number of these commenters were opposed to RSPA adopting a quantitative definition for "residue". In addition to these comments, a few of the commenters urged RSPA to develop a separate and distinct placard for those materials which exhibit inhalation toxicity. Several commenters stated that the size of the word "RESIDUE" on the RESIDUE placard was too large and was obscured by the placard holder. Based on the regulatory changes which were being made in the rule, commenters requested a one year extension of the mandatory compliance date of October 1, 1986. Discussion of these points as well as RSPA response to each of these comments follows.

Definition of Residue

RSPA proposed on March 17, 1986, (51 FR 9079) to redefine "residue". RSPA expanded the quantitative limitation in the definition contained in the final rule from 3% to 4%, allowing a tolerance of ±1%. Our intent was to provide shippers greater flexibility in complying with the rule. Although RSPA recognized that it would be difficult to accurately determine exactly the amount of residue which remains in a tank car after unloading, RSPA believed that safety would be enhanced by adopting a quantitative definition. At the very least, emergency responders would have a benchmark on which to base their decisions, should an incident occur that involved a tank car which contained only the residue of a hazardous material.

The majority of comments RSPA received stated that there was no need for a quantitative definition for "residue". Commenters stated that aside from it being difficult to determine exactly how much residue remains in an unloaded tank car, firefighters would follow the same procedures regardless of the amount of residue in a tank car. One commenter stated that it is too difficult to establish a volumetric dividing line between "full" and "residue" for safety purposes, because the hazard posed by a given material varies both by the hazard class of the material and the quantity of material present. A few commenters also suggested that RSPA eliminate the plus or minus allowance from the definition of "residue" because there was no need for the definition to contain such an allowance.

Based on the comments received concerning the definition of "residue" and recognizing the difficulty in determining the exact amount of residue which remains in a tank car once it is unloaded, RSPA has decided to adopt the definition for "residue" which was proposed in the comments submitted by E.I. du Pont de Nemours. The new definition does not quantitatively specify the amount of residue which may remain in a tank car which displays the RESIDUE placard. The new definition for "residue" states that "Residue means the hazardous material remaining in a packaging, including a tank car, after its contents have been unloaded to the maximum extent practicable and before the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapors".

Special Placement Requirements for Placards

Three commenters proposed that RSPA establish special placement requirements for placards, i.e. standardizing the location of the primary and subsidiary placards. Commenters stated that such a system is necessary because of the multiple placarding requirements of HM-196 and the new Canadian regulations which require the use of multiple placards for certain commodities. It was felt that with these new requirements, emergency response efforts may be hampered by confusion between the primary and secondary hazards. Therefore, it was suggested by these commenters that the primary hazard placard always be displayed to the left of any required subsidiary placard.

RSPA believes that imposing a special placard placement requirement may be necessary if problems are encountered discriminating between the primary and subsidiary placard, however, RSPA questions the need at this time to establish such a system. We have not been made aware of any problems or incidents that have taken place which can be attributed to confusion occurring between the placement of the primary and subsidiary hazard placards. Therefore, RSPA is not imposing any additional placement requirements on primary and subsidiary placards in this rule.

Placarding Materials Which Exhibit a Poison-Inhalation Hazard

For those materials which exhibit a Poison-inhalation hazard (§ 173.3a), several commenters suggested that RSPA develop a separate and distinct placard or marking which accurately communicates to the public that such a hazard is present. It was stated that while training and education of emergency response personnel is helpful, there will still be confusion under the current system as to whether or not a material exhibits an inhalation hazard. This is essentially true for materials in tank cars which satisfy the definition for a Poison B and also exhibit a Poison-inhalation hazard. Under HM-196, duplication of POISON placards is not required. Therefore, use of the primary POISON placard satisfies the subsidiary placarding requirement of § 172.505. Commenters pointed out that unless there is a method developed to easily identify those materials which exhibit a Poison-inhalation hazard, especially when Poison B materials are present, the emergency responders will have no way of knowing if a material presents a Poison-inhalation hazard.

RSPA acknowledges that establishment of a separate or distinct placard or marking for materials which exhibit an inhalation hazard may be necessary, however, RSPA believes that establishment of such a placard is beyond the scope of this rulemaking. Further, in developing a new, distinct placard for materials which exhibit an inhalation hazard, a consideration must be given to the format of labels as well as the potential for conflict with existing international requirements. For these reasons, RSPA believes that it would be inappropriate to establish such a placard in this rulemaking.

Lettering Size of the Word "RESIDUE" on the Placard

RSPA received three comments which stated that the size of the lettering of the

word "RESIDUE" on the placard should be changed in 1 inch rather than 1½ inches because the word "RESIDUE" was obscured by the placard holder. RSPA agrees with these commenters. RSPA never intended for the word "RESIDUE" to be partially underneath the lower cross bar of the placard holder. This is why both § 172.525 and Appendix B to Part 172 only require the letters to be "approximately" 1½ inches (40mm) high. Further, since the RESIDUE placard is the only placard which has lettering in the lower triangle of the placard, RSPA did not believe that the RESIDUE placard could be confused with any other placard. Nevertheless, in view of the comments RSPA received on this point, and to ensure by that the word "RESIDUE" appears on the placard clearly and unobscured by the placard holder, RSPA is changing the size of the lettering for the word "RESIDUE" to 1 inch.

RSPA realizes that since the use of RESIDUE placards with 1½ inch lettering has been authorized since November 1, 1985, there may be stocks of these placards on hand. Therefore, RSPA is authorizing the use of RESIDUE placards that have 1½ inch lettering until July 1, 1987. On that date, the use of RESIDUE placards with 1 inch lettering will be mandatory.

Combustible Residue Placard

In the notice, RSPA proposed to require the use of RESIDUE placards on tank cars which contain residues of combustible liquids. Two commenters suggested that if a COMBUSTIBLE RESIDUE placard is required, it should be different from the other RESIDUE placards so RESIDUE placards for combustible liquids would not be confused with other RESIDUE placards (especially the FLAMMABLE RESIDUE placard). RSPA does not believe that taking such action is necessary because the bottom triangle of the COMBUSTIBLE RESIDUE placard will always be white with the word "RESIDUE" in black letters. The bottom triangle of the other RESIDUE placards (including the FLAMMABLE RESIDUE placard) will be black with the word "RESIDUE" in white letters. With these differences, there should not be any confusion between the COMBUSTIBLE RESIDUE placard and the other RESIDUE placards. Therefore, no change has been made to the COMBUSTIBLE RESIDUE placard that was proposed in the notice. It use is required on tank cars which contain the residues of combustible liquids.

The Norfolk Southern Corporation and the Association of American Railroads contended that in the past tank cars which contained residues of combustible liquids required no placards. RSPA diagrees. Prior to the promulgation of HM-180, tank cars containing combustible liquids were required to be placarded with COMBUSTIBLE placards and shipping papers were required. When unloaded, these tank cars were still required to display COMBUSTIBLE placards and have accompanying shipping papers. This is supported by the provisions of both § 172.510(c) and § 174.25(c). These sections prohibited the display of EMPTY placards on tank cars which contain only the residue of a combustible liquid and prohibited the used of the words "Empty" or "Empty: Last Contained" on the shipping papers of those tank cars which last contained combustible liquids. These sections did not state that the use of COMBUSTIBLE placards and shipping papers were no longer required. RSPA understands that the rail industry may have interpreted these exceptions to imply that no placards or shipping papers were required for unloaded (empty) tank cars which last contained combustible liquids. This interpretation was incorrect. RSPA finds nothing in the regulations or the administrative record which indicates that tank cars which contain combustible liquid residues are currently excepted from the requirements to have shipping papers and to display the COMBUSTIBLE placards required by § 172.504 (see also § 173.118a). Nevertheless, to promote consistency in the regulations and to enhance safety, the requirements contained in this rule specify that a tank car which contains the residue of a combustible liquid must have shipping papers and the basic description on the shipping papers must include the words "RESIDUE: Last Contained". Further, tank cars which contain combustible liquid residue must display RESIDUE placards.

Mandatory Compliance Date

Several commenters requested that RSPA extend for one year the mandatory compliance date for the rules promulgated in HM-180. Specifically, the Norfolk Southern Corporation urged RSPA to defer all of the RESIDUE placard requirements and corollary shipping paper requirements. They stated that this extension was needed because of the uncertainty as to the status of the RESIDUE placarding requirements until the issuance of the March 17, 1986 notice, the possible creation and issuance of a new, more unique COMBUSTIBLE RESIDUE placard, and the change that must be made to the size of the lettering of the word "RESIDUE" on the RESIDUE placard. They also stated that this extension was needed to allow ample time for training and compliance planning.

RSPA believes that delaying the effective date of the rule for one year is unnecessary. The only change being made to shipping papers by the rule other than changing the word "empty" to "residue", is that § 174.25(c) now requires the shipping papers (billing) for tank cars which contain the residue of a combustible liquid to contain the words "RESIDUE: Last contained * * *". Previously, § 174.25(c) did not require the shipping paper (billing) for tank cars containing combustible liquid residue to show the words "Empty" or "Empty: Last Contained:". As we have previously stated, there has always been a requirement for shipping papers to accompany all tank cars which contain residues. Further, RSPA does not believe there is a need to establish a more unique COMBUSTIBLE RESIDUE placard. Regarding the change being made to the specification (size) of the word "RESIDUE" on the placard, RSPA believes adequate time (more than a year) is being provided for depletion of on-hand stocks of RESIDUE placards with 1½ inch lettering and procurement of new placards. Although changes are being made to the definition of "residue" by eliminating the quantitative levels specified, this new definition should not impose any additional operational requirements on shippers and carriers. In addition, RSPA believes that providing a grace period of one year before the mandatory compliance date of July 1, 1986 provides ample time for shippers and carriers to deplete their on hand stocks of RESIDUE placards with 1½ inch lettering. Therefore, the amendments contained in this rule are effective October 1, 1986. However, compliance with the regulations as amended herein is authorized immediately. Use of RESIDUE placards with 1½ inch lettering is authorized until July 1, 1987.

Subsidiary Risk Placard

RSPA also received two comments which stated that the subsidiary risk placard should not be reversed to a RESIDUE placard when a tank car is unloaded. In effect, both commenters believed that the ability to communicate the hazard of inhalation toxicity would be lost by subjecting materials regulated under HM-196 to the residue placarding requirements of HM-180. One of these commenters pointed out that it would be possible to use permanent adhesive placards for the supplementary POISON

placards if these placards permanently read POISON. It was stated that if the supplementary placards are required to be changed or reversed to RESIDUE placards, it will be necessary to install additional placard holders. Both commenters stressed how important it is to communicate the unique hazard of materials which exhibit an inhalation toxicity hazard (§ 173.3a).

RSPA believes that the subsidiary risk placard required by § 172.505 should be reversed or changed to a RESIDUE placard when a tank car has been unloaded and only contains residue. This will communicate with greater certainty the fact that only the residue of a material remains in the tank car and will ensure that the RESIDUE placard requirements for all materials remain consistent.

III. Review by Sections

1. Section 171.8 is revised by amending the definition of "residue". The definition, as amended, does not specify quantitatively the amount of hazardous material residue which may remain in a tank car placarded with RESIDUE placards.

2. Paragraph (c) of § 172.334 is revised to prohibit the display of an identification number marking on a subsidiary placard.

3. The first sentence of footnote 4 to Table 2 of § 172.504 is reinstated as it appeared prior to Amendment No. 172-98 and the second sentence of footnote 4 is removed so that a RESIDUE placard must be displayed on a tank car which contains the residue of a combustible liquid.

4. The exception provided for combustible liquid residues in paragraph (c)(1) of § 172.510 is removed for consistency. Tank cars which contain residue of a combustible liquid are now required to display RESIDUE placards. For clarity, paragraphs (c)(2) and (c)(3) are redesignated as (c)(1) and (c)(2).

5. Paragraphs (a)(1) of § 172.525 and (c)(10) of Appendix B to Part 172 are revised by changing the size of the letters in the word "RESIDUE" on the placard from 1½ inches (40mm) to 1 inch (25mm).

6. Paragraph (a)(2) of § 172.525 is revised to authorize identification numbers to be displayed on RESIDUE placards or on orange panels in association with RESIDUE placards.

7. The first sentence which follows paragraph (a)(2) of § 172.525 is amended to include a reference to § 172.544 so that a reference is provided to the COMBUSTIBLE placard. Also, the sentences which follow paragraph (a)(2) and precede paragraph (b) of § 172.525 are codified and designated as a new paragraph (a)(4).

8. Paragraph (a)(3) is added to § 172.525 and requires the lower triangle of the RESIDUE placard for combustible liquid residues to be white and the word "RESIDUE" to be shown in black letters on the COMBUSTIBLE-RESIDUE placard.

9. Section 174.25 is revised for clarification.

10. Section 174.93 is revised to except tank cars which contain combustible liquid residue from the train placement requirements.

IV. Administrative Notice

A. Executive Order 12291. MTB has determined the affect of this final rule will not meet the criteria specified in section 1(b) of Executive Order 12291 and is, therefore, not a major rule. This rule is not considered to be a significant rule under DOT regulatory procedures [44 FR 11034] and requires neither a Regulatory Impact Analysis, nor an Environmental Impact Statement under the National Environmental Policy Act (49 U.S.C. 4321 et seq.).

B. Information Collection. No change in information collection is anticipated as a result of this rulemaking.

C. Impact on Small Entities. Based on limited information concerning size and nature of entities likely to be affected, I certify this final rule will not, as promulgated have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects

49 CFR Part 171

Hazardous materials transportation, Definitions.

49 CFR Part 172

Hazardous materials transportation, Placarding.

49 CFR Part 174

Hazardous materials transportation, Railroad safety.

Rules and Regulations

In consideration of the foregoing, Parts 171, 172 and 174 of Title 49 Code of Federal Regulations are amended as follows:

PART 171—GENERAL INFORMATION, REGULATIONS AND DEFINITIONS

1. The authority citation for Part 171 is revised to read as follows:

Authority: 49 U.S.C. 1802, 1803, 1804, 1808; 49 CFR Part 1, unless otherwise noted.

2. In §171.8 the definition of "residue" is revised to read as follows:

§ 171.8 Definition and Abbreviations.

* * * * *

"Residue" means the hazardous material remaining in a packaging, including a tank car, after its contents have been unloaded to the maximum extent practicable and before the packaging is either refilled or cleaned of hazardous material and purged to remove any hazardous vapors.

* * * * *

PART 172—HAZARDOUS MATERIALS TABLES AND HAZARDOUS MATERIALS COMMUNICATIONS REGULATIONS

3. The authority citation for Part 172 is revised to read as follows:

Authority: 49 U.S.C. 1803, 1804, 1805, 1808; 49 CFR Part 1, unless otherwise noted.

4. In § 172.334, paragraph (c) is revised as follows:

§ 172.334 Identification numbers; prohibited display.

* * * * *

(c) Except as required by § 172.332(c)(4) for a combustible liquid, the identification number of a material may be displayed only on the placards required by the tables in § 172.504.

* * * * *

5. In § 172.504, Footnote 4 to Table 2 is revised to read as follows:

§ 172.504 General placarding requirements.

* * * * *

Table 2 * * *

[4] A FLAMMABLE placard may be used on a cargo tank or portable tank during transportation by highway, rail or water, and on a compartmented tank car containing materials classed as flammable liquid and combustible liquid.

* * * * *

6. In § 172.510, paragraph (c)(1) is removed and paragraphs (c)(2) and (c)(3) are redesignated as (c)(1) and (c)(2) and read as follows:

§ 172.510 Special placarding provisions: Rail.

* * * * *

(c) * * *

(1) Is reloaded with a material requiring no placards or different placards; or

(2) Is sufficently cleaned of residue and purged of vapor to remove any potential hazard.

* * * * *

7. In § 172.525, paragraph (a) is revised to read as follows:

§ 172.525 Standard requirements for the RESIDUE placard.

(a) Each RESIDUE placard must be as follows:

(1) Except as provided in paragraph (a)(3) of this section, the lower triangle of the RESIDUE placard must be black and the word "RESIDUE" must be in white letters approximately 1 inch (25mm) high, made with approximately ¼ inch (6mm) stroke. Use of RESIDUE placards displaying the word "RESIDUE" in 1½ inch lettering is authorized until July 1, 1987.

(2) Except for the POISON GAS, RADIOACTIVE, EXPLOSIVES, or subsidiary placard required by § 172.505, the RESIDUE placard may be used to display the appropriate identification number in accordance with the provisions of Subpart D of this part.

(3) For a combustible liquid residue, the lower triangle of the RESIDUE placard must be white and the word "RESIDUE" must be in black letters.

(4) Otherwise, the RESIDUE placard must be as specified in § 172.519 and Appendix B to this Part, and §§ 172.528, 172.530, 172.532, 172.536, 171.540, 172.542, 172.544, 172.546, 172.548, 172.550, 172.552, 172.554 and 172.558, as appropriate for the residue of the hazardous material being transported and required by this subchapter to be placarded. No other placard may be used as a RESIDUE placard.

* * * * *

Appendix B to Part 172—[Amended]

8. Paragraph (c)(10) of Appendix B to Part 172 is amended by changing the reference to the size of the letters in the word "RESIDUE" in the placard from 1½ inches (40mm) to 1 inch (25mm).

PART 174—CARRIAGE BY RAIL

9. The authority citation for Part 174 is revised to read as follows:

Authority: 49 U.S.C. 1803, 1804, 1805, 1808; 49 CFR Part 1, unless otherwise noted.

10. In 174.25, the last entry in the table which follows paragraph (a)(2)(ii) is removed, the following two entries are added to the end of the table, and paragraph (c) is revised to read as follows:

§ 174.25 Additional information on waybills, switching orders and other billings.

(a) * * *

Hazardous material or class	Placard notation	Placard endorsement
*	*	*
Tank cars which contain a residue of a hazardous material other than a combustible liquid.	See Sec. 174.25(c)	Dangerous.
Tank cars which contain a residue of a combustible liquid.	See Sec. 174.25(c)	None.

(c) The shipping paper for a tank car that contains only the residue of a hazardous material must contain the words "RESIDUE: Last Contained * * *", followed by the basic description of the hazardous material last contained in the tank car and the placard notation specified in the second column of the table in paragraph (a)(2) of this section followed by the word "RESIDUE". For example, "RESIDUE: Last Contained Petroleum Naptha, Combustible liquid, UN 1255, Placarded: COMBUSTIBLE—RESIDUE". For a tank car that contains a residue that is a hazardous substance, the letters "RQ" must also be entered on the shipping paper either before or after the basic description.

* * * * *

11. Section 174.93 is revised to read as follows:

§ 174.93 Position in train of a tank car displaying RESIDUE placards.

Except for a tank car placarded COMBUSTIBLE—RESIDUE, a tank car displaying RESIDUE placards in a moving or standing train may not be placed nearer than the second car from an engine or occupied caboose.

Issued in Washington, DC, on June 18, 1986, under the authority delegated in 49 CFR Part 106, Appendix A.

M. Cynthia Douglass,

Administrator.

[FR Doc. 86-14276 Filed 6-24-86; 8:45 am]

BILLING CODE 4910-60-M