This document is scheduled to be published in the
Federal Register on 10/18/2023 and available online at
https://federalregister.gov/d/2023-22878, and on https://govinfo.gov

6560-50-P

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 241

[EPA-HQ-OLEM-2020-0550; FRL-7815-01-OLEM]

RIN 2050-AH13

Non-Hazardous Secondary Material Standards; Response to Petition

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency is finalizing its denial of a rulemaking petition from American Forest and Paper Association et al. requesting amendments to the Non-Hazardous Secondary Materials regulations, initially promulgated on March 21, 2011, and amended on February 7, 2013, February 8, 2016, and February 7, 2018, under the Resource Conservation and Recovery Act. These regulations establish standards and procedures for identifying whether non-hazardous secondary materials are solid wastes when legitimately used as fuels or ingredients in combustion units. The petition requested the following amendments: Change the legitimacy criterion for comparison of contaminants in the non-hazardous secondary material against those in the traditional fuel the unit is designed to burn from mandatory to "should consider"; remove associated designed to burn and other limitations for creosote-treated railroad ties; and revise the definition of "paper recycling residuals" to remove the limit on non-fiber materials in paper recycling residuals that can be burned as a non-waste fuel. The Environmental Protection Agency proposed to deny the petition on January 28, 2022. After review of the public comments, the Agency is finalizing its denial of the requested amendments. In addition to denying this rulemaking petition, the Agency is revising the definition of paper recycling residuals to limit the impact non-fiber materials may have on the heat value of paper recycling residuals in order for them to be considered a non-waste fuel.

DATES: This final rule is effective on **[INSERT DATE 60 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OLEM-2020-0550. All documents in the docket are listed on the https://www.regulations.gov website. Although listed in the index, some information is not publicly available, e.g., Confidential Business Information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through https://www.regulations.gov.

FOR FURTHER INFORMATION CONTACT: Patrick Wise, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division (MC 5303P), Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460; telephone number: 202-566-0520; email address: wise.patrick@epa.gov.

SUPPLEMENTARY INFORMATION: The following outline is provided to aid in locating information in this preamble.

I. General Information

A. List of Abbreviations and Acronyms Used in This Rule

AAR	Association of American Railroads
AF&PA	American Forest and Paper Association
ASLRRA	American Short Line and Regional Railroad Association
AWC	American Wood Council
Btu	British thermal unit
CAA	Clean Air Act
CFR	Code of Federal Regulations
CISWI	Commercial and Industrial Solid Waste Incinerator
CTRT	Creosote-treated railroad ties
EPA	U.S. Environmental Protection Agency
FR	*Federal Register*
HAP	Hazardous air pollutants
ISRI	Institute of Scrap Recycling Industries
MACT	Maximum achievable control technology
NAICS	North American Industrial Classification System
NHSM	Non-hazardous secondary material
OMB	Office of Management and Budget
PRR	Paper recycling residuals
RCRA	Resource Conservation and Recovery Act
RIN	Regulatory information number
SO_2	Sulfur dioxide
SVOC	Semi-volatile organic compound
TWC	Treated Wood Council
U.S.C.	United States Code

B. What is the statutory authority for this final rule?

The Environmental Protection Agency (EPA or "the Agency") is finalizing its denial of the requested revisions in the American Forest and Paper Association (AF&PA) petition[1] and is making regulatory revisions to the definition of paper recycling residuals under the authority of

[1] Petition for Rulemaking to Amend the Legitimacy Criteria in 40 C.F.R. Part 241, -The Categorical Non-Waste Fuels Classification Criteria for Creosote Treated Railroad Ties and Other Treated Railroads Ties, and the Definition of Paper Recycling Residuals, December 7, 2018, available in docket (EPA-HQ-OLEM-2020-0550).

sections 2002(a)(1) and 1004(27) of the Resource Conservation and Recovery Act (RCRA), as amended, 42 U.S.C. 6912(a)(1) and 6903(27). Section 129(a)(1)(D) of the Clean Air Act (CAA) directs the EPA to establish standards for Commercial and Industrial Solid Waste Incinerators (CISWI), which burn solid waste. Section 129(g)(6) of the CAA provides that the term "solid waste" is to be established by the EPA under RCRA (42 U.S.C. 7429(g)(6)). Section 2002(a)(1) of RCRA authorizes the Agency to promulgate regulations as are necessary to carry out its functions under the Act. The statutory definition of "solid waste" is stated in RCRA section 1004(27).

C. Does this final rule apply to me?

Categories and entities potentially affected by this action, either directly or indirectly, include, but may not be limited to the following:

Generators and Potential Users[a] of Categorical Non-Waste Fuels	
Primary industry category or subcategory	***NAICS[b]***
Utilities	221
Manufacturing	31, 32, 33
Wood Product Manufacturing	321
Sawmills	321113
Wood Preservation (includes railroad tie creosote treating)	321114
Paper Manufacturing	322
Cement Manufacturing	32731
Rail Transportation (includes line haul and short line)	482
Scenic and Sightseeing Transportation, Land (Includes: railroad, scenic and sightseeing)	487110
Port and Harbor Operations (Used railroad ties)	488310
Landscaping Services	561730
Solid Waste Collection	562111
Solid Waste Landfill	562212
Solid Waste Combustors and Incinerators	562213
Marinas	713930
[a] Includes: Major Source Boilers, Area Source Boilers, and Solid Waste Incinerators [b] NAICS - North American Industrial Classification System	

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities potentially impacted by this action. This table lists examples of the types of entities which the EPA is aware of that could potentially be affected by this action. Other types

of entities not listed could also be affected. To determine whether your facility, company, business, organization, etc., is affected by this action, you should examine the applicability criteria in this rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

II. Background

A. History of the Non-Hazardous Secondary Materials Rulemaking

The non-hazardous secondary materials (NHSM) regulations establish standards and procedures for identifying when non-hazardous secondary materials burned in combustion units are solid wastes. The RCRA statute defines "solid waste" as "any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and **other discarded material**…resulting from industrial, commercial, mining, and agricultural operations, and from community activities." (RCRA section 1004(27) (emphasis added)). The key concept is that of "discard" and, in fact, this definition hinges on the meaning of the phrase "other discarded material," since this term encompasses all other examples provided in the definition.

The meaning of "solid waste," as defined under RCRA, is of particular importance as it relates to section 129 of the CAA. If a material or any portion thereof is a solid waste under RCRA, a combustion unit burning it is required to meet the CAA section 129 emission standards for solid waste incineration units (*NRDC v. EPA*, 489 F.3d 1250, 1258). If the material is not a solid waste, combustion units are required to meet the CAA section 112 emission standards. CAA section 129 further states that the term "solid waste" shall have the meaning "established by the Administrator pursuant to the Solid Waste Disposal Act" (42 U.S.C. 7429(g)(6)). The Solid Waste Disposal Act, as amended, is commonly referred to as RCRA.

The Agency first solicited comments on how the RCRA definition of solid waste should apply to NHSMs when used as fuels or ingredients in combustion units in an advance notice of

proposed rulemaking (ANPRM), which was published in the *Federal Register* on January 2, 2009 (74 FR 41). The EPA then published an NHSM proposed rule on June 4, 2010 (75 FR 31844), which the EPA finalized on March 21, 2011 (76 FR 15456).

In the March 21, 2011 rule, the EPA finalized standards and procedures to be used to identify whether NHSMs are solid wastes when used as fuels or ingredients in combustion units. "Secondary material" was defined for the purposes of that rulemaking as any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap (codified at 40 CFR 241.2). "Non-hazardous secondary material" is a secondary material that, when discarded, would not be identified as a hazardous waste under 40 CFR part 261 (codified at 40 CFR 241.2). Traditional fuels, including historically managed traditional fuels (e.g., coal, oil, natural gas) and "alternative" traditional fuels (e.g., clean cellulosic biomass), are not secondary materials and thus are not solid wastes under the rule unless discarded (codified at 40 CFR 241.2).

A key concept included in the March 21, 2011 rule is that NHSMs used as non-waste fuels in combustion units regulated under CAA section 112 must meet the legitimacy criteria specified in 40 CFR 241.3(d)(1); otherwise, NHSMs must be combusted in incinerator units regulated under CAA section 129. Application of the legitimacy criteria helps ensure that the fuel product is being legitimately and beneficially used and not simply being discarded through combustion. To meet the legitimacy criteria, the NHSM must be managed as a valuable commodity, have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy, and contain contaminants or groups of contaminants at concentration levels comparable to (or lower than) those in traditional fuels which the combustion unit is designed to burn. The NHSM legitimacy criteria have been in place since 2011 and were upheld by the D.C. Circuit Court in *Solvay v. EPA*. 608 Fed. Appx. 10 (D.C. Cir. 2015) (45 ELR 20107 Nos. 11-1189, (D.C. Cir., 06/03/2015)).

Based on these criteria, the March 21, 2011 rule identified the following NHSMs as not being solid wastes:

- The NHSM that meets the legitimacy criteria and is used as a fuel and that remains within the control of the generator (whether at the site of generation or another site the generator has control over) (40 CFR 241.3(b)(1));
- The NHSM that meets the legitimacy criteria and is used as an ingredient in a combustion unit (whether by the generator or outside the control of the generator) (40 CFR 241.3(b)(3));
- Discarded NHSM that has been sufficiently processed to produce a fuel or ingredient that meets the legitimacy criteria (40 CFR 241.3(b)(4)); or
- On a case-by-case petition basis, NHSM that has been determined to have been handled outside the control of the generator, has not been discarded and is indistinguishable in all relevant aspects from a fuel product, and meets the legitimacy criteria (40 CFR 241.3(c)).

In 2013, the EPA amended the NHSM rules to "clarify several provisions in order to implement the non-hazardous secondary materials rule as the Agency originally intended."[2] While the 2013 final rule did not contain any provisions specific to creosote-treated railroad ties (CTRT), the EPA noted that AF&PA and the American Wood Council submitted a letter with supporting information on December 6, 2012, seeking a categorical non-waste determination for CTRT combusted in any unit.[3] The EPA discussed at the time that the Agency was reviewing the petition and also asked petitioners to provide additional information regarding CTRT, including industry sectors that burn CTRT; types of combustion units; types of traditional fuels that could otherwise be burned in these combustion units; extent of use of CTRT in non-industrial boilers; and laboratory analyses of CTRT for the contaminants, as defined under 40 CFR 241.2, known to be significant components of creosote, such as polycyclic aromatic hydrocarbons. The EPA

---

[2] *Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste; Final Rule.* 78 FR 9112, February 7, 2013.
[3] 78 FR 9173, February 7, 2013.

also provided notice that, assuming the additional information supported the petitioners' representations, the Agency intended to propose a categorical non-waste fuel determination for CTRT.

On February 8, 2016 (81 FR 6687), the EPA published final NHSM rule amendments that provided a categorical non-waste fuel determination for CTRT that undergo, at a minimum, metal removal and shredding or grinding and are used as fuel in units designed to burn both biomass and fuel oil as part of normal operations and not solely as part of start-up or shut-down operations.[4] In addition, the final rule included a special provision for units at major source pulp and paper mills or power producers subject to 40 CFR part 63, subpart DDDDD that were designed to burn biomass and fuel oil as part of normal operations, but are modified (e.g., oil delivery mechanisms are removed) in order to use natural gas instead of fuel oil. These units may continue to combust the CTRT as product fuel if the following conditions are met: (A) CTRT must be burned in an existing (i.e., commenced construction prior to April 14, 2014) stoker, bubbling bed, fluidized bed, or hybrid suspension grate boilers; and (B) CTRT can comprise no more than 40 percent of the fuel that is used on an annual heat input basis.

A similar categorical non-waste fuel determination approach was applied to creosote-borate and mixtures of creosote and certain non-creosote treated railroad ties (i.e., other treated railroad ties, or OTRT) in the February 7, 2018 NHSM rule amendments.[5]

B. Summary of this Action

This action consists of two parts. First, the Agency is finalizing its response to a rulemaking petition ("the petition") requesting amendments to the NHSM regulations, initially promulgated on March 21, 2011, and amended on February 7, 2013, February 8, 2016, and February 7, 2018 under RCRA. Second, the Agency is finalizing a revised definition of PRR.

[4] 81 FR 6723, February 8, 2016.

[5] 83 FR 5318–19, February 7, 2018.

These two parts of this action are separate and distinct, and each part operates independently from the other.

In addition, within the first part (in which the Agency is finalizing its response to the petition), the Agency intends that each of the individual components of the petition and EPA's responses to those components, are also severable.

C. Summary of the Petitioners' Requested Changes

The petition was received on December 7, 2018; petitioners included AF&PA, the Association of American Railroads (AAR), Treated Wood Council (TWC), American Short Line and Regional Railroad Association (ASLRRA), and American Wood Council (AWC). The petition requested the following amendments to the NHSM regulations: 1) Change from mandatory to "should consider" the legitimacy criterion for comparison of contaminants in the NHSM to the traditional fuel the unit is designed to burn found at 40 CFR 241.3(d)(1)(iii); 2) remove associated designed to burn and other limitations for creosote-treated railroad ties found at 40 CFR 241.4(a)(7)–(10); and 3) revise the definition of paper recycling residuals that can be burned as non-waste fuel found at 40 CFR 241.2 to remove the limit on non-fiber materials. In issuing this petition denial, the EPA has considered and addressed each of the issues raised in the petition throughout this notice. Arguments raised in pages 13–16 of the petition regarding the contaminant comparison criteria are addressed in Section III.A. of the preamble; arguments raised on pages 16–17 of the petition regarding CTRT storage times are addressed in Section III.C. of the preamble; arguments raised in pages 18–20 of the petition regarding environmental benefits of removing restrictions on the combustion of CTRT are addressed in Sections III.A and III.B of the preamble; arguments raised in pages 20–22 of the petition regarding the definition of paper recycling residuals are addressed in Section III.D of the preamble.

D. Background on Creosote-Treated Railroad Ties

CTRT are still produced in large numbers today, and roughly 10–20 million railroad ties are removed from service each year in the U.S.[6] After railroad ties are removed from service, they may be stored for varying periods of time before being transferred for sorting/processing. Based on information provided by industry,[7] the processing of the railroad ties into fuel by the reclamation/processing companies involves several steps (metal removal, shredding, screening, etc.), which have already been described in the proposed petition response. Once the processing of CTRT is complete, the CTRT are sold directly to the end-use combustor for energy recovery, where they are typically combusted within a few days or weeks of receipt.

Use of CTRT as an alternative fuel has both positive and negative environmental implications. Combusting CTRT for energy recovery may reduce fossil fuel use,[8] increase the heat value of the fuel mix, improve the combustion temperature and conditions,[9] and divert waste ties from landfill. However, CTRT has elevated levels of various contaminants when compared to coal (76 FR 15483, March 21, 2011), fuel oil, and biomass (81 FR 6687, February 8, 2016). Thus, the 2016 NHSM non-waste determination is limited to CTRT that are used as fuel in specific types of units where CTRT have contaminants at levels comparable to or lower than the traditional fuel that combustion units are designed to burn.

In addition, in the January 28, 2022 proposed petition response, the EPA discussed potential problems associated with processing CTRT for use as fuel and requested public comment on the frequency and severity of such issues. Grinding CTRT can create dust that may blow onto neighboring properties. Processing CTRT into fuel can also be associated with other,

---

[6] 2018 Railroad Tie Survey, Association of American Railroads, available in the docket EPA-HQ-OLEM-2020-0550.

[7] AFPA Rail Tie Petition Request December 6, 2012, EPA-HQ-RCRA-2013-0110-0002.

[8] While creosote is a coal derivative, because the creosote has already been used once as a preservative on railway ties, burning those ties still may reduce the need for burning of fossil fuels.

[9] In addition, Freeman et al., 2000 indicates that co-firing CTRT with coal at 10% the annual heating value may reduce emissions of certain pollutants. However, that study is very limited and cannot be extrapolated to the use of CTRT as a fuel in general. Little is known about impacts of variability in CTRT or coal composition and how these would impact emissions for any given combustor design or control device configuration. For more information, see *Creosote Treated Railroad Ties and Coal Co-firing Technical Support Document*, available in the docket, EPA-HQ-OLEM-2020-0550-0004.

more-generalized issues like excess noise from grinding, loud night-time operations, and the smell of creosote.

However, Tribal, State, and local governments have authority under their solid waste and water programs, as well as local ordinances, to address any citizen complaints associated with the management and processing of CTRT prior to their use as a non-waste fuel, including problems associated with dust, excess noise, and runoff. In most cases, CTRT remain solid waste until processed to produce a non-waste fuel per 40 CFR 241.3(b)(4) and thus remain under such solid waste regulatory authority. In addition, a Federal non-waste determination under 40 CFR part 241 does not affect a State's authority to regulate a non-hazardous secondary material as a solid waste under the State's RCRA Subtitle D solid waste management program.

It should also be noted that environmental concerns associated with processing and management may impact a material's classification as a non-waste fuel. In order to fulfill the "valuable commodity" legitimacy criterion required of NHSM burned as fuel (40 CFR 241.3(d)(1)(i)), the material must be "managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment." Likewise, when no analogous fuel exists, the material must be "adequately contained so as to prevent releases to the environment."

The EPA requested public comment on the potential health and environmental risks associated with managing and processing CTRT prior to combustion and potential approaches to addressing these issues, but the Agency received no public input on these matters. Absent sufficient information surrounding these issues and considering the existing authority of State and local governments to address many of these issues, the EPA is declining to take further action on this issue at this time.

III. EPA Response to Petitioners' Requested Changes

This action is based on the petition and its supporting materials, the Agency's review and evaluation of this information, information submitted by other stakeholders, and relevant information compiled by the Agency. All materials and information that form the basis for this decision are available in the public docket supporting this action. The petition's arguments and supporting information, in addition to other public comments received, are summarized and discussed below, followed by the Agency's response.

A. Request To Change the Contaminant Comparison Criterion from Mandatory to "Should Consider"

1. Petitioners' Request

40 CFR 241.3(d)(1)(iii) currently states that, "The non-hazardous secondary material *must* contain contaminants or groups of contaminants at levels comparable in concentration to or less than those in traditional fuel(s) that the combustion unit is *designed* to burn" (emphasis added). Petitioners requested the following revision in the regulatory language: "Persons *should* consider whether the non-hazardous secondary material contains contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) that the combustion unit is *capable* of burning...*The factor in this paragraph does not have to be met for the non-hazardous secondary material to be considered a non-waste fuel*" (emphasis added).

Petitioners' rationale for this suggested change focused on a July 7, 2017 decision by the U.S. Court of Appeals for the D.C. Circuit that rejected mandatory compliance with the contaminant comparison criterion portion of the legitimacy test in the context of the RCRA rules defining "solid wastes" under RCRA's Subtitle C hazardous waste program ("DSW rule"). *American Petroleum Institute v. Environmental Protection Agency*, 862 F.3d 50 (D.C. Cir. 2017) ("*API*"). Petitioners argued that, in light of the Court's DSW rule decision, the continued mandatory use of the contaminant comparison criterion in the NHSM rule, including limiting

railroad tie non-waste fuel classifications to certain types of combustion units, can no longer be justified.

Petitioners referenced preamble language the EPA used in the 2015 DSW final rule regarding the contaminant comparison criterion and said that "[t]his language is consistent with the Identification of Non-Hazardous Secondary Materials that are Solid Wastes final rule (76 FR 15456, March 21, 2011)" (80 FR 1727, January 13, 2015). From this preamble language petitioners concluded that the EPA has acknowledged the equivalence of the contaminant comparison factors in the two rules (i.e., Factor 4 in the DSW rule and third legitimacy criterion in the NHSM rule).

In 2017, the *API* Court invalidated the fourth factor in the DSW rule, finding that "[n]ever in the rulemaking does EPA make out why a product that fails those criteria is likely to be discarded in any legitimate sense of the term." 862 F.3d at 62. Petitioners say that the Court also challenged the EPA's "bare assertion that high levels of hazardous constituents . . . could indicate discard," and noted that the contaminant comparison at issue was "not a reasonable tool for distinguishing products from wastes." *Id* at 60, 63 (internal quotes omitted).

Petitioners argued that the *API* holding, with its critique of the EPA's application of this element of the definition of legitimate recycling in the DSW rule, applies with equal force to the NHSM legitimacy criteria set forth at 40 CFR 241.3(d). See *id* at 63. Therefore, petitioners alleged that, based on the reasoning and holding in *API*, the contaminant comparison criterion currently contained in the NHSM rule's legitimacy criteria and the corresponding NHSM rules for railroad ties treated with creosote and other wood preservatives can no longer be used as mandatory elements to determine whether a secondary material is discarded or not.

Furthermore, petitioners asserted that the EPA has recognized that the contaminant comparison should not be a determining factor for whether a material is being discarded. In its 2016 Rule on Additions to List of Categorical Non-Waste Fuels, the EPA expressly noted that "CTRTs do not become wastes solely because of the switch to natural gas" (81 FR 6687, 6731,

February 8, 2016). In that rule, the EPA reasoned that facilities that have demonstrated the ability to burn fuel oil and biomass should not be penalized for switching to natural gas, a fuel that creates less air pollution. In addition, petitioners stated that the EPA properly determined that resinated wood should qualify as a categorical non-waste fuel under the NHSM rule, despite expressly recognizing that this material "may not meet the regulatory contaminant legitimacy criteria in every situation" (78 FR 9112, 9156, February 7, 2013). Petitioners claimed that this prior EPA precedent is fully consistent with the Court's decision in *API* and underscores the need to eliminate the contaminant comparison as a mandatory factor in the NHSM rule's legitimacy criteria generally, and as a condition as applied to individual NHSMs.

2. Public comment

Commenters continued to argue that the 2017 *API* decision is applicable to the NHSM contaminant comparison criterion, iterating similar positions taken in the original petition. In particular, commenters contended that the sole statutory definition of "solid waste" in RCRA means that the contaminant comparison test must be applied identically for hazardous and non-hazardous materials. Because the test was invalidated for hazardous secondary material in the 2017 *API* decision, they argued the contaminant comparison criterion should also be eliminated as a mandatory criterion for non-hazardous secondary material being burned as a non-waste fuel. Commenters likewise stated that a non-mandatory standard should be permissible for materials that are not hazardous when discarded if a non-mandatory test is allowable for materials that are hazardous when discarded. Commenters also stated that combustion units would still be regulated by CAA section 112 standards if the contaminant comparison test was not mandatory.

3. EPA Response

The argument that the 2017 *API* decision invalidates the contaminant comparison criterion for the NHSM program fails because the contaminant standards in each rule were established for different purposes and in different contexts.

The DSW rule establishes standards for legitimate recycling of hazardous secondary materials into products (not fuels). The exclusions in the DSW rule address reclamation, and specifically omit burning for energy recovery. Unlike NHSMs, hazardous secondary materials that are burned for energy recovery are always solid waste,[10] unless the material is a commercial chemical product that is itself a fuel.[11] Combustion is an inherently destructive process, even when energy is recovered, and unlike other types of recycling, there is no final product to consider in determining the impact of elevated hazardous constituents. The contaminant comparison in 40 CFR 260.43(b) compares hazardous constituents in the product of the recycling process to the corresponding constituents in the analogous product made from virgin material. While 40 CFR 260.43(b) specifies that this factor "does not have to be met for the recycling to be considered legitimate," the regulation also explains that "[i]n evaluating the extent to which this factor is met and in determining whether a process that does not meet this factor is still legitimate, persons can consider exposure from toxics in the product, the bioavailability of the toxics in the product and other relevant considerations." In other words, the definition of legitimate recycling in 40 CFR 260.43, as it relates to hazardous constituents, focuses on the effect those hazardous constituents have on the risks posed by the product of recycling.

In contrast, the NHSM rule was established solely to determine whether an NHSM that is combusted as a fuel or an ingredient is a waste or a non-waste for purposes of applying appropriate emission standards under CAA section 129 or CAA section 112. Without the contaminant criterion, an NHSM could contain contaminant levels that are significantly higher than the traditional fuel(s) they are meant to replace and still be considered a non-waste fuel. So, for example, if CTRT-derived pellets could be marketed to any wood-burning boiler, such as

---

[10] The EPA notes that the statutory objectives associated with designating a solid waste as discarded warrant different implementation strategies depending on the context. See *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 320 (2014) (finding that statutory terms, even those that are defined in the statute, "may take on distinct characters from association with distinct statutory objects calling for different implementation strategies").

[11] *See* 40 CFR 261.2(c)(2), RCRA section 3004(q); *Natural Resources Defense Council* v. *EPA*, 755 F.3d 1010 (June 27, 2014)) and *Sierra Club* v. *EPA*, 755 F.3d 968.

those sometimes used in schools,[12] then those boilers would be burning a material with higher levels of contaminants than the clean wood they were designed to burn, potentially exposing the children in those schools with wood-burning boilers to unexpected air pollutants. Burning is an inherently destructive process, even if there is energy recovery. Thus, through the NHSM rules, the Agency evaluates whether burning an NHSM for energy recovery also has the effect of destroying contaminants that would not otherwise be present in the corresponding traditional fuel, indicating discard is occurring. The presence of higher levels of contaminants underscores the appropriateness of applying CAA section 129 standards to the combustion of the material in question, as these standards are more appropriate for wastes, which are likely to contain more contaminants than traditional fuels.

NHSM standards for categorical non-wastes also differ significantly from the DSW rule because the NHSM standards allow consideration of "other relevant factors" in determining whether the contaminant comparison criterion is met (see 40 CFR 241.4(b)(5)(ii)). Thus, the NHSM standards already provide flexibility to meet the contaminant comparison criterion, where appropriate. The *API* Court's rejection of the mandatory contaminant comparison for hazardous wastes in the DSW rule turned, in large part, on what the Court viewed as a rigid and severe standard. The Court felt that the requirement "sets the bar at the contaminant level of the analogue without regard to whether any incremental contaminants are significant in terms of health and environmental risks." 862 F.3d 50, 60 (D.C. Cir. 2017). However, the Court went on to commend an exception to that test in which a recycler could satisfy this legitimacy criterion with evidence of "lack of exposure from toxics in the product, lack of the bioavailability of toxins in the product, or other relevant considerations which show that the recycled product does not contain levels of hazardous constituents that pose a significant human health or environmental risk." *Id*. (quoting 40 CFR 260.43(a)(4)(iii) (2016)). Ultimately, the Court found

[12] See, for example, *Biomass Boilers in Public Schools and Buildings*, https://vecan.net/iniatives/biomass-boilers-public-schools-buildings/, and *Wood Pellet Heating for Schools* https://www.maineenergysystems.com/wood-pellet-heating-for-schools/, both retrieved 06/20/2023.

the exception to be insufficient "due to the draconian character of the procedures." *Id*. at 61. That is, if a recycler failed to satisfy any step in the exception process, an otherwise legitimate product would be considered to be hazardous waste. The NHSM regulations avoid these problems by allowing the Agency to consider "other relevant factors," which offers flexibility without the "draconian" procedures of the 2015 DSW rule. Petitioners recognize this fact by noting that the EPA has already applied such flexibility when the Agency originally promulgated 40 CFR 241.4(a)(7)(ii), which recognized the fact that CTRT burned as fuel in certain units at major source pulp and paper mills or power producers which were constructed prior to April 14, 2014 and burn CTRT as less than 40% of its fuel source would be considered non-waste fuel, even if those units have been modified to burn natural gas. Likewise, the Agency previously exercised this flexibility in establishing the categorical non-waste listing for resinated wood; however, that context differed in that the EPA determined that the management of resinated wood prior to combustion as a fuel is equivalent to the management of resinated wood being used as a raw material. As such, the Agency concluded that, though resinated wood may not fulfill the legitimacy criteria in all cases, "resinated wood that is used as fuel represents an integral component of the wood manufacturing process and, as such, is not being discarded when burned as fuel." The use of resinated wood as a fuel is integrated into the wood production process in such a way that the relevant manufacturing facilities would have to be significantly re-engineered if they could not use resinated wood for its fuel value (78 FR 9155, February 7, 2013). In contrast, units that burn CTRT are far removed from the CTRT production process, and are also able to burn other types of fuels, so the Agency maintains that the more stringent provisions in the categorical non-waste listing for CTRT (as compared to that for resinated wood) are appropriate. The EPA also notes that the Agency has not reopened or requested comment on this provision, but cites it as a demonstration that the Agency can and has used flexibility to address case-specific circumstances where appropriate.

Commenters imply that the existence of such flexibility requires the EPA to disregard relative contaminant levels when comparing NHSMs to traditional fuels because of other implications related to a material's waste status. However, any "other relevant factors" considered in making a waste determination must be relevant to the core question of whether the material is a solid waste when combusted. Some commenters seem to propose looking to greenhouse gas emissions and landfill capacity as "other relevant factors," but neither of these topics dictate whether the particular material in question is combusted as a waste. The extent to which a particular disposal practice of NHSM does or does not release greenhouse gases or consume landfill capacity once discarded does not impact whether the NHSM is discarded when combusted.

Finally, in response to comments arguing that CAA section 112 standards would still apply to units combusting NHSM with significantly elevated levels of contaminants when compared to traditional fuels, the EPA does not agree that these elevated levels of contaminants would be addressed by the CAA section 112 standards, which were intended for units that burn non-waste fuel. Emission standards for dioxins, SO_2, NO_x, etc. for non-major sources are addressed under the CAA section 129 standards but are not addressed by area source boiler standards under CAA section 112, which require only tune-ups. Therefore, for all of the reasons stated above, the *API* decision does not directly apply because the context of burning NHSM differs fundamentally from hazardous waste recycling (which, to reiterate, does not include burning for energy recovery).

To end, we also note that the NHSM legitimacy criteria have been in place since 2011 and were upheld by the D.C. Circuit Court in *Solvay v. EPA*. 608 Fed. Appx. 10 (D.C. Cir. 2015) (45 ELR 20107 Nos. 11-1189, (D.C. Cir., 06/03/2015)). A substantive change to the contaminant comparison criterion would allow NHSM generators to "consider" significantly higher levels of contaminants in their NHSM-derived fuel, without any threshold or indication of when such a consideration might result in an NHSM being a solid waste. Such a substantive change would

also create regulatory uncertainty for the combustion units that burn this material and rely on an accurate non-waste determination for their CAA regulatory applicability determinations. The Agency is, therefore, denying the petitioners' request regarding the contaminant comparison criterion.

B. Request To Remove Associated Designed to Burn and Other Limitations for Creosote-Treated Railroad Ties

1. Petitioners' Request

As discussed above, 40 CFR 241.3(d)(1)(iii) states that "[t]he non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or less than those in the traditional fuel(s) that the combustion unit *is designed to burn*…" (emphasis added). As currently applied, the petitioners believe the designed to burn criterion means that the exact same railroad tie is considered a solid waste when burned in one unit, but a non-waste fuel when burned in another – depending solely on the type of fuel the boilers are designed to combust. The petition stated that the EPA has acknowledged the character of the NHSM does not change depending on the design of the boiler it goes to, and has offered no rationale for how the existence of a fuel oil nozzle in a boiler (*i.e.*, a boiler originally designed to burn fuel oil, but later retrofitted to burn natural gas) informs the question of whether CTRT are being legitimately used as fuel, or in fact are simply being discarded in a hypothetical "sham recycling" operation. Accordingly, the petition requested that the EPA remove the limitations in the CTRT categorical non-waste listing that are related to boiler design (i.e., 40 CFR 241.4(a)(7)(i) and (ii)).

In addition, petitioners argued, the EPA has imposed other restrictions unrelated to the characteristics of the NHSM itself – including a requirement that the facility in question must have been built before April 2014 and that the amount of NHSM combusted in that facility may not exceed 40% of the total fuel mix in a given year. Petitioners claimed that, in adding these various requirements regarding the characteristics of the combustion unit, the characteristics of

the material and the motivation of the recycler are essentially rendered irrelevant to the determination of whether the material is a solid waste. Petitioners contend that this is contrary to RCRA case law and an arbitrary and unreasonable basis on which to decide whether the material is, in fact, being discarded or legitimately used as fuel.

Petitioners indicated that, as the agency charged with environmental protection, the EPA should encourage the widespread use of CTRT and other similarly situated NHSM as fuel, rather than restrict that use and condemn valuable fuel sources to landfills. Furthermore, petitioners stated that the regulatory revisions requested in the petition promote environmental sustainability, consistent with the EPA's Waste Management Hierarchy, eliminate undue and burdensome regulation, and reduce costs associated with such regulatory burdens.

2. Public comment

Petitioners, through their comments, continued to argue for the removal of the associated designed to burn and other limitations for CTRT combusted as fuels.

These commenters stated that the EPA's regulation of CTRT is neither reasonable nor appropriate according to the Administrative Procedures Act. Commenters expanded upon this point by explaining that two identical CTRT removed from service would be regulated differently if one were burned in a boiler designed to burn biomass and fuel oil and the other in a unit designed to burn biomass and natural gas. Commenters further noted that if a boiler designed to burn biomass and fuel oil was built before 2014 and converted from fuel oil to natural gas, that boiler would be able to burn CTRT as a non-waste fuel, while a new boiler designed to burn biomass and natural gas would not. Commenters also noted that the EPA has declared resinated wood and coal refuse to be non-waste fuels, even though resinated wood contains elevated formaldehyde levels compared to virgin biomass and coal refuse could be combusted in boilers not designed to burn coal. This decision by the EPA allows resinated wood and coal refuse to be combusted in any boiler, while CTRT combustion must follow additional

conditions to be burned as a non-waste fuel only in specific boilers as designated in 40 CFR 241.4(a)(7).

One commenter also argued that, if a unit meets its permit requirements and the contaminant comparison criterion is met, the designed to burn qualification should be irrelevant, and that the CAA directs the EPA to focus on emissions from the combustion of fuels rather than on the nature of the fuel combusted.

3. EPA Response

Regarding petitioners' claim that the same NHSM is treated differently in different units, such a claim ignores the underlying premise of the NHSM rules. As explained in the program's original March 21, 2011 rulemaking (76 FR 15455), the NHSM program exists to determine whether an NHSM that is combusted is a waste or a non-waste for purposes of applying appropriate emission standards under CAA section 129 or CAA section 112 to the unit burning the NHSM. An NHSM that is burned in a unit that is designed to burn a comparable traditional fuel is, because of that comparability, a non-waste fuel. When an NHSM is burned in a unit that is not designed to burn a comparable traditional fuel (e.g., that is designed to burn fuel with lower levels of contaminants than found in the NHSM), that combustion is acting as a means of destroying those elevated contaminants and therefore is more appropriately regulated as solid waste incineration. Thus, it is entirely appropriate that an NHSM would be considered a non-waste fuel when burned in a unit designed to burn a comparable traditional fuel, and a solid waste when burned in a unit that is not designed to burn a comparable traditional fuel. Contaminants or groups of contaminants in the NHSM must occur at levels comparable to or lower than those in the traditional fuel the unit is designed to burn. As the Agency determined when it established the categorical non-waste listing for CTRT (81 FR 6687, February 8, 2016), under 40 CFR 241.4(a)(7)(i), each unit must be designed to burn both biomass and fuel oil, since contaminant levels in CTRT (e.g., SVOCs) are considerably higher than in biomass alone. Without the designed to burn criterion, contaminant levels could be compared to any traditional

fuel or combination of traditional fuels, resulting in a unit burning contaminants under the boiler provisions in CAA section 112 that the unit would otherwise never have been eligible to handle.[13] The EPA has not reopened or requested comment on the contaminant concentrations of a CTRT in this action and continues to rely on the determination made in the original CTRT categorical non-waste listing (81 FR 6687, February 8, 2016).

It should be noted that as a result of the 2013 NHSM rule, the regulations already provide considerable flexibility in implementing the designed to burn criterion. Persons making contaminant level comparisons may choose any traditional fuel that is physically capable of being burned, or is actually burned, in the particular type of boiler, whether or not the combustion unit is permitted to burn that traditional fuel. Broad groups of similar traditional fuels may be used when comparing contaminant levels (e.g., coal, biomass, fuel oil, and natural gas). The regulatory language in 40 CFR part 241 makes it clear that a unit is considered designed to burn a traditional fuel if it can burn the fuel, regardless of whether it has burned, or is permitted to burn, such a fuel.

Petitioners suggest replacing language in the CTRT rules regarding which units are "designed to burn" CTRT with units "operating in compliance with all applicable permits." However, the NHSM rules are used to determine which CAA permits are applicable to a unit combusting NHSM, making the suggested reference to "applicable permits" circular and meaningless.

In regard to petitioners' comments on the EPA's decision to include in the non-waste determination CTRT burned as fuel in units at major source pulp and paper mills or power producers subject to 40 CFR part 63, subpart DDDDD that had been originally designed to burn biomass and fuel oil, but had switched to natural gas (see 40 CFR 241.4(a)(7)(ii)), the EPA once

[13] This issue would be a concern even under the petitioners' requested change to make the contaminant comparison criterion "to be considered" rather than mandatory.

again notes that the Agency neither reopened nor took comment on this provision. The EPA notes that the petition only raised the issue of the requirements that limit the non-waste determination for 40 CFR 241.4(a)(7)(ii) to CTRT combusted in facilities that had been built before April 2014 in amounts that do not exceed 40% in the context of their opposition to any requirements under the non-waste determination that are related to the combustion unit.[14] As discussed above, petitioners' claim ignores the underlying premise of the NHSM rules. As explained in the program's original March 21, 2011 rulemaking (76 FR 15455), the NHSM program exists to determine whether an NHSM that is combusted is a waste or a non-waste for purposes of applying appropriate emission standards under CAA section 129 or CAA section 112 to the unit burning the NHSM. Thus, in general, restrictions related to ensuring that an NHSM is burned in a unit that was designed to burn a comparable fuel in order to be considered a non-waste fuel under the CAA are entirely appropriate, because it is the "designed to burn" criteria that help ensure that the NHSM is burned in units that would otherwise burn comparable traditional fuels (and therefore the NHSM is not being burned simply as a means of destroying contamination). The EPA need not reconsider the specific requirements in 40 CFR 241.4(a)(7)(ii) beyond the "designed to burn" provision that was discussed in detail in the petition. No challenge to the 40 CFR 241.4(a)(7)(ii) regulation was filed and the time period to challenge that rule has long passed under the judicial review provision of RCRA section 7006, which requires such challenges to be filed within 90 days of the rule's promulgation. The opportunity to petition the Agency for changes to any RCRA rule is always available to members of the public (as is the current case), but such petitions are evaluated typically based on new information identified by petitioners (as well as information identified by the Agency, and those commenting on a proposed Agency action) as the basis for the requested changes to a regulation. No such information was provided in the petition specific to this provision. Instead, Petitioners

[14] AF&PA et al., *Petition for Rulemaking to Amend the Legitimacy Criteria in 40 C.F.R. Part 241, -The Categorical Non-Waste Fuels Classification Criteria for Creosote Treated Railroad Ties and Other Treated Railroads Ties, and the Definition of Paper Recycling Residuals*, December 7, 2018, page 16.

simply provide a general assertion that the provision is an "arbitrary and unreasonable basis on which to decide whether the material is, in fact, being discarded or legitimately used as fuel."[15] In the future, if a member of the public were to petition the EPA to reconsider the specific requirements in 40 CFR 241.4(a)(7)(ii) beyond the "designed to burn" provision, the EPA would develop a separate regulatory action that considers all possible regulatory options for this categorical non-waste determination, including the option of sunsetting the provision at 40 CFR 241.4(a)(7)(ii) and leaving the requirements of 40 CFR 241.4(a)(7)(i) in place, including the "designed to burn" criteria.

However, this provision does demonstrate that the EPA can and has used the Agency's authority to consider "other relevant factors" in making a categorical non-waste fuel determination in cases where one of the legitimacy criteria is not met (see 40 CFR 241.4(b)(5)(ii)). It is important to recognize that the provisions of 40 CFR 241.4(a)(7)(ii) were proposed, based on the information available to the Agency at the time, to apply to boilers that were existing at the time the rule was promulgated to avoid penalizing the units originally designed to burn both biomass and fuel oil that switched to cleaner-burning fuel.[16] Facilities constructed after that point would fall under the main provision found at 40 CFR 241.4(a)(7)(i) and would be able to take the existing regulations under consideration when deciding their operations. Thus, the conditions imposed on CTRT combusted in natural gas-fired units under 40 CFR 241.4(a)(7)(ii) are part of the relevant factors the EPA used to determine whether discard has occurred (see 81 FR 6724–25, February 8, 2016).

Commenters claim that the environmental implications of not combusting CTRT, such as a potential increase in landfilling of CTRT and subsequent increase in greenhouse gas emission

---

[15] AF&PA et al., *Petition for Rulemaking to Amend the Legitimacy Criteria in 40 C.F.R. Part 241, -The Categorical Non-Waste Fuels Classification Criteria for Creosote Treated Railroad Ties and Other Treated Railroads Ties, and the Definition of Paper Recycling Residuals*, December 7, 2018, page 16.

[16] 81 FR
6724, February 8, 2016.

from the landfilled CTRT, obligate the EPA to withdraw designed to burn criteria from the categorical non-waste listing for CTRT due to "other relevant factors." However, any "other relevant factors" considered in weighing a categorical non-waste listing must be relevant to the core question of whether the material is a solid waste when combusted. Some commenters propose looking to greenhouse gas emissions and landfill capacity as "other relevant factors," but neither of these topics dictate whether the particular material in question is combusted as a waste; therefore, both considerations are outside the scope of this Petition Denial. The "other relevant factors" must still be applied in the context of determining whether a material is a waste or not. Ignoring designed to burn and other criteria would violate the fundamental principles of solid waste identification legitimacy criteria codified in the NHSM regulations and upheld by the D.C. Circuit Court, as noted at 87 FR 4536, 4542 (January 28, 2022). The extent to which a particular disposal practice of NHSM does or does not release greenhouse gases or consume landfill capacity does not impact whether the NHSM is discarded when combusted.

The petitioners' comments also cite two examples of NHSMs – resinated wood and coal refuse – that do not have designed to burn and existing boiler conditions associated with the categorical determination (see 40 CFR 241.4(a)(2) and (3)). The EPA has responded to a similar comment on the 2016 NHSM rule (see 81 FR 6731, February 8, 2016), noting how, unlike CTRT, resinated wood's use as a fuel was integrated into the production process and that resinated wood production facilities were specifically designed to utilize the material for its fuel value (for more, see section III.A.3 (above) and 76 FR 15500, March 21, 2011). As for coal refuse, data available suggest that this material is used in a small selection of coal refuse plants and as a secondary fuel at some additional bituminous coal combusting electric power plants (76 FR 80486, December 23, 2011). Further, the coal refuse is limited to legacy pile coal, which are processed in the same manner as currently generated coal refuse (a traditional fuel) and exhibit similar contaminant content. These situations are very dissimilar to the case of CTRT combusted in a biomass boiler that would otherwise burn clean biomass because CTRT contain

contaminants (in particular, PAHs) at levels multiple magnitudes higher than clean biomass (81 FR 6717, February 8, 2016).[17] Thus, both these categorical non-waste determinations take into account the specific types of materials and combustion units involved and the reasoning cannot be extrapolated to all combustion units that might burn CTRT, absent the designed to burn criteria.

The designed to burn criterion is fundamental to the NHSM program since it is the primary mechanism for identifying which traditional fuel should be used as the basis of determining whether contaminant levels in the NHSM are comparable to or less than the traditional fuel(s) being replaced. Without the designed to burn criterion, CTRT could be combusted in any biomass-only boiler, including biomass boilers that are area sources under the CAA. These boilers would likely have higher HAP emissions when burning CTRT rather than biomass because these contaminants are present in greater concentrations in CTRT as generated. As previously noted, emission standards for dioxins, SO_2, NO_x, etc. for non-major sources are addressed under the CAA section 129 standards but are not addressed by area source boiler standards under CAA section 112 which require only tune-ups. The Agency is therefore denying petitioners' request regarding the designed to burn criterion. See section III.A above for a discussion on the contaminant comparison criterion.

C. Preamble Discussion of Storage Times for Railroad Ties

1. Petitioners' Request

In addition to the requested regulatory changes, the petition raised an issue related to railroad tie storage timeframes as it impacts NHSM eligibility as discussed in the 2016 NHSM rule. In the preamble to that rule, the EPA discussed its presumption that storage of CTRT for long periods of time (e.g., a year or longer) without an end-use determination is not

[17] For more information, see the Summary of Public Comments and Responses for the Proposed Response to the Petition to Revise the Non-Hazardous Secondary Material Standard, located in the docket EPA-HQ-OLEM-2020-0550.

"reasonable," and indicates that the material has been discarded. Petitioners interpreted this preamble language to establish a bright-line limit of one year for CTRT accumulation in the railroad right-of-way, and asserted that this perceived time limit is incompatible with the realities of railroad operations. That is, unlike discrete facilities from which valuable secondary materials are easily reclaimed, the railroad right-of-way extends over thousands of miles across the United States. Petitioners said that many locations where CTRT are removed are not readily accessible except by rail, and tie pickup interrupts freight and passenger train service and competes with safety-related operations such as track maintenance and inspection. Train service and safety are regulated by the Surface Transportation Board and Federal Railroad Administration, respectively. Petitioners indicated that, due in part to those agencies' requirements, service and safety must take precedence over tie recovery. Petitioners asserted that these challenges make it unrealistic to collect used CTRT within one year of removal from service – but for reasons completely unrelated to the determination of whether CTRT are managed as a "valuable commodity" under the NHSM framework. Petitioners also noted that the EPA has recognized that "the reasonable timeframe for storage may vary by industry" (81 FR 6725, February 8, 2016). In the context of railroad tie management, petitioners asserted that three or more years is a reasonable timeframe for storage of removed CTRT in the right-of-way.

2. Public comment

Comments relating to the perceived one-year limit on CTRT accumulation in the right-of-way largely reiterated the arguments presented in the original petition.

One comment argued that the economic value of removed CTRT indicates that the CTRT are not discarded. This commenter claimed that the sale or transfer of CTRT to a third party invalidates claims of discard, even if final disposition and party of sale have not been determined prior to removal. Thus, they claimed, accumulated CTRT are valuable and therefore not discarded under the plain language meaning of the word.

Likewise, multiple commenters argued that railroad operational realities make the perceived one-year storage time limit infeasible for safety and logistical reasons. Commenters claimed that a one-year time limit for CTRT in the right-of-way would be unworkable due to remote rail locations and prioritization of safety requirements and maintenance activities over removal of accumulated CTRT.

Finally, one commenter interpreted the EPA's preamble language from the 2016 NHSM rule to indicate that CTRT cannot be considered discarded until at least one year after removal from service. Their comment claimed that the lack of an explicit statement that CTRT are discarded immediately upon removal in the 2016 rule indicates that the EPA cannot now reasonably conclude that discard may occur sometime less than one year after tie removal.

3. EPA Response

Storage time of unprocessed CTRT in the right-of-way has little impact for the purposes of determining whether the CTRT can qualify as a non-waste fuel under the Federal NHSM regulations. The EPA believes that petitioners' recurring comments surrounding storage times and discard originates from a misunderstanding of the 2016 rule's preamble language. Therefore, this section of the preamble – which relies upon the rationale provided in the 2016 rule – explains why the EPA is denying petitioners' three-year fixed storage timeframe consideration and addresses petitioners' misunderstanding of this issue by elaborating how and why accumulation timeframes in the right-of-way do not affect CTRT's eligibility to be combusted as non-waste fuel under the NHSM program.

First and foremost, qualification of CTRT as a non-waste fuel under the categorical non-waste determination at 40 CFR 241.4(a)(7) does not consider storage times. Granted, when the EPA considers a petition for a categorical non-waste listing under 40 CFR 241.4(b), reasonable storage timeframes are required as a component of the "managed as a valuable commodity" legitimacy criterion. However, once the determination has been made that the petition for a non-

waste categorical listing meets this requirement, future demonstration of those reasonable storage timeframes is not required. Indeed, this is a major incentive for requesting a categorical non-waste fuel determination; qualifying operators that meet the provisions of the categorical listing (in this case, at 40 CFR 241.4(a)(7)) enjoy streamlined management (e.g., do not need to make a site-specific demonstration that the NHSM meets the legitimacy criteria) because it has already been demonstrated – through the process of establishing the categorical determination – that the NHSM in question meets the program requirements. Thus, entities managing CTRT under the categorical listing are not required to document the CTRT's storage timeframes and are not limited by a bright-line restriction of one year of accumulation in the right-of-way. (It should be noted, however, that extended lengths of storage of CTRT in the right-of-way could constitute disposal under State solid waste regulations, making the CTRT subject to State solid waste management requirements.)

Should an operator wish to combust CTRT as a non-waste fuel under the NHSM program outside the confines of the categorical determination at 40 CFR 241.4(a)(7), storage time for CTRT in the right-of-way is still unlikely to have a meaningful impact on the material's eligibility. In this scenario, the operator could choose to employ the self-determination process outlined in 40 CFR 241.3(b)(4) for NHSM that are discarded but subsequently processed and meet the legitimacy criteria at 40 CFR 241.3(d)(1). As noted in the February 8, 2016 rule's preamble, the amount of time for industry to determine value and end use of CTRT (whether sent to a landfill, used as fuel, or another non-fuel purpose) sometimes exceeds one year (81 FR 6725). Generally speaking, however, long periods of time without determining end use can be indicative of discard, though there is no bright-line time period which triggers a discard determination. The fact that CTRT removed from service sometimes sit for extended periods – regardless of whether that period is more than or less than a year – indicates that they should be viewed critically when determining discard status. Further, it is the EPA's understanding (according to the descriptions provided in both the petition and public comments) that it is

standard industry practice to transfer CTRT to a reclaimer or other third party. These CTRT would be considered discarded until processed into a non-waste fuel, since NHSMs that are transferred off-site for reclamation and reuse as a fuel are considered discarded and must be processed and meet the legitimacy criteria. The assertion that the CTRT are a valuable commodity in a robust market does not change the fact that the CTRT have been discarded. NHSMs may have value in the marketplace and still be solid wastes until processed.

It should be noted that discarded NHSM may be subject to Tribal, State, and local solid waste requirements, regardless of their intended future use as a non-waste fuel under the Federal NHSM program. Though the designation of discard may be functionally irrelevant for CTRT that are subsequently processed and verified to meet the legitimacy criteria for non-waste fuels, CTRT that are determined to be solid waste would still be subject to all relevant solid waste regulations. Indeed, the EPA explicitly addressed this issue at 40 CFR 241.3(b)(4), which states that until the discarded non-hazardous secondary material is processed to produce a non-waste fuel or ingredient, the discarded non-hazardous secondary material is considered a solid waste and would be subject to all appropriate Federal, State, and local requirements.

Thus, a designation of discard does not preclude using the NHSM as a non-waste fuel, so long as the processing requirement and legitimacy criteria are met. Crucially, the relevant regulations at 40 CFR 241.3(b)(4) go on to stipulate that the legitimacy criteria apply after the non-hazardous secondary material is processed to produce a fuel or ingredient product. Consideration of reasonable timeframes would therefore look to the period of storage following processing (e.g., grinding CTRT to resize the material and removing metal contaminants such as rail spikes), which the EPA understands to usually be short. Moreover, the EPA has not established a bright-line limit on reasonable storage times and has previously explicitly stated that what constitutes a reasonable timeframe for storage will vary by industry (see, e.g., 76 FR 15520, March 21, 2011). Accordingly, CTRT could be combusted as a non-waste fuel after being

stored for more than one year, so long as storage of the processed CTRT is limited to reasonable timeframes.

Thus, the EPA believes that previous dialogue between the Agency, petitioners, and commenters on timeframes for storage of CTRT in the right-of-way has little, if any, practical effect on the combustion of CTRT as non-waste fuel under the Federal NHSM program. Accordingly, the EPA is denying petitioners' request to establish a rigid three-year timeframe for rail tie storage in the right-of-way, and instead the Agency will maintain the existing standard to allow for flexibility and has provided the preceding explanation in an attempt to resolve petitioners' misunderstanding.

Finally, it should be noted that other laws or regulations may still apply to CTRT placed in the right of way. CTRT stored in the right of way could be considered discarded and would in such cases be subject to all relevant Federal, Tribal, State, and local solid waste requirements. These regulations may vary by location, and State solid waste designations are not required to match those of the Federal rules. Broader issues associated with the accumulation of CTRT in the right of way would fall under the jurisdiction of these regulations. Additionally, some States (e.g., California, New York) have specific laws or regulations for creosote and/or products treated with creosote.

D. Request To Amend the Definition of "Paper Recycling Residuals"

1. Petitioners' Request

Petitioners also requested that the EPA revise the definition of "paper recycling residuals" (PRR) to amend the description and remove the definitional condition that PRR that "contain more than *small amounts* of non-fiber materials . . . are not paper recycling residuals" (40 CFR 241.2, emphasis added). Petitioners believed that this condition is overly vague and directly at odds with the Court's decision in *API.*

Petitioners requested that the second sentence in the definition precluding materials that contain "more than small amounts of non-fiber materials" from qualifying as PRR should be removed. They argued that this condition suggests that the list of non-fiber materials identified in the definition are somehow viewed as contaminants in PRR. But, as discussed above, petitioners argue that in vacating the contaminant comparison criterion in the DSW rule, the D.C. Circuit made clear that the mere presence of some contaminants in a material destined for legitimate recycling is not the basis for finding that the material has been "discarded" and thus subject to regulation as a solid waste.

In addition to arguing that this condition is inconsistent with the D.C. Circuit's holding in *API,* the petitioners believe that the "small amount" limitation is overly vague. While members of the regulated community affirm that they have used good faith efforts in determining that PRR burned as fuel meet this condition, they also note that "a statute which either forbids or requires the doing of an act so vague that men of common intelligence must necessarily guess at its meaning and differ as to its applications, violates the first essential of due process of law." *FCC* v. *Fox Television Stations, Inc.,* 567 U.S. at 239, 253 (2012) (internal citation omitted). According to petitioners, the "small amount" criterion in the definition of PRR falls squarely within this "impermissibly vague" infirmity and should be removed from the definition to help ensure that "those enforcing the law do not act in an arbitrary or discriminatory way." *FCC,* 567 U.S. at 253 (internal citation omitted).

Furthermore, petitioners argue that the current definition describing PRR as "composed primarily of wet strength and short wood fibers" is not correct, as the re-pulping of recovered fibers can result in a variety of strengths and sizes of fibers in PRR, so the current limitation to "wet strength and short wood fibers" is unnecessarily restrictive. Some residuals from recycling paper, paperboard and corrugated containers are composed of fibers other than wet strength fibers or short-wood fibers, but nonetheless cannot be used to make new paper or paper products and therefore are burned for their energy value.

In January 2022, the EPA proposed to deny this request, and in the same notice proposed an amended definition of PRR. This new definition replaced the less-specific "small amounts" language restricting PRR non-fiber content with more specific language that would have limited the amount of non-fiber content to 2% or less, by weight.[18] The revised definition in the proposed rule also adopted descriptive changes requested in the petition to more accurately reflect the nature of PRR.

2. Public comment on EPA's proposed definition of PRR

One commenter argued that a non-fiber limit for paper recycling residuals was not necessary, reiterating a similar assertion presented in the original petition. The commenter stated that environmental and health risks from burning PRR containing non-fiber material would already be covered under CAA permit conditions, and thus adding a non-fiber limit to PRR would be redundant.

Two commenters stated that the EPA's proposed change to the definition of paper recycling residuals incorporating a limit of 2% by weight of non-fiber materials was an inappropriate application of an Institute of Scrap Recycling Industries (ISRI) industry standard. The commenters explained that the 2% ISRI figure referred to the limit on prohibitive materials for "furnish" (i.e., incoming mixed paper to be recycled), not to the outgoing paper recycling residuals created by the recycling process. Applying this standard to paper recycling residuals would therefore not be an appropriate application of the standard.

Several commenters also argued that any numeric limit on non-fiber material would be difficult for facilities to meet. This is due, in part, to the lack of a standard test method for measuring the non-fiber content of PRR. Furthermore, one commenter noted that the 2% numeric standard itself could not have been met under typical conditions: PRR typically have more than 2% non-fiber content, albeit this amount also varies by mill.

---

[18] This standard was derived from the 2021 ISRI Scrap Specifications Circular, which sets an industry standard for "furnish" i.e., the paper materials being fed into the paper recycling process. The Circular sets a standard allowing no more than 2% non-fiber content in furnish.

Rather than the 2% by weight threshold for non-fiber materials proposed, one commenter suggested that a meaningful heating value would be a more appropriate standard. Commenters argued that heating value is central in distinguishing an NHSM that is combusted as a legitimate fuel from an NHSM combusted for discard, and a heating value standard would thus be a more appropriate standard for managing the concern that non-fiber material does not provide for energy recovery. The commenter also noted, contrary to the EPA's statement in the proposed rule, that non-fiber materials like waxes, adhesives, and plastics actually raise the heating value of PRR. This means that PRR with higher amounts of non-fiber material may have higher heating values. The commenter then suggested that the definition of PRR should be modified to state that PRR may be considered a non-waste fuel if the meaningful heating value of the materials is preserved. As a specific numerical alternative, the commenter also suggested that a value of greater than or equal to 6,300 Btu/lb on a dry basis, either annually or over a long-term average basis, would be an appropriate heating value standard. Commentors set this value using AF&PA member data and EPA Boiler MACT database data. Commenters stated that the value was chosen to be at the low end of the range of data available, rather than the midpoint of the range, to ensure that the numeric standard would be attainable.

One commenter agreed with the EPA that the current definition of PRR in 40 CFR 241.2 ("the secondary material generated from the recycling of paper, paperboard and corrugated containers composed primarily of wet strength and short wood fibers") was too limiting and should be changed. However, the commenter argued that the EPA's proposed change to "the secondary material generated from the recycling of paper, paperboard and corrugated containers *composed primarily of* fibers that are too small or weak to be used to make new paper and paperboard products" (emphasis added) was also too limiting. The commenter suggested that the definition be rewritten to read "the secondary material generated from the recycling of paper, paperboard and corrugated containers *that includes* fibers *generally* too small or weak to be used to make new paper and paperboard products" (emphasis added). The commenter argued that,

while mill equipment extracts most of the fiber that can be made into paper and paperboard, some longer and stronger fibers can evade the process and end up in the PRR. The commenter also noted that mills have an economic incentive to capture the valuable fibers to make them into new products instead of combusting these fibers for energy recovery.

3. EPA Response

The EPA disagrees with the petitioner's original arguments, reiterated in comments, for removing language limiting the amount of non-fiber materials in PRR burned as a non-waste fuel. The reasoning for not including the non-fiber materials as PRR was not focused on discard due to contaminants present, but rather, discard due to lack of heating value and not contributing to energy recovery. In the April 14, 2014 proposed rule, the EPA requested, but did not receive, information regarding the percent of non-fiber materials commonly present in PRR and their heating value (79 FR 21017). Lacking information to the contrary, the Agency determined that PRR with higher amounts of non-fiber materials would likely have a lower heating value. Combustion of materials with low heating values is typically considered discard. PRR already have a relatively low heating value (as fired, average 3,700 Btu/lb on a wet basis),[19] so the Agency reasoned that large amounts of non-fiber materials would lower the heating value of the material, further raising the question of burning as discard.

However, in the January 2022 proposed rule, the EPA sought to set a numerical threshold for non-fiber materials content, rather than prohibit them entirely or rely on the term "small amounts." As indicated above, information on such threshold amounts of non-fiber materials was not received from industry prior to publication of the January 2022 proposed rule, and a review of current scientific studies also did not reveal specific amounts. As an alternative, although not directly used for PRR as fuels, the Scrap Specifications Circular (2021); Institute of Scrap Recycling Industries Guidelines for Paper Stock identifies a 2% prohibitive material content

[19] 81 FR 6716, February 8, 2016.

limit for mixed paper stock used for re-pulping paper.[20] In the circular, prohibitive material is material which by its presence, in excess of the amount allowed, will make the furnish unusable as the grade specified, as well as any materials that may be damaging to equipment. In evaluating the grades of paper identified in the circular, the maximum allowance of prohibitive materials in mixed paper (which consists of all paper and paperboard of various qualities not limited to the type of fiber content) is 2%. The Agency previously concluded that this prohibitive material measure could provide an analogous measure for non-fiber materials contained within PRR. Accordingly, the EPA proposed to set a maximum non-fiber content standard for PRR of 2% by weight.

However, information provided to the Agency in comments on the January 2022 proposed rule provided new information previously unavailable to the Agency. Commenters' data indicates that many of the constituents of non-fiber content in PRR are more likely to raise the heating value of PRR. Commenters also argued that the ISRI standard for non-fiber content of paper recycling inputs would be inappropriate to apply to material outputs from the paper recycling process and claimed that the difficulty of complying with the proposed standard could lead paper recycling mills to dispose of PRR in landfills instead.

Accordingly, the EPA is replacing the proposed 2% by weight standard with a performance-based threshold to address the heating value concerns and associated consideration of potential discard. Requiring PRR combusted under the categorical non-waste listing at 40 CFR 241.4(a)(6) to have a minimum heating value is intended to prevent residuals with poor heating value from being used as a fuel in a combustion unit, as this use case would constitute disposal rather than use as a legitimate fuel.

The Agency maintains that residuals from processes such as mixed paper waste recycling with significant quantities of non-fiber materials (e.g., clays, starches) could be considered to be

[20] ISRI Scrap Specifications Circular (2021), page 34; http://www.scrap2.org/specs/.

a solid waste fuel when combusted when those materials lack meaningful heating value.[21] Under the amended definition of PRR, the determination of non-waste fuel status would depend more directly on the heating value of the material stream in question, but could still be deemed waste if non-fiber content drives down heating value below the minimum threshold.[22]

This unique heating value threshold for PRR is appropriate and consistent with previous Agency statements regarding the use of PRR as non-waste fuel for energy recovery. The EPA maintains that unique heating value expectations are appropriate for PRR because the boilers that combust this material are specifically designed to cost-effectively recover energy from it (see 79 FR 21018–9, April 14, 2014). Data received in comments corroborate that the selected threshold would ensure low heating value PRR are not discarded under the guise of fuel combustion, while also being achievable for the limited number of mills that currently combust this material.

Furthermore, the definition of PRR as "composed of primarily wet strength and short wood fibers" was based on previously submitted industry information (81 FR 6721, February 8, 2016). However, based on the information submitted in this petition, the Agency agrees that the reference to "primarily wet strength and short wood fibers" is too limiting and inadvertently excludes fibers of different strength and size that may provide heating value. Nevertheless, the commenter's suggestion to further change the EPA's revised language in the January 28, 2022, proposal from "*composed primarily of* fibers that are too small or weak to be used to make new paper and paperboard products" (emphasis added) to "*that includes* fibers *generally* too small or weak to be used to make new paper and paperboard products" (emphasis added) is not an acceptable change. This commenter-proposed language would not be a specific enough definition to provide assurance that non-fiber material in PRR would be minimized when PRR

[21] 81 FR 6718, February 8, 2016.

[22] The EPA recognizes that plastic films, foam and waxes could increase the heating value of a recycling residual stream. While no upper boundary on the heat content of PRR is being established, the EPA notes that the definition of PRR including the term "composed primarily of fibers" would prevent application of the PRR definition to materials that are composed mostly of plastics, foams and waxes removed during the recycling of recovered paper, paperboard and corrugated containers.

are combusted as fuel. Commenters argue that the EPA's proposed definition is "unnecessarily limiting," but a definition that upholds the integrity of PRR is necessary to ensure that non-fiber material is not overloaded and labelled as PRR, which could show an indication of discard rather than use as a legitimate fuel. Therefore, we are finalizing the proposal to change the language to "fibers that are too small or weak to be used to make new paper and paperboard products."

Accordingly, the Agency finalizes the revised definition of PRR as set out in the amendatory section at the end of this document.

IV. Effect of This Action on Other Programs

The primary action of this final rulemaking is to revise the definition of Paper Recycling Residuals in the NHSM regulations at 40 CFR 241.2. Accordingly, this action affects other programs only insofar as they rely on the definitions outlined in part 241. In particular, Clean Air Act permitting regulations refer to the RCRA definition of solid waste in determining whether a combustion unit is a solid waste incinerator or an industrial furnace for permitting purposes. Thus, the changes to the definition of PRR implemented by this rule apply to CAA permitting nationwide (i.e., do not depend upon State adoption).

In order to qualify as a categorical non-waste fuel under 40 CFR 241.4(a) and thereby be combusted in a unit not permitted to incinerate solid waste under the CAA, a material would have to meet the relevant definition in 40 CFR 241.2 *and* fulfill any additional requirements listed in the relevant categorical non-waste listing at 241.4. Additionally, though the NHSM regulations do not include specific record-keeping requirements, the CAA regulations at 40 CFR 60.2175(v) (for new sources) or 40 CFR 60.2740(u) (for existing sources) require that units combusting materials designated as categorical non-waste fuels under the NHSM program must keep records demonstrating that the material is a listed non-waste fuel under 40 CFR 241.4(a). In order to fulfill that requirement, the material would have to meet the definition of the categorical non-waste (at § 241.2) as well as any additional requirements included in the NHSM listing itself (at § 241.4(a)). Under the current RCRA and CAA regulations, as implemented through Title V

permits, an operator combusting a material as a categorical non-waste fuel must show that the material meets the definition of the categorical non-waste listing they are claiming. Based on the revised definition of Paper Recycling Residuals, the relevant CAA permitting authority may require the operator to document the fact that the PRR's heating value is above the definitional threshold of 6,300 Btu/lb on a dry basis. Given the fact the operator must know fuel value of the PRR for proper operation of the boiler, such a potential permit condition is expected to have a negligible burden. The exact nature and frequency of the sampling performed to document the fact that the PRR meet the revised definition in 40 CFR 241.2 will vary according to numerous site-specific factors and therefore is best left to the discretion of the relevant permitting authority. It should also be noted that the definition of PRR refers to "secondary material generated from the recycling of paper, paperboard and corrugated containers," so inclusion of materials that are not part of the usual paper, paperboard, or corrugated container recycling processes is definitionally disallowed.

Beyond amending the definition of PRR, this action does not change the effect of the NHSM regulations on other programs as described in the March 21, 2011 NHSM final rule (76 FR 15456), as amended on February 7, 2013 (78 FR 9138), February 8, 2016 (81 FR 6688) and February 7, 2018 (83 FR 5317). Refer to section VIII of the preamble to the March 21, 2011 NHSM final rule for the discussion on the effect of the NHSM rule on other programs.

V. State Authority

A. Relationship to State Programs

This action and change to the definition of PRR does not change the relationship to State programs as described in the March 21, 2011 NHSM final rule. Refer to section IX of the preamble to the March 21, 2011 NHSM final rule for the discussion on State authority including, "Applicability of State Solid Waste Definitions and Beneficial Use Determinations" and "Clarifications on the Relationship to State Programs." The Agency, however, would like to reiterate that this rule (like the March 21, 2011 and the February 7, 2013 final rules) is not

intended to interfere with a State's program authority over the general management of solid waste.

B. State Adoption of the Rulemaking

No Federal approval procedures for State adoption of this final rule are included in this rulemaking action under RCRA subtitle D. While states are not required to adopt regulations promulgated under RCRA subtitle D, some states incorporate Federal regulations by reference or have specific State statutory requirements that their State program can be no more stringent than the Federal regulations. In those cases, the EPA anticipates that, if required by State law, the changes being made in this document will be incorporated (or possibly adopted by authorized State air programs) consistent with the State's laws and administrative procedures.

VI. Costs and Benefits

This action is definitional in nature, and any costs or benefits accrue to the corresponding Clean Air Act rules. In accordance with the Office of Management and Budget (OMB) Circular A-4 requirement that the EPA analyze the costs and benefits of regulations, the EPA prepared a regulatory impact analysis document for this action that examines the scope of indirect impacts.

VII. Children's Environmental Health

Executive Order 13045 requires that economically significant rules that may impact children's environmental health are evaluated against possible alternatives. Though this rule is not economically significant and its impacts are not expected to affect children's environmental health, the Agency still considers potential environmental health effects on children under EPA's 2021 *Policy on Children's Health*.

Children's environmental health refers to the effect of environmental exposure during early life: from conception, infancy, early childhood, and adolescence through until 21 years of age. EPA's policy is informed by the scientific understanding that children may be at greater risk to environmental contaminants than adults due to differences in behavior and biology and that the effects of early life exposures may also arise in adulthood or in later generations.

However, EPA does not believe the environmental health or safety risks addressed by this action present a risk to children. Because this rule does not change existing conditions, no environmental health impacts are expected to arise from this rulemaking. The change to the definition of PRR would not affect the overall risk to anyone, including children, posed by boiler emissions. This is because the overall level of emissions, or the emissions mix from boilers, are not expected to change significantly because of the change in definition of PRR.

In the event of any unforeseen changes to air emissions, the EPA does not believe this change would disproportionately impact children. A demographic analysis of the populace living near major source boilers found that the percentage of the population in these areas that are children is generally the same as the national average (see "Assessment of the Potential Costs, Benefits, and Other Impacts for the Final Rule" in the docket). Further, boilers at paper recycling mills that combust PRR as non-waste fuel remain subject to the appropriate standards established under CAA section 112. Thus, even in the event of a change in air emissions due to this rule, any potential health impacts would not be expected to disproportionately affect children. Additionally, this rule is definitional in nature, so any considerations of risk related to combustion units' CAA permits should be accounted for in the relevant CAA rulemakings that established those permitting programs.

VIII. Statutory and Executive Order Reviews

Additional information about these statutes and Executive Orders can be found at https://www.epa.gov/laws-regulations/laws-and-executive-orders.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 14094: Modernizing Regulatory Review

This action is a "significant regulatory action" as defined in Executive Order 12866, as amended by Executive Order 14094, because it may raise legal or policy issues for which centralized review would meaningfully further the President's priorities or the principles set forth

in the Executive Order. Accordingly, EPA submitted this action to OMB for Executive Order 12866 review. Documentation of any changes made in response to the Executive Order 12866 review is available in the docket. The EPA prepared an economic analysis of the potential impacts associated with this action. This analysis, "Assessment of the Potential Costs, Benefits, and Other Impacts for the Final Rule" is also available in the docket.

B. Paperwork Reduction Act (PRA)

This action does not impose any new information collection burden under the PRA as this action only changes the definition of PRR for the purposes of the NHSM regulations. There are no new recordkeeping or reporting requirements with this definitional change. OMB has previously approved the information collection activities contained in the existing regulations and has assigned OMB control number 2050-0205.

C. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the EPA concludes that the impact of concern for this rule is any significant adverse economic impact on small entities and that the agency is certifying that this rule will not have a significant economic impact on a substantial number of small entities because the rule has no net burden on the small entities subject to the rule. Because the petition denial maintains the status quo, there is no impact to any entity, including to any small entity, from the petition denial. In addition, the revision to the definition of PRR will reduce regulatory uncertainty associated with these materials and help increase management efficiency for all pulp and paper mills with units that combust PRR, including mills that meet the definition of small entity without requiring a change in operations. We have therefore concluded that this action has no net burden on the small entities subject to the rule.

D. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate as described in UMRA, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The costs involved in this action are imposed only by participation in a voluntary Federal program. UMRA generally excludes from the definition of "Federal intergovernmental mandate" duties that arise from participation in a voluntary Federal program. Affected entities are not required to manage the final additional NHSMs as non-waste fuels.

E. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

This action does not have Tribal implications as specified in Executive Order 13175. It will neither impose substantial direct compliance costs on Tribal governments, nor preempt Tribal law. Potential aspects associated with the categorical non-waste fuel determinations under this final rule may invoke minor indirect Tribal implications to the extent that entities generating or consolidating these NHSMs on Tribal lands could be affected. However, any impacts are expected to be negligible. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children from Environmental Health Risks and Safety Risks

Executive Order 13045 directs Federal agencies to include an evaluation of the health and safety effects of the planned regulation on children in Federal health and safety standards and explain why the regulation is preferable to potentially effective and reasonably feasible alternatives. This action is not subject to Executive Order 13045 because it is not a significant

regulatory action under section 3(f)(1) of Executive Order 12866, and because the EPA does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. The change to the definition of PRR would not affect the overall risk to children posed by boiler emissions. This is because the overall level of emissions, or the emissions mix from boilers, are not expected to change significantly because of the change in definition of PRR, and because boilers at paper recycling mills that combust PRR as non-waste fuel remain subject to the appropriate standards established under CAA section 112.

However, the EPA's *Policy on Children's Health* applies to this action. Information on how the Policy was applied is available under "Children's Environmental Health" in Section VII of this preamble.

H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. The selected NHSMs affected by this proposed action would not be generated in quantities sufficient to significantly (adversely or positively) impact the supply, distribution, or use of energy at the national level. Even if 100% of the available PRR were converted to energy (an unlikely best-case scenario), that would translate to a potential increase of only 0.002% to 0.003% in the national energy supply, and these effects would be localized at recycling paper mills.

I. National Technology Transfer and Advancement Act (NTTAA)

This action involves technical standards. Therefore, the EPA conducted a search to identify potentially applicable voluntary consensus standards. However, the Agency identified no such standards and none were brought to its attention in comments. Therefore, the EPA has decided to use the 6,300 Btu/lb dry basis minimum standard for PRR heating value.

J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, February 16, 1994) directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations (people of color and/or indigenous peoples) and low-income populations.

The EPA believes that the human health or environmental conditions that exist prior to this action result in or have the potential to result in disproportionate and adverse human health or environmental effects on communities with environmental justice concerns. Both landfills and boilers are generally more likely to be located in disadvantaged communities, so transporting and managing NHSMs (whether for disposal at a landfill or combustion as a non-waste fuel in a boiler) is likely to have environmental health effects on these communities.[23]

The EPA believes that this action is not likely to change existing disproportionate and adverse effects on communities with environmental justice concerns. This is because the overall level of emissions, or the emissions mix from boilers, are not expected to change significantly because of the change in definition of PRR, and because boilers at paper recycling mills that combust PRR as non-waste fuel remain subject to the protective standards established under CAA section 112. Further, this RCRA action alone does not directly require any change in the management of these materials. Thus, any potential materials management changes stimulated by this action, and corresponding impacts to minority and low-income communities, are

[23] For more information on the environmental justice analysis, see the March 21, 2011 NHSM final rule (76 FR 15455) and U.S. EPA, Office of Resource Conservation and Recovery, *Summary of Environmental Justice Impacts for the Non-Hazardous Secondary Material (NHSM) Rule, the 2010 Commercial and Industrial Solid Waste Incinerator (CISWI) Standards, the 2010 Major Source Boiler NESHAP and the 2010 Area Source Boiler NESHAP,* February 2011, docket number EPA-HQ-RCRA-2008-0329-1834.

considered to be indirect impacts, and would only occur in conjunction with the corresponding CAA rules.

The information supporting this Executive Order review is contained in the docket as part of the *Assessment of the Potential Costs, Benefits, and Other Impacts of the Final Rule*.

K. Congressional Review Act (CRA)

This action is subject to the CRA, and the EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 241

Environmental protection, Air pollution control, Non-Hazardous Secondary Materials, Waste treatment and disposal.

Michael Regan,

Administrator.

For the reasons set forth in the preamble, the EPA amends 40 CFR part 241 as follows:

PART 241—SOLID WASTES USED AS FUELS OR INGREDIENTS IN COMBUSTION UNITS

1. The authority citation for part 241 continues to read as follows:

Authority: 42 U.S.C. 6903, 6912, 7429.

2. Section 241.2 is amended by revising the definition of "Paper recycling residuals" to read as follows:

§ 241.2 Definitions.

* * * * *

Paper recycling residuals means the secondary material generated from the recycling of paper, paperboard and corrugated containers composed primarily of fibers that are too small or weak to be used to make new paper and paperboard products. Secondary material from paper recycling processes with a heating value below 6,300 Btu/lb on a dry basis due to excessive non-fiber material content (including polystyrene foam, polyethylene film, other plastics, waxes, adhesives, dyes and inks, clays, starches and other coating and filler material) are not paper recycling residuals for the purposes of this definition.

* * * * *

[FR Doc. 2023-22878 Filed: 10/17/2023 8:45 am; Publication Date: 10/18/2023]