

ORAL ARGUMENT NOT YET SCHEDULED**Case No. 11-1189 (and consolidated cases)**

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

**SOLVAY USA INC., et al.
Petitioners**

v.

**ENVIRONMENTAL PROTECTION AGENCY, et al.
Respondent**

**Petition for Review of 78 Fed. Reg. 9112 (Feb. 7, 2013)
and 76 Fed. Reg. 15456 (March 21, 2011)**

JOINT BRIEF OF INDUSTRY PETITIONERS

**AMERICAN CHEMISTRY COUNCIL, AMERICAN FOREST & PAPER ASSOCIATION, AMERICAN
GAS ASSOCIATION, AMERICAN PETROLEUM INSTITUTE, AMERICAN WOOD COUNCIL,
ASSOCIATION OF AMERICAN RAILROADS, BIOMASS POWER ASSOCIATION,
CEMENT KILN RECYCLING COALITION, CEMEX, INC., CEMEX CONSTRUCTION MATERIALS
FLORIDA, LLC, COUNCIL OF INDUSTRIAL BOILER OWNERS, EDISON ELECTRIC INSTITUTE,
HATFIELD TOWNSHIP MUNICIPAL AUTHORITY, HOLCIM (US) INC., LAFARGE NORTH
AMERICA INC., LAFARGE MIDWEST, INC., LAFARGE BUILDING MATERIALS INC.,
NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, NATIONAL ASSOCIATION OF
MANUFACTURERS, NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION, PORTLAND
CEMENT ASSOCIATION, RAILWAY TIE ASSOCIATION, SOLVAY USA, INC., TREATED WOOD
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**CERTIFICATE AS TO PARTIES, RULINGS AND RELATED CASES,
AND CORPORATE DISCLOSURE STATEMENTS**

Pursuant to FED. R. APP. P. 26.1 and D.C. CIRCUIT RULES 26.1 and 28(a)(1),

Petitioners hereby certify as follows:

1. Parties

(a) Petitioners

Industry Petitioners:

American Chemistry Council
American Forest & Paper Association
American Gas Association
American Petroleum Institute
American Wood Council
Association of American Railroads
Biomass Power Association
Cement Kiln Recycling Coalition
CEMEX, Inc.
CEMEX Construction Materials Florida, LLC
Council of Industrial Boiler Owners
Edison Electric Institute
Hatfield Township Municipal Authority
Holcim (US) Inc.
Lafarge Building Materials Inc.
Lafarge Midwest, Inc.
Lafarge North America Inc.
National Association of Clean Water Agencies
National Association of Manufacturers
National Rural Electric Cooperative Association
Portland Cement Association
Railway Tie Association
Solvay USA Inc.
Treated Wood Council
Utility Solid Waste Activities Group

Environmental Petitioners:

Clean Air Council
Composite Panel Association
Desert Citizens Against Pollution
Downwinders at Risk
Environmental Integrity Project
Huron Environmental Activist League
Louisiana Environmental Action Network
Montanans Against Toxic Burning
Partnership for Policy Integrity
Sierra Club

(b) Intervenor In Support of Industry Petitioners

American Petroleum Institute
Metals Industries Recycling Coalition
Rubber Manufacturers Association

(c) Respondents

United States Environmental Protection Agency
("EPA")
Gina McCarthy, Administrator

(d) Intervenor in Support of Respondents

Industry Intervenors:

American Chemistry Council
American Forest & Paper Association
American Gas Association
American Home Furnishings Alliance, Inc.
American Petroleum Institute
American Wood Council
ARIPPA
Biomass Power Association
Brayton Point Energy, LLC
Cement Kiln Recycling Coalition
Coalition for Responsible Waste Incineration
Council of Industrial Boiler Owners
Edison Electric Institute

Hardwood Plywood & Veneer Association
JELD-WEN, inc.
Lafarge Building Materials Inc.
Lafarge Midwest, Inc.
Lafarge North America Inc.
National Association of Manufacturers
National Rural Electric Cooperative Association
Portland Cement Association
Rubber Manufacturers Association
Steel Manufacturers Association
Treated Wood Council
Utility Solid Waste Activities Group
Waste Management, Inc.
WM Organic Growth
WM Renewable Energy, LLC

Environmental Intervenors:

Desert Citizens Against Pollution
Downwinders At Risk
Environmental Integrity Project
Huron Environmental Activist League
Louisiana Environmental Action Network
Montanans Against Toxic Burning
Partnership for Policy Integrity
Sierra Club

2. Ruling Under Review

The ruling under review is a final action of EPA entitled “*Identification of Non-Hazardous Secondary Materials That Are Solid Waste*,” 76 Fed. Reg. 15456 (Mar. 21, 2011), as amended by the final rule entitled “*Commercial and Industrial Solid Waste Incineration Units: Reconsideration and Final Amendments; Non-Hazardous Secondary Materials That Are Solid Waste; Final Rule*,” 78 Fed. Reg.

9112 (Feb. 7, 2013) (collectively referred to as the “NHSM Rule”), codified at 40 C.F.R. Part 241.

3. Related Cases

Each of the petitions for review consolidated under No. 11-1189 is related. These cases consist of Case Nos. 11-1192, 11-1202, 11-1214, 11-1216, 11-1217, 11-1220, 11-1221, 11-1223, 11-1224, 11-1226, 11-1227, 11-1228, 11-1230, 11-1232, 11-1233, 11-1235, 11-1238, 13-1152, 13-1156, 13-1157, 13-1158, 13-1159, 13-1160, 13-1162, 13-1164, and 13-1165.

The following related cases are also pending before this court: (a) *United States Sugar Corporation et al. v. EPA*, No. 11-1108 (and consolidated cases) in which petitioners are seeking review of 76 Fed. Reg. 15608 (March 21, 2011) and 78 Fed. Reg. 7138 (Jan. 31, 2013) (“Boiler MACT”); and (b) *American Forest & Paper Association, et al. v. EPA*, No. 11-1125 (and consolidated cases), in which petitioners are seeking review of 76 Fed. Reg. 15704 (March 2, 2011) and 78 Fed. Reg. 9112 (Feb. 7, 2013) (“CISWI Rule”).

4. Corporate Disclosure Statements

The American Chemistry Council (“ACC”) represents the leading companies engaged in the business of chemistry. ACC members apply the science of chemistry to make innovative products and services that make people's lives better, healthier and safer. ACC is committed to improved environmental, health

and safety performance through Responsible Care®, common sense advocacy designed to address major public policy issues, and health and environmental research and product testing. The business of chemistry is a \$770 billion enterprise and a key element of the nation's economy. It is one of the nation's largest exporters, accounting for twelve percent of all U.S. exports. Chemistry companies are among the largest investors in research and development. Safety and security have always been primary concerns of ACC members, and they have intensified their efforts, working closely with government agencies to improve security and to defend against any threat to the nation's critical infrastructure. ACC does not have any outstanding shares or debt securities in the hands of the public and no-publicly owned company has a 10% or greater ownership interest in ACC.

The American Forest & Paper Association ("AF&PA") serves to advance a sustainable U.S. pulp, paper, packaging, and wood products manufacturing industry through fact-based public policy and marketplace advocacy. AF&PA member companies make products essential for everyday life from renewable and recyclable resources and are committed to continuous improvement through the industry's sustainability initiative - Better Practices, Better Planet 2020. The forest products industry accounts for approximately 4 percent of the total U.S. manufacturing GDP, manufactures approximately \$210 billion in products

annually, and employs nearly 900,000 men and women. The industry meets a payroll of approximately \$50 billion annually and is among the top 10 manufacturing sector employers in 47 states. No parent corporation or publicly held company has a ten percent (10%) or greater ownership interest in AF&PA.

American Gas Association (“AGA”) is the national association of natural gas utilities with no parent company, subsidiaries or affiliates. AGA does not have any outstanding shares or debt securities in the hands of the public and no publicly owned company has a 10% or great ownership interest in AGA.

The American Petroleum Institute (“API”) is a nationwide, not-for-profit association representing over 600 member companies in all aspects of the oil and gas industry, including science and research, exploration and production of oil and natural gas, transportation, refining of crude oil and marketing of oil and gas products. API is a “trade association” within the meaning of Circuit Rule 26.1. API is a continuing association operating for the purpose of promoting the general commercial, professional, legislative or other interests of its membership. API has no parent companies, and no publicly held company has a 10 percent or greater interest in API.

The American Wood Council (“AWC”) is the voice of North American traditional and engineered wood products, representing over 75% of the industry. From a renewable resource that absorbs and sequesters carbon, the wood products

industry makes products that are essential to everyday life and employs over one-third of a million men and women in well-paying jobs. AWC's engineers, technologists, scientists, and building code experts develop state-of-the-art engineering data, technology, and standards on structural wood products for use by design professionals, building officials, and wood products manufacturers to assure the safe and efficient design and use of wood structural components. AWC also provides technical, legal, and economic information on wood design, green building, and manufacturing environmental regulations advocating for balanced government policies that sustain the wood products industry. No parent corporation or no publicly held company has a ten percent (10%) or greater ownership interest in AWC.

The Association of American Railroads (“AAR”) is a trade association whose membership includes freight railroads that operate 83 percent of the line-haul mileage, employ 95 percent of the workers, and account for 97 percent of the freight revenues of all railroads in the United States; and passenger railroads that operate intercity passenger trains and provide commuter rail service. AAR has no parent company and is a nonstock corporation.

The Biomass Power Association (“BPA”) is a non-profit, national trade association headquartered in Portland, Maine and organized under the laws of the State of Maine. BPA has no parent corporation, and no publicly held company

has a ten percent (10%) or greater ownership interest in BPA. BPA serves as the voice of the U.S. biomass industry in the federal public policy arena. BPA is comprised of 23 member companies who either own or operate biomass power plants, and 16 associate and affiliate members who are suppliers to or customers of the industry. BPA's member companies represent approximately 80 percent of the U.S. biomass to electricity sector.

The Cement Kiln Recycling Coalition (“CKRC”) is a non-profit “trade association” within the meaning of Circuit Rule 26.1(b). It has no parent corporation, and no publicly held company owns a 10 percent or greater interest in CKRC.

CEMEX, Inc. is not a publicly held company. Its ultimate parent company is CEMEX, S.A.B. de C.V., a publicly held company traded on the New York Stock Exchange. No other publicly held company or entity owns 10% or more of CEMEX, Inc. CEMEX Construction Materials Florida, LLC is an indirect, wholly-owned subsidiary of CEMEX, Inc. CEMEX Construction Materials Florida, LLC is a producer and supplier of portland cement.

The Council of Industrial Boiler Owners (“CIBO”) certifies that it is a trade association of industrial boiler owners, architect-engineers, related equipment manufacturers, and University affiliates with over 100 members representing 20

major industrial sectors. CIBO has not issued shares to the public, although many of CIBO's individual members have done so.

The Edison Electric Institute ("EEI") is the national association of investor-owned electric utility companies with no parent company, subsidiaries or affiliates. EEI does not have any outstanding shares or debt securities in the hands of the public and no publicly-owned company has a 10% or greater owned ownership interest in EEI.

Hatfield Township Municipal Authority ("Authority") is not required to file a Disclosure Statement under either Federal Rule of Appellate Procedure 26.1 or D.C. Circuit Rule 26.1. The Authority is a government entity duly created under the provisions of the Pennsylvania Municipality Authorities Act of 1945, as amended, and is the entity within Hatfield Township, Montgomery County, Pennsylvania, responsible for providing sewer service to the township.

Holcim (US) Inc. is one of the largest manufacturers and suppliers of cement and mineral components in the United States. Holcim (US) Inc.'s headquarters are in Bedford, Massachusetts, and it serves markets throughout most of the United States. Holcim (US) Inc. is a wholly-owned subsidiary of Holcim Ltd., of Switzerland, and no other publicly held corporation owns 10% or more of Holcim (US) Inc.'s stock.

Lafarge S.A., a company publicly traded in France, owns directly or indirectly 100% of the stock of Lafarge North America Inc; Lafarge Midwest, Inc. and Lafarge Building Materials Inc. are each wholly-owned subsidiaries of Lafarge North America Inc.

The National Association of Clean Water Agencies ("NACWA") is a voluntary not-for-profit trade association whose membership includes nearly 300 municipal clean water agencies. NACWA's members operate publicly-owned treatment works ("POTWs") and collectively serve the majority of the sewered population of the United States. NACWA's purpose and general nature is to provide a forum for collaboratively addressing issues affecting POTWs and to advocate on behalf of its members regarding legislative, regulatory and legal matters. NACWA has no parent company, and no publicly held company has a 10 percent or greater ownership interest in NACWA. NACWA has no outstanding shares or debt securities in the hands of the public and has no parent, subsidiary or affiliate that has issued shares or debt securities to the public.

The National Association of Manufacturers ("NAM") is the nation's largest industrial trade association, representing small and large manufacturers in every industrial sector and in all 50 states. NAM's mission is to enhance the competitiveness of manufacturers by shaping a legislative and regulatory environment conducive to U.S. economic growth and to increase understanding

among policymakers, the media and the general public about the vital role of manufacturing to America's economic future and living standards. NAM has no parent company, and no publicly held company has a 10% or greater ownership interest in NAM.

The National Rural Electric Cooperative Association (“NRECA”) is the national association of rural electric cooperatives with no parent company, subsidiaries or affiliates. NRECA does not have any outstanding shares or debt securities in the hands of the public and no publicly-owned company has a 10% or greater ownership interest in NRECA.

The Portland Cement Association (“PCA”) is a non-profit “trade association” within the meaning of Circuit Rule 26.1(b). It has no parent corporation, and no publicly held company owns a 10 percent or greater interest in PCA.

The Railway Tie Association (RTA), based in Fayetteville, GA, is a non-profit corporation organized under the laws of the state of Georgia in existence since 1919 to promote the economical and environmentally sound use of treated wood crossties, which have been central to North American railroads for more than 160 years. RTA engages in research into crosstie design and conducts ongoing activities dealing with sound forest management, conservation of timber resources, timber processing, wood preservation and safety of industry workers. It

has no parent organization, and no publicly held company has a 10% or greater ownership interest in RTA.

Solvay USA Inc. (“Solvay”), formerly known as Rhodia Inc., is a specialty chemicals manufacturing company that, among other things, operates sulfuric acid recovery units (“SARUs”) located across the United States. The primary customers for Solvay’s SARUs are oil refineries. Solvay is 100% owned by Solvay Holding Inc., a Delaware corporation and wholly-owned subsidiary of Rhodia S.A., a French publicly-owned company. Rhodia S.A. is owned by the ultimate parent Solvay S.A.

The Treated Wood Council (TWC), based in the District of Columbia, is a not-for-profit corporation organized in 2003 under the laws of the state of Florida, serving more than 440 companies and organizations throughout the United States. The TWC’s members produce pressure-treated wood products, manufacture wood preservatives, harvest and saw wood or serve the treated wood industry. The TWC monitors and responds to legislation and regulatory activities related to the treated wood industry, including environmental issues, and advocates for environmentally sound standards for treated wood manufacture and use. It has no parent corporation, and no publicly held company owns a 10% or greater interest in the TWC.

The Utility Solid Waste Activities Group (“USWAG”) is an association of approximately 80 individual electric utilities, EEI, NRECA and AGA that represents that the electric and gas utility industry on rulemaking and administrative proceedings before the EPA under the Resource Conservation and Recovery Act, 42 U.S.C. §§6901, *et seq.*, and in litigation arising from such proceedings that affect its members. USWAG members are affected by the final action of the EPA that is challenged in this proceeding. USWAG has not parent company, subsidiaries or affiliates. USWAG does not have any outstanding shares or debt securities in the hands of the public and no publicly-owned company has a 10% or greater ownership in USWAG.

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GLOSSARY

“2008 DSW Rule Study” means *An Assessment of Environmental Problems Associated with Recycling of Hazardous Secondary Materials* (U.S. EPA January 11, 2007).

“ABR” means *Association of Battery Recyclers, Inc., et al. v. EPA*, 208 F.3d 1047 (D.C. Cir. 2000).

“AMC I” means *American Mining Congress v. EPA*, 824 F.2d 1177 (D.C. Cir. 1987).

“API I” means *American Petroleum Institute v. EPA*, 906 F.2d 729, 741 n.16 (D.C. Cir. 1990) (“API I”).

“API II” means *American Petroleum Institute v. EPA*, 216 F.3d 50, 56 (D.C. Cir. 2000).

“Boiler MACT” means 76 Fed. Reg. 15608 (March 21, 2011) and 78 Fed. Reg. 7138 (Jan. 31, 2013).

“CAA” means the Clean Air Act, 42 U.S.C. §§7401, *et seq.*

“CISWI” means commercial or industrial solid waste incinerators.

“CISWI Definition Rule” means 40 C.F.R. §60.2265 (2005).

“CISWI Rule” means 76 Fed. Reg. 15704 (March 2, 2011) and 78 Fed. Reg. 9112 (Feb. 7, 2013).

“CWA” means the Clean Water Act, 33 U.S.C. §§1251, *et seq.*

“DSE” means Domestic Sewage Exclusion.

“EPA” means United States Environmental Protection Agency.

“NHSM” means non-hazardous secondary material.

“NHSM Rule” means 76 Fed. Reg. 15456 (Mar. 21, 2011) and 78 Fed. Reg. 9112 (Feb. 7, 2013), codified at 40 C.F.R. Part 241.

“PAH” means polycyclic aromatic hydrocarbon.

“POTWs” means publicly-owned treatment works.

“PRR” means paper recycling residuals.

“RCRA” means the Resource Conservation and Recovery Act, 42 U.S.C. §§6901,
et seq.

JURISDICTIONAL STATEMENT

This Court has jurisdiction over these consolidated cases involving petitions for review of the NHSM Rule because the petitions for review were timely filed under Section 7006(a) of the Resource Conservation and Recovery Act (“RCRA”). 42 U.S.C. §6976(a).

STATEMENT OF ISSUES

1. Whether the classification as “solid waste” of non-hazardous secondary materials that are not discarded but are transferred to third parties for combustion as alternative fuels is contrary to law and arbitrary and capricious under RCRA.
2. Whether the classification as “solid waste” of alternative fuels such as construction and demolition wood, railroad ties, and other treated woods that have heating value, are managed as valuable fuel, and are processed to create new fuel products, is contrary to law and arbitrary and capricious under RCRA.
3. Whether the classification as “solid waste” of alternative fuels such as paper recycling residuals is contrary to law and arbitrary and capricious under RCRA where the combustion is an integral part of an industrial process or functionally equivalent to a traditional fuel.
4. Whether the classification as “solid waste” of sewage sludge when combusted is contrary to law and arbitrary and capricious, given that RCRA

§1004(27) expressly excludes domestic sewage from the definition of solid waste.
42 U.S.C. §6903(27).

STATUTES AND REGULATIONS

All applicable statutes and regulations are contained in the Addendum to the Opening Brief of the Industry Petitioners.

STATEMENT OF THE CASE

EPA decided in the Non-Hazardous Secondary Materials Rule (“NHSM Rule”) that combusting any non-hazardous secondary material (“NHSM” or “secondary material”) for any purpose (including as alternative fuel for energy recovery) is the “discard” of a “solid waste,” unless the material qualifies for narrowly-drawn exceptions. 40 C.F.R. §241.3(a). This decision is important because “alternative fuels” that are “solid wastes” may be burned only in commercial or industrial solid waste incinerators (“CISWI” or “incinerators”) subject to air emission standards promulgated under §129 of the Clean Air Act (“CAA”), while alternative fuels that are not “solid wastes” may be combusted in industrial boilers, furnaces and other units that are subject to emission standards promulgated under CAA §112. The practical effect of the NHSM Rule is that alternative fuels that could have been productively combusted in industrial boilers and furnaces may now have to be burned as waste in units regulated as incinerators under CAA §129 or otherwise disposed of as waste. Operators of

combustion units regulated by CAA §112 will therefore avoid burning these alternative fuels and, given the limited capacity of existing solid waste incinerators and EPA's expectation that no new incinerators will be built, misclassifying alternative fuels as wastes will increase the volume of valuable materials sent to landfills.¹ Similarly, if sewage sludge is a "solid waste" when combusted, many sewage sludge incinerators will be subject to CAA §129 standards, which could require more than \$3 billion in capital expenditures by the nation's clean water agencies with no appreciable environmental gain over the existing comprehensive sewage sludge regulatory regime in §405 of the Clean Water Act ("CWA") and 40 C.F.R. Part 503. [EPA-HQ-RCRA-2008-0329-1261.] For agencies that do not or cannot invest in their incinerators, the only options will be landfilling or land applying the sludge, with its associated costs (which could be as high as \$10 million per year for each publicly owned treatment works) and environmental implications. [*Id.*]

The NHSM Rule arises from litigation over defining which materials will be subject to the CAA §129 incinerator rules. CAA §129 regulates emissions from incinerators which combust "any solid waste material," 42 U.S.C. §7429(g)(1), "as established by the Administrator pursuant to [RCRA]." *Id.* at

¹ According to EPA, there are fewer than 170 permitted CISWI incinerators and EPA does not expect any new ones to be built. [75FR31966.]

§7429(g)(6). EPA first addressed the scope of §129 in CAA rules that defined “commercial and industrial solid waste” to include only solid waste combusted in a unit “whose design does not provide for energy recovery.” 65 Fed. Reg. 75338 (Dec. 1, 2000); 70 Fed. Reg. 55568 (Sept. 22, 2005) (“CISWI Definition Rule”). In 2005, this Court vacated and remanded the CISWI Definition Rule because it excluded materials burned for energy recovery, even if they might be “solid wastes.” *Natural Resources Defense Council v. EPA*, 489 F.3d 1250, 1260 (D.C. Cir. 2007) (“*NRDC*”).² EPA responded by promulgating the NHSM Rule under RCRA, defining “solid waste” for purposes of CAA §129. 76 Fed. Reg. 15456 (Mar. 21, 2011), amended by 78 Fed. Reg. 9112 (Feb. 7, 2013).³

The NHSM Rule begins with EPA’s assertion that *all* alternative fuels are solid waste unless otherwise excluded:

(a) Except as provided in paragraph (b) of this section or in §241.4(a) of this subpart, non-hazardous secondary materials that are combusted are solid wastes, unless a petition is submitted to, and a determination granted by, the EPA pursuant to paragraph (c) of this section.

40 C.F.R. §241.3(a). EPA established two generic “exclusions” from this

² The Court also vacated and remanded the air emission standards for industrial boilers established under CAA §112 (“Boiler MACT”), because it needed to be revised as a consequence of the decision on the CISWI Definition Rule. 489 F.3d at 1261-62.

³ EPA also revised the Boiler MACT (76 Fed. Reg. 15608 (Mar. 21, 2011)); 78 Fed. Reg. 7138 (Jan. 31, 2013) and the incinerator emissions rule. 76 Fed. Reg. 15704 (Mar. 21, 2011) (“CISWI Rule”), 78 Fed. Reg. 9112 (Feb. 7, 2013).

determination. First, alternative fuel that is combusted on-site by the generator of the secondary material is not a “solid waste” provided the alternative fuel meets “legitimacy criteria” that are intended to establish that the material is not being burned for disposal. *Id.* at §241.3(b)(1). Second, alternative fuel products created by processing “discarded” secondary materials are not “solid wastes” when combusted, again provided that the “legitimacy criteria” are met. *Id.* at §241.3(b)(4).

The “legitimacy criteria” are (1) the alternative fuel must be managed as a valuable commodity, (2) must have meaningful heating value and be used as fuel, and (3) any Clean Air Act pollutants or groups of pollutants in the alternative fuel should be at concentrations that are comparable to or lower than the concentrations found in “traditional fuels” that the combustion unit is designed to burn. *Id.* at §241.3(d)(1). Addressing the third criterion may involve extensive sampling and analysis of alternative fuels, and can result in the same material having different classifications depending on the unit in which it might be burned. *See infra* pp. 26-27, 34. A combustor must maintain documentation showing that the conditions of the applicable exclusions have been satisfied or the fuel will be considered waste and the unit a CISWI incinerator. 40 C.F.R. §§63.11225(c)(ii), 63.11225(d)(2), 60.2175(v), 60.2740(u), 60.2265, 60.2875.

The combustion of alternative fuel that does not qualify for these exclusions, including undiscarded alternative fuels transferred to third parties, is considered the disposal of “solid waste” unless EPA by regulation (40 C.F.R. §241.4(b)), or in response to a petition (*Id.* at §241.3(c)(1)), decides such materials are not “solid wastes.” Thus, EPA has decided that all alternative fuels are “solid wastes,” and it is only through narrowly-drawn exclusions from this initial regulatory decision that they can be combusted as “non-wastes.” Since these are styled as exclusions, EPA has shifted the burden to industry of demonstrating that alternative fuels are “non-wastes.”⁴

SUMMARY OF ARGUMENT

The NHSM Rule is contrary to law and arbitrary and capricious because EPA is asserting RCRA jurisdiction over alternative fuels that have not been discarded and therefore are not solid wastes subject to RCRA. Specifically, EPA has, contrary to law and arbitrarily and capriciously:

(1) decided that transferring alternative fuels to third parties for combustion is a discard and therefore such fuels are solid wastes;

⁴ The specific alternative fuels conditionally excluded from the classification of “solid waste” by EPA include scrap tires, coal refuse and dewatered pulp and paper sludge when managed in specified ways, and resinated wood. 40 C.F.R. §241.4(a)(1)-(4). EPA declined to make such findings for other alternative fuels for which a significant record exists regarding their legitimate combustion as a fuel. EPA also concluded that sewage sludge generated from publicly-owned treatment works is a solid waste when combusted. *See* [76FR15513-14].

(2) classified as solid waste alternative fuels such as those made from construction and demolition wood, railroad ties, and other treated woods that have heating value, are managed as valuable fuel, and are processed to create new fuel products;

(3) classified as solid waste alternative fuels such as paper recycling residuals, even though the record demonstrates no discard has occurred and the combustion is an integral part of an industrial process or functionally equivalent to a traditional fuel; and

(4) classified as solid waste sewage sludge when combusted even though RCRA prohibits such a classification.

STANDING

The NHSM Rule regulates the management and disposal of alternative fuels that are generated, managed, transferred or combusted by the Industry Petitioners and imposes substantial costs on them. Where “the complainant is ‘an object of the action ...’—as is the case usually in review of a rulemaking ... there should be ‘little question that the action ... has caused him injury, and that a judgment preventing ... the action will redress it.’” *Sierra Club v. EPA*, 292 F.3d 895, 900 (D.C. Cir. 2002) (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561-62 (1992)). Each of the individual Industry Petitioners have standing because they own or operate facilities that generate, manage, transfer, or combust alternative

fuels subject to the NHSM Rule, and the trade association Industry Petitioners also have standing because their individual members are similarly situated. *Sierra Club*, 292 F.3d at 900-901.

ARGUMENT

I. Standard Of Review

The Court reviews the NHSM Rule pursuant to RCRA §7006(a), under which regulations are reviewed in accordance with Sections 701 – 706 of the Administrative Procedure Act which proscribes agency actions that are arbitrary and capricious, an abuse of discretion, or otherwise contrary to law, and that are in excess of an agency’s jurisdictional authority. 5 U.S.C. §706(a)(2). EPA’s legal interpretations are reviewed under *Chevron, U.S.A., Inc. v. NRDC*, 467 U.S. 837, 842 (1984). EPA’s factual determinations and explanations are reviewed under the arbitrary-and-capricious test, which requires an agency to “articulate a satisfactory explanation for its action” and forbids it from “entirely fail[ing] to consider an important aspect of the problem.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

II. EPA’s Decision That Firm-To-Firm Transfers Of Alternative Fuels For Combustion As Fuel Are “Discards” Of “Solid Waste” Is Contrary To Law And Arbitrary And Capricious.

EPA’s RCRA authority extends only to the regulation of “solid waste” (*see* Section II.B *infra*). Ignoring that statutory limitation, EPA has unlawfully decided that all firm-to-firm transfers of alternative fuels are “discards” of “solid wastes,”

and imposes on facilities the burden of demonstrating that such fuels are “non-wastes.” This decision is contrary to law and not supported by the record.

A. EPA Has Decided That Firm-To-Firm Transfers Of Alternative Fuels Are “Discards” Of “Solid Waste”.

EPA starts from the incorrect position that *all* alternative fuels are “discarded” and therefore “solid wastes” unless explicitly excluded by EPA. 40 C.F.R. §241.3(a). EPA has improperly created a RCRA jurisdictional framework where wastes are the norm and “non-wastes” are the exception.

EPA carves out a few narrowly-drawn exceptions to its jurisdictional premise. Alternative fuel that remains under the control of the generator of the fuel is not solid waste if the fuel meets the “legitimacy criteria” that establish, in EPA’s view, that the material is not being discarded. *Id.* at §241.3(b)(1). Further, discarded alternative fuels burned in a unit that is outside the control of generator may be excluded, but only if the material has been appropriately “processed” and the “legitimacy criteria” are met. *Id.* at §241.3(b)(4).

The combustor must keep records showing that it “satisfies” the conditions of these exclusions. *Id.* at §§63.11225(c)(ii), 63.11225(d)(2), 60.2175(v), 60.2740(u). EPA characterizes this as a “demonstration” that the conditions of the exclusion have been met and the required documentation as being the “basis for this demonstration.” [76FR15481]; *see id.* [15484]; [78FR9155]. If a combustor

does not keep these records, EPA, without more, deems the alternative fuel to be a solid waste. *Id.* at §§60.2265, 60.2875.

There is no exclusion for firm-to-firm transfers of alternative fuels.⁵ This creates an indefensible and absurd result. The same alternative fuel that EPA conditionally excludes when combusted by the generator is not excluded when transferred to another firm. When transferred, the fuel escapes classification as a “solid waste” only if EPA grants a petition that demonstrates that the fuel has not been discarded “*even though* it has been transferred to a third party” and that the legitimacy criteria have been satisfied. *Id.* at §241.3(c)(1) (emphasis supplied). *See*, [76FR15538] (“the petitioner would need to demonstrate that [the NHSM] was not initially abandoned or thrown away by the generator of the non-hazardous secondary material.”).

B. EPA’s Decision That Firm-to-Firm Transfers Of Alternative Fuels Is The “Discard” Of “Solid Waste” Is Contrary To Law.

EPA’s RCRA jurisdiction “is limited to those materials that constitute ‘solid waste.’” *American Mining Congress v. EPA*, 824 F.2d 1177 (D.C. Cir. 1987) (“*AMC I*”). EPA has exceeded its limited RCRA jurisdiction by asserting jurisdiction over alternative fuels that are not “solid wastes.”

⁵ The exclusion for NHSM that has been processed into an alternative fuel presumes that the NHSM is discarded in the first instance, and is subsequently processed into an alternative fuel.

Congress defined “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, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities” 42 U.S.C. §6903(27). The central question is whether EPA can preemptively declare that alternative fuels transferred to third parties are *per se* “other discarded material.”⁶

AMC I held that the term “discarded” was employed by Congress “in its ordinary, everyday senses,” and that “Congress clearly and unambiguously expressed its intent that ‘solid waste’ (and therefore EPA’s regulatory authority) be limited to materials that are ‘discarded’ by virtue of being disposed of, abandoned or thrown away.” *Id.* at 1190.⁷ *AMC I* held that materials reused within an ongoing industrial process were not “discarded” and thus were not “solid wastes.” This Court later observed that there is a wide “spectrum” of secondary materials destined for reuse or recycling that may trigger different regulatory consequences. *American Petroleum Institute v. EPA*, 216 F.3d 50, 56 (D.C. Cir. 2000) (“*API II*”). At one end of the spectrum are secondary materials

⁶ EPA notes that the “key concept” is “discard” and that the definition of solid waste “turns on the meaning of the phrase ‘other discarded material.’” [76FR15462.]

⁷ EPA agrees that “discard” should be given its “plain meaning” (*See, e.g.*, [76FR15463]) and that its meaning is “unambiguous.” [*Id.* at 14568].

“destined for reuse as part of a continuous industrial process,” which “EPA cannot regulate as solid waste” because they are “not abandoned or thrown away.” *Id.*

“At the other end of the spectrum . . . a material that has been ‘indisputably “discarded”’ can, of course, be subjected to regulation as solid waste.” *Id.* A subsequent decision explained:

We have held that the term “discarded” cannot encompass materials that “are destined for beneficial reuse or recycling in a continuous process by the generating industry itself.” [citation omitted] We have also held that materials destined for future recycling by another industry *may* be considered “discarded”; the statutory definition does not preclude application of RCRA to such materials if they can reasonably be considered part of the waste disposal problem. [citation omitted]

Safe Food and Fertilizer v. EPA, 350 F.3d 1263, 1268 (D.C. Cir. 2003).

Accordingly, EPA does not have unfettered discretion to declare that firm-to-firm transfers are *per se* discards.

This court rejected an effort by EPA to narrowly interpret *AMC I* as applying only to secondary materials that were immediately reused in an ongoing industrial process, and that any prior storage was a “discard” that transformed them into “solid waste.” *Association of Battery Recyclers, Inc., et al. v. EPA*, 208 F.3d 1047 (D.C. Cir. 2000) (“*ABR*”). *ABR* again emphasized the ordinary meaning that should be attached to the term “discarded”: “To say that when something is saved it is thrown away is an extraordinary distortion of the English language. Yet that is where EPA’s definition leads.” *Id.* at 1054.

EPA's decision that transferring a secondary material from one company to another is throwing it away is equally a distortion of the plain reading of RCRA. EPA lacks the discretion to make such a general and universal decision. *Safe Food* explicitly rejected the argument that firm-to-firm transfers of secondary materials are necessarily discards.

[W]e have *never* said that RCRA *compels* the conclusion that material destined for recycling in another industry is *necessarily* "discarded." Although ordinary language seems inconsistent with treating immediate reuse within an industry's ongoing industrial process as a "discard," *see AMC I*, 824 F.2d at 1185, the converse is not true. As firms have ample reasons to avoid complete vertical integration, *see generally* Ronald Coase, "The Nature of the Firm," 4 *Economica* 386 (1937), *firm-to-firm transfers are hardly good indicia of a "discard" as the term is ordinarily understood*. 350 F.3d at 1268 (emphasis supplied). Ignoring this admonition, EPA made firm-to-firm transfers *the* determinative factor in the *regulatory decision* that such transfers are discards.

EPA's starting point that *all* transfers of alternative fuels are discards is precisely the view rejected by *Safe Food*. EPA's upside down view that everything is waste until demonstrated otherwise is contrary to the law regarding EPA's limited RCRA jurisdiction.⁸

⁸ Even if the demonstration is successfully made, EPA claims continued RCRA jurisdiction over the "non-waste." (e.g., EPA exercises RCRA jurisdiction over alternative fuels burned onsite by the generator, since the fuels must meet the "legitimacy criteria" established by this rule).

C. EPA Has Not Reasonably Exercised Its Discretion In Deciding That All Firm-To-Firm Transfers Of Alternative Fuels Are Discards.

If EPA has the discretion to decide whether or which firm-to-firm transfers of alternative fuels are acts of discard, EPA has arbitrarily exercised its discretion by making a regulatory decision that *all* firm-to-firm transfers of alternative fuels are discards until demonstrated otherwise. Such a blanket declaration, based on the admitted absence of information rather than the analysis of specific facts, is by definition arbitrary, and is not legitimized by allowing industry to demonstrate that a particular transfer is not a discard.

EPA claims to agree that firm-to-firm transfers do not automatically involve discard. [76FR15492]. EPA asserts that it “evaluates, first, whether such material is discarded in the first instance.” [76FR15470]; *see also* [76FR15472]. EPA says it conducts case-by-case analyses of specific materials in which firm-to-firm transfers are only one factor it considers.

EPA is in no way claiming that such transfer is the definitive criterion for discard. Instead, EPA has examined the issue of company-to-company transfers in the context of specific secondary materials and to the extent the Agency has found either discard or no legitimate recycling, it is requiring companies to file a non-waste petition in order to allow the Agency to review the specifics of their cases.

[76FR15472].

However, this is not what EPA has done. Rather, without a basis in the record, EPA made a *regulatory decision* that, as a matter of law, *all* alternative

fuels are solid wastes, and that transfers of alternative fuels are discards that do not qualify for the limited exclusions in the rule. 40 C.F.R. §§241.3(a) and 241.3(c). These conclusions were not based on specific facts or case-by-case analyses, but rather on the absence of data. *See, e.g.* [78 FR 9167], [76 FR 15472]. EPA turns RCRA on its head by concluding that all transfers are discards and making “non-waste” determinations dependent on the information made available to it. According to the Agency, it “would consider transferred materials not to be wastes *if it could make the appropriate findings for those categories.*” [76FR15471] (emphasis supplied).

EPA misapprehends its limited RCRA jurisdiction. *AMC I* held that EPA’s RCRA jurisdiction is *limited* to those materials that constitute “solid waste.” *AMC I*, at 1179 (emphasis supplied). If a material is a “non-waste,” EPA does not have RCRA jurisdiction over it. EPA cannot exercise jurisdiction over “non-wastes” under the theory that the Agency does not have information to conclude otherwise, or based merely on the suspicion that such materials could be discarded.⁹ Yet that is what EPA has done: “[a]ny petition that is submitted to EPA requesting a non-waste determination must demonstrate that the non-

⁹ Courts have rejected similar efforts by EPA to unlawfully extend its jurisdiction. *See, e.g., Waterkeeper Alliance, Inc v. EPA*, 399 F.3d 486 (2d Cir. 2005) (EPA’s Clean Water Act jurisdiction extends only to actual, not potential, discharges); *National Pork Producers Council v. EPA*, 635 F.3d 738 (5th Cir. 2011).

hazardous secondary material has not been discarded in the first instance.”

[76FR15460.]

EPA’s decision to consign all firm-to-firm transfers into RCRA is not only contrary to law, it is not reasonable. Firm-to-firm transfers are at the foundation of profitable economic activity: engaging in transactions with other entities is what businesses do. This includes a significant flow of transactions in a wide range of secondary materials and alternative fuels. As an example, petitioner Portland Cement Association estimates that over 12 million tons of non-hazardous secondary materials are used at its members’ facilities each year as fuels and ingredients, almost all as a result of firm-to-firm transfers.¹⁰ A wide range of legitimate considerations drive these transactions. For example, in some cases, the quantity of alternative fuel generated at a site is too small for efficient use and transfer to another site which aggregates similar materials is economically justified and a better use of those resources. [EPA-HQ-RCRA-2008-0329-1165, p. 3.] Another factor is an increasing interdependence of facilities and complex ownership structures that depend on sharing material flows, including alternative fuels, to optimize process efficiency and resource use. *Id.* EPA does not demonstrate why such transactions are inherently less environmentally protective than management wholly within one entity. It is not reasonable for EPA to

¹⁰ [EPA-HQ-RCRA-2008-0329-1842.]

impose artificial barriers to normal and widespread economic activity simply based on ownership structures.

By extending its RCRA jurisdiction to all alternative fuels, including those EPA concedes may be “non-wastes,” EPA has not reasonably exercised its discretion under *AMC I* or *Safe Food*, nor has it advanced a permissible interpretation of RCRA.

D. The Record Does Not Support EPA’s Decision That All Firm-To-Firm Transfers Of Alternative Fuels Are Discards Of Solid Waste.

The record does not support EPA’s regulatory decision that all firm-to-firm transfers of alternative fuels are discards of solid waste. EPA asserts that “it is plain from any reasonable analysis that transfer to another party, where a generator of a secondary material relinquishes all control of the material is certainly relevant to any determination whether a material is a waste.” [76FR15472.] However, EPA did not support this conclusion and has not provided the required “rational connection between the facts found and the choice made.” *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 43.

What is at issue here is not whether firm-to-firm transfers are merely a “relevant” factor. Rather, EPA has asserted that *all* alternative fuels fall under its RCRA jurisdiction, including firm-to-firm transfers of alternative fuels. Firm-to-firm transfers only segue into becoming a “relevant factor” after the fact, when

industry asks EPA to determine that transferring an alternative fuel is not a discard so that it can be excluded from the initial regulatory declaration.

EPA seeks to justify the regulatory determination by relying on a vague concept of probabilities:

In the proposal, EPA stated that when non-hazardous secondary material fuels are transferred to another party, the Agency *generally believed* that the material is discarded, since the generator has relinquished control of the secondary material and the entity receiving the materials *may not* have the same incentives to manage them as a useful product, which results in the materials being discarded.

[76FR15466] (emphasis supplied). EPA concedes that reliance on this mere possibility may not be very accurate: “There may also be nonhazardous secondary materials transferred to another party that may not be a waste and EPA is attempting to deal with those categories of non-hazardous secondary materials on a case-by-case basis.” [76FR15470, 15533.] Thus, EPA openly admits that its generic regulatory decision captures alternative fuel that is not solid waste (and thus over which it has no RCRA jurisdiction), hoping that this jurisdictional overreach is cured by offering industry the option of seeking a determination, on a case-by-case basis, that EPA got it wrong. EPA concedes:

Merely because one party has relinquished control of a secondary material does not make it a waste nor does the fact that a receiving party may not have the same incentives to manage them as a useful product. EPA cannot indict all parties that in fact do manage these secondary materials as a useful product.

[76FR15471.] However, that is what EPA has done: alternative fuels transferred to third parties are “indicted” as discarded solid waste, and are “guilty” unless and until demonstrated “innocent,” either through documentation demonstrating compliance with 40 C.F.R. §241.3(b)(4) or by petitions proving to EPA’s satisfaction that, “even though” the material has been transferred, it has not been discarded.

EPA fails to rely on any record evidence developed for this rulemaking to support its “general belief” that firm-to-firm transfers are “discards” or that third parties receiving the materials “may not” have the same incentive to manage such materials as useful products. Rather, EPA makes a general reference to the record of a different, yet-to-be concluded, RCRA rulemaking initiated for a different purpose, involving different facts, and initiated under the authority of a different part of RCRA. EPA asserts that:

[The] “lack of incentive of third parties to manage [secondary materials] as a useful product has been well-documented in the context of hazardous secondary material recycling as evidenced by the results of the environmental problems study performed in support of the 2008 DSW Final Rule and believed that this finding also held true for non-hazardous secondary materials that are used as fuel.”

[76FR15466.] The “environmental problems study” to which EPA is referring,

An Assessment of Environmental Problems Associated with Recycling of

Hazardous Secondary Materials (U.S. EPA January 11, 2007) (“2008 DSW Rule Study”), was developed in the context of EPA’s initiative to revise the regulation

of “hazardous waste” under Subtitle C of RCRA, known as the Definition of Solid Waste (“DSW”) rule.¹¹ EPA cannot rely on this vague reference to a study that addresses different issues in a different regulatory context to support this rulemaking.

The *2008 DSW Rule Study* was performed to support a rulemaking involving the revision of the hazardous waste regulations, and examined the causes of “environmental damage” at facilities that recycle *hazardous* secondary materials. However, this Rule involves the regulation of *non-hazardous* secondary materials. EPA has not supported its assertion that the *2008 DSW Rule Study* is relevant to the evaluation of non-hazardous alternative fuels that are transferred to third parties for combustion. EPA has thus not developed a record supporting the conclusion that all transfers of alternative fuel are discards of solid waste.

EPA attempted to find such evidence. However, it identified only a handful of incidents that have nothing to do with whether burning alternative fuels for energy recovery is waste disposal. *See* [EPA-HQ-RCRA-2008-0329-0423]. This document discusses fires at three tire piles; a fire at a debris pile; and fires at three facilities that recycle wood pallets. None of these incidents involved burning alternative fuels for energy recovery. In addition to the dubious relevance of such

¹¹ EPA describes the 2008 DSW rulemaking at [76FR15462].

a small number of incidents, these incidents do not support EPA's decision that transfers alternative fuels are discards of solid wastes.

EPA has not "found any facts," nor established any "rational connection" with any facts, supporting its effort to extend RCRA jurisdiction over all transfers of alternative fuels. *See API II*, at 58 (EPA must provide a rational explanation for its decision and develop a record demonstrating that EPA engaged in reasoned decision-making).

III. The Identification Of Alternative Fuels As Wastes Is Contrary To Law and Arbitrary and Capricious When The Record Shows That The Fuels Are Managed As A Valuable Commodity, Combusted To Recover Energy, And Are A New Product Produced From Processing Secondary Materials, Are Integral To An Industrial Process, Or Are Functionally Equivalent To The Fuels They Replace.

The record shows that many alternative fuels are new products produced from processing secondary materials, are integral to an industrial process or are functionally equivalent to the fuel they replace, and are managed as valuable commodities and combusted for legitimate energy recovery. To the extent that the NHSM Rule classifies such alternative fuels as wastes, it is contrary to law and arbitrary and capricious.

A. Construction And Demolition Wood, Railroad Ties And Other Treated Wood, Are Processed Into Legitimate Alternative Fuels That Are Not Wastes.

1. Processed Alternative Fuels Are Not Wastes.

EPA has long recognized that even if a material has been discarded, if resources are expended to manufacture a new product using that material, then that new product is no longer a waste. *See, e.g.*, [50FR 614,633-34].¹² As EPA notes, “a safe fuel product that is a valuable commodity and sold in the marketplace no differently from traditional fuels” is not a waste. [75FR31877].

2. The Significant Investments Made To Create Alternative Fuels From Construction And Demolition Wood, Railroad Ties, And Other Treated Woods Through Processing And The Market For These Materials Are Evidence That These Fuels Are Not Discarded.

Processing secondary materials to create alternative fuel products is a significant commercial activity. The record demonstrates that significant investments are made to create alternative fuel products from construction and demolition wood, railroad ties, and other treated woods, that there is a significant

¹² In the context of non-hazardous materials, this is true even when the new product is a fuel because the RCRA regulation of fuels derived from hazardous wastes does not apply to materials that are not and have never been hazardous wastes. 42 U.S.C. §6924(q); [76FR15469]; *AMCII*, at 1189 (Section 6924(q) addressed burning hazardous wastes only and did not “revamp the basic definitional section of the statute.”)

market for these materials, and that these alternative fuels are commodities, not wastes.¹³

For example, over 200 companies across the United States process 4.7 to 6.5 million tons of construction and demolition wood that are combusted for energy recovery each year. [EPA-HQ-RCRA-2008-0329-1928]; [EPA-HQ-RCRA-2008-0329-1811]. Approximately 15 companies in North America with revenue of \$65-75 million annually process over 8.5 million railroad ties that are combusted for energy recovery. [EPA-HQ-RCRA-2008-0329-2009]; [EPA-HQ-RCRA-2008-0329-0875]. There are over 89 customers of processed treated wood fuel products, with one company accounting for 2-3 million tons of treated wood fuel since 1989. [EPA-HQ-RCRA-2008-0329-1897].

These are valuable commodities. Two trailer loads of construction and demolition wood have a market value between \$700 and \$900. [EPA-HQ-RCRA-2008-0329-1946]. Forest products mills pay about \$20 to \$30 a ton for railroad tie fuel. [EPA-HQ-RCRA-2008-0329-2009]. It would cost forest products mills around \$50 million a year to replace the fuel value of the railroad ties. [*Id.* at 2.]

¹³ EPA argues that waste can have economic value and still retain its status as waste, citing *American Petroleum Institute v. EPA*, 906 F.2d 729, 741 n.16 (D.C. Cir. 1990) (“*API I*”); *United States v. ILCO, Inc.*, 996 F.2d 1126, 1131–32 (11th Cir. 1993); *Owen Electric Steel Co. of S.C. v. Browner*, 37 F.3d 146, 150 (4th Cir. 1994). [76FR15463.] However, these cases address the regulatory status of material *before* it is processed into a product. EPA acknowledges that these cases do not contradict the proposition that “legitimate products made from wastes are, themselves, products and not wastes.” [*Id.*]

In addition, there are at least 23 companies across the United States that either own or operate biomass power plants. As much as 40 percent of the biomass fuel for these plants is construction and demolition wood; without this fuel these plants would not be able to remain in operation. [EPA-HQ-RCRA-2008-0329-2009]. In Michigan, 17,625 tons of non-hazardous treated wood were combusted for energy recovery in 2009, and were eligible for clean energy credits under Michigan's Cleaner, Renewable, and Efficient Energy Act. [EPA-HQ-RCRA-2008-0329-1395].

3. The Fuel Value And Management Of Processed Construction And Demolition Wood, Railroad Ties, And Treated Woods Are Further Evidence That These Fuels Are Not Wastes.

The fuel value and management of processed construction and demolition wood, railroad ties, and treated wood provide further evidence that these fuels are not wastes. Heating value is one of the legitimacy criteria (40 C.F.R. §241.3(d)(1)(ii)), and EPA uses 5,000 Btu as a benchmark, recognizing that some boilers can effectively recover energy from fuels with a lower Btu value. [76FR15522.] Managing an alternative fuel as a valuable commodity is also a legitimacy criterion. 40 C.F.R. §241.3(d)(1)(i).

Construction and demolition wood, railroad ties and treated wood all have high Btu values and are managed and used as valuable fuel products. Construction and demolition wood has a heating value averaging about 6,800

Btu/lb. as-fired, which is higher than that of most traditional wood and biomass fuel. [EPA-HQ-RCRA-2008-0329-2009]. Construction and demolition wood is managed as a valuable commodity at both wood processing and energy recovery facilities, in the same way as wood and biomass that are traditional fuels. [*Id.* at 3.]

The Btu value of creosote-treated wood is approximately 8,000 Btu/lb. ([EPA-HQ-RCRA-2008-0329-0772]), making railroad ties an important fuel for biomass boilers because other biomass fuel can contain more moisture and thus mixing in railroad tie fuel improves combustion. [EPA-HQ-RCRA-2008-0329-2009.] Railroad ties also are managed as valuable commodities. They are removed from service by companies whose business model is reclaiming the value of the railroad ties. They manage railroad ties to retain their value, inspect and sort them and remove metal, and chip and deliver them as fuel to combustors. The combustion facilities manage the railroad tie fuel in the same manner as other biomass fuels. [*Id.* at 4.] Treated wood has a heating value of 7,000 – 8,000 Btu. [EPA-HQ-RCRA-0329-0772]. There has been a commercial market for combusting treated wood for energy recovery for many years, where it is substituted for other wood fuels, coal or other fossil fuels.

Recycling companies are investing in facilities, equipment and people to produce fuels they can sell or use themselves, not to discard solid waste.

Combustors produce or pay for alternative fuels so they can use them, not discard them. This record demonstrates that construction and demolition wood, railroad ties and treated wood are processed into commodity fuels and, when combusted, are not being discarded. These fuels cannot be classified as wastes. *AMC I*, at 1185-87, 1190-93; *ABR*, at 1051.

B. Despite A Record Of Investment, Management, And Legitimate Use, The NHSM Rule Would Arbitrarily And Capriciously Classify Some Alternative Fuels As Wastes.

Notwithstanding this record, under the NHSM Rule some construction and demolition wood, railroad ties and treated wood could be considered a waste when combusted due to EPA's overriding legitimacy criterion that an alternative fuel must, prior to combustion, contain air pollutants at concentrations that are lower than or comparable to a traditional fuel that the combustion unit is designed to burn. 40 C.F.R. §241.3(d)(1)(iii).

For construction and demolition wood, this potential waste classification is a consequence of the levels of semi-volatile organic compounds (*e.g.*, formaldehyde) in manufactured wood products such as paneling and plywood. Due to their low moisture content, these types of wood are valuable components of construction and demolition fuel products. Semi-volatile organic compounds in construction and demolition wood fuel are lower than are found in coal, so construction and demolition wood would not be a waste in boilers that can

combust coal. However, if a boiler could not combust coal (for example, if it has a pneumatic feed system that can blow chipped wood to a boiler but not coal), the alternative wood fuel could fail the “designed to burn” test and would be considered a waste. [78FR9141]; [EPA-HQ-RCRA-2008-0329-2009].¹⁴

Similarly, railroad tie fuel that is fed to a boiler that combusts only biomass and coal could be considered a waste because railroad ties have polycyclic aromatic hydrocarbon (“PAH”) levels that are lower than are found in fuel oil, but are higher than are found in virgin wood or coal. When combusted in a unit that has a feed system for fuel oil, railroad ties would not be considered wastes, but could be a waste when burned in a boiler that could only burn biomass and coal. [*Id.*]. This would be true even if the two boilers were sitting side-by-side at the same facility and were combusting railroad tie fuel purchased under the same contract. This same type of analysis applies to treated wood biomass.

The record demonstrates that construction and demolition wood, railroad ties and treated wood are processed into commodity fuels and are not part of the waste disposal problem. The record further demonstrates that neither processors

¹⁴ In addition, while the record shows that metal is separated, and on average, lead concentrations in processed construction and demolition wood are well below concentrations found in virgin wood, there may be isolated incidents where a single load of processed wood fuel might have higher lead concentrations than in virgin wood. [EPA-HQ-RCRA-2008-0329-2009]. Under the NHSM Rule, those isolated loads might be considered “solid wastes” that can transform a CAA §112 boiler into a CAA §129 CISWI incinerator.

nor combustors discard, or have any intent to discard, construction and demolition would, railroad ties or treated wood that are processed and used as valuable fuel products. Thus, classifying these alternative fuels as wastes is arbitrary and capricious.

Intent is relevant under RCRA when determining whether a secondary material is being discarded. *API II*, at 58 (it is arbitrary and capricious to ignore the motivation behind the recycling activity when determining whether a material is a waste). As noted by EPA in a 1989 memorandum issued by the Director of EPA's Office of Solid Waste: [the] "question [whether an activity involves sham recycling] involves assessing the intent of the owner or operator by evaluating circumstantial evidence, always a difficult task." [EPA-HQ-RCRA-2008-0329-0433.] In the NHSM Rule, EPA uses its "legitimacy criteria" to attempt to discern the intent of a person who combusts non-hazardous secondary materials.

EPA is careful to note that "legitimacy" is shorthand for referring to non-hazardous secondary materials that are not thrown away, are saved and are reused by being burned for their value as a fuel. The legitimacy criteria are the factors needed to be examined to make this determination. Thus, for example, it is relevant how the non-hazardous secondary materials is managed and the extent to which contaminants in the secondary material *may* indicate that the real reason for burning the secondary material is simply its destruction—referred to as "sham" recycling.").

[76FR15471] (emphasis supplied).

Notwithstanding EPA's description of the legitimacy criteria as mere "factors to be examined," under the NHSM Rule any alternative fuel that fails to

meet a legitimacy criterion is *per se* a discard of solid waste, and remains so unless and until EPA completes a rulemaking to classify the alternative fuel as a “non-waste. With respect to the “contaminant” legitimacy criterion, EPA defends this result by arguing that elevated levels of Clean Air Act pollutants themselves are evidence of a “waste-destroying intention.” [76FR15525.]¹⁵ However, for construction and demolition wood, railroad tie fuel and treated wood, this inference is not supported by the law or the record.

First, no Clean Air Act pollutants have been added to these fuels. Absent evidence of such adulteration, the presence of Clean Air Act pollutants in various concentrations in alternative fuels is not evidence of “sham recycling” (or “waste destroying intention”). *API II*, at 58 (noting that “improper disposal of waste materials through adulteration” is “called ‘sham recycling.’”).

Second, the record shows that there is no “waste destroying intention” when these fuels are combusted. In *API II*, this Court determined that unexpected constituents in a recycled material that could be the result of adulteration are relevant to a determination whether a material is a waste. However, this Court also noted that a recycler could show that the constituents in a secondary material

¹⁵ EPA did not look at protection of human health and the environment when evaluating whether a material is discarded. [76FR51525.] The safety of emissions of air pollutants from combustion is addressed under the Clean Air Act. EPA did not consider or evaluate under the NHSM Rule whether there was any additional benefit to the environment associated with the regulation of alternative fuels under the CAA §129 CISWI regulations.

“are not a product of adulteration, not discarded, and outside EPA’s authority to regulate such material under RCRA.” *Id.* at 59.

The record before the Agency makes this demonstration for construction and demolition wood, railroad ties, and treated wood. Far from being adulterated, these materials are processed in accordance with contracts and specifications to ensure that unwanted material is removed and the resulting fuel product can be combusted in compliance with a unit’s Clean Air Act permit. [EPA-HQ-RCRA-2008-0329-2009]; [EPA-HQ-RCRA-2008-0329-2009]. This removal is specified in contracts for the supply of these fuels. [EPA-HQ-RCRA-2008-0329-1946]; [EPA-HQ-RCRA-2008-0329-2009]; [EPA-HQ-RCRA-2008-0329-2004].

Based on this record, it is arbitrary and capricious to classify these fuels as wastes.

C. Alternative Fuels That Are Integral To An Industrial Process Are Not Wastes.

This Court has explicitly stated that the term “discarded materials” cannot include materials that are destined for beneficial use by the generating industry itself, because such materials are not part of the waste disposal problem. *AMC I*, at 1192-93. Further, a continuous process of reuse or recycling does not require a closed-loop process or immediate reuse. *ABR*, at 1056. Despite this clear limitation on EPA’s RCRA authority, the NHSM Rule would classify as wastes alternative fuels that are integral to an industrial process.

EPA acknowledges that some alternative fuels, such as paper recycling residuals (“PRR”), are not solid wastes when burned for energy because they are valuable energy sources, using PRR as an example of material that is not discarded when burned for energy:

For example, use of old corrugated cardboard (OCC) rejects (clay, starches, other filler and coating materials, as well as fiber) are not discarded when used within the control of the generator, *since these secondary materials are part of the industrial process*. OCC rejects can include, and are usually burned in conjunction with, other fuels (such as bark) at pulp and paper mills that recycle fibers.

[76FR15472] (emphasis supplied). PRR is the term used to describe materials removed from repulping recovered fibers at paper and pulp mills and returned to the industrial process as fuel (sometimes together with other fuels, such as biomass). [EPA-HQ-RCRA-2008-0329-1946]. PRRs have fuel value and are managed as a valuable commodity. They are specifically generated to provide mills an additional source of energy and are managed in the same manner as other solid fuels burned by mills. Some mills manage residuals in containers before burning; others comingle them with their solid fuels since they are usually mixed for burning. They are conveyed to the boiler in the same manner as other solid fuels. Although it should not be determinative of whether PRRs are legitimate alternative fuels, PRRs also do not contain Clean Air Act pollutants at levels that are higher than found in coal or biomass. [*Id.* at 57.]

Despite EPA's acknowledgement that PRRs are not discarded and the record demonstrating this fact (including meeting the legitimacy criteria), PRRs combusted by mills other than the generator would be a "solid waste" under the NHSM Rule. Even when combusted by the generator, this fuel would be a "solid waste" unless the fuel meets the legitimacy criteria (failure to produce the records demonstrating this fact under 40 CFR §§60.2265 and 60.2875 also results in regulation as a "solid waste"). Given that the use of PRRs as fuel is part of the industrial process at pulp and paper mills, these materials are not discarded and any classification of them as wastes under RCRA is contrary to law and arbitrary and capricious. *AMC I*, at 1186.

D. Fuels That Are Functionally the Same As Traditional Fuel Are Not Waste.

EPA also has acknowledged that an alternative fuel that is "functionally the same as a comparable traditional fuel" is not a waste. 40 C.F.R. §241.4(b)(5). We agree. However, EPA's starting point is a regulatory decision that all such alternative fuels are solid waste, and requires combustors to petition for a rulemaking before an alternative fuel can be combusted in a CAA §112 boiler, unless the fuel is combusted by the generator or is processed from a secondary material, and meets all three of EPA's legitimacy criteria. Like fuels that are integral to an industrial process, there is no intent to discard a fuel via combustion

when it is functionally the same as the traditional fuel that it replaces. The alternative fuel is simply a fuel.

The record for construction and demolition wood, railroad ties and other treated wood, and paper recycling residuals demonstrates that those alternative fuels replace the energy produced by a traditional fuel. Similarly, sulfuric acid recovery units, which regenerate spent sulfuric acid, combust not only spent sulfuric acid, other sulfur sources, and natural gas/fuel oil, but also alternative non-hazardous fuels. [EPA-HQ-RCRA-2008-0329-1246.] Therefore, they are functionally the same as the traditional fuel they replace and to the extent that the NHSM Rule would classify these alternative fuels as wastes, it exceeds EPA's authority under RCRA.

IV. The Possibility Of A Future Rule-Making To Classify An Alternative Fuel As A Non-Waste Does Not Cure The Overreach Of The NHSM Rule.

EPA acknowledges that “there are cases where a secondary material may not fully meet the self-implementing legitimacy criteria, but upon consideration of other relevant factors, it can be determined that the material is a legitimate fuel and is not merely being discarded by being burned.” [76FR 80482.] To address this situation, EPA established a process for petitioning EPA to promulgate rules to classify individual alternative fuels as “non-wastes.” 40 C.F.R. §241.4(b). EPA already has classified the following as non-waste fuels: resinated wood,

scrap tires, coal refuse, and pulp and paper wastewater treatment residuals that are combusted by the generator. 40 C.F.R. §241.4(a). These decisions were based on an extensive record demonstrating that these alternative fuels were combusted for energy recovery and were not discarded solid waste. [78FR9154-71.] Facilities can combust these four alternative fuels without their boiler being considered a commercial and industrial solid waste incinerator.¹⁶

However, EPA also has the extensive record discussed above demonstrating that construction and demolition wood, railroad tie fuel and other treated woods, as well as paper recycling residuals, are not wastes when combusted. EPA has indicated that it may in the future identify these alternative fuels as non-wastes. [78FR 9173.]¹⁷ However, under the NHSM Rule, these alternative fuels would be considered wastes when combusted by some companies in some boilers, despite the investments in time and resources that are made to create these fuel products for themselves or for customers, despite the contracts and specifications used to ensure the quality of these fuel products, despite the care taken to manage these

¹⁶ Under the CISWI regulations, a combustor that burns solid waste, even inadvertently, is subject to incinerator standards for six months thereafter. 40 C.F.R. §60.2145(a)(2); 40 C.F.R. §60.2710(a)(2); 40 C.F.R. §60.2265; 40 C.F.R. §60.2875. To avoid a violation, a boiler that is operating under MACT standards would have to shut down for six months if it could not meet incinerator standards.

¹⁷ EPA has proposed a rule to list paper recycling residuals, construction and demolition wood, and creosote treated railroad ties as non-waste fuels, subject to certain conditions. 79 Fed. Reg. 21006 (Apr. 14, 2014). EPA has also noted its intention to consider a petition covering treated wood biomass. [78FR9174.]

fuel products, and despite the fact the energy produced by the combustion of these fuel products replaces energy produced by traditional fuels. These facts amply demonstrate that the intent of persons who manage and combust these fuels is legitimate energy recovery and that demonstration far out-weighs any intent to discard EPA suggests can be gleaned from the Clean Air Act pollutant levels found in fuels, or the types of boilers used, or in whether or not a record required under the CISWI Rule is maintained.

Given this record, the NHSM Rule is arbitrary and capricious to the extent that it fails to classify these alternative fuels as non-wastes, whether or not these materials are combusted by a generator and whether or not all of EPA's "legitimacy criteria" are met.

V. The NHSM Rule Is Inconsistent With The Goals Of RCRA And Will Cause Both Economic And Environmental Harm.

By classifying many valuable alternative fuels as wastes, the NHSM Rule is inconsistent with Congress' goals in enacting RCRA, which included preventing the needless burying of millions of tons of recoverable material each year, separating usable materials from solid waste, and reducing the deficit by increasing the recovery and conservation of secondary materials. *See* RCRA §1002(c).

The practical effect of this Rule is that alternative fuel that could have been productively combusted will be managed as a waste and can only be combusted in

a solid waste incinerator regulated by CAA §129. Moreover, given the limited capacity of existing commercial and industrial solid waste incinerators and EPA's expectation that no new units will be built, the real consequence of misidentifying valuable alternative fuels as wastes is an enormous increase in landfill disposal.¹⁸

This outcome also will cause economic harm. EPA has asserted that the NHSM Rule has no economic impacts and therefore did not prepare an economic assessment of the rule, suggesting that any costs would be captured in the economic analysis of the CISWI Rule. [76FR15547.] However, for most combustors, there is no real opportunity to continue to use alternative fuels if EPA identifies those fuels as wastes. Instead, the uncertainty created by EPA's legitimacy criteria will cause combustors to cease using most alternative fuels because the cost of testing (and storing the fuel while awaiting test results) could

¹⁸ EPA attempts to diminish the consequences of the classification of alternative fuels as a solid waste:

In addition, EPA is not, in any sense, forbidding economic reuse of such materials by anyone other than the generator without prior government permission (through the petition process). The effect of this regulation would simply be to require the nonhazardous secondary materials designated as wastes to be combusted only in facilities regulated under section 129 of the CAA, while non-waste fuels could be combusted under section 112 of the CAA.

[76FR15472.] This is misleading. EPA has stated that there are fewer than 170 permitted CISWI units, that many facilities were likely to discontinue use of these units, and that it does not expect any new units to be built. [75FR31966-67]. This assumption is reasonable given the strong public opposition to incinerators. [EPA-HQ-RCRA-2008-0329-0871.]

exceed the value of the fuel,¹⁹ and the fact that inadvertently combusting solid wastes immediately converts the unit into a CISWI incinerator, in most cases forcing the unit to shut down for six months.²⁰ As a consequence, the market for alternative fuel would be drastically reduced, driving recyclers out of business, increasing the use of fossil fuels, and significantly increasing landfill disposal.²¹

The disposal and replacement of alternative fuels also will cause environmental harm. For example, the disposal of railroad ties that are currently processed into alternative fuels would require a space equivalent to a football field that is 70 stories high. The degradation of those ties in landfill will lead to the production of methane, a potent greenhouse gas. And, the replacement fossil fuels are likely to result in additional emissions of 1.65 million tons of CO₂ equivalent. [EPA-HQ-RCRA-2008-0329-1920.]

Further environmental harm will result from the shutdown of facilities that rely on alternative fuels, such as biomass combustors. Shutting down these facilities will eliminate biomass combustion capacity that is needed to manage additional biomass fuels, such as agricultural material, harming state and local

¹⁹ [EPA-HQ-RCRA-2008-0329-1946.]

²⁰ *See supra* n. 16.

²¹ [EPA-HQ-RCRA-2008-0329-1946]; [EPA-HQ-RCRA-2008-0329-1920]; [EPA-HQ-RCRA-2008-0329-2009].

efforts to control ozone and particulate matter levels by minimizing open burning of agricultural material.²²

Thus, unless the identification of waste under the rule is narrowed consistent with law and the record, it will cause real economic and environmental harm.

VI. EPA Has No Authority Under RCRA To Regulate Sewage Sludge As A Solid Waste.

Contrary to RCRA's plain language, which excludes "solid and dissolved materials in domestic sewage" from the solid waste definition (42 U.S.C. §6903(27)), EPA has classified sewage sludge (or wastewater treatment sludge) generated by publicly-owned treatment works ("POTWs") as a solid waste when combusted. *See* 40 C.F.R. §241.3; [76FR15513-14]. Further, EPA's classification of sewage sludge as solid waste violates EPA's non-discretionary duty to avoid duplication of and conflict with appropriate provisions of the CWA and CAA. *See* 42 U.S.C. §6905(b).

A. EPA's Classification Of Sewage Sludge As A Solid Waste Contravenes Section 1004(27) Of RCRA.

RCRA §1004(27) defines solid waste to include "sludge from a waste treatment plant" but excludes "solid or dissolved materials in domestic sewage," commonly referred to as the Domestic Sewage Exclusion ("DSE"). *See, e.g.,*

²² [EPA-HQ-RCRA-2008-0329-1946.]

[76FR15513.] When treating solid or dissolved materials in domestic sewage, POTWs across the U.S. generate millions of tons of sewage sludge each year that contain materials from domestic sewage. Consequently, sewage sludge from POTWs is excluded as a matter of law from RCRA's definition of solid waste.

EPA, however, has concluded that sludge generated from the sewage treatment process is discarded and solid waste if it is combusted. *See* [76FR15513]. This interpretation fails under both parts of the standard of review set out in *Chevron*, 467 U.S. 837, because Congress has directly spoken to this precise issue and because the agency's interpretation is not based on a permissible construction of the statute. *See Bluewater Network v. EPA*, 372 F.3d 404, 410 (D.C. Cir. 2004).

1. EPA's Interpretation Of The DSE Is Impermissible Under The Plain Meaning Of Section 1004(27).

Under *Chevron*, this Court's first inquiry is to determine whether the statutory language of RCRA §1004(27) has a plain and unambiguous meaning based on ordinary usage. *See Roberts v. Sea-Land Servs. Inc.*, 132 S. Ct. 1350, 1356 (2012). The DSE is unambiguous and broad. Although its terms are not defined by statute, their plain meaning confirms that the exception has a clear and identifiable scope that includes sewage sludge from POTWs. *See Goldstein v. SEC*, 451 F.3d 873, 878 (D.C. Cir. 2006) ("[The] lack of a statutory definition of a word does not necessarily render the meaning of a word ambiguous."). Sewage

sludge is “solid or dissolved material.” Indeed, “solid or dissolved material” uses the disjunctive “or” to indicate that the DSE applies to any “material” regardless of its form (*i.e.*, solid, liquid, gaseous or some combination thereof). Further, “material,” defined as “the elements, constituents, or substances of which something is composed,” WEBSTER’S NEW COLLEGIATE DICTIONARY 709 (1977), reaches all compounds—organic, chemical or otherwise. If the “solid or dissolved material” language includes any form of any compound, then it clearly encompasses sludge, which is a solid or semisolid matter. *See id.* at 1094; *see also* 42 U.S.C. §1004(26A) (defining sludge, in part, as any solid, semisolid or liquid waste).

In addition, sewage sludge is “domestic sewage.” *See, e.g.*, 40 C.F.R. §503.9(w). Indeed, this Court recently recognized that domestic sewage is the “but-for source of sewage sludge.” *Nat’l Ass’n of Clean Water Agencies v. EPA*, 734 F.3d 1115, 1127 (D.C. Cir. 2013). In doing so, this Court specifically rejected the argument that sewage sludge and domestic sewage should be treated as distinct substances. *Id.* Although the materials in sewage sludge have been filtered, biologically- and chemically-treated, and extracted during the treatment, it is still domestic sewage because its mass and form is a direct product of domestic sewage. *See id.* at 1126–27. Thus, sewage sludge falls under the broad

reach of the DSE's plain language as "solid or dissolved materials in domestic sewage."

This is a view that EPA once shared. In a rule listing certain sludges as hazardous wastes and excluding others, EPA proclaimed that, "if wastewaters generated at petroleum refineries . . . are mixed with domestic sewage . . . , *the sludges generated in the POTW are covered under the domestic sewage exclusion.*" 55 Fed. Reg. 46356, 46346 (Nov. 2, 1990) (emphasis supplied); *see also* 40 C.F.R. §261.4(a)(1)(i)-(ii). For 21 years, EPA has stood by—and POTWs relied upon—this interpretation. Only when it was raised in comment to the NHSM Rule did EPA hurriedly dismiss it as "error." *See* [76FR15514]. EPA's longstanding exclusion of sewage sludge as solid waste demonstrates that the DSE expressly includes sewage sludge.

It is axiomatic that EPA cannot promulgate general regulations using broadly worded definitions of solid waste when Congress limited the definition by drafting specific exclusions. "It is commonplace of statutory construction that the specific governs over the general." *See Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992). When Congress dictates that a specific exception applies, the language of that exception must control. Here, the plain language of the DSE demonstrates Congress' unambiguous intent to remove domestic sewage sludge

from the definition of solid waste. Thus, EPA has no authority to regulate sewage sludge as a non-hazardous solid waste.

2. Legislative History Confirms That The DSE Covers Sewage Sludge.

Legislative history confirms Congress' intent to cover sewage sludge under the DSE. The relevant legislative history comes from Solid Waste Disposal Act of 1965, from which RCRA was adapted. This Act's legislative history indicates that Congress included the DSE (in its prior form) in the statute because domestic wastes were already subject to controls under the Federal Water Pollution Control Act. *See* H.R. REP. NO. 899, at 444 (1965). These controls now exist under CWA §405 and 40 C.F.R. Part 503, both of which expressly cover the disposal and use of sewage sludge. EPA acknowledged this when recommending these provisions as the proper way to regulate domestic sewage more than 30 years ago. *See* 45 Fed. Reg. 333084, 33097 (May 19, 1980); *infra* IV(B).

Almost 50 years after passage of the Solid Waste Disposal Act, Congress has never modified the DSE. Congress recognizes that sewer systems and POTWs are essential public services that are effectively regulated under a complex regime of federal and local statutes and that domestic waste, including sewage sludge, is covered by the DSE. A 1992 statement from Senator Chaffee corroborates this point: "Sewage treatment plants operated by local governments—POTWs—have a special exemption called the domestic sewage

exclusion under RCRA.” 138 CONG. REC. 514755, 514758 (daily ed. Sept. 23, 1992). Although this statement was made in the context of RCRA Subtitle C amendments, it reflects Congress’ understanding that the DSE covers sewage sludge.

In sum, the legislative history demonstrates Congress’ intent to remove sewage sludge from regulation as a solid waste under the DSE. When considered together with the plain language of the DSE, the statute is unambiguous: the DSE covers sewage sludge because Congress intended for sewage sludge to be regulated under other environmental statutes. Thus, EPA’s classification of sewage sludge as solid waste under the NHSM Rule cannot stand.

3. Even If Section 1004(27) Is Ambiguous – Which It Is Not, EPA’s Interpretation Is Unreasonable.

Even if EPA’s interpretation is not unlawful under step 1 of *Chevron*, the Agency’s interpretation is not permissible and is not due any deference. EPA’s ultimate reason for expanding the definition of solid waste to include sewage sludge is to regulate its combustion under CAA §129. With this goal in mind, EPA shoehorned sewage sludge into the definition of solid waste and entirely overlooked the breadth and scope of the DSE. By focusing on its goal and ignoring the express terms of the statute, EPA cast aside the DSE. *See* [76FR15513].

In addition, EPA's interpretation ignores the legislative history, its own prior statements on the DSE's coverage of sewage sludge from POTWs, its justification for regulating sewage sludge incinerators under §129 in the *NACWA* case (734 F.3d at 1126-27)²³ and, as discussed below, its other statutory duties under RCRA to avoid duplication "to the maximum extent practicable." 42 U.S.C. §6905(b)(1). These are fatal flaws. *See Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43. In sum, EPA failed to give the DSE—its scope, history and purpose—due consideration. If it had, EPA would have no choice but to recognize that its current reading of the DSE is unreasonable and mistaken.

B. The Rule Contravenes EPA's Non-Discretionary Duty To Avoid Duplication With Other Environmental Statutes.

RCRA §1006(b)(1) imposes a non-discretionary duty on EPA to "avoid duplication, to the maximum extent practicable, with" other environmental statutes such as the CWA and the CAA. 42 U.S.C. §6905(b)(1). The NHSM Rule, however, duplicates sewage sludge regulation under the CWA.

CWA §405 provides a comprehensive regime for regulating the use and disposal of sewage sludge. 33 U.S.C. §1345. Importantly, §405 states that, "the determination of the manner of disposal or use of sludge is a local determination,

²³ There, EPA argued that sewage sludge incinerators could be regulated under §129(g)(1) because sewage sludge comes from the general public. *Id.*

except ... for regulations [that] have been established pursuant to subsection (d) of this section.” *Id.* §1345(e).

The significance of this language is twofold. First, Congress unambiguously requires that sewage sludge disposal be a “local determination.” EPA’s NHSM Rule disregards this statutory mandate, effectively federalizing how sewage sludge must be managed by abrogating the DSE. *See* 40 C.F.R. §241.3.

Second, Congress mandates that the regulation of the use or disposal of sewage sludge must be under CWA §405(d). For decades, EPA has drafted and implemented regulations pursuant to this section in “an unprecedented effort to assess the potential for pollutants in sewage sludge to affect public health and the environment through a number of different routes of exposure.” 58 Fed. Reg. 9248 (Feb. 19, 1993). However, EPA is now duplicating many of these regulations through both the NHSM Rule and CWA rules, most notably the sewage sludge incinerator requirements in 40 CFR Part 503, Subpart E. Further, the implementation of the NHSM Rule as it relates to POTWs will create multiple inconsistent obligations for municipalities who must comply with state laws and regulations that will now conflict with the NHSM Rule’s requirements. For example, both Ohio and North Carolina exclude sewage sludge from their definitions of “solid waste.” [EPA-HQ-RCRA-2008-0329-1261.] Instead of

avoiding redundancy “to the maximum extent practicable,” EPA is actively promoting redundancy and conflict in direct violation of RCRA’s mandate.

EPA’s duplicative efforts directly violate its non-discretionary duty in RCRA and mark a stunning reversal from its previous position that CWA §405 is the enabling statute for regulating the use and disposal of sewage sludge. 45 Fed. Reg. 33084, 33102 (“Where such overlapping jurisdiction exists, EPA seeks to integrate and coordinate its regulatory actions to the extent feasible.”).

By applying the NHSM Rule to sewage sludge, EPA has violated Congress’ directive to harmonize RCRA with other environmental statutes and avoid redundancy. Because the NHSM Rule contravenes Congress’ unambiguous intent and cannot be harmonized with CWA §405, it must be vacated with respect to its classification of sewage sludge as a solid waste when combusted.

CONCLUSION

For the foregoing reasons, this Court should grant the Industry petitions for review and (i) remand the Rule to EPA with the direction that EPA may only exercise RCRA jurisdiction over transfers of alternative fuels that are found to be discards, (ii) remand the Rule to EPA with the direction to classify construction and demolition wood, railroad ties, other treated woods, and paper recycling residuals as non-wastes, and (iii) vacate EPA’s classification as solid waste sewage sludge when it is combusted.

April 28, 2014

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CERTIFICATE OF COMPLIANCE

1. This brief complies with the type-volume limitation of FED. R. APP. P. 32(a)(7)(B) because this brief contains 10,639 words, excluding the parts of the brief exempted by FED. R. APP. P. 32(a)(7)(B)(iii).

2. This brief complies with the typeface requirements of FED. R. APP. P. 32(a)(5) and the type style requirements of FED. R. APP. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Office Word 2010 in 14 pt. Times New Roman font.

/s/Christopher L. Bell
Christopher L. Bell

CERTIFICATE OF SERVICE

I hereby certify that on April 28, 2014, I filed and served the foregoing with the Clerk of the Court by causing a copy to be electronically filed via the appellate CM/ECF system. I also hereby certify that the participants in the case are registered CM/ECF users and will be served via the CM/ECF system.

/s/ Christopher L. Bell
Christopher L. Bell

Case No. 11-1189 (and consolidated cases)

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

**SOLVAY USA INC., et al.
Petitioners**

v.

**ENVIRONMENTAL PROTECTION AGENCY, et al.
Respondent**

Petition for Review of 78 Fed. Reg. 9112 (Feb. 7, 2013)
and 76 Fed. Reg. 15456 (March 21, 2011)

JOINT BRIEF OF INDUSTRY PETITIONERS
**AMERICAN CHEMISTRY COUNCIL, AMERICAN FOREST & PAPER ASSOCIATION, AMERICAN
GAS ASSOCIATION, ET AL.**

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(Pub. L. 94-385, title IV, §462, Aug. 14, 1976, 90 Stat. 1168; Pub. L. 95-91, title III, §301(a), title VII, §§703, 707, Aug. 4, 1977, 91 Stat. 577, 606, 607.)

REFERENCES IN TEXT

This subchapter, referred to in subsecs. (a), and (b)(1), (3), (4), (5), was in the original “this title”, meaning title IV of Pub. L. 94-385 which enacted this subchapter, section 6327 of this title, and section 1701z-8 of Title 12, Banks and Banking, amended sections 6323, 6325, and 6326 of this title, and enacted provisions set out as a note under section 6801 of this title.

CODIFICATION

Subsec. (c)(1) of this section which read “The term ‘Administrator’ means the Administrator of the Federal Energy Administration; except that after such Administration ceases to exist, such term means any officer of the United States designated by the President for purposes of this part” has been omitted in view of termination of Federal Energy Administration and transfer of its functions and functions of Administrator thereof (with certain exceptions) to Secretary of Energy pursuant to sections 301(a), 703, and 707 of Pub. L. 95-91, which are classified to sections 7151(a), 7293, and 7297 of this title and the fact that the term “Secretary” is defined for the purposes of this subchapter by par. (3) of this section. In this part, “Secretary of Energy” has been substituted for “Administrator” wherever it appears.

TRANSFER OF FUNCTIONS

“Secretary of Energy” substituted for “Administrator”, meaning Administrator of Federal Energy Administration, in subsec. (a) pursuant to sections 301(a), 703, and 707 of Pub. L. 95-91, which are classified to sections 7151(a), 7293, and 7297 of this title and which terminated Federal Energy Administration and transferred its functions and functions of Administrator thereof (with certain exceptions) to Secretary of Energy.

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PRIOR PROVISIONS

Provisions similar to those in this section were contained in section 3251 of this title, prior to the general amendment of the Solid Waste Disposal Act by Pub. L. 94-580.

AMENDMENTS

1984—Subsec. (a). Pub. L. 98-616, §101(b)(1), designated existing provisions as subsec. (a).

Subsec. (a)(4) to (11). Pub. L. 98-616, §101(b)(2), struck out par. (4) which provided for regulating the treatment, storage, transportation, and disposal of hazardous wastes which have adverse effects on health and the environment, added pars. (4) to (7), and redesignated former pars. (5) to (8) as (8) to (11), respectively.

Subsec. (b). Pub. L. 98-616, §101(b)(1), added subsec. (b).

§ 6903. Definitions

As used in this chapter:

(1) The term “Administrator” means the Administrator of the Environmental Protection Agency.

(2) The term “construction,” with respect to any project of construction under this chapter, means (A) the erection or building of new structures and acquisition of lands or interests therein, or the acquisition, replacement, expansion, remodeling, alteration, modernization, or extension of existing structures, and (B) the acquisition and installation of initial equipment of, or required in connection with, new or newly acquired structures or the expanded, remodeled, altered, modernized or extended part of existing structures (including trucks and other motor vehicles, and tractors, cranes, and other machinery) necessary for the proper utilization and operation of the facility after completion of the project; and includes preliminary planning to determine the economic and engineering feasibility and the public health and safety aspects of the project, the engineering, architectural, legal, fiscal, and economic investigations and studies, and any surveys, designs, plans, working drawings, specifications, and other action necessary for the carrying out of the project, and (C) the inspection and supervision of the process of carrying out the project to completion.

(2A) The term “demonstration” means the initial exhibition of a new technology process or practice or a significantly new combination or use of technologies, processes or practices, subsequent to the development stage, for the purpose of proving technological feasibility and cost effectiveness.

(3) The term “disposal” means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

(4) The term “Federal agency” means any department, agency, or other instrumentality of the Federal Government, any independent agency or establishment of the Federal Government including any Government corporation, and the Government Printing Office.

(5) The term “hazardous waste” means a solid waste, or combination of solid wastes, which be-

cause of its quantity, concentration, or physical, chemical, or infectious characteristics may—

(A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or

(B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.

(6) The term “hazardous waste generation” means the act or process of producing hazardous waste.

(7) The term “hazardous waste management” means the systematic control of the collection, source separation, storage, transportation, processing, treatment, recovery, and disposal of hazardous wastes.

(8) For purposes of Federal financial assistance (other than rural communities assistance), the term “implementation” does not include the acquisition, leasing, construction, or modification of facilities or equipment or the acquisition, leasing, or improvement of land.

(9) The term “intermunicipal agency” means an agency established by two or more municipalities with responsibility for planning or administration of solid waste.

(10) The term “interstate agency” means an agency of two or more municipalities in different States, or an agency established by two or more States, with authority to provide for the management of solid wastes and serving two or more municipalities located in different States.

(11) The term “long-term contract” means, when used in relation to solid waste supply, a contract of sufficient duration to assure the viability of a resource recovery facility (to the extent that such viability depends upon solid waste supply).

(12) The term “manifest” means the form used for identifying the quantity, composition, and the origin, routing, and destination of hazardous waste during its transportation from the point of generation to the point of disposal, treatment, or storage.

(13) The term “municipality” (A) means a city, town, borough, county, parish, district, or other public body created by or pursuant to State law, with responsibility for the planning or administration of solid waste management, or an Indian tribe or authorized tribal organization or Alaska Native village or organization, and (B) includes any rural community or unincorporated town or village or any other public entity for which an application for assistance is made by a State or political subdivision thereof.

(14) The term “open dump” means any facility or site where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 6944 of this title and which is not a facility for disposal of hazardous waste.

(15) The term “person” means an individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of a State, or any interstate body and shall include each depart-

ment, agency, and instrumentality of the United States.

(16) The term “procurement item” means any device, good, substance, material, product, or other item whether real or personal property which is the subject of any purchase, barter, or other exchange made to procure such item.

(17) The term “procuring agency” means any Federal agency, or any State agency or agency of a political subdivision of a State which is using appropriated Federal funds for such procurement, or any person contracting with any such agency with respect to work performed under such contract.

(18) The term “recoverable” refers to the capability and likelihood of being recovered from solid waste for a commercial or industrial use.

(19) The term “recovered material” means waste material and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process.

(20) The term “recovered resources” means material or energy recovered from solid waste.

(21) The term “resource conservation” means reduction of the amounts of solid waste that are generated, reduction of overall resource consumption, and utilization of recovered resources.

(22) The term “resource recovery” means the recovery of material or energy from solid waste.

(23) The term “resource recovery system” means a solid waste management system which provides for collection, separation, recycling, and recovery of solid wastes, including disposal of nonrecoverable waste residues.

(24) The term “resource recovery facility” means any facility at which solid waste is processed for the purpose of extracting, converting to energy, or otherwise separating and preparing solid waste for reuse.

(25) The term “regional authority” means the authority established or designated under section 6946 of this title.

(26) The term “sanitary landfill” means a facility for the disposal of solid waste which meets the criteria published under section 6944 of this title.

(26A) The term “sludge” means any solid, semisolid or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effects.

(27) The term “solid waste” means any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under section 1342 of title 33, or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923) [42 U.S.C. 2011 et seq.].

(28) The term “solid waste management” means the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste.

(29) The term “solid waste management facility” includes—

(A) any resource recovery system or component thereof,

(B) any system, program, or facility for resource conservation, and

(C) any facility for the collection, source separation, storage, transportation, transfer, processing, treatment or disposal of solid wastes, including hazardous wastes, whether such facility is associated with facilities generating such wastes or otherwise.

(30) The terms “solid waste planning”, “solid waste management”, and “comprehensive planning” include planning or management respecting resource recovery and resource conservation.

(31) The term “State” means any of the several States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(32) The term “State authority” means the agency established or designated under section 6947 of this title.

(33) The term “storage”, when used in connection with hazardous waste, means the containment of hazardous waste, either on a temporary basis or for a period of years, in such a manner as not to constitute disposal of such hazardous waste.

(34) The term “treatment”, when used in connection with hazardous waste, means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste or so as to render such waste nonhazardous, safer for transport, amenable for recovery, amenable for storage, or reduced in volume. Such term includes any activity or processing designed to change the physical form or chemical composition of hazardous waste so as to render it nonhazardous.

(35) The term “virgin material” means a raw material, including previously unused copper, aluminum, lead, zinc, iron, or other metal or metal ore, any undeveloped resource that is, or with new technology will become, a source of raw materials.

(36) The term “used oil” means any oil which has been—

(A) refined from crude oil,

(B) used, and

(C) as a result of such use, contaminated by physical or chemical impurities.

(37) The term “recycled oil” means any used oil which is reused, following its original use, for any purpose (including the purpose for which the oil was originally used). Such term includes oil which is re-refined, reclaimed, burned, or reprocessed.

(38) The term “lubricating oil” means the fraction of crude oil which is sold for purposes of reducing friction in any industrial or mechanical device. Such term includes re-refined oil.

(39) The term “re-refined oil” means used oil from which the physical and chemical contaminants acquired through previous use have been removed through a refining process.

(40) Except as otherwise provided in this paragraph, the term “medical waste” means any solid waste which is generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals. Such term does not include any hazardous waste identified or listed under subchapter III of this chapter or any household waste as defined in regulations under subchapter III of this chapter.

(41) The term “mixed waste” means waste that contains both hazardous waste and source, special nuclear, or by-product material subject to the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.).

(Pub. L. 89-272, title II, §1004, as added Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2798; amended Pub. L. 95-609, §7(b), Nov. 8, 1978, 92 Stat. 3081; Pub. L. 96-463, §3, Oct. 15, 1980, 94 Stat. 2055; Pub. L. 96-482, §2, Oct. 21, 1980, 94 Stat. 2334; Pub. L. 100-582, §3, Nov. 1, 1988, 102 Stat. 2958; Pub. L. 102-386, title I, §§103, 105(b), Oct. 6, 1992, 106 Stat. 1507, 1512.)

REFERENCES IN TEXT

The Atomic Energy Act of 1954, referred to in pars. (27) and (41), is act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 921, and amended, which is classified generally to chapter 23 (§2011 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

PRIOR PROVISIONS

Provisions similar to those in this section were contained in section 3252 of this title, prior to the general amendment of the Solid Waste Disposal Act by Pub. L. 94-580.

AMENDMENTS

1992—Par. (15). Pub. L. 102-386, §103, inserted before period at end “and shall include each department, agency, and instrumentality of the United States”.

Par. (41). Pub. L. 102-386, §105(b), added par. (41).

1988—Par. (40). Pub. L. 100-582 added par. (40).

1980—Par. (14). Pub. L. 96-482, §2(a), defined “open dump” to include a facility, substituted requirement that disposal facility or site not be a sanitary landfill meeting section 6944 of this title criteria for prior requirement that disposal site not be a sanitary landfill within meaning of section 6944 of this title, and required that the disposal facility or site not be a facility for disposal of hazardous waste.

Par. (19). Pub. L. 96-482, §2(b), defined “recovered material” to cover byproducts, substituted provision for recovery or diversion of waste material and byproducts from solid waste for prior provision for collection or recovery of material from solid waste, and excluded materials and byproducts generated from and commonly reused within an original manufacturing process.

Pars. (36) to (39). Pub. L. 96-463, §3, added pars. (36) to (39).

1978—Par. (8). Pub. L. 95-609, §7(b)(1), struck out provision stating that employees’ salaries due pursuant to subchapter IV of this chapter would not be included after Dec. 31, 1979.

Par. (10). Pub. L. 95-609, §7(b)(2), substituted “management” for “disposal”.

Par. (29)(C). Pub. L. 95-609, §7(b)(3), substituted “the collection, source separation, storage, transportation, transfer, processing, treatment or disposal” for “the treatment”.

TRANSFER OF FUNCTIONS

Enforcement functions of Administrator or other official of Environmental Protection Agency related to compliance with resource conservation and recovery permits used under this chapter with respect to preconstruction, construction, and initial operation of transportation system for Canadian and Alaskan natural gas transferred to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, until first anniversary of date of initial operation of Alaska Natural Gas Transportation System, see Reorg. Plan No. 1 of 1979, eff. July 1, 1979, §§102(a), 203(a), 44 F.R. 33663, 33666, 93 Stat. 1373, 1376, set out in the Appendix to Title 5, Government Organization and Employees. Office of Federal Inspector for the Alaska Natural Gas Transportation System abolished and functions and authority vested in Inspector transferred to Secretary of Energy by section 3012(b) of Pub. L. 102-486, set out as an Abolition of Office of Federal Inspector note under section 719e of Title 15, Commerce and Trade. Functions and authority vested in Secretary of Energy subsequently transferred to Federal Coordinator for Alaska Natural Gas Transportation Projects by section 720d(f) of Title 15.

§ 6904. Governmental cooperation

(a) Interstate cooperation

The provisions of this chapter to be carried out by States may be carried out by interstate agencies and provisions applicable to States may apply to interstate regions where such agencies and regions have been established by the respective States and approved by the Administrator. In any such case, action required to be taken by the Governor of a State, respecting regional designation shall be required to be taken by the Governor of each of the respective States with respect to so much of the interstate region as is within the jurisdiction of that State.

(b) Consent of Congress to compacts

The consent of the Congress is hereby given to two or more States to negotiate and enter into agreements or compacts, not in conflict with any law or treaty of the United States, for—

(1) cooperative effort and mutual assistance for the management of solid waste or hazardous waste (or both) and the enforcement of their respective laws relating thereto, and

(2) the establishment of such agencies, joint or otherwise, as they may deem desirable for making effective such agreements or compacts.

No such agreement or compact shall be binding or obligatory upon any State a party thereto unless it is agreed upon by all parties to the agreement and until it has been approved by the Administrator and the Congress.

(Pub. L. 89-272, title II, §1005, as added Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2801.)

TRANSFER OF FUNCTIONS

For transfer of certain enforcement functions of Administrator or other official of Environmental Protection Agency under this chapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, and subsequent transfer to Secretary of Energy, then to Federal Coordinator for Alaska Natural Gas Transportation Projects, see note set out under section 6903 of this title.

§ 6905. Application of chapter and integration with other Acts**(a) Application of chapter**

Nothing in this chapter shall be construed to apply to (or to authorize any State, interstate, or local authority to regulate) any activity or substance which is subject to the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.], the Safe Drinking Water Act [42 U.S.C. 300f et seq.], the Marine Protection, Research and Sanctuaries Act of 1972 [16 U.S.C. 1431 et seq., 1447 et seq., 33 U.S.C. 1401 et seq., 2801 et seq.], or the Atomic Energy Act of 1954 [42 U.S.C. 2011 et seq.] except to the extent that such application (or regulation) is not inconsistent with the requirements of such Acts.

(b) Integration with other Acts

(1) The Administrator shall integrate all provisions of this chapter for purposes of administration and enforcement and shall avoid duplication, to the maximum extent practicable, with the appropriate provisions of the Clean Air Act [42 U.S.C. 7401 et seq.], the Federal Water Pollution Control Act [33 U.S.C. 1251 et seq.], the Federal Insecticide, Fungicide, and Rodenticide Act [7 U.S.C. 136 et seq.], the Safe Drinking Water Act [42 U.S.C. 300f et seq.], the Marine Protection, Research and Sanctuaries Act of 1972 [16 U.S.C. 1431 et seq., 1447 et seq., 33 U.S.C. 1401 et seq., 2801 et seq.], and such other Acts of Congress as grant regulatory authority to the Administrator. Such integration shall be effected only to the extent that it can be done in a manner consistent with the goals and policies expressed in this chapter and in the other acts referred to in this subsection.

(2)(A) As promptly as practicable after November 8, 1984, the Administrator shall submit a report describing—

- (i) the current data and information available on emissions of polychlorinated dibenzop-dioxins from resource recovery facilities burning municipal solid waste;
- (ii) any significant risks to human health posed by these emissions; and
- (iii) operating practices appropriate for controlling these emissions.

(B) Based on the report under subparagraph (A) and on any future information on such emissions, the Administrator may publish advisories or guidelines regarding the control of dioxin emissions from such facilities. Nothing in this paragraph shall be construed to preempt or otherwise affect the authority of the Administrator to promulgate any regulations under the Clean Air Act [42 U.S.C. 7401 et seq.] regarding emissions of polychlorinated dibenzo-p-dioxins.

(3) Notwithstanding any other provisions of law, in developing solid waste plans, it is the intention of this chapter that in determining the size of a waste-to-energy facility, adequate provisions shall be given to the present and reasonably anticipated future needs, including those needs created by thorough implementation of section 6962(h) of this title, of the recycling and resource recovery interests within the area encompassed by the solid waste plan.

(c) Integration with the Surface Mining Control and Reclamation Act of 1977

(1) No later than 90 days after October 21, 1980, the Administrator shall review any regulations applicable to the treatment, storage, or disposal of any coal mining wastes or overburden promulgated by the Secretary of the Interior under the Surface Mining and Reclamation Act of 1977 [30 U.S.C. 1201 et seq.]. If the Administrator determines that any requirement of final regulations promulgated under any section of subchapter III of this chapter relating to mining wastes or overburden is not adequately addressed in such regulations promulgated by the Secretary, the Administrator shall promptly transmit such determination, together with suggested revisions and supporting documentation, to the Secretary.

(2) The Secretary of the Interior shall have exclusive responsibility for carrying out any requirement of subchapter III of this chapter with respect to coal mining wastes or overburden for which a surface coal mining and reclamation permit is issued or approved under the Surface Mining Control and Reclamation Act of 1977 [30 U.S.C. 1201 et seq.]. The Secretary shall, with the concurrence of the Administrator, promulgate such regulations as may be necessary to carry out the purposes of this subsection and shall integrate such regulations with regulations promulgated under the Surface Mining Control and Reclamation Act of 1977.

(Pub. L. 89-272, title II, §1006, as added Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2802; amended Pub. L. 96-482, §3, Oct. 21, 1980, 94 Stat. 2334; Pub. L. 98-616, title I, §102, title V, §501(f)(2), Nov. 8, 1984, 98 Stat. 3225, 3276.)

REFERENCES IN TEXT

The Federal Water Pollution Control Act, referred to in subsecs. (a) and (b), is act June 30, 1948, ch. 758, as amended generally by Pub. L. 92-500, §2, Oct. 18, 1972, 86 Stat. 816, which is classified generally to chapter 26 (§1251 et seq.) of Title 33, Navigation and Navigable Waters. For complete classification of this Act to the Code, see Short Title note set out under section 1251 of Title 33 and Tables.

The Atomic Energy Act of 1954, as amended, referred to in subsec. (a), is act Aug. 1, 1946, ch. 724, as added by act Aug. 30, 1954, ch. 1073, §1, 68 Stat. 921, and amended, which is classified generally to chapter 23 (§2011 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2011 of this title and Tables.

The Marine Protection, Research and Sanctuaries Act of 1972, referred to in subsecs. (a) and (b), is Pub. L. 92-532, Oct. 23, 1972, 86 Stat. 1052, as amended, which enacted chapters 32 (§1431 et seq.) and 32A (§1447 et seq.) of Title 16, Conservation, and chapters 27 (§1401 et seq.) and 41 (§2801 et seq.) of Title 33, Navigation and Navigable Waters. For complete classification of this Act to the Code, see Short Title note set out under section 1401 of Title 33 and Tables.

The Safe Drinking Water Act, referred to in subsecs. (a) and (b), is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93-523, §2(a), 88 Stat. 1660, as amended, which is classified generally to subchapter XII (§300f et seq.) of chapter 6A of this title. For complete classification of this Act to the Code, see Short Title note set out under section 201 of this title and Tables.

The Clean Air Act, referred to in subsec. (b)(1), (2)(B), is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, which is classified generally to chapter 85 (§7401 et seq.) of this title. For complete classification of this Act to

the Code, see Short Title note set out under section 7401 of this title and Tables.

The Federal Insecticide, Fungicide, and Rodenticide Act, referred to in subsec. (b), is act June 25, 1947, ch. 125, as amended generally by Pub. L. 92-516, Oct. 21, 1972, 86 Stat. 973, which is classified generally to subchapter II (§136 et seq.) of chapter 6 of Title 7, Agriculture. For complete classification of this Act to the Code, see Short Title note set out under section 136 of Title 7 and Tables.

The Surface Mining Control and Reclamation Act of 1977, referred to in subsec. (c), is Pub. L. 95-87, Aug. 3, 1977, 91 Stat. 445, as amended, which is classified generally to chapter 25 (§1201 et seq.) of Title 30, Mineral Lands and Mining. For complete classification of this Act to the Code, see Short Title note set out under section 1201 of Title 30 and Tables.

PRIOR PROVISIONS

Provisions similar to those in this section were contained in section 3257 of this title, prior to the general amendment of the Solid Waste Disposal Act by Pub. L. 94-580.

AMENDMENTS

1984—Subsec. (b)(1), (2). Pub. L. 98-616, §102, designated existing provisions as par. (1) and added par. (2).

Subsec. (b)(3). Pub. L. 98-616, §501(f)(2), added par. (3).

1980—Subsec. (c). Pub. L. 96-482 added subsec. (c).

TRANSFER OF FUNCTIONS

For transfer of certain enforcement functions of Administrator or other official of Environmental Protection Agency under this chapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, and subsequent transfer to Secretary of Energy, then to Federal Coordinator for Alaska Natural Gas Transportation Projects, see note set out under section 6903 of this title.

URANIUM MILL TAILINGS

Section 703 of Pub. L. 98-616 provided that: "Nothing in the Hazardous and Solid Waste Amendments of 1984 [see Short Title of 1984 Amendment note set out under section 6901 of this title] shall be construed to affect, modify, or amend the Uranium Mill Tailings Radiation Control Act of 1978 [42 U.S.C. 7901 et seq.]."

§ 6906. Financial disclosure

(a) Statement

Each officer or employee of the Administrator who—

(1) performs any function or duty under this chapter; and

(2) has any known financial interest in any person who applies for or receives financial assistance under this chapter

shall, beginning on February 1, 1977, annually file with the Administrator a written statement concerning all such interests held by such officer or employee during the preceding calendar year. Such statement shall be available to the public.

(b) Action by Administrator

The Administrator shall—

(1) act within ninety days after October 21, 1976—

(A) to define the term "known financial interest" for purposes of subsection (a) of this section; and

(B) to establish the methods by which the requirement to file written statements specified in subsection (a) of this section will be

monitored and enforced, including appropriate provision for the filing by such officers and employees of such statements and the review by the Administrator of such statements; and

(2) report to the Congress on June 1, 1978, and of each succeeding calendar year with respect to such disclosures and the actions taken in regard thereto during the preceding calendar year.

(c) Exemption

In the rules prescribed under subsection (b) of this section, the Administrator may identify specific positions within the Environmental Protection Agency which are of a nonpolicy-making nature and provide that officers or employees occupying such positions shall be exempt from the requirements of this section.

(d) Penalty

Any officer or employee who is subject to, and knowingly violates, this section shall be fined not more than \$2,500 or imprisoned not more than one year, or both.

(Pub. L. 89-272, title II, §1007, as added Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2802.)

TERMINATION OF REPORTING REQUIREMENTS

For termination, effective May 15, 2000, of reporting provisions in subsec. (b)(2) of this section, see section 3003 of Pub. L. 104-66, as amended, set out as a note under section 1113 of Title 31, Money and Finance, and the 14th item on page 164 of House Document No. 103-7.

TRANSFER OF FUNCTIONS

For transfer of certain enforcement functions of Administrator or other official of Environmental Protection Agency under this chapter to Federal Inspector, Office of Federal Inspector for the Alaska Natural Gas Transportation System, and subsequent transfer to Secretary of Energy, then to Federal Coordinator for Alaska Natural Gas Transportation Projects, see note set out under section 6903 of this title.

§ 6907. Solid waste management information and guidelines

(a) Guidelines

Within one year of October 21, 1976, and from time to time thereafter, the Administrator shall, in cooperation with appropriate Federal, State, municipal, and intermunicipal agencies, and in consultation with other interested persons, and after public hearings, develop and publish suggested guidelines for solid waste management. Such suggested guidelines shall—

(1) provide a technical and economic description of the level of performance that can be attained by various available solid waste management practices (including operating practices) which provide for the protection of public health and the environment;

(2) not later than two years after October 21, 1976, describe levels of performance, including appropriate methods and degrees of control, that provide at a minimum for (A) protection of public health and welfare; (B) protection of the quality of ground waters and surface waters from leachates; (C) protection of the quality of surface waters from runoff through compliance with effluent limitations under the Federal Water Pollution Control Act, as

Section 7386d related to fund transfer authority.
 Section 7386e related to conceptual and construction design.
 Section 7386f related to authority for emergency planning, design, and construction activities.
 Section 7386g related to scope of authority to carry out plant projects.
 Section 7386h related to availability of funds.
 Section 7386i related to transfer of defense environmental management funds.
 Section 7386j related to transfer of weapons activities funds.
 Section 7386k related to funds available for all national security programs of the Department of Energy.

CHAPTER 85—AIR POLLUTION PREVENTION AND CONTROL

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§ 7427. Public notification**(a) Warning signs; television, radio, or press notices or information**

Each State plan shall contain measures which will be effective to notify the public during any calendar¹ on a regular basis of instances or areas in which any national primary ambient air quality standard is exceeded or was exceeded during any portion of the preceding calendar year to advise the public of the health hazards associated with such pollution, and to enhance public awareness of the measures which can be taken to prevent such standards from being exceeded and the ways in which the public can participate in regulatory and other efforts to improve air quality. Such measures may include the posting of warning signs on interstate highway access points to metropolitan areas or television, radio, or press notices or information.

(b) Grants

The Administrator is authorized to make grants to States to assist in carrying out the requirements of subsection (a) of this section.

(July 14, 1955, ch. 360, title I, § 127, as added Pub. L. 95-95, title I, § 124, Aug. 7, 1977, 91 Stat. 725.)

EFFECTIVE DATE

Section effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

§ 7428. State boards

(a)¹ Not later than the date one year after August 7, 1977, each applicable implementation plan shall contain requirements that—

(1) any board or body which approves permits or enforcement orders under this chapter shall have at least a majority of members who represent the public interest and do not derive any significant portion of their income from persons subject to permits or enforcement orders under this chapter, and

(2) any potential conflicts of interest by members of such board or body or the head of an executive agency with similar powers be adequately disclosed.

A State may adopt any requirements respecting conflicts of interest for such boards or bodies or heads of executive agencies, or any other entities which are more stringent than the requirements of paragraph (1) and (2), and the Administrator shall approve any such more stringent requirements submitted as part of an implementation plan.

(July 14, 1955, ch. 360, title I, § 128, as added Pub. L. 95-95, title I, § 125, Aug. 7, 1977, 91 Stat. 725.)

EFFECTIVE DATE

Section effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

¹ So in original. Probably should be "calendar year".

¹ So in original. Section enacted without a subsec. (b).

§ 7429. Solid waste combustion**(a) New source performance standards****(1) In general**

(A) The Administrator shall establish performance standards and other requirements pursuant to section 7411 of this title and this section for each category of solid waste incineration units. Such standards shall include emissions limitations and other requirements applicable to new units and guidelines (under section 7411(d) of this title and this section) and other requirements applicable to existing units.

(B) Standards under section 7411 of this title and this section applicable to solid waste incineration units with capacity greater than 250 tons per day combusting municipal waste shall be promulgated not later than 12 months after November 15, 1990. Nothing in this subparagraph shall alter any schedule for the promulgation of standards applicable to such units under section 7411 of this title pursuant to any settlement and consent decree entered by the Administrator before November 15, 1990: *Provided*, That, such standards are subsequently modified pursuant to the schedule established in this subparagraph to include each of the requirements of this section.

(C) Standards under section 7411 of this title and this section applicable to solid waste incineration units with capacity equal to or less than 250 tons per day combusting municipal waste and units combusting hospital waste, medical waste and infectious waste shall be promulgated not later than 24 months after November 15, 1990.

(D) Standards under section 7411 of this title and this section applicable to solid waste incineration units combusting commercial or industrial waste shall be proposed not later than 36 months after November 15, 1990, and promulgated not later than 48 months after November 15, 1990.

(E) Not later than 18 months after November 15, 1990, the Administrator shall publish a schedule for the promulgation of standards under section 7411 of this title and this section applicable to other categories of solid waste incineration units.

(2) Emissions standard

Standards applicable to solid waste incineration units promulgated under section 7411 of this title and this section shall reflect the maximum degree of reduction in emissions of air pollutants listed under section¹ (a)(4) that the Administrator, taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing units in each category. The Administrator may distinguish among classes, types (including mass-burn, refuse-derived fuel, modular and other types of units), and sizes of units within a category in establishing such standards. The degree of reduction in emissions that is deemed achievable for new units in a

¹ So in original. Probably should be "subsection".

category shall not be less stringent than the emissions control that is achieved in practice by the best controlled similar unit, as determined by the Administrator. Emissions standards for existing units in a category may be less stringent than standards for new units in the same category but shall not be less stringent than the average emissions limitation achieved by the best performing 12 percent of units in the category (excluding units which first met lowest achievable emissions rates 18 months before the date such standards are proposed or 30 months before the date such standards are promulgated, whichever is later).

(3) Control methods and technologies

Standards under section 7411 of this title and this section applicable to solid waste incineration units shall be based on methods and technologies for removal or destruction of pollutants before, during, or after combustion, and shall incorporate for new units siting requirements that minimize, on a site specific basis, to the maximum extent practicable, potential risks to public health or the environment.

(4) Numerical emissions limitations

The performance standards promulgated under section 7411 of this title and this section and applicable to solid waste incineration units shall specify numerical emission limitations for the following substances or mixtures: particulate matter (total and fine), opacity (as appropriate), sulfur dioxide, hydrogen chloride, oxides of nitrogen, carbon monoxide, lead, cadmium, mercury, and dioxins and dibenzofurans. The Administrator may promulgate numerical emissions limitations or provide for the monitoring of postcombustion concentrations of surrogate substances, parameters or periods of residence time in excess of stated temperatures with respect to pollutants other than those listed in this paragraph.

(5) Review and revision

Not later than 5 years following the initial promulgation of any performance standards and other requirements under this section and section 7411 of this title applicable to a category of solid waste incineration units, and at 5 year intervals thereafter, the Administrator shall review, and in accordance with this section and section 7411 of this title, revise such standards and requirements.

(b) Existing units

(1) Guidelines

Performance standards under this section and section 7411 of this title for solid waste incineration units shall include guidelines promulgated pursuant to section 7411(d) of this title and this section applicable to existing units. Such guidelines shall include, as provided in this section, each of the elements required by subsection (a) of this section (emissions limitations, notwithstanding any restriction in section 7411(d) of this title regarding issuance of such limitations), subsection (c) of this section (monitoring), subsection (d) of this section (operator training), subsection

(e) of this section (permits), and subsection (h)(4)² of this section (residual risk).

(2) State plans

Not later than 1 year after the Administrator promulgates guidelines for a category of solid waste incineration units, each State in which units in the category are operating shall submit to the Administrator a plan to implement and enforce the guidelines with respect to such units. The State plan shall be at least as protective as the guidelines promulgated by the Administrator and shall provide that each unit subject to the guidelines shall be in compliance with all requirements of this section not later than 3 years after the State plan is approved by the Administrator but not later than 5 years after the guidelines were promulgated. The Administrator shall approve or disapprove any State plan within 180 days of the submission, and if a plan is disapproved, the Administrator shall state the reasons for disapproval in writing. Any State may modify and resubmit a plan which has been disapproved by the Administrator.

(3) Federal plan

The Administrator shall develop, implement and enforce a plan for existing solid waste incineration units within any category located in any State which has not submitted an approvable plan under this subsection with respect to units in such category within 2 years after the date on which the Administrator promulgated the relevant guidelines. Such plan shall assure that each unit subject to the plan is in compliance with all provisions of the guidelines not later than 5 years after the date the relevant guidelines are promulgated.

(c) Monitoring

The Administrator shall, as part of each performance standard promulgated pursuant to subsection (a) of this section and section 7411 of this title, promulgate regulations requiring the owner or operator of each solid waste incineration unit—

(1) to monitor emissions from the unit at the point at which such emissions are emitted into the ambient air (or within the stack, combustion chamber or pollution control equipment, as appropriate) and at such other points as necessary to protect public health and the environment;

(2) to monitor such other parameters relating to the operation of the unit and its pollution control technology as the Administrator determines are appropriate; and

(3) to report the results of such monitoring.

Such regulations shall contain provisions regarding the frequency of monitoring, test methods and procedures validated on solid waste incineration units, and the form and frequency of reports containing the results of monitoring and shall require that any monitoring reports or test results indicating an exceedance of any standard under this section shall be reported separately and in a manner that facilitates review for purposes of enforcement actions. Such regulations

² So in original. Probably should be subsection "(h)(3)".

shall require that copies of the results of such monitoring be maintained on file at the facility concerned and that copies shall be made available for inspection and copying by interested members of the public during business hours.

(d) Operator training

Not later than 24 months after November 15, 1990, the Administrator shall develop and promote a model State program for the training and certification of solid waste incineration unit operators and high-capacity fossil fuel fired plant operators. The Administrator may authorize any State to implement a model program for the training of solid waste incineration unit operators and high-capacity fossil fuel fired plant operators, if the State has adopted a program which is at least as effective as the model program developed by the Administrator. Beginning on the date 36 months after the date on which performance standards and guidelines are promulgated under subsection (a) of this section and section 7411 of this title for any category of solid waste incineration units it shall be unlawful to operate any unit in the category unless each person with control over processes affecting emissions from such unit has satisfactorily completed a training program meeting the requirements established by the Administrator under this subsection.

(e) Permits

Beginning (1) 36 months after the promulgation of a performance standard under subsection (a) of this section and section 7411 of this title applicable to a category of solid waste incineration units, or (2) the effective date of a permit program under subchapter V of this chapter in the State in which the unit is located, whichever is later, each unit in the category shall operate pursuant to a permit issued under this subsection and subchapter V of this chapter. Permits required by this subsection may be renewed according to the provisions of subchapter V of this chapter. Notwithstanding any other provision of this chapter, each permit for a solid waste incineration unit combusting municipal waste issued under this chapter shall be issued for a period of up to 12 years and shall be reviewed every 5 years after date of issuance or reissuance. Each permit shall continue in effect after the date of issuance until the date of termination, unless the Administrator or State determines that the unit is not in compliance with all standards and conditions contained in the permit. Such determination shall be made at regular intervals during the term of the permit, such intervals not to exceed 5 years, and only after public comment and public hearing. No permit for a solid waste incineration unit may be issued under this chapter by an agency, instrumentality or person that is also responsible, in whole or part, for the design and construction or operation of the unit. Notwithstanding any other provision of this subsection, the Administrator or the State shall require the owner or operator of any unit to comply with emissions limitations or implement any other measures, if the Administrator or the State determines that emissions in the absence of such limitations or measures may reasonably be anticipated to endanger public health or the environment. The

Administrator's determination under the preceding sentence is a discretionary decision.

(f) Effective date and enforcement

(1) New units

Performance standards and other requirements promulgated pursuant to this section and section 7411 of this title and applicable to new solid waste incineration units shall be effective as of the date 6 months after the date of promulgation.

(2) Existing units

Performance standards and other requirements promulgated pursuant to this section and section 7411 of this title and applicable to existing solid waste incineration units shall be effective as expeditiously as practicable after approval of a State plan under subsection (b)(2) of this section (or promulgation of a plan by the Administrator under subsection (b)(3) of this section) but in no event later than 3 years after the State plan is approved or 5 years after the date such standards or requirements are promulgated, whichever is earlier.

(3) Prohibition

After the effective date of any performance standard, emission limitation or other requirement promulgated pursuant to this section and section 7411 of this title, it shall be unlawful for any owner or operator of any solid waste incineration unit to which such standard, limitation or requirement applies to operate such unit in violation of such limitation, standard or requirement or for any other person to violate an applicable requirement of this section.

(4) Coordination with other authorities

For purposes of sections 7411(e), 7413, 7414, 7416, 7420, 7603, 7604, 7607 of this title and other provisions for the enforcement of this chapter, each performance standard, emission limitation or other requirement established pursuant to this section by the Administrator or a State or local government, shall be treated in the same manner as a standard of performance under section 7411 of this title which is an emission limitation.

(g) Definitions

For purposes of section 306 of the Clean Air Act Amendments of 1990 and this section only—

(1) Solid waste incineration unit

The term "solid waste incineration unit" means a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public (including single and multiple residences, hotels, and motels). Such term does not include incinerators or other units required to have a permit under section 3005 of the Solid Waste Disposal Act [42 U.S.C. 6925]. The term "solid waste incineration unit" does not include (A) materials recovery facilities (including primary or secondary smelters) which combust waste for the primary purpose of recovering metals, (B) qualifying small power production facilities, as defined in section 796(17)(C) of title 16, or qualifying cogeneration facilities, as defined in sec-

tion 796(18)(B) of title 16, which burn homogeneous waste (such as units which burn tires or used oil, but not including refuse-derived fuel) for the production of electric energy or in the case of qualifying cogeneration facilities which burn homogeneous waste for the production of electric energy and steam or forms of useful energy (such as heat) which are used for industrial, commercial, heating or cooling purposes, or (C) air curtain incinerators provided that such incinerators only burn wood wastes, yard wastes and clean lumber and that such air curtain incinerators comply with opacity limitations to be established by the Administrator by rule.

(2) New solid waste incineration unit

The term “new solid waste incineration unit” means a solid waste incineration unit the construction of which is commenced after the Administrator proposes requirements under this section establishing emissions standards or other requirements which would be applicable to such unit or a modified solid waste incineration unit.

(3) Modified solid waste incineration unit

The term “modified solid waste incineration unit” means a solid waste incineration unit at which modifications have occurred after the effective date of a standard under subsection (a) of this section if (A) the cumulative cost of the modifications, over the life of the unit, exceed 50 per centum of the original cost of construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or (B) the modification is a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under this section or section 7411 of this title.

(4) Existing solid waste incineration unit

The term “existing solid waste incineration unit” means a solid waste unit which is not a new or modified solid waste incineration unit.

(5) Municipal waste

The term “municipal waste” means refuse (and refuse-derived fuel) collected from the general public and from residential, commercial, institutional, and industrial sources consisting of paper, wood, yard wastes, food wastes, plastics, leather, rubber, and other combustible materials and non-combustible materials such as metal, glass and rock, provided that: (A) the term does not include industrial process wastes or medical wastes that are segregated from such other wastes; and (B) an incineration unit shall not be considered to be combusting municipal waste for purposes of section 7411 of this title or this section if it combusts a fuel feed stream, 30 percent or less of the weight of which is comprised, in aggregate, of municipal waste.

(6) Other terms

The terms “solid waste” and “medical waste” shall have the meanings established by the Administrator pursuant to the Solid Waste Disposal Act [42 U.S.C. 6901 et seq.].

(h) Other authority

(1) State authority

Nothing in this section shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce any regulation, requirement, limitation or standard relating to solid waste incineration units that is more stringent than a regulation, requirement, limitation or standard in effect under this section or under any other provision of this chapter.

(2) Other authority under this chapter

Nothing in this section shall diminish the authority of the Administrator or a State to establish any other requirements applicable to solid waste incineration units under any other authority of law, including the authority to establish for any air pollutant a national ambient air quality standard, except that no solid waste incineration unit subject to performance standards under this section and section 7411 of this title shall be subject to standards under section 7412(d) of this title.

(3) Residual risk

The Administrator shall promulgate standards under section 7412(f) of this title for a category of solid waste incineration units, if promulgation of such standards is required under section 7412(f) of this title. For purposes of this³ preceding sentence only—

(A) the performance standards under subsection (a) of this section and section 7411 of this title applicable to a category of solid waste incineration units shall be deemed standards under section 7412(d)(2) of this title, and

(B) the Administrator shall consider and regulate, if required, the pollutants listed under subsection (a)(4) of this section and no others.

(4) Acid rain

A solid waste incineration unit shall not be a utility unit as defined in subchapter IV–A of this chapter: *Provided*, That, more than 80 per centum of its annual average fuel consumption measured on a Btu basis, during a period or periods to be determined by the Administrator, is from a fuel (including any waste burned as a fuel) other than a fossil fuel.

(5) Requirements of parts C and D

No requirement of an applicable implementation plan under section 7475 of this title (relating to construction of facilities in regions identified pursuant to section 7407(d)(1)(A)(ii) or (iii) of this title) or under section 7502(c)(5) of this title (relating to permits for construction and operation in nonattainment areas) may be used to weaken the standards in effect under this section.

(July 14, 1955, ch. 360, title I, § 129, as added Pub. L. 101–549, title III, § 305(a), Nov. 15, 1990, 104 Stat. 2577.)

REFERENCES IN TEXT

Section 306 of the Clean Air Act Amendments of 1990, referred to in subsec. (g), probably means section 306 of

³ So in original. Probably should be “the”.

Pub. L. 101-549, which is set out as a note under section 6921 of this title.

The Solid Waste Disposal Act, referred to in subsec. (g)(6), is title II of Pub. L. 89-272, Oct. 20, 1965, 79 Stat. 997, as amended generally by Pub. L. 94-580, §2, Oct. 21, 1976, 90 Stat. 2795, which is classified generally to chapter 82 (§6901 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 6901 of this title and Tables.

REVIEW OF ACID GAS SCRUBBING REQUIREMENTS

Section 305(c) of Pub. L. 101-549 provided that: "Prior to the promulgation of any performance standard for solid waste incineration units combusting municipal waste under section 111 or section 129 of the Clean Air Act [42 U.S.C. 7411, 7429], the Administrator shall review the availability of acid gas scrubbers as a pollution control technology for small new units and for existing units (as defined in 54 Federal Register 52190 (December 20, 1989)[)], taking into account the provisions of subsection (a)(2) of section 129 of the Clean Air Act."

§ 7430. Emission factors

Within 6 months after November 15, 1990, and at least every 3 years thereafter, the Administrator shall review and, if necessary, revise, the methods ("emission factors") used for purposes of this chapter to estimate the quantity of emissions of carbon monoxide, volatile organic compounds, and oxides of nitrogen from sources of such air pollutants (including area sources and mobile sources). In addition, the Administrator shall establish emission factors for sources for which no such methods have previously been established by the Administrator. The Administrator shall permit any person to demonstrate improved emissions estimating techniques, and following approval of such techniques, the Administrator shall authorize the use of such techniques. Any such technique may be approved only after appropriate public participation. Until the Administrator has completed the revision required by this section, nothing in this section shall be construed to affect the validity of emission factors established by the Administrator before November 15, 1990.

(July 14, 1955, ch. 360, title I, §130, as added Pub. L. 101-549, title VIII, §804, Nov. 15, 1990, 104 Stat. 2689.)

§ 7431. Land use authority

Nothing in this chapter constitutes an infringement on the existing authority of counties and cities to plan or control land use, and nothing in this chapter provides or transfers authority over such land use.

(July 14, 1955, ch. 360, title I, §131, as added Pub. L. 101-549, title VIII, §805, Nov. 15, 1990, 104 Stat. 2689.)

PART B—OZONE PROTECTION

§§ 7450 to 7459. Repealed. Pub. L. 101-549, title VI, §601, Nov. 15, 1990, 104 Stat. 2648

Section 7450, act July 14, 1955, ch. 360, title I, §150, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 725, set forth Congressional declaration of purpose.

Section 7451, act July 14, 1955, ch. 360, title I, §151, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 726, set forth Congressional findings.

Section 7452, act July 14, 1955, ch. 360, title I, §152, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 726, set forth definitions applicable to this part.

Section 7453, act July 14, 1955, ch. 360, title I, §153, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 726, related to studies by Environmental Protection Agency.

Section 7454, act July 14, 1955, ch. 360, title I, §154, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 728; amended Pub. L. 96-88, title V, §509(b), Oct. 17, 1979, 93 Stat. 695, related to research and monitoring activities by Federal agencies.

Section 7455, act July 14, 1955, ch. 360, title I, §155, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 729, related to reports on progress of regulation.

Section 7456, act July 14, 1955, ch. 360, title I, §156, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 729, authorized President to enter into international agreements to foster cooperative research.

Section 7457, act July 14, 1955, ch. 360, title I, §157, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 729, related to promulgation of regulations.

Section 7458, act July 14, 1955, ch. 360, title I, §158, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 730, set forth other provisions of law that would be unaffected by this part.

Section 7459, act July 14, 1955, ch. 360, title I, §159, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 730, related to authority of States to protect the stratosphere.

SIMILAR PROVISIONS

For provisions relating to stratospheric ozone protection, see section 7671 et seq. of this title.

PART C—PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

SUBPART I—CLEAN AIR

§ 7470. Congressional declaration of purpose

The purposes of this part are as follows:

(1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipated¹ to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air², notwithstanding attainment and maintenance of all national ambient air quality standards;

(2) to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;

(3) to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources;

(4) to assure that emissions from any source in any State will not interfere with any portion of the applicable implementation plan to prevent significant deterioration of air quality for any other State; and

(5) to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

(July 14, 1955, ch. 360, title I, §160, as added Pub. L. 95-95, title I, §127(a), Aug. 7, 1977, 91 Stat. 731.)

¹ So in original. Probably should be "anticipated".

² So in original. Section was enacted without an opening parenthesis.

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(6) A copy of all significant correspondence, reports, inspection reports, and any other communications from enforcement agencies.

(e) Methodology for evaluating the facility's performance should be developed. Evaluation procedures recommended by the U.S. Environmental Protection Agency should be used whenever possible (see bibliography).

APPENDIX TO PART 240—RECOMMENDED BIBLIOGRAPHY

1. The Solid Waste Disposal Act as amended; Title II of Pub. L. 89-272, 89th Cong., S. 306, Oct. 20, 1965; Pub. L. 91-512, 91st Cong., H.R. 11833, Oct. 26, 1970. Washington, U.S. Government Printing Office, 1971. 14 p. Reprinted 1972.
2. Seven incinerators; evaluation, discussions, and authors' closure. [Washington, U.S. Environmental Protection Agency, 1971. 40 p.] (Includes discussions and authors' closure for "An evaluation of seven incinerators" by W. C. Achinger and L. E. Daniels.)
3. DeMarco, J., D. J. Keller, J. Leckman, and J. L. Newton. Municipal-scale incinerator design and operation. Public Health Service Publication No. 2012. Washington, U.S. Government Printing Office, 1973. 98 p.
4. Occupational Safety and Health Act of 1970; Pub. L. 91-596, 91st Cong., S. 2193, Dec. 29, 1970. Washington, U.S. Government Printing Office, 1972.
5. Control techniques for particulate air pollutants. Publication AP-51. U.S. Department of Health, Education, and Welfare, National Air Pollution Control Administration, 1969.
6. Zausner, E. R. An accounting system for incinerator operations. Public Health Service Publication No. 2032. Washington, U.S. Government Printing Office, 1970. 17 p.
7. Achinger, W. C., and J. J. Giar. Testing manual for solid waste incinerators. [Cincinnati], U.S. Environmental Protection Agency, 1973. [372 p., loose-leaf.] [Open-file report, restricted distribution.]
8. Nader, J. S., W. Carter, and F. Jaye. Performance Specifications for Stationary Source Monitoring Systems. NTIS PB. 230 934/AS (1974).

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

Subpart A—General

Sec.
241.1 Purpose.

40 CFR Ch. I (7–1–13 Edition)

241.2 Definitions.

Subpart B—Identification of Non-Hazardous Secondary Materials That Are Solid Wastes When Used as Fuels or Ingredients in Combustion Units

Sec.

241.3 Standards and procedures for identification of non-hazardous secondary materials that are solid wastes when used as fuels or ingredients in combustion units.

241.4 Non-Waste Determinations for Specific Non-Hazardous Secondary Materials When Used as a Fuel.

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

SOURCE: 76 FR 15549, Mar. 21, 2011, unless otherwise noted.

Subpart A—General

§ 241.1 Purpose.

This part identifies the requirements and procedures for the identification of solid wastes used as fuels or ingredients in combustion units under section 1004 of the Resource Conservation and Recovery Act and section 129 of the Clean Air Act.

§ 241.2 Definitions.

For the purposes of this subpart:

Clean cellulosic biomass means those residuals that are akin to traditional cellulosic biomass, including, but not limited to: Agricultural and forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, tree harvesting residuals from logging and sawmill materials, hogged fuel, wood pellets, untreated wood pallets); urban wood (e.g., tree trimmings, stumps, and related forest-derived biomass from urban settings); corn stover and other biomass crops used specifically for the production of cellulosic biofuels (e.g., energy cane, other fast growing grasses, by-products of ethanol natural fermentation processes); bagasse and other crop residues (e.g., peanut shells, vines, orchard trees, hulls, seeds, spent grains, cotton byproducts, corn and peanut production residues, rice milling and grain elevator operation residues); wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, clean biomass from land clearing operations, and clean construction and demolition

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wood. These fuels are not secondary materials or solid wastes unless discarded. Clean biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials.

Contaminants means all pollutants listed in Clean Air Act sections 112(b) or 129(a)(4), with the following three modifications:

(1) The definition includes the elements chlorine, fluorine, nitrogen, and sulfur in cases where non-hazardous secondary materials are burned as a fuel and combustion will result in the formation of hydrogen chloride (HCl), hydrogen fluoride (HF), nitrogen oxides (NO_x), or sulfur dioxide (SO₂). Chlorine, fluorine, nitrogen, and sulfur are not included in the definition in cases where non-hazardous secondary materials are used as an ingredient and not as a fuel.

(2) The definition does not include the following pollutants that are either unlikely to be found in non-hazardous secondary materials and products made from such materials or are adequately measured by other parts of this definition: hydrogen chloride (HCl), chlorine gas (Cl₂), hydrogen fluoride (HF), nitrogen oxides (NO_x), sulfur dioxide (SO₂), fine mineral fibers, particulate matter, coke oven emissions, opacity, diazomethane, white phosphorus, and titanium tetrachloride.

(3) The definition does not include m-cresol, o-cresol, p-cresol, m-xylene, o-xylene, and p-xylene as individual contaminants distinct from the grouped pollutants total cresols and total xylenes.

Contained means the non-hazardous secondary material is stored in a manner that adequately prevents releases or other hazards to human health and the environment considering the nature and toxicity of the non-hazardous secondary material.

Control means the power to direct the policies of the facility, whether by the ownership of stock, voting rights, or otherwise, except that contractors who operate facilities on behalf of a different person as defined in this section shall not be deemed to "control" such facilities.

Established tire collection program means a comprehensive collection sys-

tem or contractual arrangement that ensures scrap tires are not discarded and are handled as valuable commodities through arrival at the combustion facility. This can include tires that were not abandoned and were received from the general public at collection program events.

Generating facility means all contiguous property owned, leased, or otherwise controlled by the non-hazardous secondary material generator.

Ingredient means a non-hazardous secondary material that is a component in a compound, process or product.

Non-hazardous secondary material means a secondary material that, when discarded, would not be identified as a hazardous waste under Part 261 of this chapter.

Person is defined as an individual, trust, firm, joint stock company, Federal agency, corporation (including government corporation), partnership, association, State, municipality, commission, political subdivision of a state, or any interstate body.

Processing means any operations that transform discarded non-hazardous secondary material into a non-waste fuel or non-waste ingredient product. Processing includes, but is not limited to, operations necessary to: Remove or destroy contaminants; significantly improve the fuel characteristics of the material, e.g., sizing or drying the material in combination with other operations; chemically improve the as-fired energy content; or improve the ingredient characteristics. Minimal operations that result only in modifying the size of the material by shredding do not constitute processing for purposes of this definition.

Resinated wood means wood products (containing binders and adhesives) produced by primary and secondary wood products manufacturing. Resinated wood includes residues from the manufacture and use of resinated wood, including materials such as board trim, sander dust, panel trim, and off-specification resinated wood products that do not meet a manufacturing quality or standard.

Secondary material means any material that is not the primary product of

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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.

Solid waste means the term solid waste as defined in 40 CFR 258.2.

Traditional fuels means materials that are produced as fuels and are unused products that have not been discarded and therefore, are not solid wastes, including: (1) Fuels that have been historically managed as valuable fuel products rather than being managed as waste materials, including fossil fuels (*e.g.*, coal, oil and natural gas), their derivatives (*e.g.*, petroleum coke, bituminous coke, coal tar oil, refinery gas, synthetic fuel, heavy recycle, asphalts, blast furnace gas, recovered gaseous butane, and coke oven gas) and cellulosic biomass (virgin wood); and (2) alternative fuels developed from virgin materials that can now be used as fuel products, including used oil which meets the specifications outlined in 40 CFR 279.11, currently mined coal refuse that previously had not been usable as coal, and clean cellulosic biomass. These fuels are not secondary materials or solid wastes unless discarded.

Within control of the generator means that the non-hazardous secondary material is generated and burned in combustion units at the generating facility; or that such material is generated and burned in combustion units at different facilities, provided the facility combusting the non-hazardous secondary material is controlled by the generator; or both the generating facility and the facility combusting the non-hazardous secondary material are under the control of the same person as defined in this section.

[76 FR 15549, Mar. 21, 2011, as amended at 78 FR 9211, Feb. 7, 2013]

Subpart B—Identification of Non-Hazardous Secondary Materials That Are Solid Wastes When Used as Fuels or Ingredients in Combustion Units

40 CFR Ch. I (7–1–13 Edition)

§ 241.3 Standards and procedures for identification of non-hazardous secondary materials that are solid wastes when used as fuels or ingredients in combustion units.

(a) Except as provided in paragraph (b) of this section or in § 241.4(a) of this subpart, non-hazardous secondary materials that are combusted are solid wastes, unless a petition is submitted to, and a determination granted by, the EPA pursuant to paragraph (c) of this section. The criteria to be addressed in the petition, as well as the process for making the non-waste determination, are specified in paragraph (c) of this section.

(b) The following non-hazardous secondary materials are not solid wastes when combusted:

(1) Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in paragraph (d)(1) of this section.

(2) The following non-hazardous secondary materials that have not been discarded and meet the legitimacy criteria specified in paragraph (d)(1) of this section when used in a combustion unit (by the generator or outside the control of the generator):

(i) [Reserved]

(ii) [Reserved]

(3) Non-hazardous secondary materials used as an ingredient in a combustion unit that meet the legitimacy criteria specified in paragraph (d)(2) of this section.

(4) Fuel or ingredient products that are used in a combustion unit, and are produced from the processing of discarded non-hazardous secondary materials and that meet the legitimacy criteria specified in paragraph (d)(1) of this section, with respect to fuels, and paragraph (d)(2) of this section, with respect to ingredients. The legitimacy criteria apply after the non-hazardous secondary material is processed to produce a fuel or ingredient product. 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.

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(c) The Regional Administrator may grant a non-waste determination that a non-hazardous secondary material that is used as a fuel, which is not managed within the control of the generator, is not discarded and is not a solid waste when combusted. This responsibility may be retained by the Assistant Administrator for the Office of Solid Waste and Emergency Response if combustors are located in multiple EPA Regions and the petitioner requests that the Assistant Administrator process the non-waste determination petition. If multiple combustion units are located in one EPA Region, the application must be submitted to the Regional Administrator for that Region. The criteria and process for making such non-waste determinations includes the following:

(1) Submittal of an application to the Regional Administrator for the EPA Region where the facility or facilities are located or the Assistant Administrator for the Office of Solid Waste and Emergency Response for a determination that the non-hazardous secondary material, even though it has been transferred to a third party, has not been discarded and is indistinguishable in all relevant aspects from a fuel product. The determination will be based on whether the non-hazardous secondary material that has been discarded is a legitimate fuel as specified in paragraph (d)(1) of this section and on the following criteria:

(i) Whether market participants treat the non-hazardous secondary material as a product rather than as a solid waste;

(ii) Whether the chemical and physical identity of the non-hazardous secondary material is comparable to commercial fuels;

(iii) Whether the non-hazardous secondary material will be used in a reasonable time frame given the state of the market;

(iv) Whether the constituents in the non-hazardous secondary material are released to the air, water or land from the point of generation to the point just prior to combustion of the secondary material at levels comparable to what would otherwise be released from traditional fuels; and

(v) Other relevant factors.

(2) The Regional Administrator or Assistant Administrator for the Office of Solid Waste and Emergency Response will evaluate the application pursuant to the following procedures:

(i) The applicant must submit an application for the non-waste determination addressing the legitimacy criteria in paragraph (d)(1) of this section and the relevant criteria in paragraphs (c)(1)(i) through (v) of this section. In addition, the applicant must also show that the non-hazardous secondary material has not been discarded in the first instance.

(ii) The Regional Administrator or Assistant Administrator for the Office of Solid Waste and Emergency Response will evaluate the application and issue a draft notice tentatively granting or denying the application. Notification of this tentative decision will be published in a newspaper advertisement or radio broadcast in the locality where the facility combusting the non-hazardous secondary material is located, and be made available on the EPA's Web site.

(iii) The Regional Administrator or the Assistant Administrator for the Office of Solid Waste and Emergency Response will accept public comments on the tentative decision for 30 days, and may also hold a public hearing upon request or at his discretion. The Regional Administrator or the Assistant Administrator for the Office of Solid Waste and Emergency Response will issue a final decision after receipt of comments and after a hearing (if any). If a determination is made that the non-hazardous secondary material is a non-waste fuel, it will be retroactive and apply on the date the petition was submitted.

(iv) If a change occurs that affects how a non-hazardous secondary material meets the relevant criteria contained in this paragraph after a formal non-waste determination has been granted, the applicant must re-apply to the Regional Administrator or the Assistant Administrator for the Office of Solid Waste and Emergency Response for a formal determination that the non-hazardous secondary material continues to meet the relevant criteria and, thus, is not a solid waste.

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(d) Legitimacy criteria for non-hazardous secondary materials.

(1) Legitimacy criteria for non-hazardous secondary materials used as a fuel in combustion units include the following:

(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:

(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;

(B) Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;

(C) If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;

(ii) The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.

(iii) The non-hazardous secondary material must contain contaminants or groups of contaminants at levels comparable in concentration to or lower than those in traditional fuel(s) which the combustion unit is designed to burn. In determining which traditional fuel(s) a unit is designed to burn, persons may choose a traditional fuel that can be or is burned in the particular type of boiler, whether or not the combustion unit is permitted to burn that traditional fuel. In comparing contaminants between traditional fuel(s) and a non-hazardous secondary material, persons can use data for traditional fuel contaminant levels compiled from national surveys, as well as contaminant level data from the specific traditional fuel being replaced. To account for natural variability in contaminant levels, persons can use the full range of traditional fuel contaminant levels, provided such comparisons also consider variability in non-hazardous secondary material contaminant levels. Such comparisons are to be based on a direct comparison of the contaminant levels in both the non-hazardous secondary material and traditional fuel(s) prior to combustion.

(2) Legitimacy criteria for non-hazardous secondary materials used as an ingredient in combustion units include the following:

(i) The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:

(A) The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;

(B) Where there is an analogous ingredient, the non-hazardous secondary material must be managed in a manner consistent with the analogous ingredient or otherwise be adequately contained to prevent releases to the environment;

(C) If there is no analogous ingredient, the non-hazardous secondary material must be adequately contained to prevent releases to the environment;

(ii) The non-hazardous secondary material must provide a useful contribution to the production or manufacturing process. The non-hazardous secondary material provides a useful contribution if it contributes a valuable ingredient to the product or intermediate or is an effective substitute for a commercial product.

(iii) The non-hazardous secondary material must be used to produce a valuable product or intermediate. The product or intermediate is valuable if:

(A) The non-hazardous secondary material is sold to a third party, or

(B) The non-hazardous secondary material is used as an effective substitute for a commercial product or as an ingredient or intermediate in an industrial process.

(iv) The non-hazardous secondary material must result in products that contain contaminants at levels that are comparable in concentration to or lower than those found in traditional products that are manufactured without the non-hazardous secondary material.

[76 FR 15549, Mar. 21, 2011, as amended at 78 FR 9212, Feb. 7, 2013]

§ 241.4 Non-Waste Determinations for Specific Non-Hazardous Secondary Materials When Used as a Fuel.

(a) The following non-hazardous secondary materials are not solid wastes

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when used as a fuel in a combustion unit:

(1) Scrap tires that are not discarded and are managed under the oversight of established tire collection programs, including tires removed from vehicles and off-specification tires.

(2) Resinated wood.

(3) Coal refuse that has been recovered from legacy piles and processed in the same manner as currently-generated coal refuse.

(4) Dewatered pulp and paper sludges that are not discarded and are generated and burned on-site by pulp and paper mills that burn a significant portion of such materials where such dewatered residuals are managed in a manner that preserves the meaningful heating value of the materials.

(b) Any person may submit a rule-making petition to the Administrator to identify additional non-hazardous secondary materials to be listed in paragraph (a) of this section. Contents and procedures for the submittal of the petitions include the following:

(1) Each petition must be submitted to the Administrator by certified mail and must include:

(i) The petitioner's name and address;

(ii) A statement of the petitioner's interest in the proposed action;

(iii) A description of the proposed action, including (where appropriate) suggested regulatory language; and

(iv) A statement of the need and justification for the proposed action, including any supporting tests, studies, or other information. Where the non-hazardous secondary material does not meet the legitimacy criteria, the applicant must explain why such non-hazardous secondary material should be considered a non-waste fuel, balancing the legitimacy criteria with other relevant factors.

(2) The Administrator will make a tentative decision to grant or deny a petition and will publish notice of such tentative decision, either in the form of an advanced notice of proposed rule-making, a proposed rule, or a tentative determination to deny the petition, in the FEDERAL REGISTER for written public comment.

(3) Upon the written request of any interested person, the Administrator may, at its discretion, hold an informal

public hearing to consider oral comments on the tentative decision. A person requesting a hearing must state the issues to be raised and explain why written comments would not suffice to communicate the person's views. The Administrator may in any case decide on its own motion to hold an informal public hearing.

(4) After evaluating all public comments the Administrator will make a final decision by publishing in the FEDERAL REGISTER a regulatory amendment or a denial of the petition.

(5) The Administrator will grant or deny a petition based on the weight of evidence showing the following:

(i) The non-hazardous secondary material has not been discarded in the first instance and is legitimately used as a fuel in a combustion unit, or if discarded, has been sufficiently processed into a material that is legitimately used as a fuel.

(ii) Where any one of the legitimacy criteria in §241.3(d)(1) is not met, that the use of the non-hazardous secondary material is integrally tied to the industrial production process, that the non-hazardous secondary material is functionally the same as the comparable traditional fuel, or other relevant factors as appropriate.

[78 FR 9213, Feb. 7, 2013]

PART 243—GUIDELINES FOR THE STORAGE AND COLLECTION OF RESIDENTIAL, COMMERCIAL, AND INSTITUTIONAL SOLID WASTE

Subpart A—General Provisions

Sec.

243.100 Scope.

243.101 Definitions.

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CODIFICATION

The Federal Water Pollution Control Act, comprising this chapter, was originally enacted by act June 30,

Army under such section. To the maximum extent practicable, the regulatory standards and criteria shall maximize available credits and opportunities for mitigation, provide flexibility for regional variations in wetland conditions, functions and values, and apply equivalent standards and criteria to each type of compensatory mitigation.

“(2) Final regulations shall be issued not later than two years after the date of the enactment of this Act [Nov. 24, 2003].”

REGULATORY PROGRAM

Pub. L. 106-377, §1(a)(2) [title I], Oct. 27, 2000, 114 Stat. 1441, 1441A-63, provided in part that: “For expenses necessary for administration of laws pertaining to regulation of navigable waters and wetlands, \$125,000,000, to remain available until expended: *Provided*, That the Secretary of the Army, acting through the Chief of Engineers, is directed to use funds appropriated herein to: (1) by March 1, 2001, supplement the report, Cost Analysis For the 1999 Proposal to Issue and Modify Nationwide Permits, to reflect the Nationwide Permits actually issued on March 9, 2000, including changes in the acreage limits, preconstruction notification requirements and general conditions between the rule proposed on July 21, 1999, and the rule promulgated and published in the Federal Register; (2) after consideration of the cost analysis for the 1999 proposal to issue and modify nationwide permits and the supplement prepared pursuant to this Act [H.R. 5483, as enacted by section 1(a)(2) of Pub. L. 106-377, see Tables for classification] and by September 30, 2001, prepare, submit to Congress and publish in the Federal Register a Permit Processing Management Plan by which the Corps of Engineers will handle the additional work associated with all projected increases in the number of individual permit applications and preconstruction notifications related to the new and replacement permits and general conditions. The Permit Processing Management Plan shall include specific objective goals and criteria by which the Corps of Engineers’ progress towards reducing any permit backlog can be measured; (3) beginning on December 31, 2001, and on a biannual basis thereafter, report to Congress and publish in the Federal Register, an analysis of the performance of its program as measured against the criteria set out in the Permit Processing Management Plan; (4) implement a 1-year pilot program to publish quarterly on the U.S. Army Corps of Engineer’s Regulatory Program website all Regulatory Analysis and Management Systems (RAMS) data for the South Pacific Division and North Atlantic Division beginning within 30 days of the enactment of this Act [Oct. 27, 2000]; and (5) publish in Division Office websites all findings, rulings, and decisions rendered under the administrative appeals process for the Corps of Engineers Regulatory Program as established in Public Law 106-60 [113 Stat. 486]: *Provided further*, That, through the period ending on September 30, 2003, the Corps of Engineers shall allow any appellant to keep a verbatim record of the proceedings of the appeals conference under the aforementioned administrative appeals process: *Provided further*, That within 30 days of the enactment of this Act, the Secretary of the Army, acting through the Chief of Engineers, shall require all U.S. Army Corps of Engineers Divisions and Districts to record the date on which a section 404 individual permit application or nationwide permit notification is filed with the Corps of Engineers: *Provided further*, That the Corps of Engineers, when reporting permit processing times, shall track both the date a permit application is first received and the date the application is considered complete, as well as the reason that the application is not considered complete upon first submission.”

AUTHORITY TO DELEGATE TO STATE OF WASHINGTON
FUNCTIONS OF THE SECRETARY RELATING TO LAKE
CHELAN, WASHINGTON

Section 76 of Pub. L. 95-217 provided that: “The Secretary of the Army, acting through the Chief of Engi-

neers, is authorized to delegate to the State of Washington upon its request all or any part of those functions vested in such Secretary by section 404 of the Federal Water Pollution Control Act [this section] and by sections 9, 10, and 13 of the Act of March 3, 1899 [sections 401, 403, and 407 of this title], relating to Lake Chelan, Washington, if the Secretary determines (1) that such State has the authority, responsibility, and capability to carry out such functions, and (2) that such delegation is in the public interest. Such delegation shall be subject to such terms and conditions as the Secretary deems necessary, including, but not limited to, suspension and revocation for cause of such delegation.”

CONTIGUOUS ZONE OF UNITED STATES

For extension of contiguous zone of United States, see Proc. No. 7219, set out as a note under section 1331 of Title 43, Public Lands.

§ 1345. Disposal or use of sewage sludge

(a) Permit

Notwithstanding any other provision of this chapter or of any other law, in any case where the disposal of sewage sludge resulting from the operation of a treatment works as defined in section 1292 of this title (including the removal of in-place sewage sludge from one location and its deposit at another location) would result in any pollutant from such sewage sludge entering the navigable waters, such disposal is prohibited except in accordance with a permit issued by the Administrator under section 1342 of this title.

(b) Issuance of permit; regulations

The Administrator shall issue regulations governing the issuance of permits for the disposal of sewage sludge subject to subsection (a) of this section and section 1342 of this title. Such regulations shall require the application to such disposal of each criterion, factor, procedure, and requirement applicable to a permit issued under section 1342 of this title.

(c) State permit program

Each State desiring to administer its own permit program for disposal of sewage sludge subject to subsection (a) of this section within its jurisdiction may do so in accordance with section 1342 of this title.

(d) Regulations

(1) Regulations

The Administrator, after consultation with appropriate Federal and State agencies and other interested persons, shall develop and publish, within one year after December 27, 1977, and from time to time thereafter, regulations providing guidelines for the disposal of sludge and the utilization of sludge for various purposes. Such regulations shall—

(A) identify uses for sludge, including disposal;

(B) specify factors to be taken into account in determining the measures and practices applicable to each such use or disposal (including publication of information on costs);

(C) identify concentrations of pollutants which interfere with each such use or disposal.

The Administrator is authorized to revise any regulation issued under this subsection.

(2) Identification and regulation of toxic pollutants**(A) On basis of available information****(i) Proposed regulations**

Not later than November 30, 1986, the Administrator shall identify those toxic pollutants which, on the basis of available information on their toxicity, persistence, concentration, mobility, or potential for exposure, may be present in sewage sludge in concentrations which may adversely affect public health or the environment, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each such pollutant for each use identified under paragraph (1)(A).

(ii) Final regulations

Not later than August 31, 1987, and after opportunity for public hearing, the Administrator shall promulgate the regulations required by subparagraph (A)(i).

(B) Others**(i) Proposed regulations**

Not later than July 31, 1987, the Administrator shall identify those toxic pollutants not identified under subparagraph (A)(i) which may be present in sewage sludge in concentrations which may adversely affect public health or the environment, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each pollutant for each such use identified under paragraph (1)(A).

(ii) Final regulations

Not later than June 15, 1988, the Administrator shall promulgate the regulations required by subparagraph (B)(i).

(C) Review

From time to time, but not less often than every 2 years, the Administrator shall review the regulations promulgated under this paragraph for the purpose of identifying additional toxic pollutants and promulgating regulations for such pollutants consistent with the requirements of this paragraph.

(D) Minimum standards; compliance date

The management practices and numerical criteria established under subparagraphs (A), (B), and (C) shall be adequate to protect public health and the environment from any reasonably anticipated adverse effects of each pollutant. Such regulations shall require compliance as expeditiously as practicable but in no case later than 12 months after their publication, unless such regulations require the construction of new pollution control facilities, in which case the regulations shall require compliance as expeditiously as practicable but in no case later than two years from the date of their publication.

(3) Alternative standards

For purposes of this subsection, if, in the judgment of the Administrator, it is not fea-

sible to prescribe or enforce a numerical limitation for a pollutant identified under paragraph (2), the Administrator may instead promulgate a design, equipment, management practice, or operational standard, or combination thereof, which in the Administrator's judgment is adequate to protect public health and the environment from any reasonably anticipated adverse effects of such pollutant. In the event the Administrator promulgates a design or equipment standard under this subsection, the Administrator shall include as part of such standard such requirements as will assure the proper operation and maintenance of any such element of design or equipment.

(4) Conditions on permits

Prior to the promulgation of the regulations required by paragraph (2), the Administrator shall impose conditions in permits issued to publicly owned treatment works under section 1342 of this title or take such other measures as the Administrator deems appropriate to protect public health and the environment from any adverse effects which may occur from toxic pollutants in sewage sludge.

(5) Limitation on statutory construction

Nothing in this section is intended to waive more stringent requirements established by this chapter or any other law.

(e) Manner of sludge disposal

The determination of the manner of disposal or use of sludge is a local determination, except that it shall be unlawful for any person to dispose of sludge from a publicly owned treatment works or any other treatment works treating domestic sewage for any use for which regulations have been established pursuant to subsection (d) of this section, except in accordance with such regulations.

(f) Implementation of regulations**(1) Through section 1342 permits**

Any permit issued under section 1342 of this title to a publicly owned treatment works or any other treatment works treating domestic sewage shall include requirements for the use and disposal of sludge that implement the regulations established pursuant to subsection (d) of this section, unless such requirements have been included in a permit issued under the appropriate provisions of subtitle C of the Solid Waste Disposal Act [42 U.S.C. 6921 et seq.], part C of the Safe Drinking Water Act [42 U.S.C. 300h et seq.], the Marine Protection, Research, and Sanctuaries Act of 1972 [16 U.S.C. 1431 et seq., 1447 et seq.; 33 U.S.C. 1401 et seq., 2801 et seq.], or the Clean Air Act [42 U.S.C. 7401 et seq.], or under State permit programs approved by the Administrator, where the Administrator determines that such programs assure compliance with any applicable requirements of this section. Not later than December 15, 1986, the Administrator shall promulgate procedures for approval of State programs pursuant to this paragraph.

(2) Through other permits

In the case of a treatment works described in paragraph (1) that is not subject to section

1342 of this title and to which none of the other above listed permit programs nor approved State permit authority apply, the Administrator may issue a permit to such treatment works solely to impose requirements for the use and disposal of sludge that implement the regulations established pursuant to subsection (d) of this section. The Administrator shall include in the permit appropriate requirements to assure compliance with the regulations established pursuant to subsection (d) of this section. The Administrator shall establish procedures for issuing permits pursuant to this paragraph.

(g) Studies and projects

(1) Grant program; information gathering

The Administrator is authorized to conduct or initiate scientific studies, demonstration projects, and public information and education projects which are designed to promote the safe and beneficial management or use of sewage sludge for such purposes as aiding the restoration of abandoned mine sites, conditioning soil for parks and recreation areas, agricultural and horticultural uses, and other beneficial purposes. For the purposes of carrying out this subsection, the Administrator may make grants to State water pollution control agencies, other public or nonprofit agencies, institutions, organizations, and individuals. In cooperation with other Federal departments and agencies, other public and private agencies, institutions, and organizations, the Administrator is authorized to collect and disseminate information pertaining to the safe and beneficial use of sewage sludge.

(2) Authorization of appropriations

For the purposes of carrying out the scientific studies, demonstration projects, and public information and education projects authorized in this section, there is authorized to be appropriated for fiscal years beginning after September 30, 1986, not to exceed \$5,000,000.

(June 30, 1948, ch. 758, title IV, § 405, as added Pub. L. 92-500, § 2, Oct. 18, 1972, 86 Stat. 884; amended Pub. L. 95-217, §§ 54(d), 68, Dec. 27, 1977, 91 Stat. 1591, 1606; Pub. L. 100-4, title IV, § 406(a)-(c), (f), Feb. 4, 1987, 101 Stat. 71, 72, 74.)

REFERENCES IN TEXT

The Solid Waste Disposal Act, referred to in subsec. (f)(1), is title II of Pub. L. 89-272, Oct. 20, 1965, 79 Stat. 997, as amended generally by Pub. L. 94-580, § 2, Oct. 21, 1976, 90 Stat. 2795. Subtitle C of the Solid Waste Disposal Act is classified generally to subchapter III (§ 6921 et seq.) of chapter 82 of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 6901 of Title 42 and Tables.

The Safe Drinking Water Act, referred to in subsec. (f)(1), is title XIV of act July 1, 1944, as added Dec. 16, 1974, Pub. L. 93-523, § 2(a), 88 Stat. 1660, as amended. Part C of the Act is classified generally to part C (§ 300h et seq.) of subchapter XII of chapter 6A of Title 42. For complete classification of this Act to the Code, see Short Title note set out under section 201 of Title 42 and Tables.

The Marine Protection, Research, and Sanctuaries Act of 1972, referred to in subsec. (f)(1), is Pub. L. 92-532, Oct. 23, 1972, 86 Stat. 1052, as amended, which is classi-

fied generally to chapters 32 (§ 1431 et seq.) and 32A (§ 1447 et seq.) of Title 16, Conservation, and chapters 27 (§ 1401 et seq.) and 41 (§ 2801 et seq.) of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1401 of this title and Tables.

The Clean Air Act, referred to in subsec. (f)(1), is act July 14, 1955, ch. 360, 69 Stat. 322, as amended, which is classified generally to chapter 85 (§ 7401 et seq.) of Title 42, The Public Health and Welfare. For complete classification of this Act to the Code, see Short Title note set out under section 7401 of Title 42 and Tables.

AMENDMENTS

1987—Subsec. (d). Pub. L. 100-4, § 406(a), designated existing provision as par. (1), inserted heading, redesignated former pars. (1) to (3) as subpars. (A) to (C), and added pars. (2) to (5).

Pub. L. 100-4, § 406(f), inserted heading “Regulations” and aligned par. (1) with par. (3) and subpars. (A) to (C) of par. (1) with subpar. (C) of par. (2).

Subsec. (e). Pub. L. 100-4, § 406(b), amended subsec. (e) generally. Prior to amendment, subsec. (e) read as follows: “The determination of the manner of disposal or use of sludge is a local determination except that it shall be unlawful for the owner or operator of any publicly owned treatment works to dispose of sludge from such works for any use for which guidelines have been established pursuant to subsection (d) of this section, except in accordance with such guidelines.”

Subsecs. (f), (g). Pub. L. 100-4, § 406(c), added subsecs. (f) and (g).

1977—Subsec. (a). Pub. L. 95-217, § 68(a), substituted “under section 1342 of this title” for “under this section”.

Subsec. (b). Pub. L. 95-217, §§ 54(d)(1), 68(b), (c), substituted “sewage sludge subject to subsection (a) of this section and section 1342 of this title” for “sewage sludge subject to this section” and struck out “, as the Administrator determines necessary to carry out the objective of this chapter” after “permit issued under section 1342 of this title”.

Subsec. (c). Pub. L. 95-217, §§ 54(d)(2), 68(d), substituted “disposal of sewage sludge subject to subsection (a) of this section within its jurisdiction may do so in accordance with section 1342 of this title” for “disposal of sewage sludge within its jurisdiction may do so if upon submission of such program the Administrator determines such program is adequate to carry out the objective of this chapter”.

Subsecs. (d), (e). Pub. L. 95-217, § 54(d)(3), added subsecs. (d) and (e).

REMOVAL CREDITS

Section 406(e) of Pub. L. 100-4 provided that: “The part of the decision of Natural Resources Defense Council, Inc. v. U.S. Environmental Protection Agency, No. 84-3530 (3d. Cir. 1986), which addresses section 405(d) of the Federal Water Pollution Control Act [33 U.S.C. 1345(d)] is stayed until August 31, 1987, with respect to—

“(1) those publicly owned treatment works the owner or operator of which received authority to revise pretreatment requirements under section 307(b)(1) of such Act [33 U.S.C. 1317(b)(1)] before the date of the enactment of this section [Feb. 4, 1987], and

“(2) those publicly owned treatment works the owner or operator of which has submitted an application for authority to revise pretreatment requirements under such section 307(b)(1) which application is pending on such date of enactment and is approved before August 31, 1987.

The Administrator shall not authorize any other removal credits under such Act [33 U.S.C. 1251 et seq.] until the Administrator issues the regulations required by paragraph (2)(A)(ii) of section 405(d) of such Act, as amended by subsection (a) of this section.”

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(d) Within 90 days after determining that the State has submitted a complete program, the Administrator shall approve or disapprove the program based on the requirements of this part and of the CWA and after taking into consideration all comments received. A responsiveness summary shall be prepared by the Regional Office which identifies the public participation activities conducted, describes the matters presented to the public, summarizes significant comments received and explains EPA's response to these comments.

(e) The State and EPA may extend the 90-day review period by mutual agreement.

(f) If the State's submission is materially changed during the 90-day review, either as a result of EPA's review or the State action, the official review period shall begin again upon receipt of the revised submission.

(g) Notice of program approval shall be published by EPA in the FEDERAL REGISTER.

(h) If the Administrator disapproves the State program he or she shall notify the State of the reasons for disapproval and of any revisions or modifications to the State program which are necessary to obtain approval.

§ 501.32 Procedures for revision of State programs.

(a) Any State with an approved State program which requires revision to comply with amendments to federal regulations governing sewage sludge use or disposal (including revisions to this part) must revise its program within one year after promulgation of applicable regulations, unless either the State must amend or enact a statute in order to make the required revision, in which case such revision must take place within 2 years; or a different schedule is established under the Memorandum of Agreement.

(b) State sludge management programs shall follow the procedures for program revision set forth in 40 CFR 123.62.

[54 FR 18786, May 2, 1989, as amended at 63 FR 45127, Aug. 24, 1998]

§ 501.33 Criteria for withdrawal of State programs.

The criteria for withdrawal of sludge management programs shall be those set forth in 40 CFR 123.63.

§ 501.34 Procedures for withdrawal of State programs.

The procedures for withdrawal of sludge management programs shall be those set forth in 40 CFR 123.64.

PART 503—STANDARDS FOR THE USE OR DISPOSAL OF SEWAGE SLUDGE

Subpart A—General Provisions

- Sec.
- 503.1 Purpose and applicability.
- 503.2 Compliance period.
- 503.3 Permits and direct enforceability
- 503.4 Relationship to other regulations.
- 503.5 Additional or more stringent requirements.
- 503.6 Exclusions.
- 503.7 Requirement for a person who prepares sewage sludge.
- 503.8 Sampling and analysis.
- 503.9 General definitions.

Subpart B—Land Application

- 503.10 Applicability.
- 503.11 Special definitions.
- 503.12 General requirements.
- 503.13 Pollutant limits.
- 503.14 Management practices.
- 503.15 Operational standards—pathogens and vector attraction reduction.
- 503.16 Frequency of monitoring.
- 503.17 Recordkeeping.
- 503.18 Reporting.

Subpart C—Surface Disposal

- 503.20 Applicability.
- 503.21 Special definitions.
- 503.22 General requirements.
- 503.23 Pollutant limits (other than domestic septage).
- 503.24 Management practices.
- 503.25 Operational standards—pathogens and vector attraction reduction.
- 503.26 Frequency of monitoring.
- 503.27 Recordkeeping.
- 503.28 Reporting.

Subpart D—Pathogens and Vector Attraction Reduction

- 503.30 Scope.
- 503.31 Special definitions.
- 503.32 Pathogens.
- 503.33 Vector attraction reduction.

§ 503.1**40 CFR Ch. I (7–1–13 Edition)****Subpart E—Incineration**

- 503.40 Applicability.
- 503.41 Special definitions.
- 503.42 General requirements.
- 503.43 Pollutant limits.
- 503.44 Operational standard—total hydrocarbons.
- 503.45 Management practices.
- 503.46 Frequency of monitoring.
- 503.47 Recordkeeping.
- 503.48 Reporting.

APPENDIX A TO PART 503—PROCEDURE TO DETERMINE THE ANNUAL WHOLE SLUDGE APPLICATION RATE FOR A SEWAGE SLUDGE

APPENDIX B TO PART 503—PATHOGEN TREATMENT PROCESSES

AUTHORITY: Sections 405 (d) and (e) of the Clean Water Act, as amended by Pub. L. 95–217, sec. 54(d), 91 Stat. 1591 (33 U.S.C. 1345 (d) and (e)); and Pub. L. 100–4, title IV, sec. 406 (a), (b), 101 Stat., 71, 72 (33 U.S.C. 1251 *et seq.*).

SOURCE: 58 FR 9387, Feb. 19, 1993, unless otherwise noted.

Subpart A—General Provisions**§ 503.1 Purpose and applicability.**

(a) *Purpose.* (1) This part establishes standards, which consist of general requirements, pollutant limits, management practices, and operational standards, for the final use or disposal of sewage sludge generated during the treatment of domestic sewage in a treatment works. Standards are included in this part for sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are pathogen and alternative vector attraction reduction requirements for sewage sludge applied to the land or placed on a surface disposal site.

(2) In addition, the standards in this part include the frequency of monitoring and recordkeeping requirements when sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator. Also included in this part are reporting requirements for Class I sludge management facilities, publicly owned treatment works (POTWs) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve 10,000 people or more.

(b) *Applicability.* (1) This part applies to any person who prepares sewage

sludge, applies sewage sludge to the land, or fires sewage sludge in a sewage sludge incinerator and to the owner/operator of a surface disposal site.

(2) This part applies to sewage sludge applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

(3) This part applies to the exit gas from a sewage sludge incinerator stack.

(4) This part applies to land where sewage sludge is applied, to a surface disposal site, and to a sewage sludge incinerator.

§ 503.2 Compliance period.

(a) Compliance with the standards in this part shall be achieved as expeditiously as practicable, but in no case later than February 19, 1994. When compliance with the standards requires construction of new pollution control facilities, compliance with the standards shall be achieved as expeditiously as practicable, but in no case later than February 19, 1995.

(b) The requirements for frequency of monitoring, recordkeeping, and reporting in this part for total hydrocarbons in the exit gas from a sewage sludge incinerator are effective February 19, 1994 or, if compliance with the operational standard for total hydrocarbons in this part requires the construction of new pollution control facilities, February 19, 1995.

(c) All other requirements for frequency of monitoring, recordkeeping, and reporting in this part are effective on July 20, 1993.

(d) Unless otherwise specified in subpart E, compliance with the requirements in §§ 503.41(c) through (r), 503.43(c), (d) and (e), 503.45(a)(1), (b) through (f), 503.46(a)(1), (a)(3), and (c), and 503.47(f) that were revised on September 3, 1999 shall be achieved as expeditiously as practicable, but in no case later than September 5, 2000. When new pollution control facilities must be constructed to comply with the revised requirements in subpart E, compliance with the revised requirements shall be achieved as expeditiously as practicable but no later than September 4, 2001.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42568, Aug. 4, 1999]

Environmental Protection Agency**§ 503.6****§ 503.3 Permits and direct enforceability.**

(a) Permits. The requirements in this part may be implemented through a permit:

(1) Issued to a “treatment works treating domestic sewage”, as defined in 40 CFR 122.2, in accordance with 40 CFR parts 122 and 124 by EPA or by a State that has a State sludge management program approved by EPA in accordance with 40 CFR part 123 or 40 CFR part 501 or

(2) Issued under subtitle C of the Solid Waste Disposal Act; part C of the Safe Drinking Water Act; the Marine Protection, Research, and Sanctuaries Act of 1972; or the Clean Air Act. “Treatment works treating domestic sewage” shall submit a permit application in accordance with either 40 CFR 122.21 or an approved State program.

(b) Direct enforceability. No person shall use or dispose of sewage sludge through any practice for which requirements are established in this part except in accordance with such requirements.

§ 503.4 Relationship to other regulations.

Disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR 258.2, that complies with the requirements in 40 CFR part 258 constitutes compliance with section 405(d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit shall ensure that the sewage sludge meets the requirements in 40 CFR part 258 concerning the quality of materials disposed in a municipal solid waste landfill unit.

§ 503.5 Additional or more stringent requirements.

(a) On a case-by-case basis, the permitting authority may impose requirements for the use or disposal of sewage sludge in addition to or more stringent than the requirements in this part when necessary to protect public health and the environment from any adverse effect of a pollutant in the sewage sludge.

(b) Nothing in this part precludes a State or political subdivision thereof or interstate agency from imposing re-

quirements for the use or disposal of sewage sludge more stringent than the requirements in this part or from imposing additional requirements for the use or disposal of sewage sludge.

§ 503.6 Exclusions.

(a) *Treatment processes.* This part does not establish requirements for processes used to treat domestic sewage or for processes used to treat sewage sludge prior to final use or disposal, except as provided in § 503.32 and § 503.33.

(b) *Selection of a use or disposal practice.* This part does not require the selection of a sewage sludge use or disposal practice. The determination of the manner in which sewage sludge is used or disposed is a local determination.

(c) *Co-firing of sewage sludge.* This part does not establish requirements for sewage sludge co-fired in an incinerator with other wastes or for the incinerator in which sewage sludge and other wastes are co-fired. Other wastes do not include auxiliary fuel, as defined in 40 CFR 503.41(b), fired in a sewage sludge incinerator.

(d) *Sludge generated at an industrial facility.* This part does not establish requirements for the use or disposal of sludge generated at an industrial facility during the treatment of industrial wastewater, including sewage sludge generated during the treatment of industrial wastewater combined with domestic sewage.

(e) *Hazardous sewage sludge.* This part does not establish requirements for the use or disposal of sewage sludge determined to be hazardous in accordance with 40 CFR part 261.

(f) *Sewage sludge with high PCB concentration.* This part does not establish requirements for the use or disposal of sewage sludge with a concentration of polychlorinated biphenyls (PCBs) equal to or greater than 50 milligrams per kilogram of total solids (dry weight basis).

(g) *Incinerator ash.* This part does not establish requirements for the use or disposal of ash generated during the firing of sewage sludge in a sewage sludge incinerator.

(h) *Grit and screenings.* This part does not establish requirements for the use or disposal of grit (e.g., sand, gravel,

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cinders, or other materials with a high specific gravity) or screenings (e.g., relatively large materials such as rags) generated during preliminary treatment of domestic sewage in a treatment works.

(i) *Drinking water treatment sludge.* This part does not establish requirements for the use or disposal of sludge generated during the treatment of either surface water or ground water used for drinking water.

(j) *Commercial and industrial septage.* This part does not establish requirements for the use or disposal of commercial septage, industrial septage, a mixture of domestic septage and commercial septage, or a mixture of domestic septage and industrial septage.

§ 503.7 Requirement for a person who prepares sewage sludge.

Any person who prepares sewage sludge shall ensure that the applicable requirements in this part are met when the sewage sludge is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator.

§ 503.8 Sampling and analysis.

(a) *Sampling.* Representative samples of sewage sludge that is applied to the land, placed on a surface disposal site, or fired in a sewage sludge incinerator shall be collected and analyzed.

(b) *Methods.* The materials listed below are incorporated by reference in this part. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. The materials are incorporated as they exist on the date of approval, and notice of any change in these materials will be published in the FEDERAL REGISTER. They are available for inspection at the HQ Water Docket Center, EPA/DC, EPA West, Room B102, 1301 Constitution Ave., NW., Washington, DC, and at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Copies may be obtained from the standard producer or publisher listed in the regulation. The

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methods in the materials listed below (or in 40 CFR part 136) shall be used to analyze samples of sewage sludge.

(1) *Enteric viruses.* ASTM Designation: D 4994-89, “Standard Practice for Recovery of Viruses From Wastewater Sludges”, 1992 Annual Book of ASTM Standards: Section 11—Water and Environmental Technology, ASTM, 1916 Race Street, Philadelphia, PA 19103-1187.

(2) *Fecal coliform.* Part 9221 E. or Part 9222 D., “Standard Methods for the Examination of Water and Wastewater”, 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

(3) *Helminth ova.* Yanko, W.A., “Occurrence of Pathogens in Distribution and Marketing Municipal Sludges”, EPA 600/1-87-014, 1987. National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB 88-154273/AS).

(4) *Inorganic pollutants.* “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods”, EPA Publication SW-846, Second Edition (1982) with Updates I (April 1984) and II (April 1985) and Third Edition (November 1986) with Revision I (December 1987). Second Edition and Updates I and II are available from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (PB-87-120-291). Third Edition and Revision I are available from Superintendent of Documents, Government Printing Office, 941 North Capitol Street, NE., Washington, DC 20002 (Document Number 955-001-00000-1).

(5) *Salmonella sp. bacteria.* Part 9260 D., “Standard Methods for the Examination of Water and Wastewater”, 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005; or

Kenner, B.A. and H.P. Clark, “Detection and enumeration of *Salmonella* and *Pseudomonas aeruginosa*”, Journal of the Water Pollution Control Federation, Vol. 46, no. 9, September 1974, pp. 2163-2171. Water Environment Federation, 601 Wythe Street, Alexandria, Virginia 22314.

(6) *Specific oxygen uptake rate.* Part 2710 B., “Standard Methods for the Examination of Water and Wastewater”, 18th Edition, 1992, American Public

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Health Association, 1015 15th Street, NW., Washington, DC 20005.

(7) *Total, fixed, and volatile solids*. Part 2540 G., “Standard Methods for the Examination of Water and Wastewater”, 18th Edition, 1992, American Public Health Association, 1015 15th Street, NW., Washington, DC 20005.

[58 FR 9387, Feb. 19, 1993, as amended at 69 FR 18803, Apr. 9, 2004; 72 FR 14233, Mar. 26, 2007]

§ 503.9 General definitions.

(a) *Apply sewage sludge or sewage sludge applied to the land* means land application of sewage sludge.

(b) *Base flood* is a flood that has a one percent chance of occurring in any given year (*i.e.*, a flood with a magnitude equalled once in 100 years).

(c) *Class I sludge management facility* is any publicly owned treatment works (POTW), as defined in 40 CFR 501.2, required to have an approved pretreatment program under 40 CFR 403.8(a) (including any POTW located in a State that has elected to assume local program responsibilities pursuant to 40 CFR 403.10(e)) and any treatment works treating domestic sewage, as defined in 40 CFR 122.2, classified as a Class I sludge management facility by the EPA Regional Administrator, or, in the case of approved State programs, the Regional Administrator in conjunction with the State Director, because of the potential for its sewage sludge use or disposal practice to affect public health and the environment adversely.

(d) *Cover crop* is a small grain crop, such as oats, wheat, or barley, not grown for harvest.

(e) *CWA* means the Clean Water Act (formerly referred to as either the Federal Water Pollution Act or the Federal Water Pollution Control Act Amendments of 1972), Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483, Public Law 97-117, and Public Law 100-4.

(f) *Domestic septage* is either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or

similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from a grease trap at a restaurant.

(g) *Domestic sewage* is waste and wastewater from humans or household operations that is discharged to or otherwise enters a treatment works.

(h) *Dry weight basis* means calculated on the basis of having been dried at 105 degrees Celsius until reaching a constant mass (*i.e.*, essentially 100 percent solids content).

(i) *EPA* means the United States Environmental Protection Agency.

(j) *Feed crops* are crops produced primarily for consumption by animals.

(k) *Fiber crops* are crops such as flax and cotton.

(l) *Food crops* are crops consumed by humans. These include, but are not limited to, fruits, vegetables, and tobacco.

(m) *Ground water* is water below the land surface in the saturated zone.

(n) *Industrial wastewater* is wastewater generated in a commercial or industrial process.

(o) *Municipality* means a city, town, borough, county, parish, district, association, or other public body (including an intermunicipal Agency of two or more of the foregoing entities) created by or under State law; an Indian tribe or an authorized Indian tribal organization having jurisdiction over sewage sludge management; or a designated and approved management Agency under section 208 of the CWA, as amended. The definition includes a special district created under State law, such as a water district, sewer district, sanitary district, utility district, drainage district, or similar entity, or an integrated waste management facility as defined in section 201(e) of the CWA, as amended, that has as one of its principal responsibilities the treatment, transport, use, or disposal of sewage sludge.

(p) *Permitting authority* is either EPA or a State with an EPA-approved sludge management program.

(q) *Person* is an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

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(r) *Person who prepares sewage sludge* is either the person who generates sewage sludge during the treatment of domestic sewage in a treatment works or the person who derives a material from sewage sludge.

(s) *Place sewage sludge or sewage sludge placed* means disposal of sewage sludge on a surface disposal site.

(t) *Pollutant* is an organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the Administrator of EPA, cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunction in reproduction), or physical deformations in either organisms or offspring of the organisms.

(u) *Pollutant limit* is a numerical value that describes the amount of a pollutant allowed per unit amount of sewage sludge (e.g., milligrams per kilogram of total solids); the amount of a pollutant that can be applied to a unit area of land (e.g., kilograms per hectare); or the volume of a material that can be applied to a unit area of land (e.g., gallons per acre).

(v) *Runoff* is rainwater, leachate, or other liquid that drains overland on any part of a land surface and runs off of the land surface.

(w) *Sewage sludge* is solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

(x) *State* is one of the United States of America, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American

Samoa, the Trust Territory of the Pacific Islands, the Commonwealth of the Northern Mariana Islands, and an Indian Tribe eligible for treatment as a State pursuant to regulations promulgated under the authority of section 518(e) of the CWA.

(y) *Store or storage of sewage sludge* is the placement of sewage sludge on land on which the sewage sludge remains for two years or less. This does not include the placement of sewage sludge on land for treatment.

(z) *Treat or treatment of sewage sludge* is the preparation of sewage sludge for final use or disposal. This includes, but is not limited to, thickening, stabilization, and dewatering of sewage sludge. This does not include storage of sewage sludge.

(aa) *Treatment works* is either a federally owned, publicly owned, or privately owned device or system used to treat (including recycle and reclaim) either domestic sewage or a combination of domestic sewage and industrial waste of a liquid nature.

(bb) *Wetlands* means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

Subpart B—Land Application**§ 503.10 Applicability.**

(a) This subpart applies to any person who prepares sewage sludge that is applied to the land, to any person who applies sewage sludge to the land, to sewage sludge applied to the land, and to the land on which sewage sludge is applied.

(b)(1) *Bulk sewage sludge*. The general requirements in § 503.12 and the management practices in § 503.14 do not apply when bulk sewage sludge is applied to the land if the bulk sewage sludge meets the ceiling concentrations in Table 1 of § 503.13 and the pollutant concentrations in Table 3 of

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solids in the sewage sludge at the beginning of that period is reduced by less than 17 percent, vector attraction reduction is achieved.

(3) When the 38 percent volatile solids reduction requirement in § 503.33(b)(1) cannot be met for an aerobically digested sewage sludge, vector attraction reduction can be demonstrated by digesting a portion of the previously digested sewage sludge that has a percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20 degrees Celsius. When at the end of the 30 days, the volatile solids in the sewage sludge at the beginning of that period is reduced by less than 15 percent, vector attraction reduction is achieved.

(4) The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20 degrees Celsius.

(5) Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40 degrees Celsius and the average temperature of the sewage sludge shall be higher than 45 degrees Celsius.

(6) The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for two hours and then at 11.5 or higher for an additional 22 hours.

(7) The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75 percent based on the moisture content and total solids prior to mixing with other materials.

(8) The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90 percent based on the moisture content and total solids prior to mixing with other materials.

(9)(i) Sewage sludge shall be injected below the surface of the land.

(ii) No significant amount of the sewage sludge shall be present on the land

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surface within one hour after the sewage sludge is injected.

(iii) When the sewage sludge that is injected below the surface of the land is Class A with respect to pathogens, the sewage sludge shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

(10)(i) Sewage sludge applied to the land surface or placed on an active sewage sludge unit shall be incorporated into the soil within six hours after application to or placement on the land, unless otherwise specified by the permitting authority.

(ii) When sewage sludge that is incorporated into the soil is Class A with respect to pathogens, the sewage sludge shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

(11) Sewage sludge placed on an active sewage sludge unit shall be covered with soil or other material at the end of each operating day.

(12) The pH of domestic septage shall be raised to 12 or higher by alkali addition and, without the addition of more alkali, shall remain at 12 or higher for 30 minutes.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42571, Aug. 4, 1999]

Subpart E—Incineration**§ 503.40 Applicability.**

(a) This subpart applies to a person who fires sewage sludge in a sewage sludge incinerator, to a sewage sludge incinerator, and to sewage sludge fired in a sewage sludge incinerator.

(b) This subpart applies to the exit gas from a sewage sludge incinerator stack.

(c) The management practice in § 503.45(a), the frequency of monitoring requirement for total hydrocarbon concentration in § 503.46(b) and the record-keeping requirements for total hydrocarbon concentration in § 503.47(c) and (n) do not apply if the following conditions are met:

(1) The exit gas from a sewage sludge incinerator stack is monitored continuously for carbon monoxide.

(2) The monthly average concentration of carbon monoxide in the exit gas

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from a sewage sludge incinerator stack, corrected for zero percent moisture and to seven percent oxygen, does not exceed 100 parts per million on a volumetric basis.

(3) The person who fires sewage sludge in a sewage sludge incinerator retains the following information for five years:

(i) The carbon monoxide concentrations in the exit gas; and

(ii) A calibration and maintenance log for the instrument used to measure the carbon monoxide concentration.

(4) Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater submit the monthly average carbon monoxide concentrations in the exit gas to the permitting authority on February 19 of each year.

[58 FR 9387, Feb. 19, 1993, as amended at 59 FR 9099, Feb. 25, 1994]

§ 503.41 Special definitions.

(a) *Air pollution control device* is one or more processes used to treat the exit gas from a sewage sludge incinerator stack.

(b) *Auxiliary fuel* is fuel used to augment the fuel value of sewage sludge. This includes, but is not limited to, natural gas, fuel oil, coal, gas generated during anaerobic digestion of sewage sludge, and municipal solid waste (not to exceed 30 percent of the dry weight of sewage sludge and auxiliary fuel together). Hazardous wastes are not auxiliary fuel.

(c) *Average daily concentration* is the arithmetic mean of the concentration of a pollutant in milligrams per kilogram of sewage sludge (dry weight basis) in the samples collected and analyzed in a month.

(d) *Control efficiency* is the mass of a pollutant in the sewage sludge fed to an incinerator minus the mass of that pollutant in the exit gas from the incinerator stack divided by the mass of the pollutant in the sewage sludge fed to the incinerator.

(e) *Dispersion factor* is the ratio of the increase in the ground level ambient air concentration for a pollutant at or beyond the property line of the site

where the sewage sludge incinerator is located to the mass emission rate for the pollutant from the incinerator stack.

(f) *Fluidized bed incinerator* is an enclosed device in which organic matter and inorganic matter in sewage sludge are combusted in a bed of particles suspended in the combustion chamber gas.

(g) *Hourly average* is the arithmetic mean of all measurements, taken during an hour. At least two measurements must be taken during the hour.

(h) *Incineration* is the combustion of organic matter and inorganic matter in sewage sludge by high temperatures in an enclosed device.

(i) *Incinerator operating combustion temperature* is the arithmetic mean of the temperature readings in the hottest zone of the furnace recorded in a day (24 hours) when the temperature is averaged and recorded at least hourly during the hours the incinerator operates in a day.

(j) *Monthly average* is the arithmetic mean of the hourly averages for the hours a sewage sludge incinerator operates during the month.

(k) *Performance test combustion temperature* is the arithmetic mean of the average combustion temperature in the hottest zone of the furnace for each of the runs in a performance test.

(l) *Risk specific concentration* is the allowable increase in the average daily ground level ambient air concentration for a pollutant from the incineration of sewage sludge at or beyond the property line of the site where the sewage sludge incinerator is located.

(m) *Sewage sludge feed rate* is either the average daily amount of sewage sludge fired in all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located for the number of days in a 365 day period that each sewage sludge incinerator operates, or the average daily design capacity for all sewage sludge incinerators within the property line of the site where the sewage sludge incinerators are located.

(n) *Sewage sludge incinerator* is an enclosed device in which only sewage sludge and auxiliary fuel are fired.

(o) *Stack height* is the difference between the elevation of the top of a sewage sludge incinerator stack and the

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elevation of the ground at the base of the stack when the difference is equal to or less than 65 meters. When the difference is greater than 65 meters, stack height is the creditable stack height determined in accordance with 40 CFR 51.100 (ii).

(p) *Total hydrocarbons* means the organic compounds in the exit gas from a sewage sludge incinerator stack measured using a flame ionization detection instrument referenced to propane.

(q) *Wet electrostatic precipitator* is an air pollution control device that uses both electrical forces and water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

(r) *Wet scrubber* is an air pollution control device that uses water to remove pollutants in the exit gas from a sewage sludge incinerator stack.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42571, Aug. 4, 1999]

§ 503.42 General requirements.

No person shall fire sewage sludge in a sewage sludge incinerator except in compliance with the requirements in this subpart.

§ 503.43 Pollutant limits.

(a) Firing of sewage sludge in a sewage sludge incinerator shall not violate the requirements in the National Emission Standard for Beryllium in subpart C of 40 CFR part 61.

(b) Firing of sewage sludge in a sewage sludge incinerator shall not violate the requirements in the National Emission Standard for Mercury in subpart E of 40 CFR part 61.

(c) *Pollutant limit—lead.* (1) The average daily concentration for lead in sewage sludge fed to a sewage sludge incinerator shall not exceed the concentration calculated using Equation (4).

$$C = \frac{0.1 \times \text{NAAQS} \times 86,400}{\text{DF} \times (1 - \text{CE}) \times \text{SF}} \quad \text{Eq. (4)}$$

Where:

C = Average daily concentration of lead in sewage sludge.

NAAQS = National Ambient Air Quality Standard for lead in micrograms per cubic meter.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

CE = Sewage sludge incinerator control efficiency for lead in hundredths.

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SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

(2) The dispersion factor (DF) in equation (4) shall be determined from an air dispersion model in accordance with § 503.43(e).

(i) When the sewage sludge stack height is 65 meters or less, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).

(ii) When the sewage sludge incinerator stack height exceeds 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100(ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (4).

(3) The control efficiency (CE) for equation (4) shall be determined from a performance test of the sewage sludge incinerator in accordance with § 503.43(e).

(d) *Pollutant limit—arsenic, cadmium, chromium, and nickel.* (1) The average daily concentration for arsenic, cadmium, chromium, and nickel in sewage sludge fed to a sewage sludge incinerator each shall not exceed the concentration calculated using equation (5).

$$C = \frac{\text{RSC} \times 86,400}{\text{DF} \times (1 - \text{CE}) \times \text{SF}} \quad \text{Eq. (5)}$$

Where:

C = Average daily concentration of arsenic, cadmium, chromium, or nickel in sewage sludge.

CE = Sewage sludge incinerator control efficiency for arsenic, cadmium, chromium, or nickel in hundredths.

DF = Dispersion factor in micrograms per cubic meter per gram per second.

RSC = Risk specific concentration for arsenic, cadmium, chromium, or nickel in micrograms per cubic meter.

SF = Sewage sludge feed rate in metric tons per day (dry weight basis).

(2) The risk specific concentrations for arsenic, cadmium, and nickel used in equation (5) shall be obtained from Table 1 of § 503.43.

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TABLE 1 OF § 503.43—RISK SPECIFIC CONCENTRATION FOR ARSENIC, CADMIUM, AND NICKEL

Pollutant	Risk specific concentration (micrograms per cubic meter)
Arsenic	0.023
Cadmium	0.057
Nickel	2.0

(3) The risk specific concentration for chromium used in equation (5) shall be obtained from Table 2 of § 503.43 or shall be calculated using equation (6).

TABLE 2 OF § 503.43—RISK SPECIFIC CONCENTRATION FOR CHROMIUM

Type of Incinerator	Risk specific concentration (micrograms per cubic meter)
Fluidized bed with wet scrubber	0.65
Fluidized bed with wet scrubber and wet electrostatic precipitator	0.23
Other types with wet scrubber	0.064
Other types with wet scrubber and wet electrostatic precipitator	0.016

$$RSC = \frac{0.0085}{r} \quad \text{Eq. (6)}$$

Where:

RSC=risk specific concentration for chromium in micrograms per cubic meter used in equation (5).

r=decimal fraction of the hexavalent chromium concentration in the total chromium concentration measured in the exit gas from the sewage sludge incinerator stack in hundredths.

(4) The dispersion factor (DF) in equation (5) shall be determined from an air dispersion model in accordance with § 503.43(e).

(i) When the sewage sludge incinerator stack height is equal to or less than 65 meters, the actual sewage sludge incinerator stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).

(ii) When the sewage sludge incinerator stack height is greater than 65 meters, the creditable stack height shall be determined in accordance with 40 CFR 51.100(ii) and the creditable stack height shall be used in the air dispersion model to determine the dispersion factor (DF) for equation (5).

(5) The control efficiency (CE) for equation (5) shall be determined from a performance test of the sewage sludge incinerator in accordance with § 503.43(e).

(e) *Air dispersion modeling and performance testing.* (1) The air dispersion model used to determine the dispersion factor in § 503.43 (c)(2) and (d)(4) shall be appropriate for the geographical, physical, and population characteristics at the sewage sludge incinerator site. The performance test used to determine the control efficiencies in § 503.43 (c)(3) and (d)(5) shall be appropriate for the type of sewage sludge incinerator.

(2) For air dispersion modeling initiated after September 3, 1999, the modeling results shall be submitted to the permitting authority 30 days after completion of the modeling. In addition to the modeling results, the submission shall include a description of the air dispersion model and the values used for the model parameters.

(3) The following procedures, at a minimum, shall apply in conducting performance tests to determine the control efficiencies in § 503.43(c)(3) and (d)(5) after September 3, 1999:

(i) The performance test shall be conducted under representative sewage sludge incinerator conditions at the highest expected sewage sludge feed rate within the design capacity of the sewage sludge incinerator.

(ii) The permitting authority shall be notified at least 30 days prior to any performance test so the permitting authority may have the opportunity to observe the test. The notice shall include a test protocol with incinerator operating conditions and a list of test methods to be used.

(iii) Each performance test shall consist of three separate runs using the applicable test method. The control efficiency for a pollutant shall be the arithmetic mean of the control efficiencies for the pollutant from the three runs.

(4) The pollutant limits in § 503.43 (c) and (d) of this section shall be submitted to the permitting authority no later than 30 days after completion of the air dispersion modeling and performance test.

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(5) Significant changes in geographic or physical characteristics at the incinerator site or in incinerator operating conditions require new air dispersion modeling or performance testing to determine a new dispersion factor or a new control efficiency that will be used to calculate revised pollutant limits.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42572, Aug. 4, 1999]

§ 503.44 Operational standard—total hydrocarbons.

(a) The total hydrocarbons concentration in the exit gas from a sewage sludge incinerator shall be corrected for zero percent moisture by multiplying the measured total hydrocarbons concentration by the correction factor calculated using equation (7).

$$\text{Correction factor} = \frac{1}{(1 - X)} \quad \text{Eq. (7)}$$

(percent moisture)

Where:

X=decimal fraction of the percent moisture in the sewage sludge incinerator exit gas in hundredths.

(b) The total hydrocarbons concentration in the exit gas from a sewage sludge incinerator shall be corrected to seven percent oxygen by multiplying the measured total hydrocarbons concentration by the correction factor calculated using equation (8).

$$\text{Correction factor} = \frac{14}{(21 - Y)} \quad \text{Eq. (8)}$$

(oxygen)

Where:

Y=Percent oxygen concentration in the sewage sludge incinerator stack exit gas (dry volume/dry volume).

(c) The monthly average concentration for total hydrocarbons in the exit gas from a sewage sludge incinerator stack, corrected for zero percent moisture using the correction factor from equation (7) and to seven percent oxygen using the correction factor from equation (8), shall not exceed 100 parts per million on a volumetric basis when measured using the instrument required by § 503.45(a).

40 CFR Ch. I (7–1–13 Edition)**§ 503.45 Management practices.**

(a)(1) An instrument that continuously measures and records the total hydrocarbons concentration in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(2) The total hydrocarbons instrument shall employ a flame ionization detector; shall have a heated sampling line maintained at a temperature of 150 degrees Celsius or higher at all times; and shall be calibrated at least once every 24-hour operating period using propane.

(b) An instrument that continuously measures and records the oxygen concentration in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(c) An instrument that continuously measures and records information used to determine the moisture content in the sewage sludge incinerator stack exit gas shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(d) An instrument that continuously measures and records combustion temperatures shall be installed, calibrated, operated, and maintained for a sewage sludge incinerator.

(e) Operation of a sewage sludge incinerator shall not cause the operating combustion temperature for the sewage sludge incinerator to exceed the performance test combustion temperature by more than 20 percent.

(f) An air pollution control device shall be appropriate for the type of sewage sludge incinerator and the operating parameters for the air pollution control device shall be adequate to indicate proper performance of the air pollution control device. For sewage sludge incinerators subject to the requirements in subpart O of 40 CFR part 60, operation of the air pollution control device shall not violate the requirements for the air pollution control device in subpart O of 40 CFR part 60. For all other sewage sludge incinerators, operation of the air pollution control device shall not cause a significant exceedance of the average value

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for the air pollution control device operating parameters from the performance test required by § 503.43 (c)(3) and (d)(5).

(g) Sewage sludge shall not be fired in a sewage sludge incinerator if it is likely to adversely affect a threatened or endangered species listed under section 4 of the Endangered Species Act or its designated critical habitat.

(h) The instruments required in § 503.45(a)–(d) shall be appropriate for the type of sewage sludge incinerator.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42573, Aug. 4, 1999]

§ 503.46 Frequency of monitoring.

(a) *Sewage sludge.* (1) The frequency of monitoring for beryllium shall be as required in subpart C of 40 CFR part 61, and for mercury as required in subpart E of 40 CFR part 61.

(2) The frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel in sewage sludge fed to a sewage sludge incinerator shall be the frequency in Table 1 of § 503.46.

TABLE 1 OF § 503.46—FREQUENCY OF MONITORING—INCINERATION

Amount of sewage sludge ¹ (metric tons per 365 day period)	Frequency
Greater than zero but less than 290	Once per year.
Equal to or greater than 290 but less than 1,500	Once per quarter (four times per year).
Equal to or greater than 1,500 but less than 15,000	Once per 60 days (six times per year).
Equal to or greater than 15,000	Once per month (12 times per year).

¹ Amount of sewage sludge fired in a sewage sludge incinerator (dry weight basis).

(3) After the sewage sludge has been monitored for two years at the frequency in Table 1 of § 503.46, the permitting authority may reduce the frequency of monitoring for arsenic, cadmium, chromium, lead, and nickel.

(b) *Total hydrocarbons, oxygen concentration, information to determine moisture content, and combustion temperatures.* The total hydrocarbons concentration and oxygen concentration in the exit gas from a sewage sludge incinerator stack, the information used to measure moisture content in the exit gas, and the combustion temperatures for the sewage sludge incinerator shall be monitored continuously.

(c) *Air pollution control device operating parameters.* For sewage sludge incinerators subject to the requirements in subpart O of 40 CFR part 60, the frequency of monitoring for the appropriate air pollution control device operating parameters shall be the frequency of monitoring in subpart O of 40 CFR part 60. For all other sewage sludge incinerators, the appropriate air pollution control device operating parameters shall be at least daily.

(Approved by the Office of Management and Budget under control number 2040-0157)

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42573, Aug. 4, 1999]

§ 503.47 Recordkeeping.

(a) The person who fires sewage sludge in a sewage sludge incinerator shall develop the information in § 503.47(b) through § 503.47(n) and shall retain that information for five years.

(b) The concentration of lead, arsenic, cadmium, chromium, and nickel in the sewage sludge fed to the sewage sludge incinerator.

(c) The total hydrocarbons concentrations in the exit gas from the sewage sludge incinerator stack.

(d) Information that indicates the requirements in the National Emission Standard for beryllium in subpart C of 40 CFR part 61 are met.

(e) Information that indicates the requirements in the National Emission Standard for mercury in subpart E of 40 CFR part 61 are met.

(f) The operating combustion temperatures for the sewage sludge incinerator.

(g) Values for the air pollution control device operating parameters.

(h) The oxygen concentration and information used to measure moisture content in the exit gas from the sewage sludge incinerator stack.

(i) The sewage sludge feed rate.

(j) The stack height for the sewage sludge incinerator.

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(k) The dispersion factor for the site where the sewage sludge incinerator is located.

(l) The control efficiency for lead, arsenic, cadmium, chromium, and nickel for each sewage sludge incinerator.

(m) The risk specific concentration for chromium calculated using equation (6), if applicable.

(n) A calibration and maintenance log for the instruments used to measure the total hydrocarbons concentration and oxygen concentration in the exit gas from the sewage sludge incinerator stack, the information needed to determine moisture content in the exit gas, and the combustion temperatures.

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[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42573, Aug. 4, 1999]

§ 503.48 Reporting.

Class I sludge management facilities, POTWs (as defined in 40 CFR 501.2) with a design flow rate equal to or greater than one million gallons per day, and POTWs that serve a population of 10,000 people or greater shall submit the information in § 503.47(b) through § 503.47(h) to the permitting authority on February 19 of each year.

(Approved by the Office of Management and Budget under control number 2040-0157)

APPENDIX A TO PART 503—PROCEDURE TO DETERMINE THE ANNUAL WHOLE SLUDGE APPLICATION RATE FOR A SEWAGE SLUDGE

Section 503.13(a)(4)(ii) requires that the product of the concentration for each pollutant listed in Table 4 of § 503.13 in sewage sludge sold or given away in a bag or other container for application to the land and the annual whole sludge application rate (AWSAR) for the sewage sludge not cause the annual pollutant loading rate for the pollutant in Table 4 of § 503.13 to be exceeded. This appendix contains the procedure used to determine the AWSAR for a sewage sludge that does not cause the annual pollutant loading rates in Table 4 of § 503.13 to be exceeded.

The relationship between the annual pollutant loading rate (APLR) for a pollutant and the annual whole sludge application rate (AWSAR) for a sewage sludge is shown in equation (1).

$$\text{APLR} = C \times \text{AWSAR} \times 0.001 \quad (1)$$

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Where:

APLR=Annual pollutant loading rate in kilograms per hectare per 365 day period.

C=Pollutant concentration in milligrams, per kilogram of total solids (dry weight basis).

AWSAR=Annual whole sludge application rate in metric tons per hectare per 365 day period (dry weight basis).

0.001=A conversion factor.

To determine the AWSAR, equation (1) is rearranged into equation (2):

$$\text{AWSAR} = \frac{\text{APLR}}{C \times 0.001} \quad (2)$$

The procedure used to determine the AWSAR for a sewage sludge is presented below.

PROCEDURE:

1. Analyze a sample of the sewage sludge to determine the concentration for each of the pollutants listed in Table 4 of § 503.13 in the sewage sludge.

2. Using the pollutant concentrations from Step 1 and the APLRs from Table 4 of § 503.13, calculate an AWSAR for each pollutant using equation (2) above.

3. The AWSAR for the sewage sludge is the lowest AWSAR calculated in Step 2.

APPENDIX B TO PART 503—PATHOGEN TREATMENT PROCESSES

A. Processes To Significantly Reduce Pathogens (PSRP)

1. Aerobic digestion—Sewage sludge is agitated with air or oxygen to maintain aerobic conditions for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 40 days at 20 degrees Celsius and 60 days at 15 degrees Celsius.

2. Air drying—Sewage sludge is dried on sand beds or on paved or unpaved basins. The sewage sludge dries for a minimum of three months. During two of the three months, the ambient average daily temperature is above zero degrees Celsius.

3. Anaerobic digestion—Sewage sludge is treated in the absence of air for a specific mean cell residence time at a specific temperature. Values for the mean cell residence time and temperature shall be between 15 days at 35 to 55 degrees Celsius and 60 days at 20 degrees Celsius.

4. Composting—Using either the within-vessel, static aerated pile, or windrow composting methods, the temperature of the sewage sludge is raised to 40 degrees Celsius or higher and remains at 40 degrees Celsius or higher for five days. For four hours during the five days, the temperature in the compost pile exceeds 55 degrees Celsius.

5. Lime stabilization—Sufficient lime is added to the sewage sludge to raise the pH of

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the sewage sludge to 12 after two hours of contact.

B. Processes to Further Reduce Pathogens (PFRP)

1. Composting—Using either the within-vessel composting method or the static aerated pile composting method, the temperature of the sewage sludge is maintained at 55 degrees Celsius or higher for three days.

Using the windrow composting method, the temperature of the sewage sludge is maintained at 55 degrees or higher for 15 days or longer. During the period when the compost is maintained at 55 degrees or higher, there shall be a minimum of five turnings of the windrow.

2. Heat drying—Sewage sludge is dried by direct or indirect contact with hot gases to reduce the moisture content of the sewage sludge to 10 percent or lower. Either the temperature of the sewage sludge particles exceeds 80 degrees Celsius or the wet bulb temperature of the gas in contact with the

sewage sludge as the sewage sludge leaves the dryer exceeds 80 degrees Celsius.

3. Heat treatment—Liquid sewage sludge is heated to a temperature of 180 degrees Celsius or higher for 30 minutes.

4. Thermophilic aerobic digestion—Liquid sewage sludge is agitated with air or oxygen to maintain aerobic conditions and the mean cell residence time of the sewage sludge is 10 days at 55 to 60 degrees Celsius.

5. Beta ray irradiation—Sewage sludge is irradiated with beta rays from an accelerator at dosages of at least 1.0 megarad at room temperature (ca. 20 degrees Celsius).

(6) Gamma ray irradiation—Sewage sludge is irradiated with gamma rays from certain isotopes, such as ⁶⁰Cobalt and ¹³⁷Cesium, at dosages of at least 1.0 megarad at room temperature (ca. 20 °Celsius).

7. Pasteurization—The temperature of the sewage sludge is maintained at 70 degrees Celsius or higher for 30 minutes or longer.

[58 FR 9387, Feb. 19, 1993, as amended at 64 FR 42573, Aug. 4, 1999]

SUBCHAPTER P [RESERVED]