NACWA
A Clear Commitment to America's Waters

August 3, 2010

Proposed Rulemaking–Identification of Non-Hazardous
Secondary Materials That Are Solid Waste
U.S. Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Ave., NW
Washington, DC 20460

Attention: Docket ID No. EPA–HQ–RCRA–2008–0329

Dear Sir or Madam:

The National Association of Clean Water Agencies (NACWA) appreciates this opportunity to provide comments on the United States Environmental Protection Agency's ("EPA" or "the Agency") proposed rule titled "Identification of Non-Hazardous Secondary Materials That Are Solid Waste" (Proposed Rule). 75 Fed. Reg. 31844 (Jun. 4, 2010). NACWA represents the interests of nearly three hundred of the nation's publicly owned wastewater treatment utilities (POTWs), which collectively serve the majority of the sewered population in the United States. For forty years, NACWA has maintained a leadership role in legal and policy issues affecting clean water agencies, and has been at the forefront of the development and implementation of scientifically-based, technically-sound, and cost-effective environmental programs for protecting public and ecosystem health.

EPA's Proposed Rule, if finalized, will have an immediate and significant impact on the ability of many of NACWA's members to manage the thousands of tons of sewage sludge they generate on a daily basis. NACWA's members rely on having multiple options for the management of this sludge, but the list of available options has slowly shrunk over the years for many municipalities. EPA's proposed action will have a devastating impact on sewage sludge incineration – which is used to manage approximately a fifth of the sludge generated annually in the U.S. – and eviscerate progress toward a new, viable source of renewable energy for the country.

Accordingly, NACWA requests that EPA:

1. Exercise its discretion and exclude or exempt sewage sludge that is combusted from the final rule's definition of non-hazardous solid waste and preserve the current successful regulatory framework for sewage sludge and sewage sludge incinerators (SSIs) pursuant to the regulations contained within 40 C.F.R. Part 503 (Part 503).

NACWA at 40
A WATERSHED MOMENT
1970–2010

National Association of
Clean Water Agencies
1816 Jefferson Place, NW
Washington DC 20036-2505

p 202.833.2672 f 202.833.4657
www.nacwa.org · info@nacwa.org

2. Recognize that sewage sludge and scum (a.k.a. skimmings, the floatable materials removed during wastewater treatment) are legitimate fuels.

3. Classify the energy recovery and energy production devices employed by POTWs, both as elements of the incineration process and as stand-alone processes, as legitimate energy recovery systems.

4. Strengthen the language in the Proposed Rule to clearly indicate that its determination that sewage sludge is a non-hazardous solid waste does not apply to, and will not impact, other sewage sludge management options regulated under Part 503.

With these comments, NACWA urges EPA to adhere to Congress' clear intent to provide for the safe use and disposal of sewage sludge, to preserve local control over these management choices, to promote the beneficial use of sewage sludge, and to preserve incineration as a safe, viable, and cost-effective management practice for sewage sludge.

NACWA also requests that EPA decouple finalization of the Proposed Rule from the finalization of the proposed Commercial/Industrial Solid Waste Incinerators (CISWI) Definitions Rule, 75 Fed. Reg. 31938, and the proposed Boiler Maximum Achievable Control Technology (MACT) Rule, 75 Fed. Reg. 32005, both issued in the *Federal Register* on June 4, 2010. Finalization of the proposed rules in tandem is inappropriate as stakeholders must know what solid wastes are covered under the new rule before they can meaningfully comment on the solid waste incineration and boiler rules.

I. EPA Should Preserve the Current Successful Regulatory Framework for Burning Sewage Sludge Pursuant To Part 503

A. EPA Can Exclude or Exempt Sewage Sludge from the Proposed Rule

The Agency should provide a regulatory exclusion for sewage sludge burned in incinerators, which it sought comment on in the Proposed Rule. This will preserve the current framework for regulating sewage sludge under Part 503, which was developed under the authority of Clean Water Act (CWA) § 405 and the Resource Conservation and Recovery Act (RCRA).[1] EPA clearly has discretion to take such action, and has exercised it to create several other RCRA definitional exclusions. 40 C.F.R. § 261.4 (excluding materials from regulation as hazardous wastes).

EPA also has the discretion to exempt sewage sludge burned in incinerators. RCRA § 1006(b) requires EPA to integrate RCRA requirements with the requirements of the CWA and the Clean Air Act (CAA), as well as other laws. To prevent regulatory duplication, EPA has a non-discretionary duty to consider all environmental laws when promulgating regulations under RCRA. EPA has repeatedly exercised this discretion to ensure that waste management regimes created under other laws are not disrupted. For example, EPA exempted certain PBA-contaminated wastes from RCRA regulation because they are already managed under the Toxic Substances Control Act (TSCA). 40 C.F.R. § 261.8; 55 Fed. Reg. 11798, 11841 (Identification and Listing of Hazardous Waste) (March 29, 1990) (finding that "new regulation of these wastes under RCRA may be disruptive" and "does not appear to be necessary," as "the regulation of these wastes under TSCA is adequate to protect human

[1] 75 Fed. Reg. 31866 (inviting comments on whether "it is within [EPA's] discretion . . . . to provide a regulatory solid waste exclusion for sewage sludge burned in incinerators that would preserve the current framework for regulating sewage sludge managed under section 405 of the CWA to avoid redundancy").

health and the environment"). Similarly, EPA has exempted industrial ethyl alcohol from RCRA regulation because such regulation "was considered redundant" in light of comprehensive regulations already implemented by the Bureau of Alcohol, Tobacco and Firearms. 40 C.F.R. § 261.6(a)(3)(i); *see* 51 Fed. Reg. 28664, 28671 (Exports of Hazardous Waste) (August 8, 1986).

Both Congress and EPA gave comprehensive and careful thought to the proper regulation of the use and disposal of sewage sludge under the CWA, the CAA and RCRA. Deeming sewage sludge a solid waste when incinerated for promulgation of a rule under CAA § 129 violates EPA's non-discretionary duty to harmonize environmental laws under RCRA because emissions from SSIs are already comprehensively regulated under other statutes. EPA has both the authority and the duty to maintain the comprehensive sewage sludge management programs already in place under these laws and, accordingly, must exclude or exempt sewage sludge that is combusted from the Proposed Rule.

B. EPA Should Exclude or Exempt Sewage Sludge from the Proposed Rule and Preserve the Current Successful Regulatory Structure for SSIs

Since the 1960s, federal regulation of publicly owned treatment works (POTWs) and sewage sludge has evolved under the CWA, the CAA, and RCRA, culminating in recent decades in a complete and comprehensive program that proactively regulates all facets of the use of sewage sludge. In particular, the Part 503 regulations and CAA § 112 form a cohesive, time-tested regulatory framework that provides for the safe use and disposal of sewage sludge, including incineration and other beneficial uses. America's clean water agencies have invested heavily in and depend on this clear regulatory system.

1. Sewage Sludge Quality and Incineration Is Strictly Regulated under the CWA

Since 1993, POTWs that practice incineration have been subject to a comprehensive, risk-based program for reducing the potential environmental risks of sewage sludge pursuant to CWA § 405 and the implementing regulations set forth in Part 503. Section 405(d) of the CWA requires EPA to establish numeric limits and management practices that protect public health and the environment from the adverse effects of pollutants in sewage sludge. Section 405(e) of the CWA prohibits any person from disposing of sewage sludge from a POTW through any use or disposal practice for which regulations have been established pursuant to Section 405, except in compliance with the Part 503 regulations.

In the Part 503 regulations, EPA has specified the management practices for the utilization and disposal of sewage sludge that are protective of public health and the environment. As established by the risk assessment for Part 503, emissions from the incineration of sewage sludge are low and do not pose a risk to public health or the environment. 58 Fed. Reg. 9248, 9249 (Feb. 19, 1993) (Standards for the Use or Disposal of Sewage Sludge) ("even when sludge is incinerated and the population potentially exposed to the incinerator emissions is greater, the effects are small"). To ensure the safety of sewage sludge incineration, Part 503 requires risk-based limitations for arsenic, cadmium, chromium, lead, and nickel; compliance with the National Standards for Hazardous Air Pollutants (NESHAPs) for mercury and beryllium; operational emission limits for total hydrocarbon (the surrogate for all potentially toxic organic compounds) or an alternative emission limit for carbon monoxide; and numerous other general management, monitoring, recordkeeping and reporting requirements. 40 C.F.R. Part 503, Subpart E.

The numeric emission limits and management practice requirements established under the Part 503 regulations are based on one of the Agency's largest risk assessments that was conducted in the late 1980s and

early 1990s to protect human health and the environment from any reasonably anticipated adverse effects from pollutants that may be present in sewage sludge.[2] As a result, SSIs demonstrate that the emissions from their units are not adversely impacting human health and the environment by demonstrating compliance with the Part 503 requirements. Moreover, the Part 503 regulations are continually reviewed as EPA regularly identifies and performs risk assessments on newly identified pollutants. *See, e.g.*, 66 Fed. Reg. 66228 (Dec. 21, 2001) (evaluating dioxin levels in sewage sludge and determining that "no further regulation of sewage sludge that is placed in a surface disposal unit or incinerated in a SSI is needed to protect public health and the environment from any reasonably anticipated adverse effects of dioxins"); 68 Fed. Reg. 75531 (responding to the National Research Council's recommendations based on its review under Section 405(d)(2)(C)).

Pursuant to 40 C.F.R. Part 403 (Part 403), POTWs additionally implement, through local regulatory authority, pretreatment standards to prevent discharge of pollutants to the POTW that may pass through or interfere with treatment processes. Pretreatment reduces harmful constituents in the sewage sludge combusted by incinerators. Pretreatment has dramatically reduced the contaminants in sewage sludge and accordingly emissions from SSIs have become cleaner. Comparison of the sewage sludge quality measured in the 1980s[3] with the measurements in 2006-2007 Targeted National Sewage Sludge Survey shows a clear improvement in sewage sludge quality since Part 403 and 503 were implemented.[4] Specifically, the Northeast Ohio Regional Sewer District (NEORSD), which serves the City of Cleveland and 61 suburban communities, has seen significant decreases in the concentrations of heavy metals in both its influent, attributable to the Part 403 regulations, and its effluent, attributable to both Part 403 and 503.[5] Between 1980 and 2004, NEORSD has seen the concentration of lead in the influent reduced by 95% while the concentration of lead in the effluent was reduced by 100%.[6]

Given the reduction in metals entering wastewater treatment plants due to effective pre-treatment programs and the implementation of Part 503, there has been a significant reduction in air emissions from SSIs since the early 1970s. Many POTWs are able to lower emissions far below the site-specific metal concentration limits for burned sewage sludge calculated using the Part 503 risk-based formula because of improvements in scrubber devices and in operational techniques developed by POTWs to comply with the Part 503 limits including higher exhaust gas temperatures, lower burning zone temperatures, and higher pressure drops.

For example, at NEORSD's Southerly and Westerly wastewater treatment plants (Plants), emissions are only a fraction the of the Plants' Part 503 regulatory limits for actual maximum metal and total hydrocarbon:[7]

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[2] EPA, *A Guide to the Biosolids Risk Assessments for the EPA Part 503 Rule* (1995), at 107 ("[T]he risk assessments quantitatively identified allowable concentrations or application rates of pollutants in biosolids that are used or disposed that protect human health and the environment from reasonably anticipated adverse effects.").

[3] *See* EPA, *40 City Study* (1982); EPA, *National Sewage Sludge Survey* (1988).

[4] *See infra* at Section II(c)(2)(b).

[5] *See* Lita Laven, Frank Foley and Robert Dominak, *Improvements in Biosolids Quality Due to EPA's Pretreatment and Biosolids Programs*, Residuals and Biosolids Management Conference 2006, at 142-147 [Attachment 1].

[6] *Id.* at 147, Table 1.

[7] Southerly and Westerly Plants' Part 503 Reports for 2009 provide additional details.

	Highest Actual Emissions as a Percentage of Regulatory Limit	
	Southerly 2009	Westerly 2009
Arsenic	1%	3%
Cadmium	4%	3%
Chromium	1%	1%
Lead	1%	7%
Nickel	0.02%	0.03%
Total Hydrocarbon	27%	6%

The Plants' beryllium and mercury emissions, as tested in 1993 and 1995 are also a fraction of the NESHAPS limits:

	Highest Actual Emissions as a Percentage of Regulatory Limit	
	Southerly	Westerly
Beryllium	1%	0.4%
Mercury	4%	2%

The NEORSD Plants are not unique in their performance and use widely adopted technologies and operational standards. The dramatic decrease in metal concentrations in sewage sludge and the low metal and total hydrocarbon emission levels demonstrate that the CWA's regulation of sewage sludge from pretreatment to incineration is both exhaustive and protective of human health and the environment.

2. Current Clean Air Act Regulation of Incineration of Sewage Sludge Is Effective and Should Not Be Abrogated

Further reason for EPA to promulgate an exclusion or an exemption to the new solid waste definition that preserves the current regulatory regime for sewage sludge is that Congress wrote CAA § 112 to directly regulate sewage sludge emissions. Section 112(e)(5), promulgated in the 1990 CAA amendments, requires EPA to establish emission standards for hazardous air pollutants (HAPs) for POTWs. In particular, CAA § 112(e)(5) states:

> The Administrator shall promulgate standards pursuant to subsection (d) of this section applicable to publicly owned treatments works (as defined in Title II of the Federal Water Pollution Control Act [33 U.S.C.A. § 1281 et seq.]) not later than 5 years after November 15, 1990.

42 U.S.C. § 7412(e)(5). Congress' express inclusion of POTWs, including SSIs, under CAA § 112 demonstrates express intent to regulate air emissions from SSIs under the CAA's § 112 framework. EPA should implement this Congressional intent through an exclusion or exemption or under the rule.

EPA has already regulated the incineration of sewage sludge as intended under CAA § 112, by identifying SSIs as an area source category under CAA § 112. In 2002, EPA determined that the SSI category does not have any sources with the potential to emit HAPs at a level approaching major source levels,[8] and included SSIs as an

[8] *See National Emission Standards for Hazardous Air Pollutants: Revisions of Source Category List under Section 112 of the Clean Air Act*, 67 Fed. Reg. 6521 (Feb. 12, 2002).

additional area source category under CAA §§ 112(c)(3) and 112(k)(3)(B)(ii).[9] EPA implemented these CAA § 112 requirements as Congress intended. The fact that EPA determined there was no basis under CAA § 112 to issue substantive air emission requirements for SSIs, because they all were area sources, is simply a recognition that the burning of sewage sludge did not trigger such regulation under the requirements established by Congress.

Moreover, since 1974, EPA has also imposed New Source Performance Standards (NSPS) for SSIs under CAA § 111. *See* 40 C.F.R. Part 60, Subpart O. Under the existing NSPS for SSIs, regulated incinerators must comply with emission limits for particulate matter and opacity, as well as operational, monitoring, testing and reporting requirements. In addition to the federal requirements applicable to SSIs outlined above, public agencies operating SSIs are also required to obtain a Title V operating permit if they are "major sources" as defined by the CAA. States also have authority to regulate and, in fact, do regulate air emissions from SSIs under their respective CAA State Implementation Plans.

Together, the CWA, CAA § 111 and CAA § 112 SSI emission regulations have protected human health and the environment for over twenty years. Defining sewage sludge that is combusted as a solid waste will result in the regulation of many SSIs under CAA § 129, which is contrary to Congressional mandate, is not appropriate or necessary for the protection of human health and the environment, and will impose huge costs on municipal agencies that are struggling to meet other environmental mandates.

C. Supplanting Part 503 with a New Regulatory Regime Will Disrupt America's Sewage Sludge Infrastructure with No Significant Improvements to Public Health

EPA correctly recognized that the Proposed Rule will impose indirect costs through the Boiler MACT and CISWI proposed rules, which will, as currently proposed, compel regulation of SSIs under CAA § 129.[10] The costs imposed will be huge and are not tied to clear environmental benefits or public health benefits for residents near SSIs. NACWA estimates total capital costs associated with SSI MACT standards imposed as a direct result of the Proposed Rule would be in excess of $3 billion, along with a substantial increase in operating expenses. There is no pressing public health rationale for saddling public agencies that incinerate with enormous new costs for upgrades and/or alternative management of sewage sludge. Moreover, while EPA assumes a certain public health benefit from a move away from incineration, the reality is that some of the other management options required if incineration is no longer a viable option may actually result in substantially higher emissions than incineration.

NACWA estimates that 17%-22% of all sewage sludge generated in the U.S. is incinerated, which could be in the range of 4 to 6 million wet tons per year. Incineration results in complete destruction of all pathogens, emerging contaminants, pharmaceuticals and many other undesirable trace constituents of sewage sludge. Upgrades for compliance with CAA § 129 to incinerators that already safely and efficiently process nearly a quarter of the nation's sewage sludge will be cost-prohibitive for many POTWs. Each incinerator would need to be outfitted with numerous different technologies to comply with the MACT standards.[11] Roughly dividing the

[9] *See National Emission Standards for Hazardous Air Pollutants: Revisions of Area Source Category List under Sections 112(c)(3) and 112(k)(3)(B)(ii) of the Clean Air Act*, 67 Fed. Reg. 43,112 (June 26, 2002).

[10] 75 Fed. Reg. 31889 (analyzing the costs under the Boiler MACT and CISWI proposed rules).

[11] The necessary systems may include advanced scrubbing systems and/or wet electrostatic precipitators for reducing particulate matter and particulate-based metal emissions, the addition of sodium hydroxide and/or ammonia for reducing emissions of sulfur dioxide and

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estimated costs among the 230 operative POTW incinerators, upgrades to each incinerator unit could cost over $13 million. POTWs operate on budgets that cannot accommodate tens of millions of dollars in additional capital costs and sizable increase in operating costs – with no appreciable environmental gain – particularly at a time of great economic distress coupled with the struggle of meeting other major regulatory obligations, including sewer overflow controls and nutrient reductions.

For POTWs that cannot upgrade because of a lack of space or an inability to fund upgrades, the alternative management options are problematic. Land applying or landfilling sewage sludge are more expensive than incineration in the long term and provide no benefits such as energy recovery, decreased transportation costs, and decreased transportation emissions. For POTWs that currently incinerate all of their sewage sludge, significant resources would be necessary just to develop the loading, storage, and stabilization infrastructure required for land applying or landfilling. One wastewater treatment agency estimates that it will cost $9 million just to develop such infrastructure. Even where the infrastructure is already in place, the cost necessary to land apply or landfill more or all of a facility's sewage sludge is prohibitive.

The following are a few telling examples of the costs of incineration versus landfilling sewage sludge:

- An agency in Minnesota estimates that the operations and maintenance (O&M) costs associated with incineration of sewage sludge are $200.00 per dry ton, including thickening. Because landfilled sewage sludge in Minnesota, like certain other states, must meet the Part 503 Class B pathogen reduction standards, the cost of landfilling is much higher. Minn. R. 7035.2535, Subp. 1, Item B. The estimated O&M costs necessary to prepare sewage sludge for landfill (i.e. alkaline stabilization) are $300.00 per dry ton, including thickening and landfill disposal fees ($100.00 per dry ton more expensive than incineration).

- In North Carolina, one agency estimates that incineration costs $22 per wet ton, while landfilling costs $95 per wet ton ($73.00 per dry ton more expensive than incineration).

- In Ohio, it was reported that the current cost for incineration is $157 per dry ton, while landfilling costs $312 per dry ton ($155.00 per dry ton more expensive than incineration).

- At the NEORSD's Southerly Plant, it costs over twice as much to landfill or land apply sewage sludge than to incinerate it. Moreover, land filling unit cost will substantially increase if incineration is no longer a viable option, and there are concerns about the remaining service life of the landfills in the area.

- According to an EPA report, one California POTW "indicated that the cost of incinerating its waste treatment sludge is, on an annual basis, $4.3 million less than the cost of landfilling this material."[12]

In addition, some states have limits on how much sewage sludge can be landfilled or eliminate in-state landfilling as a management option.[13] Increased reliance on landfills and limits to landfill use will force

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oxides of nitrogen, activated carbon absorbing systems and/or activated carbon injection system for reducing mercury emissions, and internal or external afterburners for reducing carbon monoxide emissions.

[12] EPA, *Materials Characterization Paper on Wastewater Treatment Plants*, March 18, 2010, p. 7.

facilities to truck sewage sludge to increasingly distant landfills resulting in higher transportation costs, including fuel costs.

Further increasing the burden on POTWs is the expectation that the cost differential between incineration and other management options will increase significantly in the coming years. NEORSD estimates that in 2013, the cost of incineration will be $4 less than it is today while the cost of landfilling will increase by $21 (per wet ton). Speaking in broad terms, in 2013 it will cost the facility $9 million per year more to landfill its sewage sludge than to incinerate it. Moreover, it will cost $10 to $11 million per year more for land application than incineration. This would substantially impact the NEORSD's current O&M budget of $40 to $45 million per year.

Particularly for the numerous large cities that rely on incineration, landfilling and land application will always be more expensive alternatives. The significant costs to POTWs will be passed on to the rate payers. In the immediate future, rates are expected to increase dramatically even without the implementation of the Proposed Rule because of the well-documented funding challenges facing POTWs as they expand infrastructure and meet EPA mandates for prevention of overflows and nutrient loading. NEORSD estimates that its rates will double within six years due to the implementation of a $3 billion combined sewer overflow control program and currently required improvements at its three treatment plants.

In addition to increased costs, land application and landfilling may actually result in higher emissions than those produced during incineration because of the distances sewage sludge must be transported. Through a detailed analysis of priority pollutant emissions associated with incineration, landfilling and land application, NEORSD and its consultants found that emissions of carbon monoxide, nitrogen oxide, and organics from three new fluidized bed incinerators being constructed at the Southerly Plant will be lower or equal to the emission levels from land application and landfilling, as follows:

Pollutant	Three Fluidized Bed Incinerators Total Emissions	Trucks Emissions Landfills (round-trip)	Trucks Emissions Land Application Sites (round-trip)*
Carbon Monoxide	3	4	7
Oxides of Nitrogen	44	46	71
Sulfur Dioxide	6	4	6
Organic Compounds	1	3	4

The calculated emissions above include only the projected air emissions from the three new fluidized bed incinerators and the trucks that would be used to transport the sewage sludge from the Southerly Plant to landfills or land application sites. It does not include any additional emissions once the sewage sludge reaches the landfill or land application site. In addition, since the Southerly Plant does not have digesters, nor the room to construct them, the only way to produce a land applicable product is through alkaline stabilization, which will increase emissions even further due to the emissions associated with the trucking of the lime from the quarry to the plant.

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[13] *See* State of Connecticut Solid Waste Management Plan at 4-64 ("Sewage sludge, which is generated by the 111 wastewater treatment plants located in Connecticut, is managed in three ways: shipped out-of-state for management, composted at one of two composting sites in-state, or sent to one of the six sewage sludge incinerators located within Connecticut.").

By forcing a switch to landfilling, the Proposed Rule also negatively affects the environment by placing recyclables in landfills, which will significantly impact landfill capacity/life. Organizations including the National League of Cities, U.S. Conference of Mayors, and the Association of State and Territorial Solid Waste Management Officials have already expressed concerns to EPA regarding the Agency's presumption that many SSIs will be abandoned in favor of landfilling and the associated cost assumptions in the context of the proposed SSI MACT standards. In preliminary discussions over the proposed standards, EPA confirmed that it has not factored dwindling landfill capacity and the significant cost to construct new landfills into its economic analysis on the MACT standard proposal.

Incineration may also be the best management option for minimizing greenhouse gas emissions. Faced with potential regulatory changes and potential increases in all of its wastewater residuals management costs, in 2008 the NEORSD asked a Blue-Ribbon Panel (Panel) of seven internationally renowned sewage sludge management professionals to evaluate sewage sludge management alternatives.[14] The Panel determined that the installation of new fluidized bed incinerators at the Southerly Plant was the most viable, cost-effective and environmentally friendly option for sewage sludge management.

The following is a summary of the Panel's greenhouse gas emissions analyses:

Sewage Sludge Processing	**Greenhouse Gas Emissions (Metric Tons CO_2-equivelent/year)**
Fluidized Bed Incineration with Energy Recovery and Electricity Production	**-10,500***
Fluidized Bed Incineration without Energy Recovery	5,700
Landfilling (transport fuel + decay)	25,000

* Includes reduced emissions from purchased power (i.e., reduced power plant emissions).

The Panel also noted that greenhouse gas emissions associated with land application would likely be higher than incineration for NEORSD, but did not have time to conduct the analysis. While the emissions reported above are specifically for the Southerly Plant, conversion from incineration to landfilling or land application will also result in an increase in greenhouse gas emissions for numerous other POTWs.

Ultimately, the elimination of incineration as a viable, cost-effective and environmentally friendly sewage sludge management option will result in substantial increases in capital expenditures, operating and maintenance costs, emissions of priority pollutants and/or emissions of greenhouse gases for many POTWs.

II. Sewage Sludge Is a Legitimate Fuel and Not a Solid Waste

Pursuant to RCRA, and the preamble to the Proposed Rule, legitimate use and recycling are critical factors in determining whether a material is not "discarded" and therefore is not a solid waste. 75 Fed. Reg. 31844, 31851. If EPA does not grant an exclusion or exemption for sewage sludge, it should determine based on the data provided in these comments that sewage sludge is a legitimate fuel and that it is being recycled for beneficial uses.

[14] Residuals Management Validation Panel, *Summary of Findings and Recommendations* (Aug. 29, 2008) [Attachment 3].

A. Sewage Sludge Incineration Is a Valuable Energy Recovery Source

Sewage sludge and scum incineration for energy recovery embodies the concept of legitimate use and recycling and the proposed Rule did not address these important RCRA concepts. Sewage sludge is an organic, renewable resource with the potential to become an important component of the country's renewable energy portfolio. Sewage sludge contains approximately 8,000 Btu/lb on a dry basis (2,000 Btu/lb on an as received basis assuming 25% solids) and can generate 2.3 kWh/lb.[15] In reliance on the current Part 503 regulatory structure, significant technological innovation is underway involving energy production from the combustion of sewage sludge, both as a component of the incineration process and through stand-alone combustion processes. The Proposed Rule would halt the advancement of these technologies as they come under the onerous requirements of CAA § 129 and undermine Congressional directives to limit greenhouse gas emissions.[16] In addition, implementation of the Proposed Rule could disrupt carefully crafted state regulatory schemes that encourage beneficial use.[17]

Sewage sludge can provide significant amounts of power for facility operations and for the nation's energy grid. At one facility, for example, heat from the incineration of sewage sludge is converted into high pressure steam, in boilers, that powers a steam turbine generator producing over 5 megawatts of electricity. While the potential for energy production is high, POTWs need support from EPA to promote the use of this sustainable and renewable energy resource.[18] Not only does the Proposed Rule fail to promote the use of alternative fuels, but the Proposed Rule serves as a major disincentive for many current and developing energy recovery projects. In addition to the loss of the beneficial use from these projects, there will also be an addition of fuel use and costs to replace recovered energy.

Many facilities are currently maximizing sewage sludge utilization while minimizing fossil fuel use:

- A sanitary district in California reports that incineration of wastewater treatment sludge saves the district $320,000 per year in energy costs by avoiding natural gas costs.[19]

- The NEORSD's Southerly Plant reports that it saves $600,000 to $700,000 per year in natural gas costs by operating waste heat boilers. In October 2000, U.S. EPA presented the NEORSD with a special beneficial use of sewage sludge award for energy conservation due to the use of a waste heat recovery system during incineration of sewage sludge at the Southerly Plant.

The efforts of these agencies to beneficially use sewage sludge may no longer be viable if the Proposed Rule is implemented. Furthermore, agencies in the process of constructing infrastructure to maximize sewage sludge energy recover may find their investments negated by the Proposed Rule:

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[15] *See* NACWA, *Renewable Energy Resources: Banking on Biosolids* (2010) at p. 3 [Attachment 2].

[16] *See, e.g.*, Energy Independence and Security Act (EISA), 42 U.S.C § 17001 et seq. (2007).

[17] Some states currently exempt from solid waste regulations incinerators or energy recovery facilities that incinerate wastes generated by the facility that owns the incinerator or energy recovery facility. *See, e.g.*, Ohio Administrative Code 3745-27-03(A)(5). The Proposed Rule opens the door for revocation of these exemptions and the potential for states to impose additional solid waste regulations on SSIs.

[18] *See* NACWA, *Renewable Energy Resources* (detailing sewage sludge energy products, technologies, and barriers to widespread adoption of these technologies).

[19] EPA, *Materials Characterization Paper on Wastewater Treatment Plants*, March 18, 2010, p. 7.

- NEORSD is in the process of constructing a new Renewable Energy Facility at its Southerly Plant that will include three new waste heat boilers and a steam turbine generator in conjunction with three new fluidized bed incinerators. The cost to purchase and install this equipment and to construct the steam turbine generator building was $22 million with payback expected in 11 years. High pressure steam produced by new waste heat boilers will power a steam turbine generator that produces electricity, which will be used to run the incinerators and ancillary equipment. The steam turbine generator will produce 2.6 megawatts, while the plant's electrical demand is 13 megawatts. During the first year of operations, the cost savings associated with the steam turbine generator will be $1.5 million, while greenhouse gas emissions associated with the reduced electrical power demands will be 16,000 metric tons CO_2e.

  The Proposed Rule could dramatically impact the Southerly Plant's $149 million Renewable Energy Facility. First, because there is only a limited amount of space around the new building, there may not be enough room to install all of the additional equipment that may be necessary to meet the final MACT Standards. Second, depending on the final MACT Standards, the layout of the equipment in the new building may need to be altered to facilitate compliance. Third, if for some reason the new MACT Standards are unachievable, the NEORSD's only viable management option would be landfilling. The cost to construct new sludge storage and truck loading facilities to fill 10,500 trucks per year could be in excess of $50 million. In addition, hauling costs and tipping fees would be approximately $18 million per year, far more than it costs to use the sewage sludge for energy recovery.

In sum, implementation of the Proposed Rule could eliminate energy recovery options for POTWs, create disincentives for POTWs to use energy recovery in the future, increase POTW dependence on fossil fuels, and increase reliance on less beneficial uses for sewage sludge management.

B. Sewage Sludge Incinerated for Energy Recovery Is Not Discarded

As described in detail above, incineration of sewage sludge is an important source of energy and plainly meets the flexible criteria courts have established for when a waste is not "discarded" and, therefore, not a solid waste. When this process is compared to the dictionary definition of "discard," it is clear that sewage sludge incinerated for energy recovery is not discarded because it is not cast aside, rejected, abandoned or given up.[20] In addition, this sewage sludge is beneficially reused in a continuous process of water treatment by the water treatment industry, *American Mining Congress v. EPA*, 824 F.2d 1177, 1186 (D.C. Cir. 1987); the sewage sludge is beneficially used shortly after its production and it is not stored for potential reuse, *American Mining Congress v. EPA*, 907 F.2d 1179, 1186 (D.C. Cir. 1990); and, the sewage sludge is being used by its producers, and not by a reclaimer, *United States v. ILCO*, 996 F.2d 1126, 1131 (11th Cir. 1993).[21] Sewage sludge, a largely organic fuel that satisfies EPA's standards for a valuable product, is a legitimate fuel rather than a discarded waste.

[20] *Safe Air For Everyone* v. *Waynemeyer* (*Safe Air*), 373 F.3d 1035, 1041 (9th Cir. 2004) citing The New Shorter Oxford English Dictionary 684 (4th ed. 1993).

[21] Through assessment of the definition of "discard" and the above test derived from relevant rulings of the circuit courts, the Ninth Circuit recently held that Kentucky bluegrass residuals are not solid wastes when they are burned in the fields as part of the continuing growing process. *Safe Air*, 373 F.3d 1035. Sewage sludge incineration for energy recovery is analogous to the burning of Kentucky bluegrass because the heat created is used to power onsite sewage management operations.

C. Sewage Sludge Is a Legitimate Fuel

EPA has long-recognized that under RCRA a fuel is not discarded and is not a solid waste. EPA's legitimacy criteria for qualification of a waste as a fuel are easily satisfied by sewage sludge and scum. NACWA in these comments is providing data and context to demonstrate that sewage sludge indeed meets the legitimacy criteria and its combustion, via incineration or some other process, for energy recovery is legitimate reuse and recycling.

1. Sewage Sludge Has a Meaningful Heating Value and Is Managed as a Valuable Commodity

EPA is proposing that non-hazardous secondary materials must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy to be considered legitimate fuels. Proposed Rule § 241.3(d)(1)(i). First as previously discussed, sewage sludge has a heating value of approximately 2,000 Btu/lb as received. EPA's proposed minimum of 5,000 Btu/lb as received[22] overlooks the significant energy recovery potential at lower levels of Btu/lb. Combustion of dewatered sewage sludge in an incinerator provides net energy that can reduce or eliminate fossil fuel usage within the incinerator unit and provide heat for energy recovery and/or energy production purposes. NACWA requests that EPA eliminate the arbitrary minimum heating value restriction to enable the significant heating value of sewage sludge to be captured and beneficially reused via incineration. Those sludges that are not incinerated and that are further dried and processed for burning in other combustion units would meet the proposed minimum Btu/lb criterion.

Second, EPA's determination that waste heat boilers do not qualify as "combustion unit[s] that recover[] energy" is arbitrary and does not recognize the significant value of waste heat boilers and their role in energy generation and beneficial use of sewage sludge. At the Southerly Plant, for example, four waste heat boilers have replaced the need for significant amounts of natural gas resulting in substantial reductions in air emissions and $14 million in natural gas related cost saving over a 25 year period. Consistent with RCRA, this sewage sludge was burned to produce heat for boilers and is not discarded solid waste. EPA's reliance on the definition of energy recovery combustion units for hazardous waste management overlooks the fact that the Proposed Rule is focused on non-hazardous wastes, which can be burned with much less risk than hazardous wastes and can greatly reduce reliance on fossil fuels. Further, EPA's determination of what constitutes a legitimate fuel should not hinge on how the energy recovery is made. EPA's categorical exclusion of waste heat boilers as a legitimate energy recovery unit is too broad and must be eliminated or narrowed to ensure valuable renewable energy sources can remain in operation.

EPA is also proposing that non-hazardous secondary materials used as fuels be managed as valuable commodities. Proposed Rule § 241.3(d)(1)(i). NACWA believes sewage sludge meets this criterion based on a review of the factors listed in Section 241.3(d)(1)(i). Specifically, sewage sludge is not stored for unreasonable times. In fact, for most POTWs that practice incineration, there is no storage at all of the sewage sludge. Sludge is transferred directly to the SSI via pipe. An equalization tank may be used to dampen diurnal variation in sludge production, but there is no storage. Some agencies, including those that digest their sludge before incineration, may have storage capabilities, but SSIs are operated based on a constant, stable feed of sludge. Sludge handling and feed systems are managed as just another process stream in a steady-state wastewater treatment and incineration operation, with no storage required. Where storage is necessary for short periods, sewage sludge is adequately contained to prevent releases to the environment.

[22] *See* 75 Fed. Reg. 31844, 31871.

2. The Proposed Contaminant Level Criterion Is Inadequate and EPA's Assessment of Sewage Sludge under this Criterion Is Flawed

In addition to meeting the heating value and management as a valuable commodity criteria, sewage sludge also meets the contaminant level criterion proposed by EPA. In the preamble to the Proposed Rule, however, EPA indicates that contaminant levels preclude sewage sludge from designation as a legitimate fuel. 75 Fed. Reg. 31844, 31867. NACWA's comments demonstrate that sewage sludge meets the contaminant level criterion as proposed and that EPA's determination that sewage sludge does not meet this criterion is based on outdated data. NACWA also believes that EPA's contaminant level criterion is too simplistic and excludes valuable, clean burning alternative materials from use as a legitimate fuel. Sewage sludge – a safe, organic fuel that has undergone a thorough risk assessment with its few contaminants currently regulated and evaluated – is a legitimate fuel.

(a) The Proposed Contaminant Level Criterion Is Inadequate

EPA is proposing a legitimacy criterion under which non-hazardous secondary materials used as fuels in combustion units must contain contaminants at levels that are comparable to those in traditional fuel products. Proposed Rule § 241.3(d)(1)(iii). According to the Agency, the contaminant level criterion "is necessary because non-hazardous secondary materials that contain contaminants that are not comparable in concentration to those contained in traditional fuel products or ingredients would *suggest* that these contaminants are being combusted as a means of discarding them." 75 Fed. Reg. 31844, 31871-72 (emphasis added). The suggestion of an intent to discard is not sufficient to categorize an entire class of non-hazardous secondary material as a solid waste particularly when there is ample evidence that the material is used beneficially for energy recovery.

The application of this contaminant criterion to sewage sludge must also be reevaluated because the Proposed Rule is not predicated on any sewage sludge incinerator emissions data. If the burning of a non-hazardous secondary material replaces the use of a traditional fuel and has lower emissions than that traditional fuel, its use should be encouraged. EPA should assess the legitimacy of non-hazardous secondary materials as a fuel on the basis of emissions. The premise of EPA's Emission-Comparable Fuel Exclusion would work very well with non-hazardous secondary materials because EPA would not need to impose regulations that obliterate the usefulness of the exclusion. Because the materials dealt with here are non-hazardous, there would be none of the combustion and storage concerns that led to the recent withdrawal of the Emission-Comparable Fuel Exclusion Under RCRA for Hazardous Wastes.[23] It is only logical that a non-hazardous secondary material should be considered a legitimate fuel if emissions from an incinerator burning this material is comparable to the emissions from an industrial boiler burning traditional fuels.

(b) EPA's Assessment of Sewage Sludge under the Contaminant Level Criterion Is Flawed

[23] 75 Fed. Reg. 33712 (June 15, 2010) (Final Withdrawal); *see also* 74 Fed. Reg. 64643, 64647 (Dec. 8, 2009) (Proposed Withdrawal) (finding that the exclusions "require more resources and more attention from the regulatory agency than a subtitle C approach to reach a comparable level of assurance that appropriate combustion conditions are met" and that some hazardous wastes "pose a greater storage hazard than fuel oil").

EPA's assessment of sewage sludge under the proposed contaminant criterion is based on outdated data and EPA must reevaluate its position in light of more recent data. EPA stated that it does not believe sewage sludge can meet the contaminant level criterion. 75 Fed. Reg. 31844, 31867 ("[M]unicipal sewage sludge contains metals that are typically higher in concentrations when compared to traditional fuels (e.g., coal and fuel oil) . . . . As such, the Agency does not believe that sewage sludge would meet the legitimacy criteria for contaminants."). EPA based this determination on one summary-level table, which contains sewage sludge contaminant levels from outdated sources.

EPA's flawed determination rests on the 1982 40 City Study and the 1988 National Sewage Sludge Survey (NSSS), not the much more recent 2006-2007 Targeted National Sewage Sludge Survey (TNSSS), which shows dramatically lower contaminant levels:

Element	40 City Study[24] 1982	NSSS[25] 1988	TNSSS[26] 2006-2007	Coal[27]
	mg/dry kg			
Arsenic	9.9	6.7	6.9	10
Cadmium	69	6.9	2.6	0.5
Chromium	429	119	80	20
Lead	369	134.4	76	40
Mercury	2.8	5.2	1.2	0.1
Nickel	135.1	42.7	48	20
Selenium	7.3	5.2	7	1

Clearly, the older data do not reflect the significant advances in pretreatment, the decline of heavy polluting manufacturing processes, and the implementation of the Part 503 regulations in the mid-1990s, all of which make sewage sludge much cleaner for fuel purposes and protect public health. EPA's own documents acknowledge the significant reductions in pollutant loadings were made in the late 1980s and early 1990s – after the sewage sludge studies relied upon for the Proposed Rule were conducted.[28]

EPA's flawed determination also overlooks the fact that sewage sludge quality is already heavily regulated by the CWA. The National Pretreatment Standards in Part 403 prevent the introduction of pollutants into POTWs and are meant to "improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges." 40 C.F.R. § 403.2. In addition, Part 503 regulations provide risk-based limits for incinerated sewage sludge contaminants and that the Agency has previously determined that when contaminant levels are below these limits, no significant public health or environmental risk exists.[29] Other non-hazardous secondary

[24] Cited by EPA at 75 Fed. Reg. 31867.

[25] *Id*.

[26] All values are based on the mean of aggregated samples from Appendix B-3 of the TNSSS Statistical Analysis Report available at http://epa.gov/waterscience/biosolids/appendixb.pdf.

[27] Cited by EPA at 75 Fed. Reg. 31867.

[28] OIG, *EPA Needs to Reinforce its National Pretreatment Program*, Report No. 2004-P-00030 (Sept. 28, 2004).

[29] 58 Fed. Reg. 9249 ("EPA is confident that the regulations it is promulgating today adequately protect public health and the environment from all reasonably anticipated adverse effects, as required by section 405(d), for several reasons" including that "even when sludge is incinerated and the population potentially exposed to the incinerator emissions is greater, the effects are small").

materials considered in the Proposed Rule do not have these highly researched and restrictive contaminant levels in place including the biomass group, construction and demolition materials, scrap tires, scrap plastics, spent solvents, coal refuse, and used oil. Through the Part 403 pretreatment program and the Part 503 regulations, sewage sludge contaminants are already managed to levels sufficient for sewage sludge to be classified as a legitimate fuel.

Further, when current sewage sludge contaminant level data is examined, there is no significant difference in the metal content of sewage sludge and traditional fuels. The coal contaminant values relied on by EPA do not demonstrate that coal contaminants are significantly lower than those in sewage sludge. In addition, the coal contaminant values, as presented by EPA, do not show the large range of contaminant levels in coal used for fuel. As stated in the Clarke and Sloss report from which the coal contaminant values were derived, "[t]race element concentrations vary enormously between coals from different sources, and even between coals from the same seams. The overall physical and chemical properties of a feed coal may be greatly altered by the mining, handling and cleaning processes prior to combustion or gasification."[30] The "enormous" variability in coal contaminant values indicates that much of the coal combusted in the U.S. is likely to have one or more of the above contaminants at a higher concentration than the "typical" coal contaminant values EPA cites. When making its determination regarding contaminant levels, EPA also overlooked the variability in sewage sludge contaminant levels. Because contaminant concentrations vary from plant to plant due to differences in industrial loadings and background concentrations, it is inappropriate to categorize all sewage sludge based on mean contaminant values. Accordingly, EPA's blanket determination that sewage sludge contains metals that are typically higher in concentration when compared to coal is flawed.

NACWA requests that EPA reevaluate the comparableness of sewage sludge to coal in light of the TNSSS survey. In addition, if necessary, EPA should consider a facility-by-facility determination of whether this criterion is met.

III. EPA Should Explicitly Limit the Scope of the Proposed Rule

NACWA and the regulated community are concerned that defining sewage sludge that is combusted as a solid waste in the Proposed Rule could have unintended effects on other forms of sewage sludge management, particularly at the state level. NACWA appreciates that EPA already has explicitly limited the purpose of the Proposed Rule to "identification of 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."[31] While it appears to be EPA's view that this Proposed Rule does not affect Part 503 and state analogs, there is, however, a potential that the Proposed Rule will affect the states' ability to implement state biosolids management programs. There is also the potential that the Proposed Rule could lead to an unnecessary increase in lawsuits challenging other forms of sewage sludge management. Accordingly, if EPA decides not to exercise its discretion and exclude or exempt sewage sludge from its regulatory definition of non-hazardous solid waste for combustion, EPA must more explicitly state that the final rule has no regulatory effects or implications for sludge that is not incinerated.

Without clear and definitive limitations on the designation of sewage sludge as a solid waste for this rule only, state regulators may mistakenly modify or eliminate current exemptions that allow for beneficial use of

[30] Clarke, L.B. and Sloss, L.L., *Trace Elements-Emissions from Coal Combustion and Gasification*, International Energy Agency Report CR/49, London (1992), p. 26.
[31] Proposed Rule § 241.1.

biosolids at the state level. Moreover, state regulators may react differently to implementation of the Proposed Rule because states allocate the responsibility for sewage sludge management to different divisions of each state's environmental agency. As of 2008, twenty-nine states regulate sewage sludge under the water program, eight states regulate sewage sludge under the solid waste program, and eight states regulate sewage sludge under both the water and solid waste programs.[32]

States that exempt sewage sludge from regulation under their solid waste programs – relying expressly or implicitly on their understanding of a broad federal exemption – may face the most uncertainty.[33] Such states may be compelled to revoke the exemption and reclassify sewage sludge as solid wastes, which could significantly alter the state's sewage sludge management scheme. States that have created specific regulations for sewage sludge separate from the solid waste regulations may also face difficulties should the Proposed Rule be finalized as drafted.[34] Furthermore, for states that currently manage sewage sludge as a solid waste, there are questions regarding at what point in the treatment process sewage sludge becomes a solid waste and states could determine that RCRA obligations attach at different points in the treatment process. The current Proposed Rule only stands to further complicate these management questions.

Because of this uncertainty, NACWA requests that EPA more explicitly state that the final rule shall have no regulatory impact on sewage sludge that is not incinerated.

IV. The Domestic Sewage Exemption Prevents EPA from Regulating Sewage Sludge as a Solid Waste

Finally, NACWA believes the Domestic Sewage Exemption (DSE) in RCRA makes the Proposed Rule inapplicable to sewage sludge and that accordingly EPA lacks the legal authority to promulgate the rule. RCRA defines "solid waste" as:

> any garbage, refuse, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, 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* . . . .

RCRA § 1004(27) (emphasis added). Accordingly, sewage sludge from POTWs is exempt from the definition of "solid waste" as "solid or dissolved material in domestic sewage." Through the DSE, Congress recognized that treated sewage sludge does not qualify as a solid waste. *See also* 40 C.F.R 261.4(a)(1).

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[32] *See* 2008 NEBRA National Biosolids Regulation, Quality, End Use & Disposal Survey at 19 (5 states were not classified).

[33] *See, e.g.*, Ohio Administrative Code 3745-27-03(A)(8)(b) (excluding land applied sewage sludge from regulation under the state solid waste rules and defining sewage sludge as "as a solid, semi-solid or liquid residue generated *during* the treatment of sewage in a treatment works") (emphasis added); North Carolina General Statutes 130A-290(c)(35)(b)(1) (excluding from the definition of solid waste "solid or dissolved material in [d]omestic sewage and sludges generated by treatment thereof in sanitary sewage collection, treatment and disposal systems which are designed to discharge effluents to the surface waters.").

[34] For example, in Minnesota, "waste" is defined in Minn. Stat. 115A.03, subd. 34 as "solid waste, sewage sludge and hazardous waste." Each term is then defined separately (Minn. Stat. 116.06, subd. 22, Minn. Stat. 115A.03 and Minn. Stat. 116.06, subd. 11, respectively), creating separate regulatory universes for each. Minn. R. chapters 7035, 7041 and 7045.

This concept of a broad POTW exemption was established by Congress as early as 1965 in the Solid Waste Disposal Act.[35] This was an early recognition that a comprehensive solid waste program, designed primarily to address hazardous wastes, did not apply to POTWs as long as they were effectively regulated under the CWA, which has always been and remains the primary statutory authority for comprehensive regulation of POTW operations. The Solid Waste Disposal Act and RCRA included the Domestic Sewage Exclusion in explicit recognition of this critical policy choice.[36]

Indeed, as EPA began its long efforts to define "solid waste" and "hazardous waste" for purposes of Subtitle C of RCRA, the Agency explicitly understood and discussed the importance of the comprehensive federal sewage sludge management program. For example, in the 1980 preamble to EPA's development of the Subtitle C regulations, EPA describes the importance, scope and ultimate supremacy of the to-be developed CWA § 405 program, indicating that, once this program was in place, it would serve as the comprehensive regulations for use and disposal of sewage sludge. 45 Fed. Reg. 33084, 33102 (May 19, 1980) ("Once such a regulation is in place, sewage sludge will be exempted from coverage under other sets of regulations."). EPA has similarly interpreted the scope of the DSE to include sewage sludge generated by POTWs in the preamble to the Agency's 1990 Final Rule to identify and list hazardous wastes for petroleum refinery process wastewaters. EPA concluded that POTW sewage sludge falls within the DSE:

> These wastes [P038 and K048 wastes] are being added to the list of [hazardous] wastes . . . in order to regulate sludges generated at wastewater treatment facilities on site at petroleum refineries as well as sludges generated at off-site wastewater treatment facilities.[14]. . .
>
> > [14] It should be noted that if wastewaters generated at petroleum refineries are discharged to a POTW and such wastewaters are mixed with domestic sewage from nonindustrial sources, *the sludges generated in the POTW are covered under the domestic sewage exclusion* and are not included in today's listings.

55 Fed. Reg. 46354, 46364 (Nov. 2, 1990) (emphasis added). Thus, there has been a clear recognition for over 30 years that sewage sludge is different than solid waste for regulatory purposes, and that sewage sludge is primarily regulated under the CWA, not RCRA.

Furthermore, when Congress incorporated RCRA's definition of "solid waste" in CAA § 129 in 1990, Congress was well aware that the DSE was encompassed in the definition of "solid waste" and that CAA § 129 would not apply to sewage sludge. This statutory exemption for sewage sludge – the subject of broad consensus and reliance in the regulated community – can not be abrogated by subsequent rule making or preamble statements. Moreover, the 1987 CWA amendments and the subsequent Part 503 rules established a management program for sewage sludge dependent on its exclusion from RCRA regulation.

Lastly, the statutory and regulatory provisions that implement the sewage sludge management program distinguish between sewage sludge and solid waste, and thereby demonstrate that they are different types of material. For example, the preamble to the Part 503 rules states that:

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[35] Solid Waste Disposal Act, Pub. L. 89-272, 79 Stat. 992 (1965).

[36] Solid Waste Disposal Act, Pub. L. No. 89-272, § 203(4), 79 Stat. 992, 998 (1965) (defining the term "solid waste" to exclude "solids or dissolved material in domestic sewage or other significant pollutants in water resources . . . ."); *accord* Resource Conservation and Recovery Act, Pub. L. No. 94-580, § 1004, 90 Stat. 2795, 2801 (1976).

> The standards also do not apply to sewage sludge that is co-incinerated with large amounts of solid waste . . . . However, the standards established in the rule do apply to sewage sludge that is incinerated in a sewage sludge incinerator with incidental amounts of solid waste use as an auxiliary fuel (i.e., 30 percent or less solid waste by weight).

58 Fed. Reg. 9248, 9253. In keeping with the distinctions drawn by Congress between sewage sludge and solid waste, EPA's careful regulatory approach in the Part 503 regulations distinguishes between sewage sludge and solid waste.

The DSE under RCRA is implemented through and supported by the comprehensive programs for sewage sludge management that have been carefully developed under CWA § 405 and RCRA. The proposed abrogation of the DSE places RCRA regulatory responsibilities on POTWs that Congress fully intended would not apply due to strict regulation of POTWs under the CWA. Losing the DSE will "federalize" decisions over how sewage sludge must be managed, which directly contravenes Congress' preservation in the CWA of local control over sewage sludge management options.

* * *

In summary, NACWA requests that EPA:

1. Exercise its discretion and exclude or exempt sewage sludge that is combusted from the final rule's definition of non-hazardous solid waste.

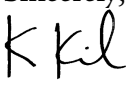
2. Recognize that sewage sludge and scum are legitimate fuels.

3. Classify the energy recovery and energy production devices employed by POTWs as legitimate energy recovery systems.

4. Clearly state that the rule does not apply to and will not impact other sewage sludge management options regulated under Part 503.

Please contact Chris Hornback at *chornback@nacwa.org* or 202-833-9106 with any questions regarding NACWA's comments.

Sincerely,



Ken Kirk
Executive Director

Attachments