RECORD NO. 11-1131 (and consolidated cases)

ORAL ARGUMENT NOT YET SCHEDULED

In The

United States Court of Appeals

For The District of Columbia Circuit

NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, *et al.*,

Petitioners,

v.

ENVIRONMENTAL PROTECTION AGENCY, *et al.*,

Respondents.

ON PETITIONS FOR REVIEW OF RULES OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY

PAGE PROOF REPLY BRIEF OF MUNICIPAL PETITIONERS

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GLOSSARY OF TERMS

CAA – Clean Air Act, 42 U.S.C. §§7401, *et seq.*

CWA – Clean Water Act, 33 U.S.C. §§1251, *et seq.*

CISWI – Commercial or Industrial Solid Waste Incinerator

DSE – Domestic Sewage Exclusion

EPA – U.S. Environmental Protection Agency

FBIs – Fluidized Bed Incinerators

GACT – Generally Available Control Technology

MACT – Maximum Achievable Control Technology

MHIs – Multiple Hearth Incinerators

NACWA – National Association of Clean Water Agencies

HAPs – Hazardous Air Pollutants

NHSM Rule – Identification of Non-Hazardous Secondary Materials That Are Solid Waste, 76 Fed. Reg. 15456 (Mar. 21, 2011)

POTWs – Publicly-Owned Treatment Works

RCRA – Solid Waste Disposal Act, 42 U.S.C. §§6901, *et seq.* as amended

RIA – Regulatory Impact Analysis

SSIs – Sewage Sludge Incinerators

SSI Rule – Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Sewage Sludge Incineration Units; Final Rule, 76 Fed. Reg. 15372 (Mar. 21, 2011)

UPL – Upper Predictive Limit statistical analysis

SUMMARY OF ARGUMENT

Authority to Regulate SSIs: EPA's brief highlights its meritless and conflicting arguments for authority to regulate sewage sludge incinerators ("SSIs") at publicly-owned treatment works ("POTWs"). The plain language of the CAA subjects SSIs to regulation under §112(d), not §129. EPA admits that SSIs are POTWs under §112(e)(5); therefore, SSIs must be regulated pursuant to §112(d). Sewage sludge combusted in SSIs does not come "from commercial or industrial establishments or the general public," so SSIs are not solid waste incineration units under §129(g)(1). Finally, EPA is mistaken that *NRDC v. EPA*, 489 F.3d 1250, 1255 (D.C. Cir. 2007) ("*NRDC*"), compels EPA to regulate SSIs under §129.

Inadequate Database: EPA contends that basing Maximum Achievable Control Technology ("MACT") floors on fewer than the minimum number of SSIs required by §129(a)(2) was reasonable and deserves deference. However, §129(a)(2) requires EPA to set MACT floors using the top-performing 12% of units in each category – which, by EPA's count, means eight fluidized bed incinerators ("FBIs") and 18 multiple hearth incinerators ("MHIs"). Instead, 16 of 18 existing source SSI MACT floors are based on fewer units than required by §129(a)(2); and all 18 MACT floors are unlawful because EPA undercounted the total number of SSIs. Municipal Petitioners Brief ("Mun. Br.") at 34 fn5. Using an Upper Predictive Limit ("UPL") does not correct this flaw. Also, the number of

SSIs and POTWs used by EPA is far too small to represent the wide diversity of geographies, climates, and populations associated with SSIs.

ARGUMENT

I. EPA'S VIEW OF ITS AUTHORITY TO REGULATE SSIS IS CONTRARY TO THE STATUTE AND MISTAKEN ON THE FACTS

EPA's effort to regulate SSIs under §129 suffers multiple flaws. First, EPA's reading of the statute is refuted by the text and overall context of §§112(e)(5) and 129(g)(1) and finds no support in either the legislative history or in the Congressional scheme for regulating POTWs. Second, EPA is wrong on the facts that sewage sludge comes from the general public, and EPA's position on this issue conflicts with its own regulations. Finally, this Court's ruling in *NRDC* does not compel EPA to regulate SSIs under §129.

A. EPA's Argument That SSIs Are Solid Waste Incineration Units Is Contrary to CAA §§112(e)(5) and 129(g)(1) and Finds No Support in the Legislative History or Overall Scheme for Regulating POTWs

EPA acknowledges that §112(e)(5) requires it to promulgate standards for POTWs under §112(d). EPA Br. at 27. EPA also acknowledges that SSIs fall within that definition of POTW. *Id.* However, EPA contends that §112(e)(5) is not the "exclusive regulatory provision" for SSIs because "[n]othing in the plain language of Section 112(e)(5) requires EPA to establish emission standards for sewage sludge incinerators located within a POTW." *Id.* at 27-28.

EPA's reading creates an impermissible exception to the unambiguous direction to regulate POTWs, including SSIs, under §112(d). Section 112(e)(5) directs EPA to promulgate standards under §112(d) by a date certain for a source category (*i.e.*, POTWs) defined by Congress. The unqualified nature of this language cannot be read as granting discretion to regulate "some parts" of POTWs under §112 and "other parts" of POTWs under §129. EPA Br. at 28. The phrase "shall promulgate standards pursuant to [§112(d)] applicable to [POTWs]" does not allow EPA to regulate parts of POTWs under §129. Nothing in the text of §112(e)(5) suggests that Congress intended for EPA to regulate SSIs and POTWs under separate statutory authorities – and EPA does not point to any evidence in the structure or history of §112(e)(5) indicating these words have anything other than their plain meaning.

EPA also argues that the "more specific" §129 should trump the "more general" reference to SSIs in §112. EPA Br. at 28-29. To the contrary, §112(e)(5) deals specifically and exclusively with regulation of POTWs, and EPA acknowledges that SSIs fall within the definition of POTW used in §112(e)(5). *Id.* at 27. Meanwhile, §129 contains no reference whatsoever to POTWs or SSIs, but instead deals more broadly with other types of incineration, including incinerators burning commercial and industrial waste and hospital and medical waste. *See* CAA §129(a)(1)(A)-(E).

In sum, EPA's argument that it can regulate "parts" of POTWs under §129 suffers a flaw of interpretation similar to that invalidated in *NRDC*. *NRDC* reminded EPA to adhere to the plain language of the statute and rejected EPA's effort to create exceptions where unambiguous language grants no such discretion. EPA plainly concedes that §112(e)(5) is unambiguous (EPA Br. at 29-30), and that SSIs are within the definition of POTW. *Id.* at 27. EPA's effort to carve out exceptions to unambiguous language in §112(e)(5) is unlawful.

B. Sewage Sludge Does Not Come From the General Public

EPA's brief claims it "reasonably" concluded that sewage sludge is from the general public "[b]ecause sewage sludge is a direct by-product of the treatment of the domestic sewage that comes from the public." EPA Br. at 25. Yet EPA's brief does not point to any support in §129(g)(1) allowing EPA to define a unit that combusts *by-products from materials that are not solid wastes* as a solid waste incineration unit. Furthermore, the facts in the record are undisputed that sewage sludge does not come from the general public, and EPA's position is contrary to its own regulations.

EPA's lawyers raise the "direct by-product" theory for the first time in EPA's brief. As addressed in the Municipal Petitioners' opening brief, EPA expressed an "original source" theory in the SSI Rule. 76 Fed. Reg. 15372, 15383

(Mar. 21, 2011) (JA:__); Mun. Br. at 19-23. EPA's brief does not now defend the Agency's original source theory, nor does it explain why it has now abandoned that rationale. EPA's brief also provides no factual basis supporting the statement that sewage sludge is a direct by-product of domestic sewage. Therefore, the SSI Rule cannot be upheld based on the lawyers' post hoc reasoning or based on a rationale that EPA did not articulate during the rulemaking. *See, e.g., K N Energy, Inc. v. FERC*, 968 F.2d 1295, 1303 (D.C. Cir. 1992), referencing *SEC v. Chenery Corp*., 332 U.S. 194, 196 (1947).

This new reading also finds no support in §129(g)(1). The text of §129(g)(1) does not expressly address the incineration of "by-products" derived from materials that are not solid wastes – namely domestic sewage. However, like EPA's "original source" reading, the new by-product reading renders the words "from commercial or industrial establishments or the general public" superfluous. Mun. Br. at 21-22. Had Congress intended §129 to include combustion of such materials, there was no need to list the sources of solid waste in §129(g)(1). The irrationality of such reading is also highlighted by the fact that domestic sewage is not a solid waste – by virtue of the domestic sewage exclusion ("DSE") in §1004(27) of the Resource Conservation and Recovery Act ("RCRA"). Thus, the by-product theory unlawfully expands the meaning of solid waste incineration unit

to include incineration of by-products derived from *non-solid waste materials* – a reading that contradicts the plain language of §129(g)(1).

Importantly, in a related rule promulgated the same day as the SSI Rule, EPA based its decision to define sewage sludge as solid waste under RCRA on the Agency's conclusion that sludge is created in the POTW – and not collected from the general public – from the dead and dying microbes that the POTW treatment system introduces in order to consume the domestic sewage. 76 Fed. Reg. 15456 (Mar. 21, 2011); EPA-HQ-RCRA-2008-0329-1828 at 1 (JA:__). In EPA's view, the DSE does not reach sewage sludge because Congress was distinguishing between domestic sewage collected from sources such as the general public and sewage sludge that is produced in the POTW. 76 Fed. Reg. 15513-14 (JA:__). This conclusion is central to EPA's determination that sewage sludge is not covered by the DSE and, therefore, is solid waste under RCRA.[1] EPA is bound by this reasoning in the context of the SSI Rule, unless it acknowledges and articulates a sound rationale for changing its view. *See, e.g.*, *Black Citizens for a Fair Media v. FCC*, 719 F.2d 407, 417 (D.C. Cir. 1983). EPA has done neither

[1] As noted in our opening brief, Municipal Petitioners separately challenge EPA's determination in the NHSM Rule that sewage sludge is a solid waste. Mun. Br. at 13 fn1. In the instant case, we treat the NHSM Rule as a given, but without prejudice to our challenges to the NHSM Rule.

and offers no rationale for treating sewage sludge differently in the SSI and NHSM Rules. Mun. Br. at 22-24.

Finally, there is ample factual support that sewage sludge is not collected from the public. Sludge is created in the POTW through biological, chemical, and physical treatment processes, not collected from homes or businesses. *Id.* at 22-23. EPA's Regulatory Impact Analysis ("RIA") outlines the various treatment processes that occur within the POTW to create sewage sludge and it describes how the resulting sewage sludge differs from domestic sewage. RIA (EPA-HQ-OAR-2009-0559-0165) at 2-1 to 2-2 (JA:__). The resulting sludge is mostly comprised of the "dead and alive micro-organisms" that consumed the domestic sewage, and the resulting sludge differs fundamentally from domestic sewage in its characteristics and composition. EPA-HQ-RCRA-2008-0329-1828 at 1 (JA:__); Mun. Br. at 23.

C. EPA's Reliance on *NRDC v. EPA* Is Misplaced and Fatal to Its Interpretation of §129

Central to EPA's view is that regulating SSIs under §129 "is compelled by this Court's decision in *NRDC v. EPA*, 489 F.3d 1250, 1255 (D.C. Cir. 2007), where the Court found that the broad language of Section 129 requires regulation of 'any' solid waste incineration unit, subject only to four narrow exceptions." EPA Br. at 14. To the contrary, neither the holding in *NRDC* nor the thrust of its

reasoning apply here. EPA's mistaken belief that *NRDC* controls is yet another reason to vacate the SSI Rule.

NRDC involved challenges to a rule defining the term "commercial or industrial waste," which determines whether a unit is a "commercial or industrial solid waste incinerator" ("CISWI") under §129. 70 Fed. Reg. 55568 (Sept. 22, 2005) ("CISWI Definitions Rule"). At the time, the CISWI Definitions Rule defined "commercial or industrial waste" to include only solid waste combusted at facilities that do not recover and use energy from such combustion. *See NRDC*, 489 F.3d at 1256-57. Finding the words "any solid waste" unambiguous, the *NRDC* Court held that the plain language of §129 does not allow EPA to create additional exemptions for CISWI units. However, it was undisputed that CISWI units combust solid waste "from commercial or industrial establishments or the general public" under §129(g)(1). Unlike here, the *NRDC* Court was not faced with whether a given category of incinerators combusts solid waste "from commercial or industrial establishments or the general public" – because CISWI units clearly do – nor did *NRDC* address the CAA regulatory scheme for POTWs and SSIs. The Court in *NRDC* had no reason to consider the application of §112(e)(5), nor did it need to deal with the issue surrounding the origins of sewage sludge and EPA's recently-promulgated NHSM Rule.

EPA misquotes *NRDC* when it claims the decision compels EPA's approach in the SSI Rule because §129 applies to "any such unit that combusts any solid waste material 'at all[,]' subject to only four specific exceptions." EPA Br. at 22-23 (quoting *NRDC*, 489 F.3d at 1257-58). In the quoted text, the Court was speaking of units combusting commercial or industrial solid waste – not units combusting any solid waste irrespective of where the solid waste comes from – as is made clear by text omitted from EPA's brief:

> we interpret section 129 under *Chevron* step 1 to unambiguously include among the incineration units subject to its standards any facility that combusts *any commercial or industrial solid waste material at all* – subject to the four statutory exceptions identified above.

NRDC, 489 F.3d at 1257-58 (emphasis added). *NRDC* does not compel EPA to regulate units like SSIs that combust material that does not come "from commercial or industrial establishments or the general public." EPA's additional argument that had Congress wanted to exclude SSIs from §129 it would have added an express exemption is similarly unavailing. Congress listed exemptions in §129(g) because these types of incinerators would have otherwise been within the meaning of "solid waste incineration unit" in §129(g)(1). By contrast, because SSIs do not combust solid waste from commercial or industrial establishments or the general public, they do not fall within the definition of solid waste incineration

units. Therefore, there was no reason for Congress to identify SSIs in the list of exclusions.

EPA's misreading of *NRDC* is a fundamental error that infects the whole of its rationale for the SSI Rule, as repeatedly evidenced in EPA's brief. EPA Br. at 20-25 (interpreting §129 based on misreading of *NRDC*); EPA Br. at 28-29 (dismissing §112(e)(5) based on *NRDC*); EPA Br. at 30-31 (after *NRDC* "EPA must now regulate sewage sludge incinerators under Section 129"). Because EPA's misunderstanding is central to its rationale for regulating SSIs, the SSI Rule must be vacated. *See Sea-Land Serv., Inc. v. DOT*, 137 F.3d 640, 646 (D.C. Cir. 1998) (agency action "cannot be sustained 'where it is based not on the agency's own judgment but on an erroneous view of the law'") (quoting *Prill v. NLRB*, 755 F.2d 941, 947 (D.C. Cir. 1985), and citing *SEC v. Chenery Corp*., 318 U.S. 80, 94 (1943)).

D. Sierra Club's View That SSIs Are Commercial or Industrial Establishments and Are Not POTWs Is Both Irrelevant and Wrong

For its part, Sierra Club looks to find authority for regulating SSIs by arguing that SSIs are "commercial or industrial establishments" within the meaning of §129(g)(1) (Sierra Club Br. at 7-8), and that SSIs are not part of POTWs under CWA §212(2)(A)-(B) (*id.* at 9-10).

EPA disagrees with Sierra Club on both points, so the Agency's rationale for the SSI Rule is not based on Sierra Club's erroneous readings of §129 and the CWA. EPA Br. at 27. This Court will not uphold agency action on a basis that the agency did not articulate and rely upon during the rulemaking. *See Teva Pharm. USA, Inc. v. FDA*, 441 F.3d 1, 5 (D.C. Cir. 2006) (citing *PDK Labs., Inc. v. DEA*, 362 F.3d 786, 798 (D.C. Cir. 2004)). Therefore, Sierra Club's arguments are irrelevant.

Both arguments are also meritless. According to Sierra Club, SSIs are covered by §129 because: (1) POTWs are "commercial establishments" because they collect a fee for treating domestic sewage, and (2) POTWs are "industrial establishments" based on a reference in the legislative history of CAA §112 and two anecdotal references unrelated to the CAA. Sierra Club Br. at 7-8.

POTWs are not "commercial or industrial establishments." First, POTWs are a publicly-owned, non-profit operation that provides public health and environmental services, unlike private and for-profit retail, manufacturing, and similar businesses within the ordinary meaning of "commercial or industrial establishments." Second, EPA promulgated standards for CISWI on the same day it issued the SSI Rule, and the CISWI rule does not include SSIs. 76 Fed. Reg. 15704, 15709 (Mar. 21, 2011) (JA:__). Finally, that POTWs charge fees to sewer

users is irrelevant to whether POTWs are "commercial establishments." After all, industrial establishments and individuals engage in commerce, yet neither are commercial establishments within the ordinary meaning of these words.

Sierra Club's only support for its view that POTWs are "industrial" are generic and off-topic references in a Senate Report and unrelated Congressional testimony. Sierra Club Br. at 7-8. These references simply have no bearing on the meaning of "industrial establishments" under §129. Sierra Club also cites a statement by Senator Durenberger in the 1990 CAA Legislative History regarding categorizing sources "into industrial categories." *Id.* at 8. This statement is taken from Senator Durenberger's general description of the framework for regulating sources under §112(d) (not §129), and so was made in a context and at a level of generality that reveals nothing about whether the Senator believed POTWs to be "industrial establishments" under §129(a)(2). That statement also does not mention *publicly-owned* treatment works, so may have been referring to wastewater treatment at industrial facilities. To the extent this vague reference has any bearing, at most it suggests that Senator Durenberger recognized §112(d) as the means for regulating hazardous air pollutants ("HAPs") from POTWs.

Sierra Club's argument finds even less footing in the statute. Subchapter I of the CAA does not define the term commercial or industrial establishments. However, when Congress intended to include governmental agencies within the text, the words used differentiate between commercial/industrial sectors and the governmental sector. For example, when establishing authority for the Chemical Safety Board under CAA §112(r), Congress directed the Board to conduct studies with "State and local governmental agencies and associations and organizations from the industrial, commercial, and nonprofit sectors." CAA §112(r)(6)(F). Similarly, Congress directed the Attorney General to prepare a report to Congress "in consultation with appropriate State, local, and Federal Government agencies, affected industry, and the public." CAA §112(r)(7)(H)(xi)(I). It is unlikely that Congress would have drawn such distinctions if, as Sierra Club claims, Congress understood the words "commercial or industrial" to include local governments.[2]

Lastly, Sierra Club claims that SSIs are not properly regulated under CAA §112 because they are not within the CWA definition of POTW, irrelevantly arguing that SSIs are not "land" and they do not combust "industrial wastes of a

[2] Sierra Club incorrectly asserts that if SSIs are not covered by §129, this would also exclude municipal waste combustors that combust waste from municipally-owned sources. Sierra Club Br. at 9. This is wrong, because municipal waste incinerators fall within §129 irrespective of whether they are public versus private because the "municipal waste" combusted in municipal waste combustors comes from the general public. *See* CAA §129(g)(5).

liquid nature." Sierra Club Br. at 10-11. Sierra Club's reading is contrary to the plain text of the CWA and ignores EPA's long-standing interpretation that SSIs are within the CWA definition of POTW.

> CWA §212(2)(A)-(B) defines "treatment works" in pertinent part as:
>
> > [A]ny devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or industrial wastes of a liquid nature to implement section 201 of this Act, … including intercepting sewers, outfall sewers, sewage collection systems, pumping, power, and other equipment, and their appurtenances; … and any works, including site acquisition of the land that will be an integral part of the treatment process (including land used for the storage of treated wastewater in land treatment systems prior to land application) or is used for ultimate disposal of residues resulting from such treatment.
> >
> > In addition … "treatment works" means any other method or system for preventing, abating, reducing, storing, treating, separating, or disposing of municipal waste, including storm water runoff, or industrial waste, including waste in combined storm water and sanitary sewer systems.

33 U.S.C. §1292(2)(A)-(B). Because the definition is broadly inclusive, SSIs are covered in several ways: (1) SSIs are "devices," and "systems" and "works" that are part of the "treatment" of municipal sewage; and (2) SSIs are "any other method or system" for "reducing, storing, treating, separating, or disposing of" wastes from sanitary sewer systems.

Sierra Club first argues that the "principal problem" with this reading is that sewage sludge is "solid" waste and, thus, not "liquid" in nature. Sierra Club Br. at 10, 14. This is both legally and factually wrong. The phrase "liquid in nature"

does not relate back to the words "municipal sewage." Even if it did, sewage sludge is typically 70-80% water and decidedly liquid in nature. NACWA comments (EPA-HQ-OAR-2009-0559-0127) at 16 (JA:__). EPA has consistently and repeatedly read CWA §212 to include SSIs. *See*, *e.g.*, 58 Fed. Reg. 9248, 9359 (Feb. 19, 1993) (POTW definition "include[s] facilities dedicated to the disposal of sewage sludge (i.e., surface disposal sites and incinerators)"). EPA's brief reaffirms this. EPA Br. at 27. The fact that SSIs are within the POTW definition is also consistent with the holistic approach to sewage management expressed in CWA §218(a) as a national policy that any treatment works "shall be considered as an overall waste treatment system for waste treatment and management."

Sierra Club irrelevantly argues that CWA §212(2)(A) includes only "land" used for sludge disposal. Sierra Club Br. at 11-12. Even if Sierra Club is correct that the "including" phrase relates only to "land," SSIs still fall within the main body of the definition. Sierra Club's reading also produces the implausible result that the POTW encompasses land miles away from the treatment plant, yet excludes the incinerator (and other equipment used for sludge disposal) located inside the POTW and physically integrated into the sewage management system. Sierra Club offers no reason why Congress would have intended this outcome or

how Sierra Club's narrow reading fits within Congress' holistic scheme for regulating sewage management.

Finally, Sierra Club erroneously claims the history of the CWA construction grants program suggests that SSIs are not within the POTW definition. *Id.* at 15-16. The grant program that Sierra Club discusses was created by Congress in the 1987 CWA amendments to encourage the collection and dissemination of information on developments in the safe and beneficial use of sewage sludge (*e.g.*, advances in land application), not for construction of SSIs as Sierra Club claims. *See* CWA §405(g); comments of Rep. Howard, 133 Cong. Rec. H.131 (Jan. 7, 1987) (JA:__). That Congress authorized grants for studies and demonstration projects has no bearing on whether SSIs are eligible for grants under the construction grants program. In fact, prior to 1987, EPA had awarded millions of dollars in construction grants for numerous SSIs under the existing CWA Title II program, which funds are limited to "treatment works" defined in CWA §212(2). *See* NACWA comments at 9-10 (providing examples of POTWs receiving construction funds for SSIs, nearly all prior to 1987) (JA:__). In 1987, Congress reauthorized this construction grants program, and did so without limiting in any way EPA's authority to continue awarding grants for SSIs. *See* CWA §207; comments of Rep. Howard, 133 Cong. Rec. H.131 (JA:__). This history confirms

that Congress intended SSIs to be within the CWA §212 definition incorporated into CAA §112(e)(5).

II. EPA'S EFFORT TO SET MACT FLOORS USING AN INADEQUATE NUMBER OF SSIS IS CONTRARY TO §129

EPA's defense of its MACT floor methodology recounts at length the general statistical approach the Agency used. EPA Br. at 47-50. However, the thrust of EPA's response to the Municipal Petitioners' brief is that the Agency's approach to accounting for variability is "more complicated" than meets the eye, (*id.* at 48), and deserves a "high level of deference" (*id.* at 50). Although EPA's description is indeed complicated, the errors in EPA's approach are not so difficult to locate.

These errors can be illustrated through an example. Consider calculating the average length of 18 pieces of lumber cut to various lengths. To calculate the average length, EPA's approach is to measure five pieces of lumber three times each, average the measurements, and (because there is variability in the measuring tools) use the UPL to determine the length that it expects the five pieces of lumber to fall below in nearly all future measurements. However, the example shows that EPA's approach reveals nothing about the lengths of the remaining 13 pieces of lumber unless it is also shown that all the unmeasured pieces have lengths equal to at least one of the measured pieces.

Change the lumber into the 18 top-performing MHIs and length measurements into stack-test runs, and this example helps to illustrate the errors in EPA's MACT floor approach. First, it shows that measuring emission performance of only five MHIs is not a reasonable approach for determining the performance of all 18 top-performing MHIs, unless EPA also demonstrates that emissions of each pollutant from the five tested MHIs are representative of emissions of that pollutant from all the remaining MHIs. To the contrary, EPA admits that the method it used to select the top-performing units *did not result in a representative sample of SSIs*. 76 Fed. Reg. 15386 (JA:__); Mun. Br. at 39. Rather than collecting additional data from the remaining 13 MHIs (or using other information such as sludge concentration data as advocated by commenters) to address these flaws, EPA relies solely on its view that applying the UPL to data from SSIs in a variety of regions, climates, and populations sufficiently accounts for variability. 76 Fed. Reg. 15391. However, EPA did not use data from SSIs from a mix of regions, climates, and populations, (*see* Mun. Br. at 40-41), and EPA's brief does not refute this.

Numerous commenters submitted data showing the significant variability in characteristics of sewage sludge among POTWs and within POTWs over time. Mun. Br. at 38-39. EPA acknowledges that sewage sludge varies among POTWs and that many pollutants emitted from SSIs result directly from the presence of

materials in the sludge. 76 Fed. Reg. 15391. Failure to account for this variability among the top-performing SSIs makes it impossible for EPA to demonstrate that the resulting emission standards are achievable.

Second, and fundamental to the framework of §129, even if the UPL might otherwise be a reasonable tool for estimating performance of units for which EPA has data, EPA's approach does satisfy the §129(a)(2) requirement to establish MACT floors using the top-performing 12% of units in each category. As illustrated in the lumber example, EPA's UPL approach does not result in MACT floors based on information from the statutorily required number of units. EPA rightly does not claim – and could not accurately claim – that its floors are based on information from the required number of SSIs. Contrary to EPA's claim (EPA Br. at 41), Municipal Petitioners do not assert that MACT floors may only be based on actual stack-test data – indeed, NACWA has repeatedly urged EPA to use sludge concentration data. However, under §129(a)(2), MACT floors must be based on information *from the required number of units*, whether that information is test, regulatory, or permit data. *See generally*, *Sierra Club v. EPA*, 167 F.3d 658, 662 (D.C. Cir. 1999). In the SSI Rule, EPA used only stack-test data in its MACT floor databases, and EPA admits that the MACT floors do not use stack-test data – or any other kind of information – from the number of units required by §129(a)(2). 76 Fed. Reg. 15387 (JA:__). EPA's UPL approach is just a way of

setting MACT floors on fewer than the top-performing 12% of SSIs, an outcome not permitted by §129(a)(2).

III. THE APPROPRIATE REMEDY IS TO VACATE THE SSI RULE

The SSI Rule unlawfully establishes MACT-level emission standards under §129, including standards for non-HAP pollutants, pre-construction siting approvals for new SSIs, monitoring and other requirements unique to §129. Because these requirements are beyond EPA's authority, the appropriate remedy is to vacate and remand the SSI Rule.

Vacatur is a routine remedy when an agency exceeds its statutory authority and there is reason to believe the rule will fundamentally change on remand. *See NRDC*, 489 F.3d at 1261-62 (vacating rules where EPA exceeded its authority under §129 "[i]n light of the need for wholesale revision on remand"). Here, EPA would regulate a different set of pollutants because §112(d) applies to HAPs listed under §112, while §129 adds several non-HAP pollutants. *See* CAA §129(a)(4). As noted in EPA's brief, the Agency would also need to consider different control technologies because area (*i.e.*, non-major) sources like SSIs typically are subjected to standards reflecting "generally available control technology" ("GACT") under §112(d)(5), instead of MACT-level controls. EPA Br. at 26 fn6. EPA never evaluated GACT for SSIs, and never considered the statutory factors

governing whether to adopt GACT-level controls. In this evaluation, EPA would need to consider whether controls beyond the existing Part 503 standards are warranted considering technological developments, cost effectiveness, and other factors. Further, EPA would eliminate requirements unique to §129, such as pre-construction siting approvals, operator training and availability requirements, and other requirements not present under §112.

Vacatur is also the proper remedy should the Court remand based only on the defects with the emission standards. Different MACT floors will result when EPA shifts the standard-setting databases to reflect additional SSI subcategories and new information from SSIs added to make the databases complete. Thus, EPA cannot not issue legally defensible standards based on the record already developed. *See, e.g.*, *A.L. Pharma, Inc. v. Shalala*, 62 F.3d 1484, 1492 (D.C. Cir. 1995).

This also is not a case where vacating the SSI Rule would leave SSIs unregulated while EPA responds to the remand. *See NRDC*, 489 F.3d at 1261-62 (vacating after balancing the likelihood of significant changes on remand with public health factors); *id.* at 1265-67 (dissenting because vacatur would leave no standards in effect). It is not true that emission of toxic pollutants "will continue unabated" unless the SSI Rule is left intact. Sierra Club Br. at 18. To the contrary,

SSIs are currently regulated by comprehensive risk-based standards as required by CWA §405 and set forth in 40 C.F.R. Part 503 addressing the potential health and environmental risks of pollutants emitted by SSIs. When EPA created Part 503, it identified the pollutants from sludge incineration that may adversely affect public health or the environment and specified standards and practices that are protective of public health and the environment. Part 503 contains emissions standards for many of the same pollutants addressed in the SSI Rule – including mercury, cadmium, lead, and hydrocarbons/carbon monoxide – plus standards for beryllium, arsenic, chromium, and nickel. Mun. Br. at 9-10. EPA has previously found that these existing standards are sufficiently protective of human health and the environment, (*see* NACWA comments at 6 and fn5 (JA:__)), and EPA does not claim otherwise in the SSI Rule.

CONCLUSION

For the reasons above and in our opening brief, Municipal Petitioners respectfully request the Court to vacate the SSI Rule.

Respectfully,

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CERTIFICATE OF COMPLIANCE

Undersigned counsel certify that this Reply Brief of Municipal Petitioners complies with the typeface and type-volume requirements of Fed. R. App. P. 32(a), because the brief contains 4,994 words, which is fewer than 5,000 words, as counted by counsel's word-processing system, in compliance with the Court's July 6, 2012 order.

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CERTIFICATE OF SERVICE

I hereby certify that on this 6th day of December 2012 a copy of the foregoing Reply Brief of Municipal Petitioners was served electronically through the Court's CM/ECF system on all registered counsel.

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