United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued October 3, 1996 Decided December 6, 1996

No. 95-1611

DAVIS COUNTY SOLID WASTE MANAGEMENT AND
ENERGY RECOVERY SPECIAL SERVICE DISTRICT,
A UTAH POLITICAL SUBDIVISION,
PETITIONERS

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

Consolidated with
Nos. 96-1015, 96-1048

On Petition for Review of an Order of the
Environmental Protection Agency

Mary Anne Q. Wood, David P. Novello and *Warren K. Rich* argued the causes for petitioners, with whom *Richard G. Wilkins, Larry S. Jenkins, Timothy R. Henderson* and *Jennifer L. Wurzbacher* were on the joint briefs. *William D. Evans, Jr.* entered an appearance.

John A. Sheehan and *Eileen T. McDonough,* Attorneys, United States Department of Justice, argued the causes for respondent, with whom *Lois J. Schiffer,* Assistant Attorney General, was on the brief.

Before: WALD, GINSBURG and RANDOLPH, *Circuit Judges.*

Opinion for the Court filed by *Circuit Judge* WALD.

WALD, *Circuit Judge*: Davis County Solid Waste Management and Energy Recovery Special Service District and Waste Energy Partners Limited Partnership (collectively "petitioners") challenge the final standards governing municipal solid waste ("MSW") combustion that were promulgated by the Environmental Protection Agency ("EPA" or "agency") on December 19, 1995. *See* Standards of Performance for Municipal Waste Combustors and Emission Guidelines for Existing Sources, 60 Fed. Reg. 65,387 (1995) ("1995 Standards"). These standards, which implement sections 111 and 129 of the Clean Air Act ("CAA"), 42 U.S.C. §§ 7411, 7429 (1994), include new source performance standards ("NSPS") and emissions guidelines for a variety of substances and mixtures. The NSPS

apply to new municipal waste combustor ("MWC") units, while the emission guidelines apply to existing MWC units.

According to petitioners, the 1995 standards exceed the EPA's statutory authority under the CAA because they are based on the aggregate MSW combustion capacity ("MSW capacity") of the plant at which a MWC unit is located, rather than on the MSW capacity of the MWC unit. Petitioners also argue that as applied to them the 1995 standards are arbitrary and capricious and that the EPA failed to comply with the CAA's procedural requirements in issuing the standards. Cement Kiln Recycling Coalition ("CKRC") argues that the EPA exceeded its statutory authority, acted arbitrarily and capriciously, and failed to comply with the CAA's procedural requirements in applying the standards to cement kilns. Since we agree with petitioners that the 1995 standards violate the plain meaning of section 129 and therefore vacate the standards, we do not reach petitioners' additional challenges or those of CKRC.

I. BACKGROUND

MSW is the waste generated by household, commercial, institutional and industrial sources, such as appliances, newspapers, food wastes, boxes and office paper. MSW is disposed of in landfills or by incineration, also referred to as combustion. According to the EPA, approximately 16 percent of the MSW generated in the United States today is combusted. 1995 Standards, 60 Fed. Reg. at 65,390, 65,392. Combustion of MSW results in the emission of various air pollutants, such as acid gases, organics, metals, nitrogen oxides and ash, some of which are considered to be carcinogens or to have other adverse effects when inhaled. *See* Assessment of Municipal Waste Combustor Emissions Under the Clean Air Act, 52 Fed. Reg. 25,399, 25,403-06 (1987) ("1987 Assessment"). Prompted by growing awareness about the potential hazards of air emissions from MWC units, as well as a petition from several states and environmental groups, in 1987 the EPA issued an advance notice of its intention to regulate MWC units under section 111 of the CAA, which requires the EPA to propose emission standards for sources that the EPA determines "causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 111(b)(1)(A); 1987 Assessment, 52 Fed. Reg. at 25,399 (1987).

The EPA issued the proposed standards for MWC emissions in 1989. *See* Standards of Performance for New Stationary Sources: Municipal Waste Combustors, 54 Fed. Reg. 52,251 (1989) ("1989 Proposed NSPS"); Emission Guidelines: Municipal Waste Combustors, 54 Fed. Reg. 52,209 (1989) ("1989 Proposed Guidelines"). The proposed standards did not require that any particular technology be installed in MWC units to control emissions; rather, they established limits on the levels of certain pollutants that MWC units could emit, and derived these limits from studying the level of emissions achievable with the best pollution control technology. In establishing these emission limits, the standards distinguished among MWC units based on whether the unit was built after or was already existing at the time the standards were proposed and on the aggregate MSW capacity of the plant at which a MWC unit was located. MSW capacity was defined as the maximum amount of MSW that could be combusted daily at a unit, and aggregate MSW plant capacity was defined as the sum of the MSW capacities of all of the MWC units at the same location. 1989 Proposed NSPS, 54 Fed. Reg. at 52,255, 52,261-62; 1989 Proposed Guidelines, 54 Fed Reg. at 52,213, 51,219-20.

The proposed standards for new units located at plants with an aggregate capacity greater than 250 tons per day ("tons/day") ("large new units"), and existing units located at plants with an aggregate MSW capacity above 2,200 tons/day ("regional existing units"), were based on the emissions control achievable with the highest efficiency scrubber system, a spray dryer/fabric filter system ("SD/FF"). The standards for new units located at plants with an aggregate capacity of 250 tons/day or less ("small new units") and existing units located at plants with an aggregate MSW capacity above 250 tons a day and up to 2,200 tons/day ("large existing units"), were based on the emissions control achievable with an intermediate scrubber system, such as dry sorbent injection/fabric filter ("DSI/FF") system or a dry sorbent injection/electrostatic precipitator ("DSI/EPS") system.[1] The standards for existing units located at plants with an aggregate MSW

[1]SD and DSI are "scrubbers," referred to as such because they function by "scrubbing" pollutants out of the gas stream that results from combustion. In SD, lime slurry is sprayed into a SD vessel through which the gas stream flows. The lime and acid gases react to form sulfate salts. In DSI, a powdered sorbent (such as lime, hydrated lime or sodium bicarbonate) is pneumatically injected into a section of either the flue gas duct or the furnace part of a MWC unit,

capacity of 250 tons/day or less ("small existing units"), on the other hand, did not necessitate the use of any scrubber technology because the EPA decided that its cost for these small plants would be unreasonable. Instead, the standards for small existing MWC units only required that these plants employ an ESP, the minimum control technology available to reduce emissions of particulate matter, and, like all MWC units, follow good combustion practices ("GCP") and meet certain material separation requirements.[2] 1989 Proposed NSPS, 54 Fed. Reg. at 52,254, 52,272; 1989 Proposed Guidelines, 54 Fed. Reg. at 52,012-52,228-30.

Congress responded to the EPA's 1989 proposed standards by enacting section 129, specifically addressed to solid waste incineration units, as part of Title III of the 1990 CAA amendments. Section 129(a)(1) directs the EPA to establish emission standards for solid waste incineration units, including NSPS directly applicable to new units and emission guidelines applicable to existing units by way of state implementation plans.[3] 42 U.S.C. § 7429(a)(1). Congress defined a "solid waste incineration unit" as "a distinct operating unit of any facility which combusts any solid waste material from commercial or industrial establishments or the general public." 42 U.S.C. § 7429(g)(1). Certain incinerators, such as units requiring permits under the Solid Waste Disposal Act or materials recovery facilities, were excluded from the definition of a solid waste incineration unit.

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whereupon the sorbent reacts with acid gases to form alkali salts. To be effective, scrubbers must be used in conjunction with devices that capture particulate matter, including the salts and other substances produced by the scrubbers. FF and ESP are such devices. A FF, often referred to as a baghouse, consists of a series of cylindrical bags through which the combustion gas stream is filtered and the particulate matter released by the scrubber are captured. An ESP imparts an electrical charge to particles that causes the particulate matter in the gas stream to adhere to metal plates in the ESP. Rapping on the plates causes the particles to fall into a hopper for disposal. *See* 1989 Proposed NSPS, 54 Fed. Reg. 52,263-64; Proposed Guidelines, 54 Fed. Reg. at 52,220-22; *see also* Office of Air Quality Planning and Standards, EPA, Pub. No. EPA-450/3-89-924c, Municipal Waste Combustors-Background Information for Proposed Standards: Post-Combustion Technology Performance (August 1989).

[2]GCP are procedures designed to ensure that MWC units are properly designed, constructed, operated and maintained. Material separation involves excluding certain materials that are particularly likely to release hazardous substances when combusted, such as tires or batteries, or separating materials that can be recycled to lower the amount of MSW being combusted. 1989 Proposed NSPS, 54 Fed. Reg. at 52,263-64; 1989 Proposed Guidelines, 54 Fed. Reg. at 52,220-23.

[3]"Standards" is used here to refer to both NSPS and emissions guidelines.

Id. MSW was defined as "refuse ... collected from the general public and from residential, commercial, institutional and industrial sources" and units combusting a fuel stream that is comprised of 30 percent or less of MSW were excluded from the definition of MWC units and from the standards applicable to MWC units.[4] *Id.* § 7429(g)(5).

Section 129(a)(2) lays out the methodology the EPA must use in setting the emissions standards, referred to as maximum achievable control technology ("MACT") standards, and requires that the standards "shall reflect the maximum degree of reduction in emissions of ... [certain listed air pollutants] that the [EPA], taking into consideration the cost of achieving such emission reduction, and any non-air quality health and environmental impacts and energy requirements, determines is achievable for new or existing units in each category." *Id.* § 129(a)(2). The EPA "may distinguish among classes, types, ... and sizes of units within a category in establishing [MACT] standards," but the EPA's discretion to determine the stringency of MACT standards is limited; the MACT standards must be at least as stringent as the MACT floor. The MACT floor is defined as either "the emissions control ... achieved in practice by the best controlled similar unit" for "new units in a category," or as "the average emissions limitation achieved by the best performing 12 percent of units in the category" for existing units. *Id.* This description of the MACT methodology demonstrates that the demarcation of the relevant categories of solid waste incineration units is central to the regulatory scheme established in section 129. The importance of how a category of units is defined is clearest in regard to existing units, whose MACT floor is the lowest level of emissions achieved by the best controlled 12 percent of units in a category; the MACT floor will obviously be lower if the category includes more units with advanced pollution control devices than if the category contains fewer units with such devices. But how the categories are defined proves important also with respect to new units, since the standards for a new unit in a given category will be based on the best performing similar unit, which will be another unit in that category.

Section 129 also identified the pollutants for which the EPA must issue emissions standards

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[4]Section 129(g)(4) actually refers to "municipal waste" as opposed to MSW, but it is apparent from the fact that section 129 addresses solid waste incineration units that the type of municipal waste at issue is MSW.

and set deadlines by which the standards must be issued. Section 129(a)(4) required that the EPA "specify numerical emission limitations" for certain substances and mixtures, some of which (cadmium, lead, mercury and fly/bottom ash) were not covered by the proposed 1989 standards. *Id.* § 7429(a)(4). The schedule set out in section 129(a)(1) is as follows: standards for MWC units with a MSW capacity above 250 tons/day were to be promulgated by November 15, 1991; standards for MWC units with a MSW capacity of 250 tons/day or less and for units combusting hospital, medical or infectious waste were to be promulgated by November 15, 1992; and standards for units combusting commercial and industrial waste were to be proposed by November 15, 1993 and promulgated by November 15, 1994. *Id.* § 7429(a)(1). The EPA was also required to publish a schedule by May 15, 1992, indicating when standards for other categories of solid waste incineration units would be promulgated.

At the time of the 1990 CAA amendments, the EPA was under a court deadline to promulgate final standards for new and existing MWC units. Standards of Performance for New Stationary Sources: Municipal Waste Combustors, 56 Fed. Reg. 5488, 5488 (1991) ("1991 NSPS"); Emissions Guidelines: Municipal Waste Combustors, 56 Fed. Reg. 5514, 5514 (1991) ("1991 Guidelines"). In setting a deadline for the promulgation of standards for MWC units with a capacity greater than 250 tons/day, Congress stated that it did not intend to disturb any court ordered schedule, and that standards issued pursuant to such a schedule should be subsequently modified, if necessary, to conform to section 129. *Id.* The EPA therefore only issued final standards applicable to new and existing units with unit MSW capacities greater than 250 tons/day. The final standards, issued in 1991, differed somewhat from those proposed in 1989. The standards for new units were based on the emissions control obtainable not only with a SD/FF system, as proposed, but also with selective noncatalytic reduction ("SNCR").[5] In promulgating the final 1991 standards for existing units, the EPA changed the categorization of units it had proposed in 1989, eliminating the "regional unit"

[5]SNCR involves injecting of ammonia, urea, or urea and methanol into the combustor to reduce the emission of nitrogen oxides. 1994 Proposed NSPS, 59 Fed. Reg. at 48,213-24; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,243-44; *see also* Leslie L. Sloss et al., NITROGEN OXIDES CONTROL TECHNOLOGY FACT BOOK 97-101 (1992) ("NITROGEN OXIDES FACT BOOK").

category and instead distinguishing between "very large units," which were units located at plants with aggregate MSW capacities above 1,100 tons/day, and "large units," which were units located at plants with aggregate MSW capacities above 250 tons/day up to and including 1,100 tons/day. The standards for very large units were based on the emissions control obtainable with a SD/ESP system, whereas the standards for large units were based on the control obtainable with a DSI/ESP system. The 1991 standards dropped the materials separation requirement proposed in 1989 because of cost concerns, but the GCP requirement for all units remained. 1991 NSPS, 56 Fed. Reg. at 5490; 1991 guidelines, 56 Fed. Reg. at 5516-17.

The EPA proposed new standards for MWC units, based on section 129 and the MACT methodology, on September 20, 1994. *See* Standards of Performance for New Stationary Sources: Municipal Waste Combustors, 59 Fed. Reg. 48,198 (1994) ("1994 Proposed NSPS"); Emissions Guidelines: Municipal Waste Combustors, 59 Fed. Reg. 48,228 (1994) ("1994 Proposed Guidelines"). The 1994 proposed standards imposed more stringent emissions limits than the 1991 standards and covered more MWC units.[6] 1994 Proposed NSPS, 59 Fed. Reg. at 48,200-02, 48,205; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,230-32. As required by the MACT methodology, the EPA first calculated MACT floors based on the emissions control achieved by the best controlled similar unit for new units, or the emissions control achieved by the best performing 12 percent of units in the same category for existing units. In determining which units were similar or in the same category for the purposes of setting MACT floors, the 1994 proposed standards differentiated among both new and existing units based on the aggregate MSW capacity of the plant at which the MWC unit was located rather than on the capacity of the individual MWC unit. Like the earlier standards, the 1994 proposed standards defined aggregate MSW plant capacity as the sum of the maximum amount of MSW each MWC unit located at a particular site is designed to combust daily. MWC units were then grouped for MACT standard-setting purposes into those with an aggregate MSW capacity greater than 250 tons/day ("large plants") and those with an aggregate MSW capacity

[6]Units built or modified after December 20, 1989, but before September 20, 1994, were subject to the 1991 NSPS as well as the 1994 emission guidelines. 1994 Proposed Guidelines, 59 Fed. Reg. at 48,230.

greater than 35 megagrams per day ("Mg/day") up to and including 250 tons/day ("small plants").[7] 1994 Proposed NSPS, 59 Fed. Reg. at 48,198, 48,202, 48,212-13; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,231-32, 48,244.

The EPA kept the MACT standards for several pollutants at the MACT floors for both new and existing units, because it concluded that going beyond the MACT floor would impose significant retrofitting costs that were unreasonable given the limited additional pollution control that stricter standards would achieve. The MACT floors for new units at large plants were based on a SD/FF system with SNCR and activated carbon injection ("CI"), while the MACT floors for existing units at large plants were based on a SD/FF or SD/ESP system with SNCR and carbon injection.[8] The MACT floors for new units at small plants, on the other hand, were based on a SD/FF system with CI and the MACT floors for existing units at small plants were based on only a DSI/ESP system and carbon injection. 1994 NSPS, 59 Fed. Reg. at 48,213-16; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,232-33, 48,245-49. Units located at plants with a MSW capacity between 25 Mg/day and 35 Mg/day were required to submit initial reports but were not subject to emission controls. 1994 NSPS, 59 Fed. Reg. at 48,212-16; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,242-49. All units subject to the standards were required to comply with the GCP specified in the 1991 standards, with new training and MWC operator requirements; additional siting and material separation plan requirements were imposed on new units. 1994 Proposed NSPS, 59 Fed. Reg. at 48,206, 48,219-22; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,232, 48,235.

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[7]The 1994 proposed standards, as well as the 1995 final standards, actually define large and small plants in terms of MSW capacity measured in Mg/day instead of tons/day—large plants are defined as plants with an aggregate MSW capacity above 225 Mg/day, while small plants are plants with an aggregate MSW capacity of 225 Mg/day or less. One megagram is equivalent to 2,204 pounds or 1.1 short tons, and thus 225 Mg is close to 250 tons. *See* 1994 Proposed NSPS, 59 Fed. Reg. at 48,198; 1994 Proposed Guidelines, 59 Fed. Reg. at 48,228. Given that the EPA treats these measurements, 225 Mg/day and 250 tons/day, as equivalent, and that the provision of section 129 at issue refers to 250 tons/day, this opinion refers to 250 tons/day instead of 225 Mg/day.

[8]CI involves injecting powdered activated carbon into the flue gas after combustion but before the gas stream reaches the scrubber or particulate matter devices. The carbon is a catalyst for oxidation of mercury into forms that can be more readily captured by these devices. 1994 Proposed Guidelines, 59 Fed. Reg. at 48,243-44. SNCR was not required for large existing mass burn refractory units. Proposed Guidelines, 59 Fed. Reg. at 48,233, 48,247.

On December 19, 1995, the EPA promulgated the 1994 proposed standards in final form, with a few modifications. 1995 Standards, 60 Fed. Reg. 65,387. The major changes were the following: new and existing MWC units located at plants with aggregate MSW capacities greater than 35 Mg/day, but actually combusting less than 10 Mg/day of MSW and limited to this lower level by permit, were exempt from the standards and were only required to file an initial report on their operations; new and existing MWC units with a total capacity of 25 to 35 mg/day were exempted from initial notification requirements; and the MACT floor for nitrogen oxides for both new and existing units was determined separately for each type of combustor. 1995 Standards, 60 Fed. Reg. at 65,401-44. Notably, the 1995 final standards retained the proposed approach of creating categories of MWC units based on the aggregate MSW capacity of the plants at which the units are located. The final standards also retained the proposed definition of a MWC as "any setting or equipment that combusts MSW," and further continued to exclude cofired combustors, which burn MSW along with non-MSW materials, from the scope of the standards, provided only 30 percent or less of the combustor's fuel stream was MSW. *Id.* at 65,391-95, 65,398-99.

Petitioners operate existing MWC units that have unit MSW capacities below 250 tons/day, but are located at plants with an aggregate MSW capacity above 250 tons/day. Including petitioners' units, there are 45 units located at 18 plants in this status. Because the 1995 standards categorize units by aggregate plant MSW capacity for purposes of determining the MACT floor, these units are currently grouped with large existing units. Since large existing units generally have the most efficient pollution control systems of any existing units, the MACT floor derived from the emissions of large existing units is very stringent. Petitioners argue that if MWC units were instead categorized by unit MSW capacity for the purpose of determining MACT floor, their units would be subject to less stringent emissions levels, because they would be grouped with smaller units that have less efficient pollution control systems and thus higher MACT floors.[9] Petitioners' MWC units are currently

[9]The extent of any decrease in stringency of the emissions controls applicable to petitioners' units that would result from determining MACT floors based on unit MSW capacities is unclear, as MACT floors and standards for the small plant category would have to be recalculated if petitioners' units and other similarly situated units were shifted to the category.

equipped with DSI/ESP systems, and in order to meet the 1995 standards the units would have to be retrofit with SD, CI and possibly SNCR devices, at a substantial cost.

After the 1995 standards were issued, petitioners and CKRC filed the challenges at issue here. This court subsequently denied the EPA's request for a voluntary remand to supplement the record and stayed the 1995 standards pending the outcome of this appeal.

II. DISCUSSION

Petitioners' main challenge is that the use of aggregate plant capacity to set the categories of MWC units for purposes of determining MACT floors and standards is inconsistent with section 129 of the CAA, which they claim requires categories of MWC units for MACT purposes to be based on unit MSW capacity. We must vacate the 1995 standards if they are "in excess of statutory jurisdiction, authority, or limitations, or short of statutory right." 42 U.S.C. § 7607(d)(9)(C); *see also* 5 U.S.C. § 706(2)(C); *American Petroleum Inst. v. EPA,* 52 F.3d 1113, 1119 (D.C. Cir. 1995) (same standard applies under CAA and APA review provisions). As the EPA is entrusted with the responsibility of administering the CAA, the *Chevron* two-step analysis governs our inquiry into whether the agency's 1995 standards represent a permissible construction of section 129. If we determine that "Congress has directly spoken to the precise question at issue, that is the end of the matter; for the court ... must give effect to the unambiguously expressed intent of Congress"; but "if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute." *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.,* 467 U.S. 837, 842-43 (1984). In this case, our analysis need not proceed beyond *Chevron*'s first step, for it is clear that the 1995 standards conflict with the plain meaning of section 129.

A. *The Language of Section 129*

The precise question here is whether section 129 establishes different categories of MWC units based on unit MSW capacity for the purpose of determining MACT floors and standards. The language of section 129(a)(1) is critical to our analysis, and we set it out in full:

> (a) New source performance standards[10]
>
> (1) In general
>
> (A) The Administrator shall establish performance standards and other requirements pursuant to section 7411 of this title and this section for each category of solid waste incineration units. Such standards shall include emissions limitations and other requirements applicable to new units and guidelines (under 7411(d) of this title and this section) and other requirements applicable to existing units.
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> (B) Standards under section 7411 of this title and this section applicable to solid waste incineration units with capacity greater than 250 tons per day combusting municipal waste shall be promulgated not later than 12 months after November 15, 1990. Nothing in this subparagraph shall alter any schedule for the promulgation of standards applicable to such units under section 7411 of this title pursuant to any settlement and consent decree entered by the Administrator before November 15, 1990: *Provided,* That, such standards are subsequently modified pursuant to the schedule established in this subparagraph to include each of the requirements in this section.
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> (C) Standards under section 7411 of this title and this section applicable to solid waste incineration units with capacity equal to or less than 250 tons per day combusting municipal waste and units combusting hospital waste, medical waste and infectious waste shall be promulgated not later than 24 months after November 15, 1990.
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> (D) Standards under section 7411 of this title and this section applicable to solid waste incineration units combusting commercial or industrial waste shall be proposed not later than 36 months after November 15, 1990, and promulgated not later than 48 months after November 15, 1990.
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> (E) Not later than 18 months after November 15, 1990, the Administrator shall publish a schedule for the promulgation of standards under section 7411 and this section applicable to other categories of solid waste incineration units.

It is indisputable that section 129(a)(1) expressly differentiates among units based on unit MSW capacity when it states that standards for "units with [a MSW] capacity greater than 250 [tons/day]" must be issued by November 15, 1991, while standards for "units with [a MSW] capacity equal to or less than 250 tons/day" need not be issued until November 15, 1992. The only question remaining is whether in this provision Congress intended to create two categories of MWC units based on unit capacity for the purpose of determining what emissions controls will be imposed on the units, or whether it intended only to differentiate between the two types of MWC units for regulatory

[10]Although this subsection is titled "New source performance standards," it is apparent from the references to emission guidelines and existing units in section 129(a)(1)(A) that the subsection addresses the promulgation of emissions standards for all solid waste incineration units, and not just new source performance standards for new units.

scheduling purposes. The EPA maintains that section 129(a)(1) simply sets out the deadlines by which emissions standards must be promulgated and does not create two categories of MWC units for substantive regulatory purposes. Petitioners unsurprisingly contend the opposite, that section 129(a)(1) plainly establishes two separate categories of solid waste incineration units, large MWC units (units with unit MSW capacities above 250 tons/day) and small MWC units (units with unit MSW capacities of 250 tons/day or less), for which emissions controls must be separately promulgated.

The text and structure of section 129(a)(1) and the rest of section 129 go to show that petitioners have much the better of the argument. Section 129(a)(1) begins by stating that the EPA shall promulgate standards and guidelines for "each category of solid waste incineration units," and then proceeds to identify specific types of units and the date by which standards shall be issued for each type. The types of units identified are not only MWC units with a unit capacity above 250 tons/day and MWC units with a unit capacity of 250 tons/day or less, but also units combusting hospital and medical waste and units combusting commercial or industrial waste. The plain implication of section 129(a)(1) is that the types of units listed are the relevant categories for determining emissions standards. This implication is reinforced by the final part of section 129(a)(1), section 129(a)(1)(E), which states that the EPA shall publish a schedule indicating when standards applicable to "other categories of solid waste incineration units" will be promulgated. The reference to the EPA's authority to identify and set promulgation deadlines for *other* categories of solid waste incineration units plainly implies that certain categories of these units have already been identified. This interpretation is bolstered by the fact that at no other point in section 129 are any categories of solid waste incineration units identified in prior parts of the section. Instead, the language used in the following parts of section 129 assumes that the basic categories of solid waste incineration units have already been set and proceeds to give guidance on how the EPA should treat different units within the categories in determining emission standards, emphasizing in particular that the EPA is to distinguish between new and existing units within a category. For example, section 129(a)(2) instructs the EPA to require the maximum degree of emissions control that the EPA determines "is

achievable for new or existing units in each category," specifies that the EPA is to follow a different methodology in calculating MACT floor for new and existing units and authorizes the EPA to set "[e]missions standards for existing units in a category [that are] ... less stringent than standards for new units in the same category," provided the standards for existing units are at least as stringent as the MACT floor.

Significantly, the EPA does not dispute that section 129(a)(1) sets out the basic categories of solid waste incineration units. According to the EPA, however, section 129(a)(1) should be read as differentiating among units on the basis of the type of waste being combusted, and thus the categories of units created in section 129(a)(1) are units combusting MSW (MWC units), units combusting medical, hospital and infectious waste, and units combusting commercial and industrial waste. The EPA maintains that reading the regulatory deadlines in section 129(a)(1) as establishing the different categories of solid waste incineration units would actually run counter to the legislative mandate, because this approach would preclude differentiation among units by the type of waste combusted. According to the EPA's view of petitioners' statutory argument, small MWC units and units combusting hospital waste, medical waste, and infectious waste would have to be considered as one category because these units are both listed in the same clause of section 129(a)(1) and assigned the same promulgation deadline. We have difficulty in following the EPA's logic. Section 129(a)(1) creates two categories of MWC units not simply because it imposes different dates by which the standards for large and small MWC units must be promulgated, but more compellingly because it separately defines these two types of MWC units. Since section 129(a)(1) also separately identifies units combusting hospital, medical, and infectious waste and units combusting commercial and industrial waste, these represent two additional categories of solid waste incineration units. Thus, the most logical and straightforward reading of section 129(a)(1) is that it establishes four categories of solid waste incineration units—MWC units with a unit capacity above 250 tons/day, MWC units with a unit capacity of 250 tons/day or less, units combusting hospital, medical and infectious waste, and units combusting commercial or industrial waste.

The EPA's claim that section 129(a)(1) is simply a scheduling provision is also implausible in

light of the regulatory scheme detailed in the following subsection of the statute, section 129(a)(2). *See Ethyl Corp. v. EPA,* 51 F.3d 1053, 1061 (D.C. Cir. 1995) (drawing on a neighboring CAA provision in determining that the EPA's interpretation of its authority to issue waivers for fuel additives violated the plain meaning of section 211(f)(4) of the CAA). Under the MACT methodology set out in section 129(a)(2), the emission standards must be at least as stringent as the MACT floors, and MACT floor for existing units is defined as the average level of emissions achieved by the best performing 12 percent of units in a category. Therefore, in order to promulgate emissions standards, the EPA must first calculate MACT floors, and the EPA cannot calculate the MACT floors until it has studied the emissions levels of all the units in the relevant category. When this MACT methodology set out in section 129(a)(2) is viewed in light of the regulatory deadlines established in section 129(a)(1), it becomes apparent that Congress must have intended large and small MWC units to represent separate categories of solid waste incineration units. If large MWC units are a separate category of units, the EPA can set emissions standards for these units before it gathers data on emissions at small MWC units; but if large and small MWC units are in the same category, the EPA cannot set standards for large MWC units until it has studied emissions at small MWC units, because the EPA would need this emissions data to calculate MACT floors.

That the EPA was able to avoid this dilemma in practice only by simultaneously studying emissions at all MWC units and then simultaneously promulgating new standards for large and small MWC units in 1994 does not detract from the plain import of the section's language and structure, which assumes differently timed regulatory actions. While section 129 certainly does not preclude the EPA from simultaneously studying and promulgating standards for large and small MWC units, nothing in section 129 either requires or even suggests such simultaneous action. Rather, it is clear from the text of section 129(a)(1), setting out different deadlines for when standards for large and small MWC units are to be promulgated, that Congress anticipated separate promulgation. The EPA's approach essentially reads these different deadlines out of the statute, and it is of course a well-established maxim of statutory construction that courts should avoid interpretations that render a statutory provision superfluous. *Pennsylvania Dep't of Pub. Welfare v. Davenport,* 495 U.S. 552,

562 (1990); *Alabama Power Co. v. EPA,* 40 F.3d 450, 455 (D.C. Cir. 1994). In the final analysis the only interpretation of section 129's language that both gives meaning to the regulatory deadlines in section 129(a)(1) and coheres with the MACT methodology set out in section 129(a)(2) is one that reads section 129(a)(1) as creating two categories of MWC units for regulatory purposes, namely large and small MWC units.

The EPA points to section 129(a)(2), which states that the EPA "may distinguish among classes, types ... and sizes of units within a category in establishing [MACT] standards" as evidence that section 129 authorizes the EPA to group MWC units by aggregate plant capacity for MACT purposes. 42 U.S.C. § 7429(a)(2). According to the EPA, it has merely exercised its discretion under section 129(a)(2) and differentiated among three classes of MWC units: those located at plants with an aggregate MSW capacity above 250 tons/day, those located at plants with an aggregate MSW capacity of 250 tons/day or less, and those located at plants with an aggregate MSW capacity of 35 Mg/day or less. But this justification for the aggregate plant capacity approach of the 1995 standards assumes that Congress put all MWC units in one category in section 129(a)(1), since section 129(a)(2) only gives the EPA discretion to distinguish among units *within a category*. As discussed above, however, this assumption is indefensible in light of the distinction in section 129(a)(1) between MWC units with unit capacities above 250 tons/day and MWC units with unit capacities of 250 tons/day or less.

Given that section 129(a)(1) created these two categories of MWC units, section 129(a)(2) actually serves as further evidence that the aggregate plant capacity approach used in the 1995 standards violates the plain meaning of section 129. In section 129 Congress notably did not give the EPA much discretion to create categories of solid waste incineration units; rather, it listed several categories of solid waste incineration units and only allowed the EPA discretion to identify "*other* categories of solid waste incineration units." In contrast, section 111 of the CAA, which applies to all stationary sources of air pollutants, and section 112, which applies to all stationary sources of hazardous air pollutants, give the EPA substantial discretion to create categories of sources for which standards must be promulgated. 42 U.S.C. § 7411(b)(1)(A); 42 U.S.C. §§ 7412(c)(1), 7412(c)(3).

Neither the provision of discretionary authority to distinguish "within a category" in section 129(a)(2), nor the grant of authority to identify categories of air pollution sources in section 111, can, however, be used so as to eradicate the very specific limits placed on the EPA's authority to create categories of solid waste incineration units laid out in section 129(a)(1).[11] *See, e.g., Mead Corp. v. Browner,* No. 95-1610, 1996 WL 653637 at *3-*4 (D.C. Cir. Nov. 12, 1986) (EPA's general power to group hazardous waste sites for response purposes under CERCLA does not authorize the EPA to include a site on national site list that does not meet statutory listing criteria simply by grouping it with sites that do meet criteria); *American Petroleum Institute,* 52 F.3d at 1119 ("EPA cannot rely on its general authority to make rules necessary to carry out its functions when a specific statutory directive defines the relevant functions of EPA in a particular area"). Sections 111 and 112 act as counterindicators to the EPA's interpretation, since they illustrate that Congress knew how to bestow such category-defining discretion when it wanted to do so.

B. *The Legislative History of Section 129*

The EPA also defends its aggregate plant capacity approach by citing to the legislative history of section 129, which it says demonstrates that Congress intended to allow the EPA to establish its own categories of units, including categories based on aggregate plant capacity, in order to realize the congressional purpose behind section 129. Even though we find the meaning of section 129(a)(1) clear from its text, we will examine the legislative history of section 129 to determine whether reading section 129 according to its literal meaning will frustrate congressional intent. Ordinarily, "[t]he plain meaning of legislation should be conclusive, except in the "rare cases [in which] the literal application of a statute will produce a result demonstrably at odds with the intentions of its drafters.' " *United States v. Ron Pair Enters., Inc.,* 489 U.S. 235, 242 (1989) (quoting *Griffin v. Oceanic Contractors, Inc.,* 458 U.S. 564, 571 (1982)) (alterations in original); *see also Environmental Defense Fund v.*

[11]We emphasize that we do not hold that the EPA is precluded from ever taking a unit's location into account, but simply that EPA cannot use location to override the MWC unit categories established by Congress. Section 129(a)(2) gives the EPA broad discretion to differentiate among units in a category, and there is nothing in the text of section 129(a)(2) that would prevent the EPA from subcategorizing within the two categories of MWC units established by Congress on the basis of the units' location, provided the EPA indicated why such a subcategorization was appropriate.

EPA, 82 F.3d 451, 468-69, *as amended,* 92 F.3d 1209 (D.C. Cir. 1996). "[L]iteral interpretation need not rise to the level of "absurdity' before recourse is taken to the legislative history, ... [but] there must be evidence that Congress meant something other than what it literally said before a court can depart from plain meaning." *Engine Mfrs. Ass'n v. EPA,* 88 F.3d 1075, 1088 (D.C. Cir. 1996) (citation omitted). An examination of the legislative history here fails to provide the requisite evidence that reading section 129 as creating two categories of MWC units based on unit capacity would frustrate legislative purpose or otherwise violate the intent of its drafters; indeed, we believe it demonstrates the opposite.

The language and structure of section 129 changed dramatically as the 1990 CAA amendments wound their way through Congress. The House did not include any provision on solid waste incineration in the bill it initially passed and sent to conference, and there was no informative discussion of section 129, after it appeared in the conference bill. *See* 136 CONG. REC. 11,904 (daily ed. May 23, 1990) (Statement of Rep. Bliley), *reprinted in* 2 COMM. ON ENV'T & PUB. WORKS, 103D CONG., A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS 2724 (1993) ("LEGISLATIVE HISTORY"). Consequently, the only relevant history of section 129 comes from the Senate's deliberations. A provision on municipal combustion was contained in the reported version of Senate Bill 1630, the legislation embodying the CAA amendments. This early version of section 129 (which at this point was actually section 130) differed dramatically from the finally enacted section 129; for example, it addressed only municipal waste combustion, required that the EPA use the best available control technology approach then in use in section 211 of the CAA in promulgating standards, did not differentiate between new and existing units in specifying how standards would be calculated or provide for the EPA to take costs into account in setting emission controls. S. 1630, 101st Cong., § 130 (as reported), *reprinted in* 5 LEGISLATIVE HISTORY, at 8154-80. An amendment offered by Senator Dole on the floor after the bill was reported out of committee, which was also supported by the bill's managers and sponsors, embodied much of the language of the present section 129(a)(1), including the separate promulgation deadlines for MWC units with unit capacities above 250 tons/day and MWC units with unit capacities of 250 tons/day or less. 136 CONG. REC. 6549 (daily ed. Apr.

3, 1990), *reprinted in* 4 LEGISLATIVE HISTORY, at 7250. Although the Senate amendment required the EPA to distinguish among classes, sizes and types of units within a category, this mandatory language was changed in conference to permit rather than require the EPA to do so. In addition, section 129(a)(2) was changed in conference to incorporate the MACT methodology, which was also applied to section 112 of the CAA, replacing the best achievable control technology approach and the caveat was added that section 129's deadlines were not to displace any court-ordered schedule. H.R. CONF. REP. No. 952, 101st Cong., 2d Sess. at 187-88 (1990), *reprinted in* 1 LEGISLATIVE HISTORY, at 1637-38.

From our reading, we can discern no clear congressional understanding as to what categories of solid waste incineration units were created by section 129. Senator Dole did not specifically discuss how the different categories of solid waste incineration units would be identified when he offered his amendment. However, he did state that he offered the amendment so that standards applicable to "large municipal incinerators" would not be imposed on all incinerators and described the difficulties these standards would pose for hospital and medical waste incinerators, "smaller modular incineration systems widely used ... for dealing with municipal waste for rural areas and small communities," and for "[i]ndustrial incinerators." 136 CONG. REC. 6400 (daily ed. Apr. 3, 1990), *reprinted in* 4 LEGISLATIVE HISTORY, at 7049-50. His comments, if anything, point in the direction that section 129(a)(1) was intended to create four categories of units—large MWC units, small MWC units, hospital and medical units and industrial units—as indeed the plain language of section 129(a)(1) suggests. On the other hand, post-conference statements on the Senate floor by a sponsor and a manager of the bill, Senators Durenberger and Chafee, respectively, indicate that they thought units would be divided into categories according to the type of waste combusted and that all MWC units would be in one category. Senator Durenberger stated that section 129 "requires EPA to issue new source performance standards for municipal incinerators, for medical waste incinerators and for incinerators burning commercial and industrial waste," while Senator Chafee commented that "[t]he conference agreement includes provision to control the air emissions from municipal, hospital and other commercial and industrial incinerators." 136 CONG. REC. 6401 (daily ed. Apr. 3, 1990)

(Statement of Sen. Durenberger), *reprinted in* 4 LEGISLATIVE HISTORY, at 7052; 136 CONG. REC. S16,955 (daily ed. Oct. 27, 1990) (Statement of Sen. Chafee), *reprinted in* 1 LEGISLATIVE HISTORY, at 952. Meanwhile, remarks by Senator Baucus, the other Senate manager, stating that "the Administrator[,] in establishing MACT for incinerators is directed to establish different categories for units combusting municipal waste with capacity greater than 250 tons per day, units with capacity less than 250 tons per day combusting municipal waste and medical waste, and for units combusting commercial or industrial waste," suggest that he believed not only that there would be two categories of MWC units, based on unit capacity, but also that smaller MWC units and units combusting medical waste would be in the same category. 136 CONG. REC. S16,979 (daily ed. Oct. 27, 1990), *reprinted in* 1 LEGISLATIVE HISTORY, at 1031; *see also* 136 CONG. REC. 6402 (daily ed. Apr. 3, 1990) (Statement of Sen. Baucus) (amendment embodying section 129 "directs EPA to establish one set of standards for municipal incinerators, another set for hospital incinerators and small units, and another set for industrial incinerators."), *reprinted in* 4 LEGISLATIVE HISTORY, at 7054. The inconsistencies in the comments of different Senators is not surprising; the provisions of section 129 are highly technical, and the impact of the different descriptions of section 129(a)(1)'s categories would have been difficult to foresee. Inevitably, such a plethora of inconsistent statements provides too "meager [a] record" for us to conclude that Congress intended to create a single category of MWC units, particularly "given the clear statutory language" to the contrary. *Engine Mfrs. Ass'n,* 88 F.3d at 1091; *see also Qi-Zhuo v. Meissner,* 70 F.3d 136, 140 (D.C. Cir. 1995) ("in the realm of legislative interpretation, inconsistent history certainly cannot override plain language").

The legislative history does demonstrate that in enacting section 129 Congress sought to force the EPA to impose stricter emission standards on MWC. The 1989 proposed regulations formed the backdrop to Congress' passage of section 129, and it is evident that Congress believed the 1989 proposed standards did not impose adequate emissions control, especially in regard to the smaller existing units that were exempted from having to install any scrubber devices. The legislation embodying the 1990 CAA amendments specifically directed the EPA to reconsider its proposed 1989 emissions standards for "small new units and for existing units" in light of the new MACT

methodology. 42 U.S.C. § 7429, *Note* (Review of Acid Gas Scrubbing Requirements); *see also* H.R. CONF. REP. No. 101-952, at 342 ("Proposed requirements for units smaller than 250 tons per day should be reconsidered in light of the new provisions of section 129."), *reprinted in* 1 LEGISLATIVE HISTORY, at 1792. In the Senate debates, Senator Durenberger commented that although the EPA's approach at that juncture was a "credible effort," the EPA's standards were "not as protective as the standards ... sought in legislation," and that section 129 would require significantly more units to install scrubbers than the 1989 proposed standards. 136 CONG. REC. S16,924 (daily ed. Oct. 27, 1990), *reprinted in* 1 LEGISLATIVE HISTORY, at 857-58. Senator Baucus agreed, stating that "EPA is to review its proposal with respect to the acid gas scrubber requirement for all existing units.... EPA proposed a scrubber requirement for some very large existing units and no requirement for smaller units. Whether that determination properly implements this new standard is in doubt." 136 CONG. REC. S17,241 (daily ed. Oct. 26, 1990), *reprinted in* 1 LEGISLATIVE HISTORY, at 1137; *see also* 136 CONG. REC. 6403 (daily ed. Apr. 3, 1990) (Statement of Sen. Baucus) ("EPA's proposal is not adequate [in part because] ... it is limited to large municipal incinerators"), *reprinted in* 4 LEGISLATIVE HISTORY, at 7056.

Reading section 129 as categorizing MWC units based on unit capacity instead of aggregate plant capacity will not frustrate Congress' purpose of forcing the EPA to impose more stringent emissions controls on existing units. Even if MWC units are categorized based on unit capacity, the standards for existing MWC units will still be more stringent than those proposed in 1989 because of the MACT methodology, and all MWC units with a capacity above 35 Mg/day will have to install some form of scrubber equipment. More importantly, as the EPA itself admits, the effect of recalculating MACT floors based on unit capacity instead of aggregate plant capacity will be to make the standards applicable to small existing units significantly more stringent than in the 1995 standards. Most small existing units that have unit MSW capacities lower than 250 tons/day are currently grouped in the small plant category; the only exceptions are the 45 units (including petitioners' units) that have unit MSW capacities below 250 tons/day but are located at plants with aggregate plant capacities above 250 tons/day. The effect of recalculating MACT floors based on unit capacity will

be to replace this small plant category with a new "small unit" category that contains not only the units that were previously in the small plant category, but also these additional 45 MWC units. Many, if not most, of these 45 MWC units have more effective pollution control systems than the existing units that were in the small plant category. Since MACT floors are calculated by determining the level of emissions achieved by the best performing 12 percent of units in a category, grouping these 45 MWC units with the units that were in the small plant category will result in new MACT floors that are more stringent than the MACT floors that were calculated for the small plant category in 1995. The actual emissions standards will similarly be more stringent, because, as discussed above, section 129 requires that the actual standards must be at least as stringent as the MACT floors. The only way that this result can be avoided is if the EPA exercises its discretion to distinguish among units within a category and creates subcategories of small units, for which it can then calculate MACT floors and standards separately.

It is true that categorizing on the basis of unit capacity may make the standards applicable to petitioners' units and other similarly situated units less stringent. While these units have more effective pollution control equipment than most units currently in the small plant category, they also have less effective equipment than most units currently in the large plant category. Consequently, petitioners' units and other similarly situated units will encounter less stringent MACT floors, and most likely less stringent actual emission standards, when grouped with small units than they would when grouped with large units, even accounting for the increased stringency that will result from including these units in the new small unit category.[12] But it is not at all apparent that this potential loss in emissions control goes against Congress' intent in enacting section 129. At the same time as it sought greater emissions control, Congress clearly did not intend that all units should be required to adhere to emissions controls of the same stringency. This intention was evident to some degree in the reported version of Senate Bill 1630, which authorized the EPA to distinguish among units

[12]Again, whether the new emission standards for petitioners' units and other similarly situated units are in fact less stringent than the emissions standards imposed on these units in 1995 will depend on whether the EPA utilizes its discretion to create subcategories within the small unit category or justifies imposing standards on these units that are more stringent than the MACT floor.

based on the type of combustion technology or pollution control equipment the units employed. It became much more apparent once Senate Bill 1630 was amended to require the EPA to differentiate among categories of solid waste incineration units and between new and existing units, to consider costs, non-air quality health and environmental impacts and energy requirements in determining whether to set emissions standards that are more stringent than the MACT floor, and to allow the EPA to distinguish among classes, types and sizes of units in setting standards. According to Senator Dole, the purpose of the new language was to insure that "real and important differences in size, class and type of technology ... are recognized," so that the use of incineration as a waste disposal method did not become economically infeasible. 136 CONG. REC. 6400 (daily ed. Apr. 3, 1990), *reprinted in* 4 LEGISLATIVE HISTORY, at 7049; *see also* 136 CONG. REC. S17,238-39 (daily ed. Oct. 26, 1990) (Statement of Sen. Dole) (discussing provisions of S. 1630 after conference), *reprinted in* 1 LEGISLATIVE HISTORY at 1129-31. Other Senators critically involved in the 1990 CAA amendments agreed, arguing that the new language would give the EPA greater flexibility to take important distinctions among units into account. 136 CONG. REC. 6402 (daily ed. Apr. 3, 1990) (Statement of Sen. Baucus), *reprinted in* 4 LEGISLATIVE HISTORY, at 7054; 136 CONG. REC. S17,238-39 (daily ed. Oct. 26, 1990) (Statement of Sen. Durenberger) (responding to Sen. Dole's comments on S. 1630 after conference), *reprinted in* 1 LEGISLATIVE HISTORY, at 1129-31.

Section 129 thus represents a compromise between competing concerns and purposes; Congress wanted both to impose more stringent emission controls on incinerators and not to foreclose the use of incineration by imposing such stringent standards that smaller units could not feasibly meet them. In a context of competing legislative purposes, it is often difficult to determine whether an interpretation of a statute frustrates or advances congressional purposes; since if a "provision strikes a balance between competing policies, ... any adjustment of the balance to favor one policy would inevitably "frustrate' another." *Engine Mfrs. Ass'n,* 88 F.3d at 1089 n.42; *see also Natural Resources Defense Council v. EPA,* 822 F.2d 104, 113 (D.C. Cir. 1987) ("[w]hile a broad policy goal may well be the animating force driving the legislation, achievement of actual passage of the measure invariably requires compromise and accommodation."). Given Congress' emphasis on

"real differences," such as size, among solid waste incineration units, and the fact that recategorizing units based on unit capacity may result in stricter emissions controls for some units, we are unable to conclude that any potential loss in emissions control at petitioners' and other similarly situated units would so frustrate the legislative purpose behind section 129 as to allow us to ignore the provision's plain language.

The EPA additionally argues that the legislative history of section 129 demonstrates that Congress meant unit capacity to refer to aggregate plant capacity, and thus, "as a matter of historical fact, Congress did not mean what it appears to have said." *Engine Mfrs. Ass'n,* 88 F.3d at 1089. The EPA bases this argument on the frequent remarks by members of Congress indicating that they believed they were "build[ing] upon the EPA proposal" in enacting section 129. 136 CONG. REC. S16,924 (daily ed. Oct. 27, 1990) (Statement of Sen. Durenberger), *reprinted in* 1 LEGISLATIVE HISTORY, at 857; 136 CONG. REC. 6403 (daily ed. Apr. 3, 1990) (Statement of Sen. Baucus), *reprinted in* 4 LEGISLATIVE HISTORY, at 7056; 136 CONG. REC. H12,863 (daily ed. Oct. 26, 1990) (Statement of Rep. Bliley), *reprinted in* 1 LEGISLATIVE HISTORY, at 1225. According to the EPA, this suggests that Congress did not perceive the categorization scheme set out in section 129 as different from that in the 1989 proposed standards, which distinguished among units based on aggregate plant capacity, not unit capacity. The EPA also notes that the conference report and comments by the Senate managers and sponsors frequently refer to the standards for "small units" contained in the 1989 proposed standards, but in fact the regulations did not propose standards for "small units" but for MWC units located at "small MWC plants." *See, e.g.,* H.R. CONF. REP. No. 101-952, at 342 (stating that "[p]roposed requirements for units smaller than 250 tons per day should be reconsidered," rather than that proposed requirements for units located at plants smaller than 250 tons/day should be reconsidered), *reprinted in* 1 LEGISLATIVE HISTORY, at 1792; 136 CONG. REC. S17,241 (daily ed. Oct. 26, 1990) (Statement of Sen. Baucus) (stating that "EPA proposed a scrubber requirement for some very large existing units and no requirement for smaller units," although the EPA actually had proposed scrubber requirements for units at large plants and exempted units at small plants), *reprinted in* 1 LEGISLATIVE HISTORY, at 1137; 136 CONG. REC. S16,924 (daily ed.

Oct. 27, 1990) (Statement of Sen. Durenberger) (noting that Senate was delaying the promulgation date of standards "for the small units" so that the EPA could determine whether these units should remain exempt from scrubber requirements, even though the EPA had only exempted units at small plants from scrubber requirements); *reprinted in* 1 LEGISLATIVE HISTORY, at 858.

All well and good, but an examination of the definition of "solid waste incineration unit" contained in section 129 itself reveals that Congress unequivocally defined a solid waste incineration unit as "a distinct operating unit of any facility" that combusts solid waste. 42 U.S.C. § 7429(g)(1). In the 1995 and earlier standards, which used aggregate plant MSW capacity as the dividing line between categories of MWC units, "plant" was defined to mean the same thing as facility. The 1995 standards define a plant as "one or more [MWC] units at the same location" and use plant and facility interchangeably in identifying the MWC units subject to particular emissions controls; for example, the NSPS for new units are described as applying to "each new MWC unit located at an MWC facility that has an aggregate [MSW] plant capacity" above 35 Mg/day. 1995 Standards, 60 Fed. Reg. at 65,391, 65,415; *see also* 1989 Proposed Guidelines, 54 Fed. Reg. at 52,219 ("[f]or purposes of determining the regulatory size category of an existing MWC plant, the capacity of all the existing MWCs at the same location would be aggregated"). To follow the EPA's lead and read unit capacity as meaning aggregate plant capacity in section 129 would therefore essentially equate a unit with a facility, in the face of explicit congressionally approved text providing that units and facilities are not identical.

The cumulative evidence thus suggests that while Congress desired to build upon the 1989 proposed standards, it did not intend to adopt the same categories of MWC units that the regulations had established, and that the phrase "small units" was simply used in congressional deliberations as a shorthand reference to units located at plants with a small aggregate plant MSW capacity. Given that section 129 distinguishes between units and facilities in its definitional subsection, it seems likely that if Congress had meant unit capacity (or to parrot the exact language of section 129(a)(1), "units with capacity") to refer to aggregate plant MSW capacity, it would have said just that. Significantly, Title III of the 1990 CAA amendments also contained provisions amending section 112 of CAA,

which governs emissions of hazardous air pollutants, making it clear that the EPA was to determine the aggregate emissions of all of the stationary sources at a particular site in assessing whether a source constituted a "major source." The definition of major source added to section 112 by the 1990 CAA amendments says it "means any stationary source or group of stationary sources located within a contiguous area and under common control" that potentially emits "in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous pollutants." 42 U.S.C. § 7412(a)(1); *see also* 136 CONG. REC. S16,927-29 (daily ed. Oct. 27, 1990) (Statement of Sen. Durenberger) (discussing definition of major source under section 112), *reprinted in* 1 LEGISLATIVE HISTORY, at 864-69. We naturally find it difficult to accept that Congress would specifically instruct the EPA to determine the applicability of emissions controls on an aggregate basis in one section of the 1990 CAA amendments and not do so in neighboring section, if in fact it had the same intent regarding the second section as well.

We finally conclude that the 1995 standards conflict with the plain meaning of section 129 and exceed the EPA's statutory authority under section 129 of the CAA. Section 129 creates two categories of MWC units based on unit capacity, units with unit MSW capacities above 250 tons/day and units with unit MSW capacities of 250 tons/day or less. The 1995 standards ignore the categories of MWC units created in section 129 and group MWC units on the basis of aggregate MSW capacity instead of unit MSW capacity for MACT purposes. Although the EPA has some discretion to distinguish among MWC units in setting emissions standards, section 129 does not give it authority to ignore the categories that Congress established, and "[i]t is axiomatic that an administrative agency's power to promulgate legislative regulations is limited to the authority delegated by Congress." *Bowen v. Georgetown Univ. Hosp.,* 488 U.S. 204, 208 (1988).

III. REMEDY

In light of the preceding discussion, we have no choice but to vacate substantial portions of the 1995 standards, based on our conclusion that they exceed the EPA's statutory authority. It is not immediately apparent to us, however, that all of the 1995 standards must be vacated. As discussed above, the effect of recategorizing by unit capacity will be to shift some units in what is currently the

large plant category to what is now the small plant category. This shift likely will not affect the NSPS for new units, regardless of unit capacity. The MACT floor for new units is the level of control achieved by the best controlled similar unit, which in the case of new units at large plants is a unit with a GCP/SD/FF/SNCR/CI system and for new units at small plants is a unit with a GCP/SD/FF/CI system. Unless the units shifted to the small plant category were the only units employing GCP/SD/FF/SNCR/CI controls—a proposition that seems highly improbable based on the record—the MACT floor and standards for new units at large plants should remain the same. Similarly, the MACT floors and standards for new units at small plants might possibly be affected by the recategorization if the units shifted used SNCR and did not use a distinguishable form of combustor (*i.e.,* a mass burn or modular combustor), which also appears to be an unlikely scenario.

As MACT floors for existing units are determined by calculating the average emissions limitations achieved by the best performing 12 percent of units in a given category, recategorizing MWC units is likely to have an effect on the standards for existing units. But it may still be the case that the new MACT floors for existing units with unit capacities above 250 tons/day will be nearly the same as those proposed for the large plant category in the 1995 standards, provided the emissions control achieved by the best performing 12 percent of units that remain in the large plant category is still the level of control obtainable with a SD/FF or ESP/SNCR/CI system. On the other hand, it is clear that the recategorization will affect the MACT floors for existing units with unit capacities of 250 tons/day or less, which previously were in the small plant category. Unless the EPA subcategorizes MWC units in this category by location or other factors, the standards for these units will become significantly more stringent.

Thus, it is possible that only the standards applicable to existing units in the small plant category must be vacated. At oral argument, however, counsel for the EPA stated that he believed the 1995 standards would need to be vacated in their entirety if we were to decide that MWC units had to be recategorized by unit capacity. Given this acknowledgment, and the fact that it is not entirely clear from the record precisely which standards will have to be changed and to what extent, we vacate the 1995 standards in their entirety and remand to the EPA for further proceedings

consistent with this opinion. On remand, the EPA may reissue those standards, if any, that are not affected by our decision if it determines that these standards are still appropriate.

Since we vacate the 1995 standards in their entirety, we do not reach petitioners' other challenges. We also do not reach CKRC's claim that the EPA erred in interpreting section 129 to apply to industrial furnaces such as cement kilns or its argument that the EPA cannot apply the existing or future standards to cement kilns without studying their unique operation in more depth. We recognize that, if the EPA simply reissues the standards that are not affected by recategorizing MWC units by unit capacity, CKRC may be forced to reinstitute its challenges, and CKRC's second argument, particularly, is not without plausibility. But because we vacate the 1995 standards in their entirety, our consideration of these matters awaits another day.

IV. CONCLUSION

We hold that the EPA's use of aggregate plant MSW capacity rather than unit MSW capacity in the 1995 standards to create categories of MWC units for MACT purposes violates the plain meaning of section 129 and exceeds the EPA's statutory authority. We therefore vacate the 1995 standards in their entirety on this ground and remand to the EPA, without reaching the additional challenges raised by petitioners and CKRC.

So ordered.