



February 14, 2006

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Administrator,  
Environmental Protection Agency  
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BY FIRST CLASS MAIL, FAX, AND EMAIL

Dear Mr. Johnson:

This is a petition under Clean Air Act § 307(d)(7)(B), 42 U.S.C. § 7607(d)(7)(B). The party submitting this petition is Sierra Club, 85 Second Street, 2d Floor, San Francisco, California 94105 ((415) 977-5500). By this petition, Sierra Club requests that you reconsider certain aspects of the final action taken at 70 Fed. Reg. 74870 (December 16, 2005) and entitled “Standards of Performance for New Stationary Sources and Emission Guidelines for Existing Sources: Other Solid Waste Incineration Units; Final Rule.”

**I. EPA MUST RECONSIDER ITS DECISIONS TO EXEMPT HUMAN CREMATORIES FROM ITS OTHER SOLID WASTE INCINERATOR REGULATIONS AND TO APPLY THE UNLAWFUL DEFINITION OF SOLID WASTE USED IN ITS COMMERCIAL AND INDUSTRIAL SOLID WASTE INCINERATOR RULEMAKING.**

**A. Background.**

In its proposed rule for “other solid waste incinerators” (OSWI), EPA refused to set emission standards for human crematories. The agency argued that human bodies are not “solid waste” and that crematories, therefore, are not “solid waste combustion units.” 69 Fed. Reg. 71472 71479 (December 9, 2004). EPA received comments pointing out that although human bodies incinerated at a crematory may not be “solid waste” in a spiritual or religious sense, they are “solid waste” within the purely legal meaning of the Solid Waste Disposal Act (SWDA). Comments of Earthjustice at 8. Specifically, the SWDA broadly defines “solid waste” to include any “discarded material,” and bodies that have been delivered to crematories for incineration are “discarded material.” *Id.* The comments also pointed out that EPA’s own definition of “solid waste” pursuant to the SWDA makes clear that a material is “discarded” — and therefore “solid waste” — if it is burned or incinerated and not subject to one of several enumerated exemptions. *Id.* at 9 (citing 40 C.F.R. § 261.2(a)(2)).

In its final OSWI rule, EPA argues for the first time that the definition of solid waste that it adopted pursuant to the SWDA does not apply. 70 Fed. Reg. at 74881. EPA then claims that this definition applies only to hazardous waste and that a different definition of solid waste — issued in a separate rulemaking for commercial and industrial waste incinerators (CISWI) — governs. *Id.*

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise “after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B). EPA’s new arguments regarding whether human bodies burned at crematories are solid waste meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## **B. Grounds For Objection.**

At a minimum, EPA’s complete failure to provide notice or opportunity for comment on its decision to apply the CISWI definition of solid waste in its OSWI rulemaking contravenes Clean Air Act § 307(d). The agency must provide full public comment opportunity on this aspect of its rule.

EPA’s new argument that the definition of solid waste that it issued for the CISWI rule also governs the OSWI rulemaking ignores the disclaimer that EPA issued when it promulgated the CISWI rule: “the purpose of the definition is solely to identify nonhazardous solid waste for the purpose of the CISWI regulations.” 65 Fed. Reg. 75388, 75343 (December 1, 2000) (emphasis added). As that disclaimer makes clear, EPA’s new claim that the CISWI definition applies broadly “to identify nonhazardous solid waste for the regulatory programs authorized by CAA section 129, such as the final CISWI and OSWI rules,” 70 Fed. Reg. at 74881, is false. Accordingly, EPA’s attempt to rely on this definition now is unlawful and arbitrary and capricious.

EPA’s attempt to rely on the CISWI definition also ignores Clean Air Act § 129(g)(6), which provides that “solid waste” shall have the meaning established by EPA “pursuant to the Solid Waste Disposal Act.” 42 U.S.C. § 7429(g)(6). Section 129(g)(6) makes clear that the term solid waste must have one comprehensive meaning that applies to all SWDA rulemakings and all § 129 rulemakings. *Id.* Regardless of EPA’s self-serving statement that definition of solid waste in its CISWI rule was issued “jointly” under the SWDA and Clean Air Act, that definition applied by its terms only to a single Clean Air Act rulemaking. 65 Fed. Reg. at 75343. *See also id.* at 75342 (“[w] emphasize that the definition is adopted solely for purposes of section 129 in order to implement the principles of that section.”)(emphasis added). Therefore, it cannot possibly provide the meaning for solid waste established pursuant to the Solid Waste

Disposal Act as required by Clean Air Act § 129(g)(6). By attempting to create different meanings for solid waste, EPA not only contravenes § 129(g)(6) but frustrates Congress's purpose in enacting that provision, which was to ensure that solid waste has the same meaning under both the Clean Air Act and the SWDA and that solid waste receives consistent regulatory treatment under these statutes.

EPA's rejection of the solid waste definition that it issued pursuant to the SWDA in part 261 also is unlawful. Although EPA argues that definition was issued only to cover "hazardous" solid waste, the agency has conceded that it has established only one "comprehensive definition" of solid waste under the SWDA: the definition in 40 C.F.R. § 261.2. 69 Fed. Reg. 7390, 7395 (February 17, 2004). Under, § 129(g)(6), therefore, that definition must provide the meaning of "solid waste" under § 129. 42 U.S.C. § 7429(g)(6). Further, the definition of solid waste established in part 261 was the only comprehensive definition that existed when Congress enacted § 129. Thus, by providing that "solid waste" shall have the meaning established by EPA pursuant to the SWDA, Congress plainly indicated that it intended EPA to use that definition.

Finally, EPA's arguments for rejecting the solid waste definition issued in part 261 are arbitrary and capricious. The agency states that specificity is needed in part 261 to assure that hazardous waste is not "inappropriately discarded or abandoned." 70 Fed. Reg. at 74881. But the agency does not say why the inappropriate uncontrolled burning of nonhazardous solid waste should not also be prevented. Thus, the agency has not provided a rational explanation for rejecting the part 261 definition — undisputedly the only comprehensive definition of solid waste that exists under the SWDA — simply because it initially was developed to address hazardous waste.

## **II. EPA MUST RECONSIDER ITS ALASKAN EXCLUSION.**

### **A. Background.**

In its proposal, EPA provided an exemption for incinerators in isolated areas of Alaska. 69 Fed. Reg. at 71482-71483. The agency did not provide any reason to believe that incinerators operating in rural Alaska are not solid waste incineration units within the meaning of Clean Air Act § 129, but instead advanced the policy argument that, in these areas, landfilling is not possible and controlling incinerator emissions would be prohibitively expensive. *Id.* The agency characterized its exclusion as addressing the needs of "isolated villages." *Id.*

EPA received comment that because incinerators in rural Alaska are solid waste incineration units within the meaning of § 129, the Clean Air Act requires the agency to set § 129 standards for these units regardless of its policy views. Comments of Earthjustice at 11.

In its final rule, EPA now admits that among the incinerators operating in rural Alaska are units run by oil exploration companies to combust "municipal-type" waste generated on-site. 70 Fed. Reg. at 74878. The agency further states that such

incinerators are not covered by the OSWI rule. EPA asserts that the OSWI rule covers only very small municipal waste incinerators (VSMWC) and institutional waste incinerators (IWI) and that units operated at commercial or industrial facilities but burning “municipal-type” waste do not fall into either category. *Id.* The agency acknowledges that such units must be regulated under § 129, but claims that it intends to regulate them as CISWI in a future rulemaking. *Id.*

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise “after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B). EPA’s new arguments regarding its Alaskan exclusion meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## **B. Grounds For Objection.**

When EPA issued its CISWI regulations in 2000, the agency stated

We are promulgating standards and guidelines for new and existing commercial and industrial solid waste incineration (CISWI) units. The standards and guidelines fulfill the requirements of sections 111 and 129 of the Clean Air Act (CAA) which require us to promulgate standards and guidelines for CISWI units.

65 Fed. Reg. at 75338. EPA did not say — as it does now — that its CISWI rules fail to cover “commercial/industrial-owned/operated incinerators that burn only municipal-type waste.” 70 Fed. Reg. at 74878. To the contrary, EPA defined CISWI as “any combustion device that combusts commercial and industrial waste, as defined in this subpart,” and it defined “commercial and industrial waste” as “solid waste combusted in an enclosed device using controlled flame combustion without energy recovery that is a distinct operating unit of any commercial or industrial facility (including field-erected, modular, and custom built incineration units operating with starved or excess air), or solid waste combusted in an air-curtain incinerator without energy recovery that is a distinct operating unit of any commercial or industrial facility.” 40 C.F.R. § 60.2265. Thus, under EPA’s own CISWI definitions — and contrary to the claim advanced in its OSWI rule preamble — “commercial/industrial-owned/operated incinerators that burn only municipal-type waste” are subject to the agency’s CISWI regulations. EPA’s attempt to create an exemption for them in the preamble of its OSWI rule contravenes both the substantive requirements of § 129 and the procedural requirements of § 307(d).

EPA’s statement that it intends to issue separate CISWI regulations at some unspecified time in the future for “commercial/industrial-owned/operated incinerators that burn only municipal-type waste,” 70 Fed. Reg. at 74878, misses two crucial points. First, such incinerators already are subject to EPA’s CISWI regulations. To the extent they are operating without a permit that incorporates EPA’s CISWI regulations or

without complying with such regulations — as EPA’s OSWI rule indicates is the case for certain oil-field incinerators in Alaska — they are violating the Clean Air Act. Second, EPA lacks discretion to defer CISWI rulemakings to some later date. The Clean Air Act required EPA to complete its CISWI regulations by 1994. 42 U.S.C. § 7429(a)(1)(D). After EPA missed that statutory deadline, the agency was sued and entered into a consent decree requiring it to complete its CISWI regulations. Thus, assuming *arguendo* that EPA’s CISWI regulations did not already cover “commercial/industrial-owned/operated incinerators that burn only municipal-type waste,” the agency would be in violation of its obligations under that consent decree.

Finally, the policy arguments that EPA advanced at proposal for not regulating rural Alaskan incinerators — that regulation would be prohibitively expensive — do not apply to oil-field incinerators. Companies that can afford to engage in exploration for oil can also afford to control the toxic emissions from their incinerators.

In sum, EPA’s new arguments that “commercial/industrial-owned/operated incinerators that burn only municipal-type waste” are not covered by its existing CISWI regulations or its OSWI regulations are both wrong and unlawful.

### **III. EPA MUST RECONSIDER ITS EXCLUSION FOR TEMPORARY USE INCINERATORS.**

#### **A. Background.**

In its proposal, EPA exempted temporary use incinerators used in disaster or emergency recovery efforts. 69 Fed. Reg. at 71483. The agency asserted that requiring these incinerators to control their pollution “could perhaps hinder recovery efforts.” *Id.* The agency did not state any basis for that speculation.

EPA received comment that it lacks authority to create exclusions for temporary use incinerators and, in any event, had not shown that requiring these incinerators to control their emissions would hinder recovery efforts. Comments of Earthjustice at 12. EPA also received comments that the proposed exclusion would allow incinerators operating under the Stafford Act to operate indefinitely without restrictions, and would allow other incinerators to avoid regulation without adequate cause. 70 Fed. Reg. at 74879. In response to these comments, EPA issued a different exclusion in its final rule. The new exclusion only applies to incinerators used in areas that have been declared a State of Emergency by a State or local government or by the President under the Stafford Act. *Id.* Further, an incinerator must notify the Administrator if it intends to operate for more than eight weeks without meeting emission standards and must receive approval to so operate for more than sixteen weeks. *Id.*

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise “after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule

and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B). EPA’s new temporary use exclusion and the arguments EPA advances in support of this exclusion meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## **B. Grounds For Objection.**

Although EPA has limited the potential for abuse of its exclusion, the new exclusion still exceeds EPA’s authority and invites abuse. The rule allows incinerators to avoid compliance with any emission standards for an unlimited period of time so long as the federal, State, or local government has declared the area in which it is operating a State of Emergency and has decided to allow it to operate without controls. *Id.* Nothing in the Clean Air Act authorizes so broad an exclusion. Indeed, it bears emphasis that Congress knew how to create exemptions when it wanted to do so. Section 112 of the Clean Air Act, for example, provides for a “Presidential exemption” for a period “not to exceed two years.” 42 U.S.C. § 7412(i)(4). Congress did not create such an exemption under § 129 and, *a fortiori*, did not contemplate the type of open-ended exemption and abdication of federal authority that EPA provides in its final rule.

## **IV. EPA MUST RECONSIDER ITS EXCLUSION FOR INCINERATORS THAT BURN NATIONAL SECURITY DOCUMENTS.**

### **A. Background.**

In its proposal, EPA requested comment on whether it should provide an exclusion for incinerators that burn national security documents. 69 Fed. Reg. at 71478. The agency received comments that it lacked authority to create such an exclusion and, in any event, had provided no reason for doing so. Comments of Earthjustice at 12. In its final rule, EPA established an exclusion for two types of incinerators that burn national security documents: “incinerators used solely during military training field exercises to destroy national security materials integral to the field exercises; and other incinerators that apply for and obtain the exclusion. 70 Fed. Reg. at 74880. In attempt to support its second exclusion, EPA now argues that “the government could change the acceptable means of disposing of national security materials in the future” and “there may be unexpected circumstances when mechanical or other alternative means of destruction are temporarily unavailable. *Id.*

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise “after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B). EPA’s new exclusion for incinerators that burn national security documents and the arguments it

advances in support of this exclusion meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## **B. Grounds For Objection.**

As noted in the comments EPA received, the agency lacks authority to create exclusions under § 129 for solid waste incineration units. As explained in detail above, Congress could have provided such authority, but chose not to do so.

In addition, EPA's new arguments for allowing incinerators other than those used in field training exercises to receive exemptions are arbitrary and capricious. The possibility that the government "could change the acceptable means of disposing of one or more types of national security materials in the future," 70 Fed. Reg. at 74880, lends no support to the agency's exclusion. If the government burns its waste, the government should comply with air pollution control requirements, just like any other entity. EPA does not suggest that the government is unable to meet pollution control requirements at incinerators other than those used for field exercises, nor could it.

EPA's argument that means of destruction other than incineration might become unavailable, *id.*, is also without merit. The possibility that the government might use other means of waste disposal does not in any way support the notion that it should be exempted from pollution control requirements when it chooses to incinerate its waste.

## **V. EPA MUST RECONSIDER ITS EXCLUSION FOR CEMENT KILNS THAT BURN WASTE.**

### **A. Background.**

Although EPA did not mention cement kilns that combust solid waste in the preamble to its proposal, the agency's proposed regulations provided an exclusion for them. 69 Fed. Reg. at 71496. The agency received comment that its failure to set § 129 standards for cement kilns that combust solid waste is flatly unlawful and violates the consent decree in *Sierra Club v. Whitman*, D.D.C. No. 01-1537. Comments of Earthjustice at 4. In its final rule, EPA now argues for the first time that it does not have to set § 129 standards for waste-burning cement kilns because it has already regulated all cement kilns under § 112 and lacks authority to regulate sources under both § 112 and § 129. 70 Fed. Reg. at 74875.

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise "after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." 42 U.S.C. § 7607(d)(7)(B). EPA's new argument for excluding waste-burning cement kilns meets the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## B. Grounds For Objection.

EPA's obligation to set § 129 standards for waste-burning cement kilns is in no way altered by the fact that it already has set § 112 standards for cement kilns generally. As explained in the comments that EPA received, the agency has a nondiscretionary obligation to set § 129 standards for all facilities that combust any solid waste. That does not mean that EPA must regulate waste-burning cement kilns under both § 112 and § 129, a result that would contravene § 129(h). Rather, it means that EPA must set § 129 standards for waste-burning cement kilns, and regulate such kilns as incinerators under those standards. Indeed, EPA itself has acknowledged that after setting § 112 standards for facilities it can set § 129 standards for such facilities and revoke the § 112 standards.

EPA's refusal to set § 129 standards for cement kilns not only contravenes § 129 and violates the *Sierra Club* consent decree, but also conflicts directly with earlier agency statements. In its proposed cement kiln rule, EPA stated that it was regulating non-hazardous-waste-burning cement kilns under § 112 as an "interim" measure. 63 Fed. Reg. 14182, 14185-14186 (March 24, 1998). The agency specifically argued that § 129(g)(1)'s broad definition of solid waste incineration unit and specific exemptions require the agency to set § 129 standards for all solid waste incineration units except those specifically exempted:

Accordingly, with the exception of those solid waste incineration units that are expressly excluded from regulation by section 129(g)(1), Congress intended EPA to establish regulations for all SWIU's under section 129. This includes cement kilns that combust solid waste materials, including refuse-derived fuel.

63 Fed. Reg. at 14186 (emphasis added). In its final rule, EPA then reaffirmed that its § 112 standards for waste burning cement kilns were an "interim" measure. 64 Fed. Reg. 31898, 31910 (June 14, 1999).

Addressing the related issue of cement kilns that burn medical waste, EPA went further to promise that waste-burning cement kilns would not only be covered by § 129 standards but that EPA would set those standards in its OSWI rulemaking (then subject to a November 15, 2000 regulatory deadline):

The EPA has announced that regulations for other solid waste incinerators will be developed by the year 2000. Thus, burning of hospital waste or medical/infectious wastes in other solid waste incineration units will be covered by regulations developed within the next few years. Exclusion of incinerators that burn small amounts of hospital waste or medical/infectious waste from the HMIWI regulation is only a temporary deferment from regulation if these units are not presently regulated under section 129.

62 Fed. Reg. 48348, 48357/2 (September 15, 1997) (emphasis added).



EPA's unexplained reversal of its earlier position is quintessentially arbitrary and capricious and, by refusing to set § 129 standards for waste-burning cement kilns now that it has finally issued OSWI regulations, the agency effectively makes a fraud of its earlier commitments.

## **VI. EPA MUST RECONSIDER ITS REFUSAL TO SET STANDARDS FOR SEWAGE SLUDGE INCINERATORS.**

### **A. Background.**

EPA's proposal did not include standards for sewage sludge incinerators or even mention them. The agency received comments that because sewage sludge incinerators are solid waste incineration units and are not subject to EPA's § 129 regulations for either MWC, MWI or CISWI, the agency must regulate them under § 129 as OSWI. Comments of Earthjustice at 4. EPA now argues that since 2000 it has indicated that it no longer intends to regulate sewage sludge incinerators as incinerators under § 129 but instead intends to regulate them, if at all, as area sources of hazardous air pollution under § 112. 70 Fed. Reg. at 74880. In attempt to support its position, EPA appears to adopt argument that it advanced in its April 2000 semiannual regulatory agenda, where it claimed

However, this sludge is from a municipal source, and not from "commercial or industrial establishments or the general public." Therefore, SSIs that combust this sludge are not "solid waste incineration units" and section 129 does not apply to them. Virtually all of the SSIs that would be candidates for regulation combust sludge from POTWs, and thus are not covered under section 129.

70 Fed. Reg. at 74880.

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise "after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed." 42 U.S.C. § 7607(d)(7)(B). EPA's refusal to set standards for sewage sludge incinerators and the new argument that it advances in attempt to support this refusal meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

### **B. Grounds For Objection.**

Because sewage sludge incinerators do combust solid waste, they are solid waste incinerators and the Clean Air Act requires EPA to set § 129 standards for them. EPA's statutory obligation is in no way altered by indications of agency intent published in a semiannual regulatory agenda.

To the extent EPA is now relying on the argument that the sludge coming to sewage sludge incinerators from publicly owned treatment works (POTWs) is not coming from “commercial or industrial establishments or the general public,” the agency is mistaken. Read as a whole, § 129(g) makes plain that Congress intended to broadly cover incinerators that burn waste from all types of sources. 42 U.S.C. § 7429(g)(1). By defining solid waste incineration units as “any facility which combusts any solid waste material from commercial or industrial establishments or the general public (including single and multiple residences, hotels and motels),” Congress expressed that broad intent — not, as EPA would have it — an unexpressed intent to carve out a narrow exception for waste from municipal sources. Significantly, when Congress wanted to create an exception for certain types of solid waste incinerator, and it did so expressly in § 129(g)(1). *Id.* Given that, it is bizarre to interpret § 129(g)(1) to silently create a separate exemption for just one other type of incinerator, sewage sludge incinerators, in different language and a different portion of the relevant statutory provision.

In any case, POTWs are commercial or industrial establishments. Because they charge money to receive and treat waste, they are engaged in commerce, and are therefore “commercial establishments.” Moreover, they are “industrial.” POTWs are not only large industrial plants, but are widely referred to as an “industry” in Congress and by the very trade associations that represent POTWs. For example, a Senate Report on proposed legislation known as the Wastewater Treatment Security Act of 2003, refers to the “wastewater industries.” S. Rep. 149, 108<sup>th</sup> Cong., 1<sup>st</sup> Sess. (2003). In testimony to the House Subcommittee on Water Resources and the Environment, the Association of Metropolitan Sewerage Agencies (AMSA) stated

To answer the question posed by the title of this hearing—yes, America’s wastewater utilities, water resources and the environment are at risk from future terrorist attacks. The events of the past month have revealed how little our industry knows about the unique risks posed by terrorist threats and how we can better prepare ourselves for an uncertain future.

Testimony Of The Association Of Metropolitan Sewerage Agencies (AMSA) October 10, 2001 (Ex. A hereto) (emphasis added). *See also, e.g.* Greenwire, January 25, 2005 (Ex. B hereto), “Sewage Treatment Industry To Propose National Tax On Bottled Drinks”); Hampton Roads Sanitation District, *Water Ways v. XIII*, No. 2 (Ex. C hereto) (“The National Environmental Achievement Awards are the Oscars of the wastewater industry.”). If EPA’s tortured reading of the Clean Air Act were correct, many medical waste incinerators also would be excluded from the definition of “solid waste incineration unit” because they burn waste that comes from publicly owned hospitals. That result would contravene § 129(a)(1)(C), which requires EPA to issue § 129 standards for medical waste incinerators. 42 U.S.C. § 7429(a)(1)(C).

Finally, even if POTWs were not commercial or industrial establishments, the waste burned in sewage sludge incinerators still comes from commercial or industrial establishments or the general public. That such waste might be treated in a POTW before being burned in a sewage sludge incinerator does not alter this fact.

## VII. EPA MUST RECONSIDER ITS REFUSAL TO SET STANDARDS FOR PLASMA ARCS AND OTHER INCINERATION UNITS.

### A. Background.

In its proposal, EPA failed even to mention a wide variety of solid waste incinerators that use various combustion technologies such as pyrolysis, thermal oxidation, catalytic cracking, plasma arcs, catalytic oxidation, flameless thermal oxidizers, gasification, etc. The agency received comments pointing out that a failure to set standards for these units would contravene the Clean Air Act and its obligations under the *Sierra Club* consent decree:

Many incinerators using such technologies combust municipal waste, medical waste, or commercial or industrial waste. Those incinerators are, therefore, subject to EPA's existing § 129 regulations for MWC, MWI, or CISWI. Any such units that combust other solid waste, however, must be regulated as OSWI. Also, to the extent EPA takes the position that a unit combusting municipal waste, medical waste or commercial or industrial waste using pyrolysis, thermal oxidation, catalytic cracking, plasma arcs, catalytic oxidation, flameless thermal oxidizers, gasification, or some similar technology is not covered by its existing regulations for either MWC, MWI, or CISWI, the agency must include emission standards for such unit in its OSWI regulations. It bears emphasis that pyrolysis, thermal oxidation, catalytic cracking, plasma arcs, catalytic oxidation, flameless thermal oxidizers, gasification and similar technologies are all types of combustion, regardless of their names. Commenters cannot possibly anticipate all the different names that will be given to combustion units. Nor have commenters any obligation to undertake such an impossible task. Under the Clean Air Act and the *Sierra Club* consent decree, EPA has an obligation to ensure that, by November 30, 2005, all other solid waste incinerators — i.e., all incinerators not already subject to EPA's § 129 regulations for MWC, MWI, or CISWI — are subject to § 129 standards as OSWI. That obligation is in no way conditioned on comments from outside parties that identifying the types of incinerators for which EPA has failed to propose emission standards.

*Id.* at 2-3 (emphasis in original).

In its final rule, EPA states vaguely

Some of these types of units may well be covered under the CAA section 129 final rules. For example, pyrolysis/combustion units (two chamber incinerators with a starved air primary chamber followed by an afterburner to complete combustion) within the VSMWC and IWI subcategories are considered OSWI units. In addition, thermal oxidizers, catalytic oxidizers, and flameless thermal oxidizers, if used to combust

solid waste, could be subject to the final OSWI rules of other section 129 rules if they meet the appropriate applicability requirements.

70 Fed. Reg. at 74876-74877 (emphasis added). Thus, EPA apparently suggests for the first time that incineration units such as thermal oxidation units might not be subject to any § 129 standards even if they are being used to combust solid waste.

EPA also argues for the first time that “these types of units often are used to combust uncontained gases (generally from industrial processes) and are not used to dispose of solid waste.” *Id.* at 74877. EPA further argues

The other types of units mentioned by the commenter appear to be either: (1) part of industrial processes (e.g. catalytic cracking) and are regulated under CAA section 112 and other standards for the specific industrial process; (2) noncombustion thermal technologies that operate with an external heat source (e.g. plasma arc); or (3) technologies that are specifically designed to prevent combustion reactions, and, instead are used to produce fuel or chemical feedstocks via controlled chemical reactions (e.g. gasification). Any of these technologies that are used to process hazardous waste are excluded from section 129, and any of these technologies that are regulated as site remediation units under section 112 are also not subject to section 129.

*Id.* (emphasis added). Thus, without providing the public with any notice or opportunity for comment, EPA seeks to broadly exclude a wide variety of incinerators from regulation as incinerators and — in some cases — from any regulation at all.

Section 307(d)(7)(B) of the Clean Air Act provides that if grounds for an objection to a rulemaking arise “after the period for public comment (but within the time specified for judicial review) and if such objection is of central relevance to the outcome of the rule, the Administrator shall convene a proceeding for reconsideration of the rule and provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B). EPA’s refusal to set standards for any unit that combusts solid waste using pyrolysis, thermal oxidation, catalytic cracking, plasma arcs, catalytic oxidation, flameless thermal oxidizers, gasification, or some similar technology is not covered by its existing § 129 regulations, and the new argument that EPA advances in attempt to support this refusal, meet the requirements of § 307(d)(7)(B). Accordingly, EPA must reconsider this aspect of its rule.

## **B. Grounds For Objection.**

Contrary to the ambiguity implied by EPA in its statements that various types of solid waste incinerators “may” or “could” be covered by § 129, 70 Fed. Reg. at 74876-74877, the Clean Air Act makes plain that all solid waste incinerators are covered by § 129. EPA has an unambiguous nondiscretionary statutory duty to set § 129 standards for all solid waste incinerators. Thus, if there are any such units that are not already

subject to the agency's existing standards for MWC, MWI and CIWI, the agency must set § 129 standards for them in its OSWI rulemaking.

EPA's statement that thermal oxidizers often are used to combust uncontained gases "generally from industrial processes" suggests that the agency is trying to exempt from regulation incinerators that combust contained waste gases. Gases in the industrial process generally are contained in pipes, and therefore are "contained," not "uncontained." Accordingly, they are solid waste. Any unit that combusts such gas is an incinerator, and must be regulated under § 129.

EPA's claim that plasma arcs and other units with "external heat source[s]" are a "noncombustion" technology is factually incorrect and contrary to the agency's own findings and definitions. To begin with plasma arcs are combustion sources, and do not use external heat sources. EPA has admitted that pyrolysis units followed by afterburners are incinerators. 70 Fed. Reg. at 74876-74877. EPA's own regulations define "incinerator" to include anything that meets the definition of a "plasma arc incinerator," and defines "plasma arc incinerator" as any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion and which is not listed as an industrial furnace." 40 C.F.R. § 260.10 (emphasis added). Similarly, EPA offers the following definitions of "plasma arc reactors" on its website:

**Plasma Arc Reactors:** devices that use an electric arc to thermally decompose organic and inorganic materials at ultra-high temperatures into gases and a vitrified slag residue. A plasma arc reactor can operate as any of the following:

- integral component of chemical, fuel, or electricity production systems, processing high or medium value organic compounds into a synthetic gas used as a fuel
- materials recovery device, processing scrap to recover metal from the slag
- destruction or incineration system, processing waste materials into slag and gases ignited inside of a secondary combustion chamber that follows the reactor

Ex. D hereto. Further, the agency has offered no rational distinction between these units and plasma arcs, which the agency suggests are not incinerators.

Even if EPA regulations did not already acknowledge that plasma arcs and other such units are incinerators, the relevant issue is whether these units are combusting waste, not how they accomplish the combustion. As explained in detail in the comments of Earthjustice, EPA must set § 129 standards for any unit that combusts any solid waste, except those types of units expressly exempted in § 129(g). Plasma arcs are combusting waste, regardless of what means they use to that end. Indeed, the process in plasma arcs fits easily within EPA's own definition of combustion. *See, e.g.*, Ex E ("Combustion: 1. Burning or rapid oxidation, accompanied by release of energy in the form of heat and light, 2. Refers to controlled burning of waste, in which heat chemically alters organic compounds, converting into stable organics such as carbon dioxide and water."). EPA's attempt to exempt plasma arcs and other unspecified types of incinerator from § 129 regulation is especially reprehensible given that they emit highly toxic emissions and are not subject to other air toxics regulations. Thus, EPA is knowingly depriving Americans

of Congressionally mandated protection from some of the most toxic pollutants known to man.

EPA also states that certain unspecified units used “to produce fuel or other chemical feedstocks via controlled chemical reactions (e.g. gasification)” may not be covered by § 129. 70 Fed. Reg. at 74877. Gasification constitutes combustion in itself and, in many instances the gases produced are themselves then combusted. For both reasons, units that use these technologies are involved in combustion if the materials that are being fed into them meet the definition of solid waste.

Finally, although hazardous waste combustors are not subject to regulation under § 129, other types of waste combustion are subject to § 129, regardless of whether they are currently covered by regulations under § 112. EPA’s obligation to set § 129 standards for all facilities that combust solid waste is in no way limited by the existence of § 112 regulations. If a type of incinerator is currently subject to § 112 regulation, the agency must issue § 129 regulations for it and then revoke the § 112 regulations once the § 129 regulations take effect.

## **CONCLUSION**

Pursuant to Clean Air Act, § 307(d)(7)(B), you must convene a proceeding for reconsideration of the issues raised above and “provide the same procedural rights as would have been afforded had the information been available at the time the rule was proposed.” 42 U.S.C. § 7607(d)(7)(B).

If you have any questions, please do not hesitate to call me (202) 667-4500.

Sincerely,

James S. Pew  
Attorney for Sierra Club