ADDING FUEL TO THE FLAMES: WHY EPA'S NEW SOURCE REVIEW PROGRAM UNDER THE CLEAN AIR ACT EXACERBATES LEAD POLLUTION IN LEAD NONATTAINMENT AREAS

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INTRODUCTION

Lead pollution presents unique concerns for human health, especially the health of children.[1] Once taken into the body, lead will distribute in the blood, damaging the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system.[2] Children are especially sensitive to even low levels of lead exposure, which may seriously affect growth and damage the nervous system.[3] To limit the harmful effects of lead pollution, the Environmental Protection Agency (EPA) launched a lead program in 1991, aiming to "reduce lead exposure to the fullest extent practicable, with particular emphasis on reducing the risk to children."[4] As a part of the lead program, EPA enforces the National Ambient Air Quality Standards (NAAQS) for lead under the Clean Air Act.[5]

In 2011, Energy Answers Arecibo, LLC (the Company) applied for a Prevention of Significant Deterioration (PSD) permit under the Clean Air Act (the CAA) to construct and operate a municipal waste incinerator in Barrio Cambalache, Arecibo, Puerto Rico.[6] EPA issued the Company a PSD permit without addressing its lead emissions. In response to public comments calling for lead pollution control, EPA asserted that "Arecibo is in a nonattainment area for lead, so EPA does not have authority to regulate it under the PSD program."[7] EPA also noted that "Energy Answers is not subject to the nonattainment permit regulations since it would have to emit 100 tons per year of lead."[8] EPA therefore declined to regulate the lead

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1. J.S. Carra, *The U.S. Environmental Protection Agency's Broad Strategy to Address Lead Poisoning*, *in* LEAD POISONING: EXPOSURE, ABATEMENT, REGULATION 71, 75 (Joseph J. Breen & Cindy R. Stroup eds., 1995).

2. *Lead in Air*, U.S. ENVTL. PROT. AGENCY, http://www.epa.gov/oaqps001/lead/health.html (last visited Sept. 3, 2014).

3. G.S. Casuccio et al., *Characterization and Identification of Lead-Rich Particles: A First Step in Source Apportionment*, *in* LEAD POISONING: EXPOSURE, ABATEMENT, REGULATION 143, 143 (Joseph J. Breen & Cindy R. Stroup eds., 1995).

4. Carra, *supra* note 1, at 71–72.

5. *Id.* at 73.

6. ENERGY ANSWERS INT'L, INC., BRIEF OF ENERGY ANSWERS ARECIBO, LLC IN RESPONSE TO PETITIONS FOR REVIEW, app. 1, 1-1 (2013), *available at* http://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/B541820439F5706285257BC600442856?OpenDocument.

7. U.S. ENVTL. PROT. AGENCY, RESPONSES TO PUBLIC COMMENTS ON THE CLEAN AIR ACT PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY DRAFT PERMIT FOR ENERGY ANSWERS ARECIBO, LLC, ARECIBO PUERTO RICO RENEWABLE ENERGY PROJECT 58 (2013), *available at* http://yosemite.epa.gov/oa/eab_web_docket.nsf/Filings%20By%20Appeal%20Number/F442A72F84600C7E85257BB100707E8B/$File/Exhibit%202%20--%20EPA%20Responses%20To%20Public%20Comments%20...10.25.pdf.

8. *Id.* at 99.

emissions under any permit program, even though the Company's proposed facility would be in an area that has already suffered severe lead pollution and exceeded NAAQS for lead.

Under the CAA, Congress requires EPA to promulgate NAAQS for lead as particulate matter.[9] EPA may require a state to designate the status of each geographic area with respect to its compliance with NAAQS for lead.[10] The state will designate an area as "nonattainment" for lead if it does not meet the national primary or secondary ambient air quality standard for lead.[11] The state will designate an area as "attainment" for lead if it meets the national primary or secondary ambient air quality standard for lead.[12] The state will designate an area as "unclassifiable" if available information is insufficient to classify the area as meeting or not meeting the national primary or secondary ambient air quality standard for lead.[13] Under the CAA, EPA developed the New Source Review program (the NSR program) to regulate new and modified stationary sources.[14] EPA's NSR program requires all major and certain minor stationary sources to undergo preconstruction review and approval.[15] The NSR program is composed of three different permit programs: the PSD program, the Nonattainment New Source Review (NNSR) program, and the Minor New Source Review (Minor NSR) program.[16] The PSD program and NNSR program constitute major NSR programs because they regulate only major sources.[17] An NNSR permit contains more stringent emission limits and higher technology standards than a PSD permit.[18]

EPA limits the applicability of major NSR permit programs to certain geographic areas: the PSD permit program applies to new major sources in attainment areas, and the NNSR permit program applies to new major

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9. Air Pollution Prevention and Control Act, 42 U.S.C. §§ 7408–09 (2006); EDWARD E. SHEA, LEAD REGULATION HANDBOOK 62 (2d ed. 2007).

10. Air Pollution Prevention and Control Act, 42 U.S.C. § 7407(d)(5) (2006).

11. *Id.* § 7407(d).

12. *Id.*

13. *Id.*

14. Bernard F. Hawkins, Jr. & Mary Ellen Ternes, *The New Source Review Program*, *in* THE CLEAN AIR ACT HANDBOOK 125, 125 (Julie R. Domike & Alec C. Zacaroli eds., 2011). This Note only discusses new stationary sources, not modifications. The term "new sources" in this Note refers to new sources constructed from scratch.

15. *Id.*

16. *Id.* This Note does not discuss Minor NSR because this Note addresses lead pollution caused by new *major* sources, to which Minor NSR does not apply. *See* DAVID R. WOOLEY & ELIZABETH M. MORSS, CLEAN AIR ACT HANDBOOK: A PRACTICAL GUIDE TO COMPLIANCE 205 (23d ed. 2013) (stating that Minor NSR applies to new sources that escape regulation under the major source PSD or NNSR program). As discussed below, major sources are sources that emit or have the potential to emit 100 tons per year of a regulated air pollutant.

17. Hawkins & Ternes, *supra* note 14, at 125.

18. *Id.* at 182–84.

sources in nonattainment areas.[19] In nonattainment areas, EPA further limits the applicability of the NNSR permit program to new major sources whose emissions of nonattainment pollutants equal or exceed 100 tons per year.[20] In the case of lead, the PSD permit program only regulates lead emissions from new major sources located in lead attainment areas. The NNSR permit program regulates lead emissions in lead nonattainment areas if the emissions come from a new major source that emits or has the potential to emit at least 100 tons of lead per year. Has EPA violated the CAA by limiting the applicability of the PSD and NNSR permit programs to certain geographic areas and further limiting the applicability of the NNSR program to certain levels of emissions of particular pollutants?

This Note examines EPA's rule on the applicability of major NSR programs—including the PSD and NNSR permit programs—to new sources of lead emissions and proceeds in five parts. Part I of this Note discusses the harmful effects of lead pollution on human health, especially the health of children. Part II discusses the CAA's mandates on the control of lead emissions from new stationary sources. Part III discusses EPA's NSR program and EPA's rules on the applicability of the PSD and NNSR permit programs. Part IV discusses EPA's impermissible interpretation of the applicability of the NNSR permit program in lead nonattainment areas. Finally, in Part V this Note proposes a test for EPA or the states to determine the applicability of the NNSR permit program in lead nonattainment areas.

I. LEAD POLLUTION'S HARMFUL EFFECTS ON HUMAN HEALTH

Lead is a heavy metal with an atomic weight greater than that of sodium.[21] Lead exists in two major forms: in metallic form and in chemical compounds.[22] Airborne lead is particulate and comes from many anthropogenic sources, such as mining, lead smelting, primary lead production, primary non-ferrous production, iron and steel production, petrol combustion, and waste incineration.[23] Emissions from those facilities are the primary causes of lead exposure in nearby communities.[24] Airborne

19. 40 CFR § 52.21 (2002) (overruled by Utility Air Regulatory Group v. EPA, 134 S. Ct 2427 (2014)).

20. *Id.*

21. Marjorie Smith, *What Is Lead?*, *in* LEAD TOXICITY: HISTORY AND ENVIRONMENTAL IMPACT 3, 3 (Richard Lansdown & William Yule eds., 1986).

22. *Id.* at 4.

23. Michael R. Moore, *Lead In The Air*, *in* LEAD TOXICITY: HISTORY AND ENVIRONMENTAL IMPACT 136, 136 (Richard Lansdown & William Yule eds., 1986).

24. SHEA, *supra* note 9, at 29.

lead enters the human body through inhalation or ingestion of lead-contaminated food, water, paint, dust, and soil.[25]

Inhaled lead accounts for about 90% of the lead in the human body and thus is the primary way that people intake lead.[26] Some inhaled lead will remain in the lungs and pass into the bloodstream.[27] The human body absorbs lead compounds more easily than elemental lead.[28] Once absorbed into the body, the blood lead level may increase in less than an hour.[29] The increase in blood lead level may create acute symptoms, including colic, wrist drop, headaches, fatigue, bowel irregularity, and behavioral problems. Even low blood lead levels may result in an increased risk of cardiovascular disease.[30] Lead reduces the oxygen carrying capacity of the blood by inhibiting the production of heme, which carries oxygen in red blood cells.[31] Long-term excessive lead exposure can result in irreversible damage to the kidneys.[32] Lead is especially damaging to the central nervous system and, in extreme cases, can cause encephalopathy.[33] Early symptoms of encephalopathy include headaches and loss of memory; severe symptoms include paralysis, coma, and even death.[34] Although an adult will excrete about 99% of the lead taken into the body within a few weeks, lead will accumulate in the body tissues, especially bone, under continued exposure.[35]

Children are especially vulnerable to lead emissions. Compared to adults, children absorb a greater percentage of lead taken into the body and are more susceptible to lead poisoning effects.[36] The same symptoms may occur in children at lower blood lead levels.[37] The increase of blood lead levels could result in long-term harms, including microcytic anemia,

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25. Richard E. Ayres & Jessica L. Olson, *Setting National Ambient Air Quality Standards*, *in* THE CLEAN AIR ACT HANDBOOK 13, 35 (Julie R. Domike & Alec C. Zacaroli eds., 2011).

26. *Id.* at 30.

27. *Id.*

28. *Id.* at 31.

29. *See* N. Castellino & P. Castellino, *Lead Metabolism*, *in* INORGANIC LEAD EXPOSURE: METABOLISM AND INTOXICATION 148 (Nicoló Castellino et al. eds., 1995) ("Experiments on laboratory animals have demonstrated that shortly after lead administration (30–60 min) the amount of the dose found in the whole blood is elevated: it has been estimated as 17–42% of the injected dose.").

30. SHEA, *supra* note 9, at 31–32.

31. *Id.*

32. *Id.* at 34.

33. U.S. ENVTL. PROT. AGENCY, RISK ANALYSIS TO SUPPORT STANDARDS FOR LEAD IN PAINT, DUST, AND SOIL app. A at 2-10 (1998) [hereinafter EPA RISK ANALYSIS].

34. *Id.*

35. SHEA, *supra* note 9, at 31.

36. I. Chang-Yen et al., *Incidence of Severe Lead Poisoning in Children in Trinidad Resulting from Battery Recycling Operations*, *in* LEAD POISONING: EXPOSURE, ABATEMENT, REGULATION 63, 63 (Joseph J. Breen & Cindy R. Stroup eds., 1995).

37. SHEA, *supra* note 9, at 32.

reduced growth in stature, hearing and speech impairment, and retarded mental development.[38] In extreme circumstances, frank anemia, nephropathy, encephalopathy, and even death may occur.[39] Long-term lead exposure, even at low levels, can have a cumulative effect on a child's health.[40] Studies of the long-term effects of low-level lead exposure found that children with higher dentin lead levels were more likely to drop out of school; suffer reading disabilities; have lower class ranks; have poor hand-eye coordination; and have deficits in IQ scores, attentiveness, and classroom performance.[41]

To limit the harmful effects of lead pollution, EPA launched a lead program in 1991, aiming to "reduce lead exposure to the fullest extent practicable, with particular emphasis on reducing the risk to children."[42] The NSR program under the CAA is one tool EPA uses to limit lead pollution. Under the NSR program, EPA enforces the NAAQS for lead by requiring new or modified sources of lead pollution to comply with permit requirements.[43] However, as I will demonstrate, some of EPA's rules on the applicability of the permit requirements under the NSR program contradicts the plain language of the CAA and legislative intent and is not a permissible interpretation of the Act.

II. THE CLEAN AIR ACT'S MANDATES ON NEW SOURCE EMISSIONS CONTROLS

Section 109 of the CAA requires EPA to promulgate NAAQS for "each air pollutant for which air quality criteria have been issued" under Section 108.[44] EPA shall list an air pollutant and issue air quality criteria for such pollutant if (1) its emissions "cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare" and (2) the pollutant is emitted from "numerous or diverse mobile or stationary sources."[45] In *Natural Resources Defense Council v. Train*, the United States Court of Appeals for the Second Circuit confirmed that Section 108 imposes a mandatory duty on EPA to list lead and issue air quality criteria after EPA determined that lead "has an adverse effect on public health and welfare, and that the presence of lead in the ambient air results from

38. Chang-Yen et al., *supra* note 36, at 63.
39. *Id.*
40. Casuccio et al., *supra* note 3, at 143.
41. EPA RISK ANALYSIS, *supra* note 33, at 2-13.
42. Carra, *supra* note 1, at 71–72.
43. *Id.* at 73.
44. 42 U.S.C. § 7409(a).
45. *Id.* § 7408(a); Ayres & Olson, *supra* note 25, at 14.

numerous or diverse mobile or stationary sources."[46] EPA listed lead in 1976 and issued air quality criteria in the following year.[47] In 1978, EPA promulgated NAAQS for lead at a level of 1.5 µg Pb/m3 averaged over a calendar quarter.[48] In 2008, EPA strengthened NAAQS from 1.5 µg Pb/m3 to 0.15 µg Pb/m3 based on new research on the impact of lead pollution.[49]

NAAQS for lead aim to protect human health and the environment and indicate the acceptable maximum lead concentration in ambient air.[50] EPA enforces NAAQS through the State Implementation Plans (SIPs), under which each state shall submit to EPA a plan for "implementation, maintenance, and enforcement" of NAAQS.[51] Following the promulgation of NAAQS for any pollutant, the Governor of each state shall submit to EPA a list of all areas in the state, designating each area as (1) "nonattainment" if the area does not meet NAAQS for the pollutant or the area "contributes to ambient air quality in a nearby area" that does not meet NAAQS for the pollutant; (2) "attainment" if the area meets NAAQS for the pollutant; or (3) "unclassifiable" if the state cannot classify the area as meeting or not meeting NAAQS due to the lack of information.[52]

A primary way to implement, maintain, and enforce NAAQS for lead is to impose preconstruction review and permitting requirements upon new sources of lead pollution.[53] The CAA provides the preconstruction review of new major sources under Parts C and D of the Act. Part C, entitled "Prevention of Significant Deterioration of Air Quality," aims to "protect public health and welfare from any actual or potential adverse effect" of air emissions, "notwithstanding attainment and maintenance" of NAAQS.[54] Part D, entitled "Plan Requirements for Nonattainment Areas," aims to reduce the air emissions in areas that fail to satisfy NAAQS and effectively enforces NAAQS in those areas.[55]

Part C prohibits the construction of a new major emitting facility in attainment areas and unclassifiable areas unless EPA or the state has issued a PSD permit for such facility.[56] Part C defines the term "major emitting facility" as any of the listed stationary sources of air pollutants that "emit, or have the potential to emit, one hundred tons per year or more of any air

46. Natural Res. Def. Council, Inc. v. Train, 545 F.2d 320, 322–25 (2d Cir. 1976).
47. Ayres & Olson, *supra* note 25, at 36.
48. *Id*.
49. *Id*. at 37.
50. Hawkins & Ternes, *supra* note 14, at 125.
51. 42 U.S.C. § 7410.
52. *Id.* § 7407.
53. Hawkins & Ternes, *supra* note 14, at 125.
54. 42 U.S.C. § 7470.
55. *Id.* §§ 7501–15.
56. *Id*. § 7475.

pollutant."[57] A "stationary source" means "any building, structure, facility, or installation which emits or may emit any air pollutant."[58] A PSD permit includes conditions requiring the proposed facility (1) to comply with the emission limitations; (2) to control its emissions so that the emissions from facility construction or operation "will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year," (B) NAAQS, or (C) any other emission or performance standard under the CAA; (3) to employ the best available control technology (BACT) for each pollutant; (4) to conduct necessary monitoring to determine the effects of air emissions on air quality; and (5) to comply with any other requirements of Part C.[59]

Part D imposes requirements for new sources or modification of existing sources in nonattainment areas. Part D applies to areas designated as "nonattainment" with respect to any air pollutant.[60] Part D requires EPA to establish a schedule specifying dates by which the states containing the nonattainment areas shall submit plans (State Attainment Plans) for implementing "all reasonably available control measures as expeditiously as practicable" to attain NAAQS.[61] The attainment date for NAAQS "shall be the date by which attainment can be achieved as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment . . . except that the Administrator may extend the attainment date . . . for a period no greater than 10 years."[62] State Attainment Plans "shall require [Nonattainment New Source Review] permits for the construction and operation of new or modified major stationary sources

57. *Id*. § 7479. The listed stationary sources include fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units per hour heat input; coal cleaning plants (thermal dryers); kraft pulp mills; Portland Cement plants; primary zinc smelters; iron and steel mill plants; primary aluminum ore reduction plants; primary copper smelters; municipal incinerators capable of charging more than fifty tons of refuse per day; hydrofluoric, sulfuric, and nitric acid plants; petroleum refineries; lime plants; phosphate rock processing plants; coke oven batteries; sulfur recovery plants; carbon black plants (furnace process); primary lead smelters; fuel conversion plants; sintering plants; secondary metal production facilities; chemical process plants; fossil-fuel boilers of more than two hundred and fifty million British thermal units per hour heat input; petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels; taconite ore processing facilities; glass fiber processing plants; and charcoal production facilities. *Id*. The term "major emitting facility" also includes "any other source with the potential to emit two hundred and fifty tons per year or more of any air pollutant," but it does not include "new or modified facilities which are nonprofit health or education institutions which have been exempted by the State." *Id*.

58. *Id*. § 7411 (a)(3).

59. *Id*. § 7475 (a)(3).

60. *Id*. § 7501.

61. *Id*. § 7502.

62. *Id*.

anywhere in the nonattainment area."[63] A proposed facility can receive an NNSR permit only if: (1) the facility has obtained "sufficient offsetting emissions reductions" so that "total allowable emissions" from existing sources and new or modified sources will be less than total emissions from existing sources before the construction of the proposed facility;[64] (2) the facility complies with the "lowest achievable emission rate" (LAER); and (3) the owner or operator of the facility has "demonstrated that all major stationary sources owned or operated by such person . . . in such State are subject to emission limitations" and comply with "all applicable emission limitations and standards" under the CAA.[65]

Part D therefore prohibits "the construction and operation of new or modified major stationary sources anywhere in the nonattainment area" unless EPA or the state has issued an NNSR permit for such new source.[66] Unlike the term "major emitting facility" under Part C, Congress does not specifically define the term "major stationary sources" under Part D.[67] However, Congress provides a default definition of the term "major stationary sources" under Title II—General Provisions. Specifically, Section 302(j) declares that, unless otherwise expressly provided, the definition of "major stationary source" and "major emitting facility" is "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant."[68]

III. EPA'S NEW SOURCE REVIEW PROGRAM

EPA implements the CAA's mandates on preconstruction review of new major sources through its NSR program.[69] The NSR program involves a case-by-case permitting process for individual sources before the owner or operator may commence construction or major modification.[70] The NSR program has three components: (1) the PSD program established under Part C; (2) the NNSR program established under Part D; and (3) the individual

63. *Id.*
64. *Id.* § 7503.
65. *Id.*
66. *Id.* § 7502.
67. Part D defines only the term "modification." *See id.* § 7501 ("The terms 'modifications' and 'modified' mean the same as the term 'modification' as used in section 7411 (a)(4) of this title.").
68. *Id.* § 7602.
69. Hawkins & Ternes, *supra* note 14, at 125.
70. *Id.* at 135. This Note only discusses new stationary sources constructed from scratch, not modifications.

state Minor NSR programs governing smaller sources of air pollution.[71] The PSD program and the NNSR program apply to major sources of air pollution.[72] Specifically, PSD permit requirements, the centerpiece of the PSD program, apply to "the construction of any new major stationary source or the major modification of any existing major stationary source" in attainment or unclassifiable areas.[73] EPA defines the term "major stationary source" in the same way Congress defines "major emitting facility" in the CAA, except that "new major stationary source[s]" under EPA's definition also include any physical modification that would constitute a major stationary source by itself even if the stationary source where the physical modification occurs does not qualify as a major stationary source.[74] EPA defines "major modification" as "any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase . . . of a regulated NSR pollutant . . . and a significant net emissions increase of that pollutant from the major stationary source."[75] As a key PSD permit condition, EPA requires a new major stationary source to apply the BACT "for each regulated NSR pollutant that it would have the potential to emit in significant amounts."[76]

EPA limits the PSD permit requirements to major emitting facilities in attainment and unclassifiable areas, excluding major stationary sources in nonattainment areas from PSD permit requirements. EPA specified that "[t]he requirements of paragraphs (j) through (r) of this section [establishing PSD permit requirements] shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment."[77] The Environmental Appeals Board of EPA (the Board) confirmed EPA's position regarding the applicability of PSD permits in a footnote within its

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71. *Id.* at 125. This Note does not discuss Minor NSR. This Note only considers major sources.

72. *Id.*

73. 40 CFR § 52.21 (2002) (overruled by Utility Air Regulatory Group v. EPA, 134 S. Ct 2427 (2014)).

74. *Id.*

75. *Id.* Regarding lead emissions, "significant" means a rate of emission that would equal or exceed 0.6 tons per year. *Id.* The term "Regulated NSR pollutant" includes: (1) any pollutant for which NAAQS have been promulgated; (2) any pollutant that is subject to standards promulgated under Title I Section 111 of the CAA; (3) any class I or II substance subject to a standard under Title VI (Stratospheric Ozone Protection) of the CAA; and (4) any pollutant that is otherwise subject to regulation under the CAA. *Id.* NSR pollutants do not include hazardous air pollutants listed under Section 112 of the CAA unless the pollutant is also regulated as a "constituent or precursor of a general pollutant" listed under Section 108. *Id.*

76. *Id.*

77. *Id.*

Sutter Power Plant decision.[78] The Board stated that "[n]otably, a single geographic area may be designated as attainment or unclassifiable for one or more of the six pollutants and as nonattainment for one or more of the others . . . [T]he PSD program will apply in that geographic area, but only to the attainment/unclassifiable pollutants."[79]

EPA requires each state's SIP to adopt a "preconstruction review program" (NNSR permit program) for any new major stationary source or major modification in nonattainment areas.[80] EPA, however, limits the applicability of the NNSR permit program to "any new major stationary source or major modification *that is major for the pollutant for which the area is designated nonattainment*."[81] EPA explained the statutory basis for this limited applicability of the NNSR permit program:

> The basic rationale for these restrictions is that [CAA] section 110(a)(2)(I), which contains the construction moratorium, restricts the construction moratorium to pollutants for which the source is major and for which the area is designated nonattainment. Since there is no requirement similar to the one in section 165(a) [providing PSD permit requirements] that subjects a source to review for all regulated pollutants it emits once it is subject to review for one pollutant, preconstruction review under the Offset Ruling and section 173 is restricted in the same manner as the construction moratorium.[82]

Therefore, in addition to the geographical limit of nonattainment areas to the applicability of the NNSR permit program, EPA further limits the applicability of NNSR permit requirements to new major stationary sources or major modifications which emit a major amount of the pollutant for which the area is designated as nonattainment.

According to EPA's limited application of NNSR permit requirements, emissions of nonattainment pollutants from new sources must meet the 100-ton-per-year threshold before triggering NNSR permit requirements, unless the CAA expressly specifies a lower threshold for the "major amount." The only place where the CAA defines the word "major" is in the definition of the term "major emitting facility," which designates any of the listed

78. Sutter Power Plant, 8 E.A.D. 680, 682 n.2 (EAB 1999).
79. *Id.*
80. 40 C.F.R. § 51.165 (2002).
81. *Id.* (emphasis added).
82. Requirements for Preparation, Adoption, and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans, 45 Fed. Reg. 52,676, 52,711 (Aug. 7, 1980) (to be codified at 40 C.F.R. pts. 51, 52, 124).

stationary sources that "emit, or have the potential to emit, one hundred tons per year or more of any air pollutant."[83] The CAA provides that the 100-ton-per-year threshold applies unless another provision of the CAA expressly requires a lower threshold.[84] The CAA provides varied and lower "major amount" thresholds for ozone, carbon monoxide, and PM-10, depending on the severity of the nonattainment for the area in question. For example, Congress lowers the "major amount" threshold to 50 tons per year of volatile organic compounds (VOCs) in "serious" ozone nonattainment areas, 25 tons per year of VOCs in "severe" ozone nonattainment areas, and 10 tons per year of VOCs in "extreme" ozone nonattainment areas.[85] Likewise, Congress lowers the "major amount" threshold to 50 tons per year or more of carbon monoxide in "serious" carbon monoxide nonattainment areas[86] and to 70 tons per year of PM-10 in "serious" PM-10 nonattainment areas.[87]

NNSR permit conditions are much stricter than PSD permit conditions because NNSR permits impose the LAER requirement and the emissions offsets requirement.[88] LAER means (1) "the most stringent emissions limitation" under the SIP for such category of sources, unless the owner or operator "demonstrates that such limitations are not achievable"; or (2) "[t]he most stringent emissions limitation which is achieved in practice by such class or category of stationary sources."[89] Cost consideration plays a much smaller role in establishing the LAER requirement for NNSR permits than it does in establishing the BACT requirement for PSD permits.[90] Accordingly, "cost alone may not be a valid justification for declining to use an otherwise available emissions control technique or technology."[91] The purposes of emissions offsets are (1) improving the air quality in nonattainment areas towards achieving NAAQS and (2) "providing a positive net air quality benefit in the affected area."[92] Emissions offsets consider actual, not potential, emissions of pollutants.[93] Emissions offsets can be greater than a one-to-one ratio: the farther away from NAAQS compliance, the greater offsets ratios are.[94] For example, in "severe" ozone

83. 42 U.S.C. § 7479.
84. *Id.* § 7602.
85. *Id.* § 7511(a).
86. *Id.* § 7512(a).
87. *Id.* § 7513(a).
88. Hawkins & Ternes, *supra* note 14, at 182–83.
89. 40 C.F.R. § 51.165 (2002).
90. Hawkins & Ternes, *supra* note 14, at 183.
91. *Id.*
92. *Id.* at 184.
93. *Id.*
94. *Id.* at 183.

nonattainment areas, the offset ratio for VOCs is 1.3 to 1; in "extreme" ozone nonattainment areas, the offset ratio for VOCs is 1.5 to 1, which means the proposed facility must reduce VOC emissions by 1.5 tons for every ton the facility emits.[95]

IV. EPA'S IMPERMISSIBLE INTERPRETATION OF THE APPLICABILITY OF NNSR PERMIT REQUIREMENTS IN NONATTAINMENT AREAS

CAA Parts C and D grant EPA authority to regulate new source emissions under the NSR program. EPA's rules and regulations under the NSR program, specifically its rules on the applicability of permit programs, must comply with statutory mandates. This section employs the tools of statutory interpretation to discern statutory mandates and legislative intent on the applicability of permit programs and further determine the validity of EPA's rules.

A. Liberalized Plain Meaning Rule as a Tool for Statutory Interpretation

The theories of statutory interpretation prioritize the plain meaning construction of the statutory text over other methods of interpretation.[96] To construe a statute, the United States Supreme Court always begins with the statutory language itself and determines whether the language is plain and unambiguous regarding the disputed issue.[97] If the statutory language is plain and unambiguous, the Court generally interprets the statutory terms according to their ordinary meaning unless the statute defines the terms otherwise or the literal interpretation contradicts a "clearly expressed legislative intention."[98] The Court in *Caminetti v. United States*, confronted with contrary evidence of legislative intent, reaffirmed the application of the plain meaning rule to determine legislative intent:

> [I]t has been so often affirmed as to become a recognized rule, when words are free from doubt they must be taken as the final expression of the legislative intent, and are not to be added to or subtracted from by considerations drawn from titles or designating names or reports accompanying their introduction, or from any

95. 42 U.S.C. § 7511(a).

96. WILLIAM N. ESKRIDGE, JR. ET AL., LEGISLATION AND STATUTORY INTERPRETATION 257 (2d ed. 2006).

97. Carcieri v. Salazar, 555 U.S. 379, 387 (2009); Duncan v. Walker, 533 U.S. 167, 172 (2001).

98. BP Am. Prod. Co. v. Burton, 549 U.S. 84, 91 (2006); Bread Political Action Comm. v. FEC, 455 U.S. 577, 580 (1982).

> extraneous source. In other words, the language being plain, and not leading to absurd or wholly impracticable consequences, it is the sole evidence of the ultimate legislative intent.[99]

In practice, however, the Supreme Court and lower federal courts use extrinsic aids, such as legislative history and administrative interpretations, to interpret statutes even under the plain meaning rule.[100] In *United States v. Oregon*, the Court considered the legislative history after concluding that the statutory language was clear on its face.[101] In *Gemsco v. Walling*, the Court based its holding on the plain meaning of the statutory language but still included a lengthy analysis of the legislative history.[102] In *TVA v. Hill*, the Court examined the statutory language, the legislative history, and the structure of the statute although it concluded that the statutory language could hardly be any plainer.[103] In numerous cases, the lower federal courts, as the Court did in *Oregon*, considered the legislative history after concluding that the statutory language was clear and that there was no need to resort to the legislative history.[104] Furthermore, the United States Court of Appeals for the District of Columbia Circuit (the DC Circuit) concluded that unambiguous statutory language renders extrinsic aids unnecessary for statutory interpretation but does not prohibit the use of those aids. The court held that the plain meaning rule does not "preclude consideration of persuasive evidence if it exists."[105]

The Court in *United States v. American Trucking Associations* justified the use of extrinsic sources together with the plain meaning rule for statutory interpretation, holding that when an extrinsic aid to statutory construction is available, "there certainly can be no rule of law which forbids its use, however clear the words may appear on superficial examination."[106] The Court further specified the circumstances when courts could look beyond the statutory words: "[w]hen that [plain] meaning has led to absurd or futile results . . . even when the plain meaning did not produce absurd results but merely an unreasonable one plainly at variance

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99. Caminetti v. United States, 242 U.S. 470, 490 (1917); *see also* Arthur W. Murphy, *Old Maxims Never Die: The "Plain-Meaning Rule" and Statutory Interpretation in the "Modern" Federal Courts*, 75 COLUM. L. REV. 1299, 1300 (1975) ("A vintage example of the rule in operation is the famous decision of the United States Supreme Court in *Caminetti v. United States*.").

100. Murphy, *supra* note 99, at 1300.

101. United States v. Oregon, 366 U.S. 643, 648 (1961).

102. Gemsco, Inc., v. Walling, 324 U.S. 244, 255–69 (1945).

103. Tenn. Valley Auth. v. Hill, 437 U.S. 153, 173–74 (1978).

104. Murphy, *supra* note 99, at 1304.

105. March v. United States, 506 F.2d 1306, 1313 (D.C. Cir. 1974).

106. United States v. Am. Trucking Ass'n, 310 U.S. 534, 544 (1940) (footnote omitted) (internal quotation marks omitted).

with the policy of the legislation as a whole."[107] But the Court still acknowledged the priority of the plain meaning rule in statutory interpretation:

> There is, of course, no more persuasive evidence of the purpose of a statute than the words by which the legislature undertook to give expression to its wishes. Often these words are sufficient in and of themselves to determine the purpose of the legislation. In such cases we have followed their plain meaning.[108]

The plain meaning of statutes is the starting point of statutory interpretation, but the plain meaning is not and should not be the end point. That is because of the evolving and contextual nature of legislation.[109] When legislators draft a statute, just as when people write or speak, they have an audience in their mind and consider past statements and communications.[110] The meaning of statutory language therefore depends on the legislators and their projected audience's shared understanding and the evolved or evolving conversation between them.[111] "[S]ometimes, Congress was engaged in an ongoing conversation about a particular topic and amended legislation in the context of that give-and-take, with statutory results that need to be construed with a sensitivity to the entire statutory history."[112] Moreover, Congress might sometimes deviate from the ordinary use of language because, except for the due process requirement under the Constitution, "nothing in the Constitution requires Congress to draft all legislation using the same presumptions of audience or to adhere to rigid standards of linguistic precision."[113]

Therefore, this Note adopts a liberalized plain meaning rule to interpret the CAA. The liberalized rule still sets the plain meaning interpretation as the starting point and center of statutory construction. But the ascertainment of the plain meaning may not be the end of statutory construction even though the language is unambiguous. The liberalized rule allows a further step to consider extrinsic sources, especially if they are persuasive, such as legislative history, overall structure of the statute, congressional polices and

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107. *Id.* at 543 (internal quotation marks omitted).
108. *Id.*
109. Robin Kundis Craig, *The Stevens/Scalia Principle and Why It Matters: Statutory Conversations and A Cultural Critical Critique of the Strict Plain Meaning Approach*, 79 TUL. L. REV. 955, 997 (2005).
110. *Id.*
111. *Id.* at 998.
112. *Id.* at 999–1000.
113. *Id.* at 1039.

purposes, and agency interpretations. These extrinsic sources could help put statutory words in context and determine what the words should mean and how they should apply to specific situations.[114] The essence of statutory construction is reading over the legislators' shoulders and "striv[ing] to understand how Congress, administrative agencies, and regulated entities would rationally understand, in context, the words Congress chose to use."[115]

B. Applicability of PSD Permit Requirements in Nonattainment Areas

As stated above, EPA limits the PSD permit requirements to major emitting facilities in attainment and unclassifiable areas, excluding major stationary sources in nonattainment areas from PSD permit requirements. EPA's interpretation is consistent with the plain meaning of CAA Part C for the following reasons. First, the express purpose of PSD requirements under Part C indicates Congress' intent to limit the application of PSD permit requirements to attainment and unclassifiable areas. Under Part C, Congress has granted EPA the authority to promulgate regulations on PSD permit requirements. Part C aims to "protect public health and welfare from any actual or potential adverse effect" caused by air pollution sources, "notwithstanding attainment and maintenance of all national ambient air quality standards" in the areas where the pollution sources are located.[116] Part C also aims to "prevent significant deterioration of air quality" and "preserve" "existing clean air resources" and air quality in national parks and other areas of special value.[117] The words that Congress repeats in defining the objectives of Part C are "prevent" and "preserve." The word "prevent" means "to keep from happening or existing."[118] The word "preserve" means to "maintain" and "to keep safe from injury, harm, or destruction."[119] Therefore, Congress' intent in drafting Part C was to maintain the status quo in the areas where the air quality fulfills NAAQS. If Congress had intended Part C to apply in nonattainment areas, Congress would not have defined the objectives as to "prevent" or "preserve" the status quo but to change and improve the existing air quality.

Second, Congress used the phrase "any area to which this part applies" throughout Part C to indicate that Part C does not apply to all geographic

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114. *Id.* at 979.
115. *Id.*
116. 42 U.S.C. § 7470(1).
117. *Id.*
118. MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 984 (11th ed. 2007).
119. *Id.* at 982.

areas but specific areas. For instance, Section 165 declares that no major emitting facility may be "constructed in any area to which this part applies" unless the proposed facility complies with the permit requirements under Part C.[120] The DC Circuit, in *Alabama Power Co. v. Costle*, interpreted this language and held that "the phrase 'constructed in any area to which this part applies' limits the application of Section 165 [under Part C] to major emitting facilities to be constructed in certain locations . . . . Congress intended location to be the key determinant of the applicability of the PSD review requirements."[121] Congress, however, omitted the phrase "any area to which this part applies" in the provisions where it concerns the source rather than area.[122] For example, Section 165(e)(1) requires the states or permit applicants to conduct an analysis of the ambient air quality "at the proposed site and in areas which may be affected by emissions from such facility."[123] Courts presume that Congress' decision to include particular language in one section but omit it in another section of the same statute is intentional and purposeful.[124] Therefore, the application of PSD permit requirements under Section 165 is limited to new sources in attainment or unclassified areas.[125]

Third, Section 161 under Part C restricts the applicability of Part C and PSD permit requirements to attainment and unclassifiable areas by defining the PSD program's geographical scope. Section 161 provides in general that states shall adopt necessary measures, including permit requirements, to prevent significant deterioration of air quality pursuant to the regulations promulgated under Part C. Specifically, Section 161 declares that "each applicable implementation plan shall contain emission limitations and such other measures . . . to prevent significant deterioration of air quality in each region . . . designated . . . as attainment or unclassifiable."[126] If Congress had intended the state PSD plans to apply to any geographic area, including nonattainment areas, it would not have included the language "*in each region . . . designated . . . as attainment or unclassifiable*."[127] Additionally, the enforcement section under Part C reinforces the geographical limit of PSD requirements by authorizing EPA and the states to take enforcement measures to prevent the construction or modification of a major emitting facility "which is not subject to an implementation plan" and "which is

120. 42 U.S.C. § 7475(a).
121. Ala. Power Co. v. Costle, 636 F.2d 323, 365 (D.C. Cir. 1979).
122. *Id.*
123. 42 U.S.C. § 7475(e)(1).
124. Barnhart v. Sigmon Coal Co., 534 U.S. 438, 452 (2002).
125. *Costle*, 636 F.2d at 365–66.
126. 42 U.S.C. § 7471.
127. *Id.* (emphasis added).

proposed to be constructed in *any area designated . . . as attainment or unclassifiable.*"[128]

Lastly, in the section that defines class I and class II areas to implement Part C, Congress defines class II areas as "[a]ll areas in such State *designated . . . as attainment or unclassifiable* which are not established as class I."[129] Class I areas include all "international parks," "national wilderness areas which exceed 5,000 acres in size," "national memorial parks which exceed 5,000 acres in size," and "national parks which exceed 6,000 acres in size."[130] The definition of class II areas uses "attainment or unclassifiable" areas to delineate the total areas considered under Part C and further divides the total areas into class I and class II areas. Therefore, the plain language that Congress uses to define class II areas reveals that the PSD permit requirements under Part C apply to attainment and unclassifiable areas, not nonattainment areas.

C. EPA's Impermissible Interpretation of the Applicability of NNSR Permit Requirements in Nonattainment Areas

As discussed above, EPA limits the applicability of NNSR permit requirements to new sources that are major for the pollutants for which the area is designated as nonattainment. That is, under EPA's interpretation, a proposed new stationary source in a nonattainment area will not require an NNSR permit if it is not a major source for the specific pollutants for which the area is designated as nonattainment. As discussed below, EPA's restrictive rule on the applicability of NNSR permits in nonattainment areas contradicts the plain language of the CAA and congressional policy and thus is not a permissible construction of the CAA.

1. The Statutory Text

The NNSR permit program constitutes a part of nonattainment SIPs. Nonattainment SIPs must comply with (1) CAA Section 110(a)(2), which sets out requirements for both attainment SIPs and nonattainment SIPs; (2) general requirements for all nonattainment programs under section 172(c); and (3) pollutant-specific requirements under sections 110(a)(2), 172, 181, 186, and 188.[131] Only Section 172(c) concerns the applicability of NNSR permits in nonattainment areas. Section 172(c)(5) provides that "such plan

128. *Id.* § 7477 (emphasis added).
129. *Id.* § 7472 (emphasis added).
130. *Id.* § 7472.
131. WOOLEY & MORSS, *supra* note 16, at 53.

[SIP] provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with Section 7503 of this title."[132]

The plain meaning of Section 172(c)(5) is that NNSR permit requirements apply when there is (1) construction and operation (2) of new or modified (3) major stationary sources (4) in the nonattainment area. As stated above, although the CAA does not provide any definition of the term "major stationary sources" under Part D—Nonattainment Areas—it defines the term "major stationary sources" under Title II—General Provisions. Specially, Section 302(j) declares that, unless otherwise expressly provided, the definition of "major stationary source" and "major emitting facility" is "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, one hundred tons per year or more of *any* air pollutant."[133] The definition under Section 302(j) governs because Part D does not expressly provide another definition. The definition of the word "any" in the Merriam-Webster Dictionary is "one or some indiscriminately of whatever kind."[134] "Any" is ordinarily used to indicate "one selected without restriction"[135] and a person or thing that is not particular or specific. Therefore, the plain language of Section 172(c)(5) requires permits for the construction and operation of new stationary sources in nonattainment areas which directly emit or have the potential to emit at least 100 tons per year of *any* air pollutant, *not specific* nonattainment pollutants. Any contrary interpretation would contradict the plain meaning of the word "any."

This interpretation of Section 172(c)(5) covering major sources of *any* air pollutant is consistent with the DC Circuit and EPA's interpretation of the term "any air pollutant" under Part C of the CAA (the PSD program). Part C defines "major emitting facility" as any of the enumerated types of "stationary sources of air pollutants which emit, or have the potential to emit, 100 tons per year or more of *any air pollutant*."[136] In 1978, EPA interpreted the term "any air pollutant" as "any air pollutant regulated under the Clean Air Act."[137] EPA explained that the term "regulated under the Clean Air Act" or "subject to regulation under the Act" means "any pollutant regulated in Subchapter C of Title 40 of the Code of Federal Regulations [EPA's Air Programs under the CAA] for any source type."[138]

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132. 42 U.S.C. § 7502.
133. *Id.* § 7602 (emphasis added).
134. MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY 56 (11th ed. 2007).
135. *Id.*
136. *Id*. § 7479 (emphasis added).
137. Approval and Promulgation of State Implementation Plans; 1977 Clean Air Act Amendments to Prevent Significant Deterioration, 43 Fed. Reg. 26,388, 26,403 (June 19, 1978).
138. *Id.* at 26,397.

In a recent case, *Coalition for Responsible Regulation v. EPA*, EPA reaffirmed its broad interpretation that "any air pollutant" means any pollutants regulated.[139] EPA rejected the industry's pollutant-specific interpretation that PSD permit requirements only apply to new sources that emit a major amount of a pollutant for which the area is designated as attainment.[140] The court upheld EPA's 36-year old interpretation of "any air pollutant" under CAA Part C and concluded that the statute "compelled" EPA's longstanding interpretation.[141] "[T]he word 'any' has an expansive meaning that is, 'one or some indiscriminately of whatever kind.'"[142] Congress would not have intended different meanings regarding the same term in different sections of the Act without expressly saying so. Therefore, the term "any air pollutant" under Part D (nonattainment section) should have an expansive meaning, rather than being limited to specific nonattainment pollutants.

Congress' choice of language in other provisions under Part D supports the interpretation of the applicability of NNSR permits to major sources for *any* air pollutant. Part D consists of six subparts: the first subpart provides general plan requirements of controlling new source emissions, implementing "all reasonably available control measures as expeditiously as practicable" and meeting deadlines for attaining NAAQS in nonattainment areas; Subparts 2 through 5 provide additional requirements for ozone, carbon monoxide, particulate matter, sulfur oxides, nitrogen dioxide, and lead nonattainment areas, respectively; Subpart 6 is a savings provision, preserving EPA's rules and regulations promulgated under the CAA before November 15, 1990, unless they are inconsistent with any provision of the CAA.[143] Subpart 2 provides additional plan requirements for ozone nonattainment areas and tailors the strictness of control measures to the severity of ozone pollution in different areas; specifically, it requires more stringent new source emissions control standards and measures in areas where ozone pollution is more severe. Subpart 2 begins by specifying the requirements in the least severe ozone pollution area, "marginal areas," which require permits for the "construction and operation of each new or modified major stationary source *(with respect to ozone)* to be located in the area."[144] Congress would not have included the parenthetical "(with respect to ozone)" if it had intended for the term "new or modified major stationary

139. Coal. for Responsible Regulation, Inc. v. Envtl. Prot. Agency, 684 F.3d 102, 133–34 (D.C. Cir. 2012).
140. *Id.* at 141.
141. *Id.* at 133.
142. *Id.* at 134.
143. 42 U.S.C. §§ 7501−15.
144. *Id.* § 7511(a) (emphasis added).

source" to mean new or modified sources that are major only for the pollutant(s) for which the area is designated as nonattainment; the language "with respect to ozone" would be redundant and superfluous. In other parts of Subpart 2, Congress uses "major stationary sources of volatile organic compounds" or "major stationary sources of VOCs" when it especially refers to sources that are major for VOCs.[145] Congress therefore intentionally and purposely included particular pollutants to refer to major sources of such pollutants. Thus, Congress intended the term "major stationary sources" under Part D to mean sources that are major for *any* pollutant, and Congress would have included language referring to a specific pollutant if Congress had intended the term "major stationary sources" to mean sources that are major for *only such pollutants*.

Furthermore, the structure of Part D also supports the applicability of NNSR permits to new sources that are major sources for *any* air pollutant. Part D first provides general plan requirements for new source emission controls in nonattainment areas and further imposes more stringent requirements for new sources in nonattainment areas for ozone, carbon monoxide, and particulate matter by lowering the threshold for "major stationary source" designation as to respective nonattainment pollutants. For example, Subpart 2, concerning ozone pollution in ozone nonattainment areas, declares that "[f]or any Serious Area, the terms 'major source' and 'major stationary source' include . . . any stationary source or group of sources . . . that emits, or has the potential to emit, at least 50 tons per year of volatile organic compounds."[146] This provision imposes more stringent requirements for new sources in ozone nonattainment areas by expanding the definition of "major stationary sources," and thus the jurisdiction of permit requirements, to cover new sources that emit or have the potential to emit at least 50 tons per year of VOCs. Under the expanded definition of "major stationary sources," new sources that are not major for any pollutant under the original definition would qualify as "major stationary sources" and trigger the permit requirements under Part D if they emit or have the potential to emit at least 50 tons per year of VOCs. Therefore, the applicability of NNSR permits to new sources that are major sources for *any* air pollutant is consistent with the structure of Part D. In conclusion, EPA's restrictive interpretation of the applicability of NNSR permits contradicts the plain language of the CAA.

2. Legislative History

145. *Id.*
146. *Id.* (emphasis added).

The CAA's legislative history also supports the interpretation that NNSR permit requirements apply to proposed new sources in nonattainment areas that are major for *any* air pollutant, not just for the nonattainment pollutants. As discussed below, the legislative history of the 1977 Amendment to the CAA puts the statutory language in context[147] and suggests a case-by-case test in determining the applicability of NNSR permits.

The legislative history of the 1977 Amendment supports the interpretation of the plain language of Section 172(c)(5)[148] that NNSR permit requirements apply to new major sources of *any* pollutants, not just nonattainment pollutants. In the 1977 Amendment of the CAA, Congress added Section 302(j),[149] together with the PSD program and NNSR Program. Section 302(j) declares that, unless otherwise expressly provided, the definition of "major stationary source" and "major emitting facility" is "any stationary facility or source of air pollutants which directly emits, or has the potential to emit, 100 tons per year or more of *any* air pollutant."[150] Unless otherwise provided, Section 302(j) governs the meaning of any term in the CAA that refers to major sources—either major stationary sources or major emitting facilities.[151] Section 302(j)'s default definition does not apply in Part C because Congress narrows the definition of "major emitting facility" in Part C by specifying that only new sources that belong to certain categories are major emitting facilities.[152] Part D, in contrast, does not specifically define "major stationary source." Therefore, Section 302(j)'s definition should govern the interpretation of the term "major stationary sources" under Section 172(c)(5). As discussed above, the term "any air pollutant" under Section 302(j) has expansive meaning and does not refer to particular pollutants.

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147. The plain language of Section 172(c)(5) discussed above seems to suggest that the only trigger for NNSR permit requirements is the emission of a major amount of any air pollutant from a new stationary source. However, as shown below, the legislative history indicates that Congress did not intend to set such a bright-line rule; rather, Congress intended to apply NNSR permit requirements to new major sources when emissions from those sources would prevent the attainment of NAAQS. *See* Clean Air Act § 172(c)(5); 42 U.S.C. § 7502.

148. As stated above, Section 172(c)(5) provides that "such plan [SIP] provisions shall require permits for the construction and operation of new or modified major stationary sources anywhere in the nonattainment area, in accordance with section 7503 of this title." 42 U.S.C. § 7502.

149. Clean Air Act Amendment of 1977, Pub. L. No. 95-95, §301, 91 Stat. 685, 770, *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 276 (1978); H.R. REP. NO. 95-564, §301 (1977) (Conf. Rep.), *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 472–73 (1978).

150. 42 U.S.C. § 7602 (emphasis added).

151. S. REP. NO. 95-127, at 96 (1977), *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 1470–71 (1978).

152. *Id.*; *see supra* note 57 and accompanying text.

S. 252, the Senate bill that ultimately became a part of the 1977 Amendment, suggested a narrative and case-by-case test for the applicability of NNSR permit requirements. In 1976, at the 94th Congress, the Senate proposed to add provisions on new source emissions controls in nonattainment areas, whereas the House did not propose comparable provisions.[153] At the 95th Congress, the Senate Committee on Environment and Public Works reported to the Senate the bill, S. 252, which stated that "[n]o major emitting facility shall be constructed or modified in any air quality control region or portion thereof in which any national ambient air quality standard [NAAQS] is exceeded, if such facility will emit air pollutants subject to such standard so as to *prevent the attainment or maintenance of such standard*, unless" particular pollution control requirements, including NNSR permit requirements, are met.[154] According to the Senate bill, in nonattainment areas, a new source of nonattainment pollutants would trigger NNSR permit requirements if (1) it is a major emitting facility and (2) the emission of nonattainment pollutants from that source would *prevent the attainment or maintenance of NAAQS*. The Senate bill's prevent-attainment-of-standard test is narrative, flexible, and case-specific.

At the 95th Congress, the Senate Committee on Environment and Public Works submitted a report to the Senate on S. 252.[155] The Committee report[156] accompanying the Senate bill affirmed the prevent-attainment-of-standard test in the section discussing legislative intent:

> [T]he Act is amended by adding a new subsection which provides that unless certain conditions are met, a major facility may not receive a permit for construction or modification in an area which is exceeding an ambient air quality standard [NAAQS] if the new facility will emit pollutants which prevent attainment or maintenance of the ambient standard.[157]

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153. STAFF OF S. COMM. ON ENV'T & PUB. WORKS, 94TH CONG., LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, 4380 (Comm. Print 1978) (emphasis added).

154. S. 252, 95th Cong. (1st Sess. 1977), *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 632–33, 1543 (1978) (emphasis added).

155. S. REP. NO. 95-127, at 1 (1977), *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 1375 (1978).

156. "Committee reports are perhaps the most valuable single element of the legislative history of a law. They are used by the courts, executive departments, and the public as a source of information regarding the purpose and meaning of the law." OTTO J. HETZEL ET AL., LEGISLATIVE LAW AND STATUTORY INTERPRETATION: CASES AND MATERIALS 152 (4th ed. 2008).

157. S. REP. NO. 95-127, at 54 (1977), *reprinted in* S. COMM. ON ENV'T & PUB. WORKS, LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, at 1428 (1978).

A superficial reading of this paragraph may indicate that the report used the prevent-attainment-of-standard test as the test for permit approval rather than applicability. However, the report later referred to the term "certain conditions" as conditions for permit approval. Therefore, the above paragraph could be paraphrased as follows: a major facility or modification may not be built in an area which exceeds NAAQS if the new facility will emit pollutants that prevent attainment or maintenance of the ambient standard, unless certain NNSR permit requirements are met.

The Committee report also identified the fundamental purposes of reviewing new sources in nonattainment areas. Achieving the fundamental purposes demands the prevent-attainment-of-standard test for the applicability of NNSR permits. According to the Committee report, the fundamental purpose of the new source review in nonattainment areas under the 1977 Amendment was to address a "major weakness" of the implementation of the 1970 Act in assessing the impact of new source emissions on state plans to attain NAAQS by statutory deadlines.[158] States generously permitted new emissions and falsely assumed that the deadline was distant so that future reductions could offset current emissions.[159] The 1977 Amendment aimed to address this ineffective implementation by requiring states to "assure that before new or expanded facilities are permitted, a State demonstrate that these facilities can be accommodated [by, for example, emission offsetting] within its overall plan to provide for attainment of air quality standards."[160] Therefore, the fundamental purpose of the nonattainment new source review under the 1977 Amendment demanded preconstruction review, including the permitting of a new source if the totality of the circumstances indicated that such source would prevent the attainment or maintenance of NAAQS by statutory deadlines.

Senator Muskie brought S. 252 before the Senate on behalf of the Committee[161] and embraced the prevent-attainment-of-standard test for the applicability of NNSR permits during the Senate floor debate. Senator Muskie stated that the procedure for preconstruction review of new sources

158. *Id*. at 1429. The 1977 Amendment extended the deadlines under the 1970 Act for nonattainment areas to attain NAAQS. Thomas O. McGarity, *Missing Milestones: A Critical Look at the Clean Air Act's VOC Emissions Reduction Program in Nonattainment Areas*, 18 VA. ENVTL. L.J. 41, 46 (1999). In general, the attainment date for a nonattainment area is the date by which the area can achieve attainment "as expeditiously as practicable, but no later than 5 years from the date such area was designated nonattainment" except that EPA may extend the attainment date "for a period no greater than 10 years from the date of designation as nonattainment." 42 U.S.C. § 7502.

159. *Id*.

160. *Id.*

161. STAFF OF S. COMM. ON ENV'T & PUB. WORKS, 95TH CONG., LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, 705 (Comm. Print 1978).

in nonattainment areas must contain "adequate authority to prevent construction or modification of a new source which will prevent the attainment or maintenance of national ambient air quality standards."[162] In other words, if a construction or modification of a new source will prevent the attainment or maintenance of NAAQS, such new source will trigger the preconstruction review, including the permit process. Additionally, Senator Muskie embraced case-by-case scrutiny of new sources in nonattainment areas, which he said was the "only mechanism" that would assure the attainment of NAAQS by statutory deadlines unless the state could show that its State Attainment Plan would improve air quality and reduce emissions at a rate sufficient to attain NAAQS by statutory deadlines.[163]

The Senate bill's prevent-attainment-of-standard test is similar to EPA's interpretation insofar as it applies NNSR permit requirements only to major stationary sources. However, EPA's 100-ton-threshold test contradicts the Senate bill's test in that EPA further limits major stationary sources to those of nonattainment pollutants. EPA's test, unlike the Senate bill, is numerical, rigid, and arbitrary.

3. Impermissible Interpretation under *Chevron*

As stated above, not all major stationary sources in nonattainment areas trigger NNSR permit requirements. According to EPA, NNSR permit requirements only apply to the emissions of pollutants "for which the source is major and for which the area is in nonattainment."[164] Although EPA's regulation on the applicability of PSD permits is reasonable, its regulation on the applicability of NNSR permits is not a permissible interpretation of the CAA.

In *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, the Supreme Court specified the standard of judicial review of an administrative agency's interpretation of the statute it enforces:

> When a court reviews an agency's construction of the statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter . . . . If, however, the court determines Congress has not directly addressed the precise question at issue . . . if the statute is silent or ambiguous with respect to the specific issue, the question

162. *Id.* at 713.
163. *Id.* at 716.
164. Hawkins & Ternes, *supra* note 14, at 182.

> for the court is whether the agency's answer is based on a permissible construction of the statute.[165]

EPA's interpretation of NNSR permit requirements fails the *Chevron* test because Congress' intent is clear—NNSR permit requirements may apply to any new source that is major for *any* air pollutant. Moreover, as demonstrated below, even assuming Congress' intent was ambiguous, EPA's narrow application of NNSR permit requirements to new sources that are major for nonattainment pollutants is not a permissible statutory construction.

Congress clearly intended for NNSR permit requirements to apply to nonattainment areas, as Part D is entitled "plan requirements for nonattainment areas." Congress also intended for NNSR permit requirements to apply to any new source that is major for *any* air pollutant. This intent is evident throughout the CAA: (1) Congress explicitly defined the term "major stationary sources" under Section 302(j) as sources that are major for any air pollutant; (2) under Part D, Congress included language referring to specific pollutants when it especially concerned new sources that are major for such pollutants; (3) Congress imposed more stringent requirements under Part D for new sources in ozone, carbon monoxide, and particulate matter nonattainment areas by lowering the major source threshold as to those nonattainment pollutants to extend permit requirements to more new sources in those areas. Therefore, no inquiry into EPA's interpretation is necessary if Congress' intent is clear as to the applicability of NNSR permits.

Even assuming Congress' intent was ambiguous, EPA's regulation on the applicability of NNSR permit requirements is not a permissible interpretation of the CAA. Under EPA's regulation, NNSR permit requirements apply to a new source only if (1) the new source is located in a nonattainment area, (2) the source emits the pollutants for which the area is designated as nonattainment, and (3) the source is a major emitting facility of such pollutants—that is, the source emits or has the potential to emit at least 100 tons per year of such pollutants. EPA's regulations will result in a significant loophole in the control of new source emissions of lead in lead nonattainment areas. Unlike new sources in ozone, carbon monoxide, and particulate matter nonattainment areas, new sources in lead nonattainment areas are not subject to any lowered major source threshold for lead but are still subject to the 100-ton-per-year threshold. EPA's regulation will allow a new source that is located in a lead nonattainment

165. Chevron, U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 842–43 (1984).

area and emits or has potential to emit 99.9 tons per year of lead to escape NNSR permit requirements and exacerbate the lead pollution, further delaying the attainment for NAAQS. This is a result that the legislature could not have reasonably intended.[166]

EPA may argue that the 100-ton threshold for the applicability of NNSR permit requirements is necessary in accommodating industrial development and economic growth in nonattainment areas. The legislative history of the 1977 Amendment regarding NNSR permit requirements reveals that Congress recognized the conflict between the economic interest in permitting the growth of industrial facilities and the environmental interest in attaining acceptable air quality.[167] However, Congress made a policy choice under the CAA's nonattainment provisions to give the environmental interest of improving air quality priority over the economic interest of growth. The Senate and House of Representatives agreed that the "protection of the public health must be the primary concern" in controlling new source emissions in nonattainment areas.[168] During the Senate floor debate on the Senate bill proposing to control new source emissions in nonattainment areas, Senator Muskie explained the Committee's opinions on the consideration of cost in defining technological standards of new sources: "New sources and modifications must employ systems which achieve the greatest emission reductions possible, even if such systems may be more costly than other less effective systems."[169] In the Senate Committee's opinion, it was an "inappropriate policy" to weigh costs as heavily as the effectiveness in emission reduction in defining new source emissions control requirements in nonattainment areas.[170] In establishing

166. Congress could not have intended to delay the attainment for NAAQS because under CAA Part D, Congress expressly requires individual states to implement "all reasonably available control measures as expeditiously as practicable" to attain NAAQS. 42 U.S.C. § 7502. *See also* Babbitt v. Sweet Home Chapter of Cmtys. for a Great Or., 515 U.S. 687, 721 (1995) (Scalia, J., dissenting) (disagreeing with the Court that the interpretation of the word "take" under the Endangered Species Act is not permissible because "it produces a result that no legislature could reasonably be thought to have intended"); State of Ohio v. U.S. Dep't of the Interior, 880 F. 2d 432, 441–59 (D.C. Circ. 1989) (holding that the Department of the Interior's "lessor of"' rule is an impermissible interpretation of the Comprehensive Environmental Response, Compensation and Liability Act because it directly contradicts the expressed intent of Congress).

167. *Chevron*, 467 U.S. at 838; *See also* S. REP. NO. 95-127, *supra* note 151, at 1376 (stating that "one issue [that] occupied a majority of the attention of the committee" is the concern that "achievement of air quality standards required to protect public health may impose unacceptable constraints on the Nation's capacity to achieve the kind of economic activity necessary to bring about full employment and a balanced Federal budget").

168. STAFF OF S. COMM. ON ENV'T & PUB. WORKS, 95TH CONG., LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, 322 (Comm. Print 1978).

169. *Id.* at 717.

170. *Id.*

control system requirements for new sources in nonattainment areas, EPA should consider the costs of such systems "only to a very limited extent."[171]

Moreover, EPA once agreed with Congress' policy choice that "[s]ince a policy which simply precludes all industrial growth in these areas [nonattainment areas] would be unacceptable, we are in favor of a stringent policy which allows new emissions only if they will not make air quality worse."[172] Finally, according to Senator Muskie, economic growth and environmental interest are not mutually exclusive;[173] on the contrary, environmental constraints may stimulate technological innovation and ultimately facilitate economic growth:

> I believe that an economic growth policy which abandons environmental objectives would be a foolish course. The Nation must have clean growth. If the price of that clean growth is to restrain the size of particular activities pending the development of new pollution control technologies or new production procedures, then new technologies and processes can and will be developed in order to take advantage of the economies of scale.[174]

V. A PROPOSED TEST FOR DETERMINING THE APPLICABILITY OF NNSR PERMIT REQUIREMENTS IN LEAD NONATTAINMENT AREAS

EPA and various stakeholders have been making proposals to reform EPA's NSR program since 1992.[175] Those proposals suggest two primary objectives of NSR reform: (1) industries, EPA, and some state agencies seek to simplify the NSR program, making it more flexible and less burdensome to the regulated community; and (2) environmental groups suggest that NSR reform should lead to enhanced environmental protection.[176] The 1977 House of Representative's Committee Report suggested that EPA's NSR reform should achieve both objectives, stating that the sections on nonattainment areas were "proposed as a means of assuring realization of the dual goals of attaining air quality standards and providing for new economic growth."[177] Particularly, as discussed above,

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171. *Id.*

172. *Id.* at 3549.

173. *Id.* at 710. According to Senator Muskie, the Senate Committee found that the CAA would not pose "unacceptable limits" on economic growth.

174. *Id.* at 4799.

175. Michael Settineri, *Reforming the New Source Review Program*, 13 FORDHAM ENVTL. L.J. 107, 162–63 (2001).

176. *Id.* at 122–23.

177. *Id.* at 113; H.R. REP. No. 95-294, at 13 (1977), *reprinted in* 1977 U.S.C.C.A.N. 1077, 1091.

Congress considered the protection of public health as the "paramount purpose and value" and the "overriding commitment" of the CAA.[178] Therefore, the protection of public health and attaining NAAQS should be the primary concern in formulating suggestions for NSR reform.

EPA's current rule restricts the applicability of PSD permit requirements to new sources in attainment and unclassified areas and NNSR permit requirements to new sources in nonattainment areas that emit a major amount (100 tons per year) of nonattainment pollutants. This rule creates a loophole in the control of major source emissions in nonattainment areas by exempting new sources that emit not major, but significant, amounts of nonattainment pollutants from both PSD and NNSR permit requirements. For example, such new sources may emit or have the potential to emit 99.9 tons per year of lead and major amounts of other pollutants. As discussed above, such an exemption contradicts the plain language of the CAA and legislative intent and is not a permissible interpretation of the Act under the *Chevron* test. Particularly, the test of the applicability of NNSR permit requirements under EPA's policy is the 100-ton-per-year threshold of nonattainment pollutants emissions, which contradicts the narrative and case-by-case test under the Senate bill for the 1977 Amendment.

EPA should therefore adopt a case-by-case test to determine the applicability of NNSR permit requirements to new sources in nonattainment areas. Similar to the prevent-attainment-of-standard test under the Senate bill, EPA or the states should consider the totality of the circumstances for each new source proposed in nonattainment areas and determine the impact of its lead emissions on the state plan to attain NAAQS for lead. In assessing the impact, EPA or the states should be free to choose a method, which may be as simple as a numerical threshold or as complex as a detailed analytical framework containing both numerical and narrative criteria. But the assessment standard should be strict enough so that new sources that emit or have the potential to emit at least 100 tons per year of lead will trigger NNSR permit requirements. The key to this case-by-case determination of the applicability of NNSR permits is that EPA or the states must give at least some consideration to the impact of a new source of lead on the attainment of NAAQS. Under this case-by-case test, a new source in lead nonattainment areas that is major for pollutants other than lead may trigger NNSR permit requirements if, for example, the totality of the circumstances indicates that such source's lead emissions will

178. STAFF OF S. COMM. ON ENV'T & PUB. WORKS, 95TH CONG., LEGIS. HISTORY OF THE CLEAN AIR ACT AMENDMENT OF 1977, 319 (Comm. Print 1978).

prevent the implementation of the state plan from achieving NAAQS for lead.

This case-by-case test complies with CAA Section 172(c)(5), which imposes NNSR permit requirements on new sources that are major for *any* air pollutant, not just nonattainment pollutants. This case-by-case test will facilitate the legislative purposes of attaining air quality standards and protecting the public health. This test is also flexible enough to accommodate individual circumstances to allow economic growth. Moreover, the case-by-case test, substituting EPA's 100-ton-per-year test, will fill the gap in EPA's regulation of new sources in nonattainment areas by examining each major new source that emits not major, but a significant, amount of nonattainment pollutants and determining whether such source requires an NNSR permit. The case-by-case test therefore will prevent new sources of lead emissions from evading permit requirements and facilitate the attainment of NAAQS in lead nonattainment areas.

Future reform of EPA's NSR program should not overlook the goal of attaining NAAQS in nonattainment areas, especially when EPA's existing NSR program creates a significant loophole in regulating new sources in nonattainment areas. EPA and the states should not achieve the goal of providing for new economic growth at the expense of the goal of attaining NAAQS, especially by allowing more new sources to avoid permit requirements. EPA therefore should abandon its rules on the applicability of NNSR permits, limiting NNSR permits to new sources that are major for pollutants for which the area is designated as nonattainment, and adopt a rule that extends the applicability of NNSR permits to new sources that are major for *any* pollutant. This is the initial step EPA should take to remove a significant loophole in its new source pollution control in nonattainment areas. Further reforms would concern the trade-offs between the goals of attaining NAAQS and allowing for new economic growth.

CONCLUSION

Lead pollution presents unique concerns for human health, especially the health of children. The CAA requires EPA to promulgate NAAQS for lead. Under the CAA, EPA developed the NSR program to regulate new and modified stationary sources. EPA's NSR program requires all major and certain minor stationary sources to undergo preconstruction review and approval. EPA's NSR program includes the PSD and NNSR permit programs, with the latter having more stringent permit conditions than the former.

EPA's regulation limits the applicability of PSD permit requirements to major stationary sources in attainment areas, exempting major stationary

sources in nonattainment areas. EPA also limits the applicability of NNSR permit requirements to new sources that are major for the pollutants for which the area is designated as nonattainment. Although EPA's regulation on the applicability of PSD permits is reasonable, its regulation on the applicability of NNSR permits is not a permissible interpretation of the CAA. EPA's regulation creates a significant loophole in the control of new source emissions in nonattainment areas, exacerbating lead pollution and further delaying the attainment of NAAQS for lead. Therefore, EPA should change its rule on the applicability of NNSR permits in nonattainment areas and adopt a case-by-case test to determine the impact of lead emissions from each new major source on the state plan to attain NAAQS for lead. This proposed test for the applicability of NNSR permits facilitates the fundamental goal of the new source review in nonattainment areas to attain NAAQS as expeditiously as practicable. It also accommodates the agency's interest in minimizing administrative costs by giving EPA or state agencies the freedom to choose the method for assessing a new source's impact on NAAQS attainment. This proposed test, potentially imposing environmental constraints on more industrial facilities, would stimulate technological innovation and ultimately facilitate economic growth. This proposed test, however, is not a panacea for all the problems of EPA's NSR program or all lead pollution problems in lead nonattainment areas. The proposed test is the initial step to reform EPA's NSR program and achieve the dual goals of attaining NAAQS and allowing for new economic growth.