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By electronic submission

Environmental Protection Agency
Docket Center – Air Docket
EPA West Building
1301 Constitution Avenue
Washington, D.C. 20460

RE: Docket ID No. EPA – HQ – OAR – 2007 - 0121

To Whom It May Concern:

We write on behalf of the Harvard Law School Environmental Law and Policy Clinic¹ in response to EPA’s request for comments on its Advance Notice of Proposed Rulemaking on the Control of Emissions from New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder (the “ANPR”). Having reviewed the ANPR, as well as prior, related rulemakings, Section 213 of the Clean Air Act (“CAA), the legislative history of Section 213, and other federal agency actions in connection with ocean-going marine vessels registered under foreign flags (“foreign-flagged vessels” or “FFVs”), it is our conclusion that EPA has the authority – and has been directed by Congress in Section 213 to exercise that authority – to regulate the large (“Category 3”) compression-ignition engines of foreign-flagged vessels in order to reduce the significant air emissions they generate in and around ports in the United States.

EPA studies confirm the importance of prompt regulation of this major source of air pollution. Ninety percent (90%) of annual entrances to U.S. ports are made by foreign-flagged vessels. 72 Fed. Reg. at 69,536. Hence, FFVs are the predominant source of air pollution in and around America’s ports and shores. *Id.* See 68 Fed. Reg. at 9750. EPA estimates that, without further controls on Category 3 marine engines, by 2030 the contribution of these engines to the formation of harmful ground-level ozone and concentrations of fine particles in the ambient atmosphere will increase to about 34 percent of mobile source nitrogen oxides (NO_x), 45 percent of mobile source fine

¹ The Harvard Law School Environmental Law and Policy Clinic (“ELPC”) works on a variety of local, national, and international projects covering the spectrum of environmental issues. These comments are authored by Wendy Jacobs, who is a Lecturer on Law at Harvard Law School and Director of the ELPC, together with Benjamin Thibault and Mark Yeboah, who are both active members of the Clinic and second year students at HLS.

particulate matter (PM_{2.5}), and about 94 percent of mobile source sulfur oxides (SO_x). 72 Fed. Reg. at 69,545. EPA can and should regulate Category 3 engines in FFVs as soon as possible to protect public health and the environment. As will be shown below, EPA’s hesitation to regulate FFVs is not justified by the CAA or public policy.

Indeed, EPA’s 2003 interpretation of the term “new nonroad engine” to exclude engines on FFVs contravenes the plain language and purpose of Section 213 of the CAA and should be revised, at least as to Category 3 engines.² Nothing in Section 213 of the CAA permits EPA to exempt from regulation a class of engines that has a significant and deleterious impact on human health and the environment in the United States merely because the ship carries a foreign flag. Section 213 of the CAA identifies the factors that EPA may take into account in setting engine standards – nationality of the vessel is not one of those factors. 42 U.S.C. § 7547(a)(3). Nor did Congress authorize EPA to defer to international standards to regulate FFVs for “foreign policy” purposes. *Compare*, 42 U.S.C. § 7547(a)(3) *w.* 68 Fed. Reg. at 9749 (describing EPA’s desire to “pursue further negotiations in the international arena to achieve more stringent global emission standards”) and 72 Fed. Reg. 20,950 (stating that “adopting appropriate international standards would be the most efficient mechanism to control emissions from U.S. and foreign-flagged vessels”) and 72 Fed. Reg. at 69,537 (stating that EPA will continue to coordinate Category 3 emission standards with activities at the International Maritime Organization).

In 2003, when EPA issued the first set of regulations applicable to marine vessel engines (the “Tier 1 Final Rule”), the standards for NO_x were identical to those already in place under the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI. EPA reasoned then that FFVs would be required to comply with MARPOL and, therefore, little would be gained from EPA regulation of FFVs. However, EPA’s upcoming Tier 2 standards are expected to be more stringent than MARPOL. *See* Tier 1 Final Rule, 68 Fed. Reg. at 6749 (stating that the Tier 2 program “will consist of more stringent standards” than the Tier 1 standards that are “equivalent to internationally negotiated NO_x standards”). Thus, EPA’s prior equivalency justification for excluding FFVs is no longer applicable.

I. Only by Regulating Category 3 Engines on FFVs Can EPA Satisfy the Mandate of Section 213 of the CAA

Section 213 of the CAA requires EPA to determine whether and what classes or categories of new nonroad engines “are significant contributors to ozone or carbon monoxide concentrations in more than 1 area which has failed to attain the national ambient air quality standards for ozone or carbon monoxide.” 42 U.S.C. §7547(a)(1), (2). Once that determination is made, the statute mandates that EPA “shall promulgate (and from time to time revise) regulations containing standards applicable to emissions

² *See* Control of Emissions From New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder, 68 Fed. Reg. 9746 (Feb 28, 2003) (“Tier 1 Final Rule”).

from those classes or categories of new nonroad engines and new nonroad vehicles (other than locomotives or engines used in locomotives).” 42 U.S.C. § 7547(a)(3).

Pursuant to Section 213, EPA has repeatedly found that the engines on large ocean-going ships are such “significant contributors.” 72 Fed. Reg. at 69,526. EPA has determined that within the class of the largest marine engines, Category 3 engines are *the most significant* contributors of pollution in U.S. coastal areas. 68 Fed. Reg. at 9750. Moreover, FFVs represent approximately ninety percent (90%) of annual entrances to U.S. ports, 72 Fed. Reg. at 69,536, and engines on FFVs account for the majority of emissions from Category 3 marine diesel engines impacting U.S. air quality. 68 Fed. Reg. at 9750; 72 Fed. Reg. at 69,548. EPA has concluded that FFVs “contribute substantially to local air pollution in port areas.” Control of Emissions of Air Pollution From New Marine Compression-Ignition Engines at or Above 37 kW, 64 Fed. Reg. 73300, 73323 (Dec. 29, 1999). *See also* 68 Fed. Reg. at 9751.

It necessarily follows, then, that EPA must set air emission standards for FFVs operating Category 3 marine diesel engines unless Section 213 specifies otherwise. But it does not.³ The *only* factors that EPA is allowed to take into account in setting those standards, pursuant to the unequivocal language in the statute, are technological feasibility, costs, safety, noise and energy. Section 213(a)(3) of the CAA, 42 U.S.C. § 7547(a)(3). Nothing in Section 213 authorizes EPA to exempt any class of new nonroad engines or vehicles which its findings confirm contribute to pollution that “may reasonably be anticipated to endanger public health or welfare.” Nothing in Section 213 allows EPA to take the nationality of the vessel carrying the engine into account.

Indeed, in its ANPR, EPA points to nothing in Section 213 or its legislative history authorizing EPA to exempt FFVs. EPA’s reference to certain definitions in Section 216 regarding cars and trucks does not justify exemption of FFVs from regulation under Section 213.

In fact, federal agencies do regulate FFVs in U.S. waters when the governing statute does not explicitly direct or otherwise authorize the agency to exempt FFVs. For example, pursuant to the 1990 Oil Pollution Act, the U.S. Coast Guard requires ships operating in U.S. waters to have double hulls, segregated ballast tanks, crude oil washing systems, fixed pumping systems, and oil residue tanks. *See generally* 33 C.F.R. § 157. Notably, these requirements exceeded international standards in effect at the time the Coast Guard adopted them. The Coast Guard applies these requirements to U.S. vessels and “any other vessel[s] that enter[] or operate[] in the navigable waters of the United States”, 33 C.F.R. § 157.01(a). The regulations require significant modifications to vessel design. *See, e.g.*, 33 C.F.R. § 157.10d(b)(1) (“[e]ach vessel to which this section applies must be fitted with a double hull”); 33 C.F.R. § 157.11(a) (“[e]ach tank vessel must have a fixed

³ Congress could have instructed EPA, but did not, to exempt FFVs. In the absence of such congressional instruction, FFVs operating in U.S. waters are subject to regulation by U.S. agencies in order to effectuate the policies and requirements of the relevant statutes. *See e.g., Stevens v. Premier*, 215 F.3d 1237 (11th Cir. 2000).

pipings system for transferring oily mixtures from cargo tanks”). The Coast Guard recognized that exempting FFVs would undermine the statute.

EPA itself has regulated FFVs under the Clean Water Act’s National Pollutant Discharge Elimination System (NPDES) permit program. *See* Issuance of Final General NPDES Permit for Portions of Deep Seabed Mining Exploration Activities in the Pacific Ocean, 49 Fed. Reg. 39,442, 39,446 (Oct. 5, 1984).⁴ To effectuate the purpose of the CAA, EPA should regulate Category 3 engines on FFVs, too.

II. EPA Should Not Adopt a Definition of New Nonroad Engines and Vehicles that Undermines Section 213

The terms “new nonroad engines” and “new nonroad vehicles” are not defined in Section 213. Looking for guidance, EPA turned to the definition of “new motor vehicle” in Section 216 of the CAA. That section provides that the definition of “new” in “new motor vehicle” and “new motor vehicle engine” depends on whether the engine or vehicle is manufactured in or imported into the U.S. For the former, a “new” motor vehicle engine is one as to which the equitable or legal title has never been transferred to an ultimate purchaser. 42 U.S.C. § 7550(3). For imported vehicles and engines, “such terms mean a motor vehicle and engine, respectively, manufactured after the effective date of a regulation issued under section 202.” *Id.*

In the Section 213, Tier 1 Final Rule, EPA reasoned that Section 216 “excludes” cars and trucks that have not been imported into the U.S., and concluded that that same exclusion should be read into Section 213. Extrapolating that a ship only temporarily docked in a U.S. port has not been imported within the meaning of U.S. Customs laws, EPA declined to regulate FFVs in the 2003 Tier 1 Final Rule. *Id.*⁵

⁴ Further, as a result of *Northwest Environmental Advocates v. United States EPA*, 2005 U.S. Dist. LEXIS 5373 (D. Cal. 2005), EPA is in the process of developing NPDES regulations for the discharge of pollutants incidental to the normal operation of marine vessels, applicable to foreign-flagged vessels. *See* Development of Clean Water Act National Pollutant Discharge Elimination System Permits for Discharges Incidental to the Normal Operation of Vessels, 72 Fed. Reg. 34,241, 34,241 (June 21, 2007). The National Marine Fisheries Service is currently developing rules to implement speed restrictions applicable to marine vessels, including FFVs, to reduce the threat of ship collisions with North Atlantic right whales. *See* Endangered Fish and Wildlife; Proposed Rule to Implement Speed Restrictions to Reduce the Threat of Ship Collisions with North Atlantic Right Whales, 71 Fed. Reg. 36,299, 36,299 (June 26, 2006). This rule, which contemplates application to domestic and FFVs, *see, e.g.* 71 Fed. Reg. at 36,302, is being developed pursuant to the Endangered Species Act and the Marine Mammal Protection Act. Finally, even though the Americans with Disabilities Act does not explicitly address FFVs, the Eleventh Circuit has held that the Act applies to FFVs operating in U.S. waters. *See Stevens v. Premier Cruises, Inc.*, 215 F.3d 1237 (11th Cir. 2000). In none of these examples did Congress explicitly address FFVs. Nevertheless, application to FFVs was necessary to effectuate the statute. Considering EPA’s finding that FFVs contribute substantially to air pollution, this is exactly the situation that we have here.

⁵ In its 1999 Final Rule, EPA used this logic to exclude regulation of FFVs from its Category 1 and 2 regulations. 64 Fed. Reg. 73300, 73302. We do not take a position, here, as to whether it is appropriate to forego regulation of Category 1 and 2 engines that are not “imported”. We do, however, call into question the extension of this logic to Category 3 marine engines that in fact harm U.S. air quality while in port,

EPA’s reasoning mixes apples with oranges. Section 213 can reasonably be interpreted to exclude cars and trucks that have neither been manufactured in nor imported into the United States because those excluded cars and trucks do not pollute air in the U.S. Neither Section 213 nor Section 216, however, authorizes EPA to exclude marine vessels that *do* use and pollute U.S. ports, whether those vessels can somehow be deemed “imported” or “not imported.”⁶

Engine Manufacturers Assoc. v. EPA, 88 F.3d 1075 (D.C. 1996), which EPA cites in support of its past position on FFVs, is not applicable.⁷ In that case the Court held that EPA’s decision to define a “new” non-road vehicle as the CAA defined “new” motor vehicle, in the absence of a statutory definition of “new non-road vehicle,” survived *Chevron* review.⁸ However *Engine Manufacturers Assoc.* concerned “off-highway equipment” and not ocean-going ships. *See Id.* at 1078. Furthermore, the Court based its decision, in part, on EMA’s failure to explain why off-highway equipment is relevantly different from motor vehicles. *Id.* at 1087. Ocean-going marine vessels *are* relevantly different from off-highway equipment in their operation and their impact on air quality in the U.S. In the context of ocean-going ships, EPA’s incorporation of “imported” in its definition of “new” unreasonably excludes the vast majority of the Category 3 engines that emit air pollutants in U.S. ports. Indeed, given the magnitude of the pollution problem in U.S. coastal areas caused by FFVs – as opposed to domestic ships – a court could well find that excluding FFVs from Category 3 regulation would not pass *Chevron* review because that decision would effectively nullify Section 213, even if EPA could somehow reasonably transfer the “imported/non-imported” distinction from Section 216 to Section 213. *See Whitman v. Am. Trucking Assocs.*, 531 U.S. 457, 485 (2001) (noting that, even under deferential review, an agency may not construe a statute in a way that completely nullifies its purpose).

In summary, the proper focus here should be on FFVs, not on imported cars. Nothing in Section 213 exempts FFVs from regulation. For EPA to exempt them vitiates the Congressional mandate to protect U.S. coastal waters and nearby cities from excessive and dangerously high ozone, fine particulate matter, and carbon monoxide pollution.

regardless of whether they are “imported” or “non-imported”, a distinction that is completely inapt for Category 3 FFVs that use U.S. ports and thereby harm U.S. air quality.

⁶ Otherwise stated, the distinction between “imported” and “not imported” makes no sense in the context of marine vessels regularly entering U.S. ports. Nor does Section 213 suggest that EPA should be tasked with categorizing marine vessels as imported or not imported.

⁷ We do not take a position here as to whether EPA might appropriately apply the Section 216 definition of “new” to other types of non-road vehicles addressed by Section 213.

⁸ The D.C. Circuit also suggested in *Bluewater Network v. EPA*, 372 F.3d 404 (D.C. Cir. 2004), that EPA has discretion to define “new” under Section 213. However, the Court did not decide Bluewater’s challenge to EPA’s decision to defer regulation of FFVs. Instead, the Court held that Bluewater’s challenge was premature. *Id.* at 413.

III. EPA Cannot Refuse to Regulate FFVs for Foreign Policy Reasons

To support its decision to exclude FFVs, EPA has argued that regulating FFVs, could somehow hinder U.S. foreign policy. *See, e.g.*, ANPR to Tier 1 Rule, 67 Fed. Reg. 37,548, 37,566 (stating that in deciding whether to regulate FFVs, “EPA will consider whether this would raise questions of international oceans policy or would have adverse ramifications on U.S. foreign policy”). EPA justified its 2003 decision to exempt FFVs because “deferring” their regulation “may help facilitate the adoption of more stringent consensus international standards.”⁹ 68 Fed. Reg. at 9759.

Even if EPA had the authority to base its rulemaking under Section 213 on foreign policy considerations, this one is illogical. As the argument seems to go, if the United States imposes stricter regulations than already exist under international standards, it would have less leverage in negotiating more stringent international standards. In fact, the result would quite likely be the opposite for two reasons: 1) foreign vessels would already have to comply with U.S. standards in commercially vital U.S. ports, lowering resistance to higher international standards; and 2) the U.S. regulations would function as an “early leader” model in international standard development.

Indeed, evidence from past regulatory action shows that this international mobilization would in fact occur. For example, in the Oil Pollution Act, Congress required all vessels carrying certain amounts of oil to be equipped with double hulls when in the waters subject to U.S. jurisdiction. 46 U.S.C. 3703a(a). This requirement exceeded international standards then in effect. Three years later, MARPOL’s Annex I was amended to include an equivalent requirement at U.S. urging. *See* MARPOL 73/78, Regs. I/13/F and I/13/G, effective July 1993.

It is therefore more reasonable to assume that strong U.S. regulation of FFVs will encourage international action, rather than discourage it. In any event, EPA’s “deference” has not worked. As EPA acknowledges, “the international process has taken longer than anticipated.” Unified Agenda 72 Fed. Reg. 23,201, 23,223 (Apr. 30, 2007) (referring to its work through the IMO to “further the goal of more stringent exhaust emission standards”).

But even assuming the validity of its foreign policy concerns, EPA does not have the authority to nullify its statutory mandate to reduce vessel emissions based on those concerns. The Supreme Court has foreclosed the use of foreign policy considerations when the EPA exercises its authority to regulate air pollution. EPA invoked a similar “international negotiations” argument in deciding to forego regulation of green house gases in *Massachusetts v. EPA*, 127 S.Ct. 1438 (2007). In particular, it argued that “regulating greenhouse gases might impair the President’s ability to negotiate with ‘key developing nations’ to reduce emissions”. *Id.* at 1463. Thus, EPA argued, even if it did have statutory authority to regulate, “it would be unwise to do so at this time.” *Id.* at

⁹ This same reason was given for not regulating U.S. vessels more stringently. 68 Fed. Reg. at 9749-50.

1462. The Supreme Court recognized EPA’s discretion to exercise its authority to regulate, but held that EPA must “exercise discretion within defined statutory limits.” *Id.* It also acknowledged that “while the President has broad authority in foreign affairs, that authority does not extend to the refusal to execute domestic laws.” *Id.* at 1463; *see also Central Valley Chrysler-Jeep, Inc. v. Goldstene*, 2007 WL 4372878 at 30 (E.D. Cal. 2007) (interpreting *Massachusetts v. EPA* as reflecting “the well-established rule that the Executive Branch's power to implement policies is at its lowest when those policies would operate in contradiction to an act of Congress” and as recognizing “that whatever the foreign policy of the executive branch might be, it does not conflict with or prevent EPA from carrying out its congressionally mandated regulatory duties”).

Section 213 requires EPA to promulgate regulations for new non-road engines in order to “achieve the greatest degree of emission reduction achievable.” Continued failure to regulate Category 3 engines on FFVs would frustrate the explicit purpose of the CAA “to protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its population.” 42 U.S.C. §§ 7401(b)(1); 7547.

IV. Failure to Regulate FFVs Would Violate Important Environmental Justice Policies

Both federal executive policy and internal EPA policy require EPA to assess environmental justice concerns in its regulations. The executive order requires that each federal agency, “[t]o the *greatest extent* practicable and *permitted by law* . . . shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations” Exec. Order No. 12,898, 59 Fed. Reg. 7629, 7629 (Feb. 11, 1994) (emphasis added). As required by section 1-103 of the order, in 1995 EPA developed an agency strategy to address these concerns and stipulated that “EPA will work to ensure that environmental justice is incorporated into the Agency's *regulatory process*.” EPA, EPA’s Environmental Justice Strategy, 15 (1995), available at http://www.epa.gov/compliance/resources/policies/ej/ej_strategy_1995.pdf (emphasis added). More recently, Administrator Johnson reaffirmed the agency’s commitment to environmental justice “in the *development, implementation, and enforcement of environmental laws, regulations, and policies*.” Memorandum from Stephen L. Johnson, EPA Administrator, to the EPA (Nov. 4, 2005), available at <http://www.epa.gov/compliance/resources/policies/ej/admin-ej-commit-letter-110305.pdf> (further identifying reduction of asthma attacks and exposure to air toxics as two of eight environmental justice priorities) (emphasis added).

Populations that live nearest to ports are subject to greater health risk than the general U.S. population due to higher diesel exhaust exposure. ANPR, 72 Fed. Reg. at 69,526 (citing a California Air Resources Board (CARB) study). Magnifying this injustice, most of these communities near major U.S. ports are heavily populated urban areas that are in nonattainment for ozone and/or PM_{2.5}. *See id.* (noting that many of the “most

serious . . . nonattainment areas are located . . . where . . . Category 3 marine engine emissions contribute to air pollution” and that “more than 40 major U.S. ports . . . are located in nonattainment areas” for these pollutants); *see also id.* at 69,528 (showing a map of the U.S. port communities and their consistent location within major nonattainment areas). Many major U.S. shipping ports are located very close to dense, inner-city residential areas that are homes to low-income and minority group communities.¹⁰ EPA itself has explicitly recognized this environmental injustice, stating that: “pollution effects fall disproportionately on the relatively low-income residential areas surrounding ports,” Change in Deadline for Rulemaking to Address the Control of Emissions From New Marine Compression-Ignition Engines at or Above 30 Liters per Cylinder, 72 Fed. Reg. 68,518, 68,521 (Dec. 5, 2007); and “more low-income individuals tend to live closer to marine ports”, ANPR, 72 Fed. Reg. 69,552. Unregulated Category 3 engine emissions from vessels in port therefore directly, substantially, and disproportionately endanger low-income and minority groups.

The failure of EPA to regulate FFVs, given the fact that they account for the lion’s share of pollution in and around ports, contributes to this distressing environmental injustice and violates the environmental justice policies.¹¹ Indeed, in 2005, the U.S. Government Accountability Office criticized EPA for failing properly to consider environmental justice in its CAA rulemaking, particularly in regard to its rules for certain non-road engines. U.S. GOVERNMENT ACCOUNTABILITY OFFICE, ENVIRONMENTAL JUSTICE: EPA SHOULD DEVOTE MORE ATTENTION TO ENVIRONMENTAL JUSTICE WHEN DEVELOPING CLEAN AIR RULES 3, 34 (2005), *available at* <http://www.gao.gov/new.items/d05289.pdf> (identifying “a rule to control the emissions of air pollution from nonroad diesel engines and fuels” as one of the “significant” and “high priority” rules that did not mention environmental justice). EPA must regulate FFVs to address the proscribed injustice and inequity of failing to regulate.

¹⁰ *See, e.g.*, CARB, EMISSION REDUCTION PLAN FOR PORTS AND GOODS MOVEMENT: APPENDIX A A-9 (2006), *available at* http://www.arb.ca.gov/planning/gmerp/march21plan/appendix_a.pdf (asserting that many California port communities are “made up of people from economically disadvantaged groups who would be the least able to sustain the personal and financial impacts related to increased disease burden”); PACIFIC INSTITUTE, PAYING WITH OUR HEALTH: THE REAL COST OF FREIGHT TRANSPORT IN CALIFORNIA 13 (2006) (showing that the five major California port communities have median incomes between 44 and 78 percent of the state-wide median and between 66 and 95 percent of the residents are people of color as compared to 53 percent across the state).

¹¹ EPA has suggested that environmental justice will not be considered in this rulemaking because it is minority and low-income communities “that will receive the most benefits in this rule that will reduce emissions of large marine engines.” 72 Fed. Reg. at 69,552. EPA thereby decided that only its positive regulatory actions will be subject to environmental justice considerations. However, EPA’s decision not to regulate or to under-regulate FFVs (or any vessel emissions) *is also* subject to environmental justice policies, because EPA has the *legal authority* to regulate. *See* Exec. Order No. 12,898, 59 Fed. Reg. at 7629 (requiring EPA to achieve environmental justice “to the greatest extent practical and permissible by law”). This is supported by EPA’s internal strategy requiring that environmental justice be incorporated in “the Agency’s regulatory process” and its “development . . . of . . . regulations.” *See* p. 7-8 *supra*. Therefore, EPA must consider environmental justice concerns when deciding *whether or not* (and how stringently) to regulate FFV emissions. As explained in the text, these concerns militate strongly for FFV regulation.

Conclusion

For all of these reasons, EPA should apply the Category 3 regulations to FFVs.

Very Truly Yours,

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