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November 14, 2013

Via Electronic and U.S. Mail
The Honorable Gina McCarthy, Administrator
United States Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

Re: PETITION FOR RULEMAKING IF MARPOL ANNEX VI NOx STANDARDS FOR ECAs SURROUNDING THE UNITED STATES ARE DELAYED

Dear Administrator McCarthy:

The South Coast Air Quality Management District (SCAQMD) hereby petitions the Environmental Protection Agency (EPA) to promulgate regulations under Section 213 of the Clean Air Act (42 U.S.C. § 7547) to reduce NOx emissions from Category 3 engines on foreign-flagged vessels entering U.S. waters, including the exclusive economic zone, if the International Maritime Organization (IMO) delays the 2016 NOx standards for new engines operating in the North American and Caribbean Emission Control Areas (ECAs).[1]

An urgent need for these regulations has been created by the proposal by Russia to delay implementation of stringent "Tier III" NOx standards within ECAs from 2016 to 2021, including within the North American ECA. The Marine Environment Protection Committee of the International Maritime Organization (IMO) is scheduled to vote on this proposal at its meeting in March 2014. It is imperative that EPA propose regulations for foreign flagged vessels if IMO delays implementation of the ECA standard. Furthermore, it is critical to adopt these standards promptly so that marine engine and ship manufacturers will know what standards they need to meet in time to produce the lower-emission engines.

[1]The Administrative Procedures Act provides that "Each agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule." 5 U.S.C. § 553(e).

The SCAQMD in California is the regional agency charged with the primary responsibility for the control of air pollution in the South Coast Air Basin. Cal. Health & Safety Code § 40412. It has primary responsibility to control air pollution from nonvehicular sources, while the California Air Resources Board (CARB) has primary responsibility over motor vehicles. Cal. Health & Safety Code § 40000. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD also includes portions of the Mojave Desert Air Basin and Salton Sea Air Basin in Riverside County, including the Palm Springs area. The SCAQMD encompasses over 10,000 square miles and is home to over 16 million people, about 5% of the U.S. population, and has some of the worst air quality in the nation. It is one of only two areas designated as "extreme" nonattainment for ozone, and it depends on NOx reductions from large ("Category 3") marine vessels to attain both the ozone standards and the 2012 PM2.5 standard. Without the reductions expected from implementation of the North American ECA, it will likely be infeasible to attain the1997 8-hour ozone standard by the required date of 2023.

Background

For over two decades, EPA has delayed deciding whether the Clean Air Act (CAA) authorizes it to establish emission standards for foreign-flagged vessels in U.S. waters.

The 1990 Amendments to the CAA included Section 213(a)(1), which directed EPA's Administrator to study nonroad engine emissions and "determine if such emissions cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7547(a)(1). The Administrator was to complete the study "within 12 months of November 15, 1990," i.e., by November 15, 1991. Section 213(a)(2) required additional action "within 12 months after completion of the study under paragraph (1)," i.e., by November 15, 1992. EPA was to determine whether emissions from nonroad engines, including marine vessel engines, "are significant contributors to ozone or carbon monoxide concentrations" in nonattainment areas. 42 U.S.C. § 7547(a)(2). If the Administrator determined that these sources were significant contributors, he or she was to regulate them. Section 213(a)(3) required that the standards to be adopted:

> Shall achieve the greatest degree of emission reduction achievable through the application of technology which the Administrator determines will be available for the engines or vehicles to which such standards apply, giving appropriate consideration to the cost of applying such technology within the period of time available to manufacturers and to noise, energy, and safety factors associated with the application of such technology.

The Administrator was to promulgate the regulations "within 12 months after completion of the study," i.e., by no later than November 15, 1992.

Regulatory History

In June 1994, a year and a half after the statutory deadline, EPA made the determination required by § 213(a)(2) of the CAA. It concluded that emissions of CO, NOx, and VOCs from, among other sources, Category 3 marine diesel engines are "significant contributors" to ozone and CO concentrations in nonattainment areas. 59 Fed. Reg. 31,306, 31,307 (June 17, 1994) (Determination of Significance for Nonroad Sources and Emission Standards for New Nonroad Compression-Ignition Engines at or Above 37 Kilowatts).

In December 1999, seven years after the statutory deadline, EPA promulgated regulations setting emission standards for smaller marine diesel engines. However, the agency explicitly excluded both the larger Category 3 engines and all engines on foreign-flagged vessels. 64 Fed. Reg. 73,300 (December 29, 1999) (Control of Emissions of Air Pollution from New Marine Compression Ignition Engines at or Above 37 kW).

In February 2000, Bluewater Network challenged both the 1999 rule and EPA's failure to regulate Category 3 marine engines. *Bluewater Network v. EPA,* No. 00-1065 (D.C. Cir). The litigation settled when EPA agreed to publish a rule containing emission standards for Category 3 engines, and invite comment on whether the regulations should apply to foreign-flagged vessels. EPA published the rule on February 28, 2003 at 68 Fed. Reg. 9746 (February 28, 2003). This rule employed a "two-tiered" approach: the rule promulgated standards that simply replicated NOx emission standards set forth by IMO in Annex VI to the International Convention on the Prevention of Pollution from Ships, as Modified by the Protocol of 1978 Relating Thereto (MARPOL Annex VI). EPA admitted that these standards would only minimally, if at all, reduce emissions because by that time manufacturers were already making engines that met those standards. 68 Fed. Reg. 9746 at 9761 (Feb. 28, 2003). EPA's 2003 rule postponed to a future rulemaking the setting of more stringent and comprehensive Tier 2 standards. The rule committed EPA to completing the rulemaking no later than April 27, 2007. *Id.* at 9746. The rule also committed EPA to considering, in that future rulemaking, whether the rule should apply to foreign-flagged vessels. *Id.* at 9759.

Bluewater Network petitioned for review of this rule. The SCAQMD appeared as an amicus on behalf of petitioner. The D.C. Circuit upheld the rule, concluding that the challenge to failure to regulate foreign-flagged vessels was premature. *Bluewater Network v. EPA*, 372 F.3d 404 (D.C. Cir. 2004). But EPA failed to promulgate a new rule in April, 2007. Instead, it proposed to extend its deadline once more to December 17, 2009. 72 Fed. Reg. 20,977 (April 27, 2007). On December 5, 2007, EPA finalized that delay. 72 Fed. Reg. 68,518 (Dec. 5, 2007).

The South Coast Air Quality Management District, the Santa Barbara County Air Pollution Control District, and Friends of the Earth challenged EPA's deferment rule—including EPA's failure to regulate foreign-flagged vessels. Once again, the D.C. Circuit upheld EPA's delay.

South Coast Air Quality Management Dist. et al. v. U.S. EPA, 554 F.3d. 1176 (D.C. Cir. 2009). With respect to foreign-flagged vessels, the Court accepted EPA's representation that it would deal with this issue in the upcoming rulemaking and again concluded that the challenge was premature.

On April 30, 2010, EPA issued its long-awaited second phase of rulemaking (now called "Tier 3" standards for Category 3 engines) for U.S. vessels. 75 Fed. Reg. 22,896 (Apr. 30, 2010). The NOx and SOx standards were equivalent to those adopted for ECAs by the IMO, requiring an 80% reduction in NOx emissions in ships built beginning in 2016. *Id.* EPA explained that the new engine standards and fuel sulfur limits would be applicable to all vessels regardless of flag through the "Act to Prevent Pollution from Ships" (APPS), under which EPA enforces MARPOL and the ECA. With respect to foreign-flagged vessels, EPA explained:

> The amendments to APPS to incorporate Annex VI require compliance with MARPOL Annex VI by U.S. and foreign vessels that enter U.S. ports or operate in U.S. waters. In light of this, we are deciding not to revisit our existing approach with respect to foreign vessels in this rule. However, the MARPOL Annex VI Tier III NOx and stringent fuel sulfur limits are geographically based and would not become effective absent designation of U.S. coasts as an ECA.

75 Fed. Reg. 22,896, 22,898.

EPA further noted that the United States had already proposed to IMO that there be created a North American ECA. EPA stated: "If this amendment is not adopted in a timely manner by IMO, we intend to take supplemental further action to control emissions from vessels that affect U.S. air quality." *Id.*

Thus, EPA made clear that (1) regulation of foreign-flagged vessels was dependent upon the ECA, and (2) if the ECA did not provide the needed protection, EPA would independently pursue the needed rulemaking. Thus, EPA has effectively committed to regulate foreign-flagged vessels now if the ECA deadline is delayed, as is currently proposed. EPA must fulfill this commitment to regulate foreign-flagged vessels if IMO delays the Tier III standard, and must do so expeditiously to provide manufacturers a clear signal that they must continue their efforts to comply with the needed NOx standards. This rulemaking was due November 15, 1992 and is more than two decades late already.

Need For Regulation of Foreign-Flagged Vessels

At least as long ago as 1999, EPA explicitly concluded that foreign-flagged vessels "contribute substantially to local pollution in port areas." 64 Fed. Reg. 73,300 at 73,323 (Dec. 29. 1999). This conclusion was reiterated in the 2003 rulemaking. 68 Fed. Reg. 9746 at 9751 (Feb. 28,

2003). In its 2007 advanced notice of proposed rulemaking, EPA acknowledged that foreign-flagged vessels account for 90 percent of the visits by vessels to U.S. ports, a figure that corresponds proportionately to the pollution emitted by these vessels. 72 Fed. Reg. 69,522 at 69,536 (Dec. 7, 2007). Nevertheless, EPA declined to decide whether to regulate foreign-flagged vessels under the CAA when it finally adopted the Tier 3 standards in April 2010. 75 Fed. Reg. at 22,898.

Given that foreign-flagged vessels represent 90% of port vessel calls, we may safely assume that around 90% of the benefits EPA cites from its 2010 program are derived from foreign-flagged vessels. Therefore, if IMO delays the NOx standards in ECAs from 2016 to 2021, about 90% of the ozone benefits of EPA's marine vessel control program will likewise be delayed. Roughly 90% of the projected 2020 ozone benefits will not occur, because the NOx standard will not have gone into effect for foreign-flagged vessels. EPA describes the ozone benefits of its marine vessel control program (which includes the effects of the ECA as well as EPA's regulations) in 2020 as avoiding up to 280 premature deaths per year, and approximately 360,000 minor restricted activity days. 75 Fed. Reg. 22,896, 22,960 (Table VIII-4). EPA estimated the monetary value of the ozone benefits of the program to include up to $2.4 billion annually in avoided premature deaths. 75 Fed. Reg. at 22,962 (Table VIII-5).

Moreover, EPA has predicted substantial human health benefits from implementation of the North American ECA. EPA's efforts in support of the U.S. and Canada's proposal for the North American ECA shows that ozone impacts from ships extend as far inland as Illinois and Indiana. Technical Support Document for North American ECA, pp. 16-18. Reducing ship NOx emissions by implementing standards for new engines beginning in 2016 as required by the ECA will substantially reduce those impacts.

For the SCAQMD, ships represent about 43 tons per day of NOx emissions in 2022, if the IMO standard is not implemented, growing to 45 tons per day in 2023. These NOx emissions are substantially greater than the NOx projected from all of the about 12 million automobiles in our region, and about twice as much NOx as is emitted from the 270 largest stationary sources, including refineries, power plants, and factories. Implementation of the IMO Tier III standard beginning in 2016 is projected to reduce these NOx emissions by about 14 tons per day in 2022, and by about 17 tons per day in 2023. Moreover, benefits would continue to increase as Tier III ships continue to make up a greater proportion of the fleet in the following years. In contrast, if the IMO standard is delayed, ships will be the largest source of NOx emissions in the South Coast Air Basin.

Moreover, timing is everything. The South Coast Air Basin must meet the 80 ppb 8-hour ozone National Ambient Air Quality Standard (NAAQS) by 2023. If the IMO standard is delayed from 2016 to 2021, because the standard only applies to new engines, there will be little time by 2023 for any benefit to be seen in the fleet that visits Southern California ports. The 17 tons per day of emission reductions that the state of California is counting on to meet the ozone standard

will have to be made up somewhere else. Yet, almost all other categories of emission sources are already controlled by well beyond 90%. Only locomotives, other nonroad engines, and heavy-duty diesel trucks account for even 20 tons per day in 2023 so they could not be further controlled to obtain an additional 17 tons per day of NOx reductions. All of these sources are primarily within EPA's purview to regulate except that the California Air Resources Board may regulate trucks and nonroad engines with a waiver from EPA. And EPA has recognized that emissions from ships as a proportion of overall pollution are "projected to increase significantly as regulatory controls on other major emission categories take effect." 72 Fed. Reg. at 69,526 (Dec. 7, 2007). For example, EPA controls on emissions from highway and land-based nonroad diesel engines "will lead to the elimination of over 90% of harmful regulated pollutants from these sources." 72 Fed. Reg. at 69,523 (Dec. 7, 2007).

Therefore, if the expected emission reductions from Category 3 marine engines are not obtained by 2023, it will likely be infeasible for the South Coast Air Basin to attain the 8-hour ozone standard by 2023. Moreover, due to a court decision, EPA has recently directed the South Coast Air Basin to attain the revoked one-hour standard by 2022. This will likewise be infeasible. Finally, we are counting on these expected NOx reductions to help us attain the 2012 revised PM2.5 standard as well, which would be required as early as 2020. If the South Coast cannot maintain and implement a plan that will attain the NAAQS on time, it is subject to sanctions including the cut-off of billions of dollars of transportation funding and severe restrictions on the construction of new and modified sources. A weakened economy in Southern California could create economic reverberations nationally, particularly since this region is the gateway for over 40% of the containerized goods sold in the nation.

NOx emission reductions from ships are crucial for the Santa Barbara region as well. The Santa Barbara Air Pollution Control District has recently attained the NAAQS for ozone, but by a narrow margin. Although the county does not have a port, it has 130 miles of coastline that are heavily traveled by ships heading to or from southern California ports. Currently, these ships represent 54% of the NOx emissions in the county and ships are expected to result in 70% of NOx emissions in the county by 2020 if left uncontrolled. NOx emission standards for engines installed after January 1, 2016 and operating in an ECA are about 75% lower than standards otherwise applicable under MARPOL. Therefore, if the ECA standards are delayed, ship NOx emissions will become an insuperable barrier to Santa Barbara County attaining the ozone NAAQS. EPA recognized this as long ago as 2007, stating that Santa Barbara regulators "will be unable to meet air quality standards for ozone without significant emission reductions from [ocean-going] vessels, *even if they completely eliminate all other sources of pollution.*" 72 Fed. Reg. 69,522 at 69,527 (Dec. 7, 2007) (emphasis added).

But Southern California is not alone. EPA has stated that virtually all coastal areas are affected by emissions from ships. *Id.* at 69,627. Consequently, EPA states that:

> Emission reductions resulting from tightened standards for Category 3 marine diesel engines would greatly assist nonattainment areas, especially along our nation's coasts, in attaining and maintaining the ozone and PM2.5 NAAQS in the near term and for decades to come.

Id. at 69,525.

Accordingly, the entire nation is counting on the emission reductions of NOx from the North American ECA to help attain the ozone standards on time. EPA can and must fulfill its commitment made in the 2010 rulemaking to address the situation regarding foreign-flagged vessels if the ECA Tier III NOx standard is delayed. It can do so by merely adopting regulations mandating the ECA Tier III NOx standard for engines built starting in 2016 operating in U.S. waters. EPA's strong support for this standard before IMO indicates that EPA has no doubt about the standard's technical or economic feasibility—its only question is whether the CAA authorizes it to regulate foreign-flagged vessels, which make up the large majority of the problem.

The Clean Air Act Authorizes EPA to Regulate Foreign-Flagged Vessels

There is no doubt that EPA has authority to regulate U.S. flagged vessels under § 213(a)(4) of the CAA. EPA has so far declined to decide whether the CAA gives it authority to regulate foreign-flagged vessels. We submit that EPA may regulate foreign-flagged vessels under at least two circumstances: (1) as to foreign owned and operated ships, where the regulation would not interfere with matters that "involve only the internal order and discipline of the vessel," *Spector v. Norwegian Cruise Lines, Ltd.*, 545 U.S. 119, 131 (2005), and (2) where the vessel is owned and operated by a U.S. corporation, even if it is foreign-flagged.

Even as to ships that are foreign owned and operated, the CAA provides broad authority for EPA to regulate. The U.S. Supreme Court has held that a U.S. statute is presumed to apply to a foreign-flag vessel in United States waters if "the interests of the United States or its citizens, rather than interests internal to the ship, are at stake." *Spector*, *supra*, 545 U.S. at 130. The Court emphasized that the "clear statement" rule, under which a U.S. statute will be presumed to apply to internal affairs of a ship only if Congressional intent is clear, was a "narrow" one. 545 U.S. at 131. It applies to "only those applications [of the statute] that would interfere with the foreign vessel's internal affairs." *Spector*, *supra*, 545 U.S. at 132. In contrast, where "the welfare of American citizens" was key, the clear statement rule would not apply. *Id.* at 131. The Court held that "the guiding principles in determining whether the clear statement rule is triggered are the desire for international comity and the presumed lack of interest by the territorial sovereign in matters that bear no substantial relation to the peace and tranquility of the port." *Spector*, 541 U.S. at 133. In three separate places, the Court said that the clear statement rule applies only where the statute regulates "matters that involve *only* the internal

order and discipline of the vessel" or "*only* the internal operations of the ship." *Spector,* 545 U.S. at 131 (emphasis added).

In applying the above principles, the Supreme Court suggested-- without holding-- that the clear statement rule might apply where the Americans with Disabilities Act (ADA) would mandate a "permanent and significant" alteration of a physical feature of a ship. *Id.* at 135. The Court left this determination, however, for the lower courts on remand. We submit that even if application of the ADA to the physical structure of the ship might be considered to affect the "internal order" of the ship, the same is not true for application of air pollution laws. The ADA deals with activity that occurs solely on the ship. Physical barriers that might be subject to the ADA affect disabled persons only while on that ship. In contrast, air pollution from a ship is not a matter that is limited to the "internal order" of the ship and indeed is the quintessential example of activity that affects persons off the ship, and potentially many miles away.

Air pollution from ships is not a matter that "concern[s] only the internal operations of the ship." *Spector*, 545 U.S. at 131. Instead, it profoundly affects the health and welfare of the residents of the United States. And even a requirement that could mandate a "permanent and significant" modification of a ship's physical structure need not interfere with the internal affairs of foreign-flagged ships. The issue is very different from the attempted application of American labor laws to labor relations solely between a foreign vessel and its foreign crew, the paradigm for matters that affect "only the internal order and discipline" of the ship, as discussed in *Spector.* Certainly, in the case of air pollution, it is incorrect to presume that the U.S. lacks any interest in the physical structure of the ship on the theory that it "bear[s] no substantial relation" to the interests of the United States. *Spector*, 541 U.S. at 133. Thus, the clear statement rule does not apply to the CAA.

Given the vital interest of the entire country in reducing pollution from ships, and the fact that foreign-flagged ships represent 90% of the emissions from ships that affect our coastal regions, and as far inland as Illinois, the "physical structure" of a ship–to the extent it affects air pollution–is not a matter that "concerns only the internal operations of the ship." *Spector,* 545 U.S. at 131. The ship's design has nothing to do with the internal order and discipline that a foreign vessel is entitled to exclusively control. *Wildenhus's Case*, 120 U.S. 1 (1887). Instead, like the criminal activity involved in the *Wildenhus* case, pollution from ships substantially affects the ports they visit, and thus may be regulated by the nation the ship is visiting.

At least in the ports of Los Angeles and Long Beach, the vast majority of ship calls are made by foreign-flagged ships. EPA has acknowledged that "engines on foreign-flagged vessels account for the majority of emissions from Category 3 marine diesel engines impacting U.S. air quality." 68 Fed. Reg. at 9750 (Feb. 28, 2003). Certain methods of reducing air pollution from ships may require specific physical structures on the ship, such as selective catalytic reduction for NOx emissions. If EPA's power to require changes to the physical structure of the ship

were limited to regulating U.S. flagged ships, the benefits of regulation would be drastically reduced. EPA should therefore presume that the CAA authorizes it to adopt emission standards to reduce air pollution from foreign-flagged ships *unless* a particular regulation would interfere with the internal affairs of the ship in a way that is not justified by the interests of the U.S. in protecting the health and welfare of its residents.[2]

Moreover, even if a clear statement were required, the CAA meets this test. Section 213(a)(3) clearly mandates EPA to adopt regulations for those classes of new nonroad engines that cause or contribute to pollution that significantly contributes to ozone or carbon monoxide in more than one nonattainment area. 42 U.S.C. § 7547(a)(3). Section 213(a)(4) clearly authorizes EPA to regulate any other nonroad engines which EPA determines "significantly contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7547(a)(4). This language is unequivocal, and applies to all such nonroad engines, foreign or domestic. EPA has recognized that foreign-flagged vessels contribute the majority of emissions from large ships affecting U.S. air quality. 68 Fed. Reg. at 9750. Congress must be presumed to have been aware of the general dominance of foreign-flagged vessels when it adopted § 213 of the CAA. Therefore, even if a clear statement were required, the CAA satisfies this test.

Finally, EPA should regulate foreign-flagged vessels if they are owned or operated by American corporations. It is well known that many "foreign-flag" registrations are merely "flags of convenience," and do not reflect the nationality or principal place of business of the corporation actually owning or operating the ships. We believe that EPA should extend its regulations to vessels that are owned or operated by American companies. The *Spector* case does not preclude such a result. While the *Spector* case involved a company that was predominantly a "United States centered venture," the company was in fact a Bermuda Corporation, not a U.S. corporation. *Spector,* 545 U.S. at 126. Accordingly, the Supreme Court treated the ship as a foreign-owned vessel. The Court therefore presumed that U.S. statutes would not apply "to foreign-flag vessels insofar as they regulate matters that involve only the internal order and discipline of the vessel, rather than the peace of the port," absent a "clear statement of Congressional intent." *Spector*, 545 U.S. at 130. The Supreme Court based its conclusion on principles of "international comity."[3]

Where a ship is owned by a U.S. corporation, there are no principles of international comity to apply. A U.S. statute should be presumed to apply to U.S. corporations, regardless of where

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[2] In such a case, a "clear statement" may be needed in order to determine that the CAA applies to a truly foreign owned and operated vessel.

[3] It appears that the tradition that matters which only affect the internal affairs of a foreign vessel should be left to the foreign nation, began in a time when foreign-flagged vessels were truly foreign, and the U.S. could be said to have no interest in their internal affairs. *Wildenhus's Case*, 120 U.S. 1 (1887) (Belgian ship).

they choose to register their ships. EPA should exercise its authority to regulate ships owned or operated by U.S. companies, and not allow them to avoid legitimate regulation based upon the charade that their ships are registered in a foreign country.

Relief Requested

Petitioner SCAQMD respectfully requests that the Administrator:

> If the IMO delays its Tier III standard as to the North American and Caribbean ECAs, propose regulations on or before June 1, 2014, and finalize them on or before December 1, 2014, which contain standards for NOx emissions from Category 3 engines installed on marine vessels on or after January 1, 2016, and which apply to ships entering the U.S. exclusive economic zone or U.S. ports, which standards are identical to the International Maritime Organization January 1, 2016 Tier III NOx standards for vessels entering ECAs under Annex VI as in effect as of November 1, 2013.

Respectfully submitted,

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