

## VIA CERTIFIED MAIL - RETURN RECEIPT REQUESTED

July 18, 2012

Lisa P. Jackson Administrator **Environmental Protection Agency** 1101A EPA Headquarters Ariel Rios Building 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

RE: Notice of Citizen Suit Concerning Clean Air Act Deadlines for Refineries

## Dear Administrator Jackson:

This is a notice of "a failure of the Administrator to perform an[] act or duty under this chapter which is not discretionary with the Administrator" within the meaning of section 304(a)(2) of the Clean Air Act, 42 U.S.C. § 7604(a)(2). This notice is given pursuant to section 304(b)(2), 42 U.S.C. § 7604(b)(2), and 40 C.F.R. Part 54 as a prerequisite to bringing a civil action.

The organizations giving this notice are: Air Alliance Houston, 2409 Commerce Street Houston, TX 77003; California Communities Against Toxics, P.O. Box 845, Rosamond, CA 93560, (661) 510-3412; Coalition For a Safe Environment, 1601 North Wilmington Blvd., Wilmington, CA 90744, (310) 704-1265; Community In-power and Development Association, 1301 Kansas Ave., Port Arthur, TX 77640; Del Amo Action Committee, 4542 Irone Ave., Rosamond, CA 93560, (310) 769-4813; Environmental Integrity Project, 1 Thomas Circle, Suite 900, Washington, DC 20005; Louisiana Bucket Brigade, 4226 Canal Street New Orleans, LA 70119; and Texas Environmental Justice Advocacy Services (TEJAS), 6733 Harrisburg Boulevard Houston, TX 77011.

Section 112(f) - Standards to Protect Public Health and Environment. Section 112(f) of the Clean Air Act provides that:

> (A) [T]he Administrator shall, within 8 years after promulgation of standards for each category or subcategory of sources pursuant to [§ 112(d)], promulgate standards for such category or subcategory if promulgation of such standards is required in order to provide an ample margin of safety to protect public health in accordance with this section (as in effect before November 15, 1990) or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect. . . . If standards promulgated pursuant to subsection (d) of this section and applicable to a category or subcategory of sources emitting a

pollutant (or pollutants) classified as a known, probable or possible human carcinogen do not reduce lifetime excess cancer risks to the individual most exposed to emissions from a source in the category or subcategory to less than one in one million, the Administrator shall promulgate standards under this subsection for such source category.

. . .

(C) The Administrator shall determine whether or not to promulgate such standards and, if the Administrator decides to promulgate such standards, shall promulgate the standards 8 years after promulgation of the standards under [§ 112(d)] for each source category or subcategory concerned . . . .

42 U.S.C. § 7412(f)(2). More than eight years have passed since EPA promulgated the following standards under CAA § 112(d) for the following categories of major sources of hazardous air pollutants:

- (1) Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units, 67 Fed. Reg. 17,762 (Apr. 11, 2002) (40 C.F.R. Part 63, Subpart UUU);
- (2) Petroleum Refineries, 60 Fed. Reg. 43,244 (Aug. 18, 1995) (40 C.F.R. Part 63, Subpart CC).

Nonetheless, you have neither promulgated standards for these categories pursuant to CAA § 112(f)(2), nor determined that such standards are not "required in order to provide an ample margin of safety to protect public health in accordance with this section . . . or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect." 42 U.S.C. § 7412(f)(2). There are no section 112(f)(2) standards or final residual risk determination currently in force or effect in the Federal Register for these sources. Accordingly, you have failed to perform a nondiscretionary act or duty within the meaning of Clean Air Act § 304(a)(2) for each of the above-listed standards and source categories.

Section 112(d)(6) – MACT Review and Revision. Section 112(d)(6) of the Clean Air Act requires EPA to "review, and revise as necessary (taking into account developments in practices, processes, and control technologies), emission standards promulgated under this section no less often than every 8 years." 42 U.S.C. § 7412(d)(6). More than eight years have passed since EPA promulgated CAA § 112(d) regulations for the following categories:

- (1) Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units, 67 Fed. Reg. 17,762 (Apr. 11, 2002) (40 C.F.R. Part 63, Subpart UUU);
- (2) Petroleum Refineries, 60 Fed. Reg. 43,244 (Aug. 18, 1995) (40 C.F.R. Part 63, Subpart CC).

Nonetheless, you have not reviewed and revised EPA's emission standards for these categories, as section 112(d)(6) of the Clean Air Act requires. There are no revised, final section standards promulgated pursuant to section 112(d)(6) or a section 112(d)(6) determination currently in force or effect in the Federal Register for these sources. Further, more than two required review cycles (over 16 years) have passed since EPA promulgated CAA § 112(d) standards for Subpart CC. Accordingly, you have failed to perform a nondiscretionary act or duty within the meaning of Clean Air Act § 304(a)(2).

**60-Day Notice.** Under section 304 of the Clean Air Act, 42 U.S.C. § 7604, the above list of groups may commence a citizen suit to compel you to perform any or all of the above acts or duties at any time beginning sixty days from the postmark date of this letter, which is July 18, 2012. See 40 C.F.R. § 54.2(d).

There is an urgent need for EPA action to update the refineries air toxics limits under section 112 of the Clean Air Act. Refineries emit many hazardous air pollutants, including benzene, naphthalene, polycyclic organic matter (POM), polycyclic aromatic hydrocarbons (PAH), ethylene dibromide, acrolein, mercury, cadmium, lead, arsenic, hexane, hydrogen cyanide, toluene, ethyl benzene, formaldehyde, and styrene, among others. There are approximately 150 refineries in operation around the United States, threatening millions of people with cancer and other serious health threats. Many communities near refineries are also overburdened with many different sources of toxic air pollution. Affected communities, including members of the above-listed groups, cannot wait any longer for relief from refineries' toxic air pollution. These communities, especially the people most exposed to refineries' emissions, have a dire need for EPA to perform the overdue rulemakings discussed in this letter, which are likely to show that EPA must set more stringent emission limits – particularly if EPA fulfills its duty to follow current science to account for real-world health risk to children and other vulnerable individuals.<sup>1</sup>

Exposure to toxic chemicals released by refineries is much greater than existing emission inventories would predict because emissions are consistently underestimated and underreported. Differential Absorption Light Detection and Ranging (DIAL) studies at refineries consistently show that emissions from flares, tanks, and wastewater treatment facilities release VOCs, including toxics like benzene, toluene, hexane, and others, at rates several times greater than reported to emission inventories.<sup>2</sup> Passive Fourier Transform Infrared (PFTIR) studies have also

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<sup>&</sup>lt;sup>1</sup> See, e.g., NATIONAL ACADEMY OF SCIENCES, SCIENCE AND DECISIONS: ADVANCING RISK ASSESSMENT (2009), http://www.nap.edu/catalog.php?record\_id=12209.

<sup>&</sup>lt;sup>2</sup> See EPA, CRITICAL REVIEW OF DIAL EMISSIONS TEST DATA FOR BP PETROLEUM REFINERY IN TEXAS CITY, TEXAS, EPA 453/R-10-002, ES-2, Table 1 (Nov. 2010); LOREN RAUN AND DAN W. HOYT, CITY OF HOUSTON, BUREAU OF POLLUTION CONTROL AND PREVENTION, MEASUREMENT AND ANALYSIS OF BENZENE AND VOC EMISSIONS IN THE HOUSTON SHIP CHANNEL AREA AND SELECTED SURROUNDING MAJOR STATIONARY SOURCES USING DIAL (DIFFERENTIAL ABSORPTION LIGHT DETECTION AND RANGING) TECHNOLOGY TO SUPPORT AMBIENT HAP CONCENTRATIONS REDUCTIONS IN THE COMMUNITY (DIAL PROJECT), 92-93, Table 4.4(a) (Jul. 2011) (attached); ALLAN CHAMBERS AND MEL

confirmed that, because of oversteaming, flares underperform, releasing up to 30% or more of the waste gas to the atmosphere instead of the assumed 2%. Furthermore, EPA's Petroleum Refineries information collection request (ICR) found data showing that fluid catalytic cracking units emit more than 4,000 tons of hydrogen cyanide a year, a pollutant that was never previously reported from these process units. Similarly, testing at cooling towers, performed pursuant to EPA's ICR, found that these units emit tons of unreported benzene, ethylbenzene, and xylene. As a result of the underreported emissions, the need for federal action to issue health-based rules is all the more urgent.

There is significant information available demonstrating that refineries can control their pollution at a much greater rate than many facilities currently do.<sup>4</sup> In fact EPA's enforcement division is already pursuing these control options at several refineries. For example, EPA's settlements with Marathon Petroleum Company and BP Whiting require the companies to install flare gas recovery units to capture and reuse waste gas at these refineries.<sup>5</sup> Furthermore, several refineries, including Marathon and BP Whiting, are being required to upgrade the flare instrumentation to assure optimal flare efficiency.<sup>6</sup> This type of measure has been found to reduce the emission of hazardous air pollutants by at least 100 tons, or several thousand pounds.<sup>7</sup> Refinery communities cannot wait for EPA enforcement to tackle this problem one facility at a time.

EPA must immediately perform the overdue refineries rulemakings discussed in this letter to meet the agency's important duties to prevent unacceptable risk to public health and provide the "ample margin of safety to protect public health" that section 112(f)(2) of the Clean Air Act requires, and to review and update the existing standards as required by section

STROSHER, REFINERY DEMONSTRATION OF OPTICAL TECHNOLOGIES FOR MEASUREMENT OF FUGITIVE EMISSIONS AND FOR LEAK DETECTION, 17, Table. 8 (2006).

<sup>6</sup> *Id.* (see both settlements).

<sup>&</sup>lt;sup>3</sup> See Marathon Petroleum Company, LLC, Performance Test of a Steam-Assisted Elevated Flare with Passive FTIR (May 2010) (attached); Marathon Petroleum Company, LLC, Performance Test of a Steam-Assisted Elevated Flare with Passive FTIR – Detroit (Nov. 2010); Shell Global Solutions (US) Inc., Shell Deer Park Refining LP Deer Park Refinery East Property Flare Test Report (Apr. 2011); David T. Allen and Vincent M. Torres, TCEQ 2010 Flare Study Final Report (Aug. 2011).

<sup>&</sup>lt;sup>4</sup> See, e.g., GALVESTON-HOUSTON ASSOCIATION FOR SMOG PREVENTION, INDUSTRY PROFESSIONALS FOR CLEAN AIR, ENVIRONMENTAL DEFENSE FUND, AND ENVIRONMENTAL INTEGRITY PROJECT, HOUSTON WE HAVE A PROBLEM, A ROADMAP FOR REDUCING PETROCHEMICAL TOXIC EMISSIONS IN THE LONE STAR STATE (May 2008) (attached) (describing many ways to reduce hazardous air pollutant emissions, including the flaring rules in place in California air districts).

<sup>&</sup>lt;sup>5</sup> See e.g., EPA, BP WHITING SETTLEMENT (2012), available at <a href="http://www.epa.gov/compliance/resources/cases/civil/caa/bp-whiting.html">http://www.epa.gov/compliance/resources/cases/civil/caa/bp-whiting.html</a>; EPA MARATHON PETROLEUM COMPANY, LP AND CATLETTSBURG REFINING LLC SETTLEMENT (2012), available at <a href="http://www.epa.gov/compliance/resources/cases/civil/caa/marathonrefining.html">http://www.epa.gov/compliance/resources/cases/civil/caa/marathonrefining.html</a> (attached).

<sup>&</sup>lt;sup>7</sup> EPA, Press Release, U.S. Announces Innovative Clean Air Agreement for Industrial Flares with Marathon Petroleum Company (April 5, 2012), available at <a href="http://www.justice.gov/opa/pr/2012/April/12-enrd-431.html">http://www.justice.gov/opa/pr/2012/April/12-enrd-431.html</a> ("From 2008 to the end of 2011, the controls Marathon installed eliminated approximately . . . 110 tons per year of hazardous air pollutants (HAPs) from the air. An additional . . . 30 tons per year of HAPs are projected to be eliminated in the future.").

112(d)(6), "taking into account developments in practices, processes, and control technologies," to require the maximum level of emission reductions currently achievable.

We have attached some of the cited documents for EPA's review in electronic form on an accompanying CD-ROM. We would welcome the opportunity to provide additional information.

## **Contact Information**

We are acting as attorneys for the above-listed parties in this matter. Please contact us at your earliest convenience regarding this matter. Please address any communications to us at the addresses and telephone numbers set forth below.

Sincerely,

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