2/8 MCP

Leavy, Jacqueline

From: Albert Lin <alin@earthjustice.org>
Sent: Friday, February 05, 2016 4:08 PM
To: Mccarthy, Gina; Silverman, Steven; Topham, Nathan
Cc: Emma Cheuse
Subject: Petition for Rulemaking on NESHAP from Secondary Lead Smelting
Attachments: Secondary Lead Petition on Applicability.pdf; Attachment 1.Aqua 5051-3711_p Public Notice.pdf; Attachment 2.Aqua Metals - Class II Air Quality Permit Application.pdf; Attachment 3.151216 A1943 Aqua 5051-3711 Directors Review.pdf; Attachment 4.Supplement to Secondary Lead Smelter Reconsideration Petition.pdf

Categories: Red Category

February 5, 2016

Please accept the attached Petition for Rulemaking submitted via e-mail and first class mail on:

National Emission Standards for Hazardous Air Pollutant Emissions From Secondary Lead Smelting, 77 Fed. Reg. 556 (Jan. 5, 2012), Docket ID No. EPA-HQ-OAR-2011-0344.

This petition is submitted by Earthjustice on behalf of Sierra Club and California Communities Against Toxics.

/s/ Albert Lin (for Emma C. Cheuse)

Albert Lin
Litigation Assistant
Earthjustice Washington, D.C. Office
1625 Massachusetts Avenue, N.W., Suite 702
Washington, DC 20036-2243
T: 202.745.5219
F: 202.667.2356
earthjustice.org

EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

BY FIRST CLASS MAIL AND EMAIL

February 5, 2016

Administrator Gina McCarthy
Office of the Administrator
U.S. Environmental Protection Agency
Room 3000
William Jefferson Clinton Building
1200 Pennsylvania Ave., NW
Washington, DC 20460
(McCarthy.Gina@epa.gov)

Associate General Counsel for the Air and Radiation Law Office
Office of General Counsel
Mail Code 2344A
U.S. EPA
1200 Pennsylvania Ave., NW
Washington, DC 20460
(Silverman.Steven@epa.gov)

Nathan Topham
Office of Air Quality Planning and Standards
Sector Policies and Programs Division
U.S. EPA
Research Triangle Park, NC 27711
(Topham.Nathan@epa.gov)

Re: Petition for New Rule for National Emissions Standards for Hazardous Air Pollutant Emissions From Secondary Lead Smelting, 77 Fed. Reg. 556 (Jan. 5, 2012), Dkt. ID No. EPA-HQ-OAR-2011-0344.

Dear Administrator McCarthy:

This is a petition for EPA for a new rulemaking under Clean Air Act § 307(b), 42 U.S.C. § 7607(b). The parties submitting this petition are Sierra Club (85 Second Street, Second Floor, San Francisco, CA 94105; Telephone: (415) 977-5500) and California Communities Against Toxics (P.O. Box 845, Rosamond, CA 93560). By this petition, these Petitioners respectfully request that EPA revise the provisions on applicability and definitions in the National Emissions Standards for Hazardous Air Pollutant Emissions From Secondary Lead Smelting (40 C.F.R. Part 63 Subpart X), and if necessary revise the source category listing as discussed below, based on new information that arose more than 60 days after the final rule was published, pursuant to 42 U.S.C. § 7607(b) and *Oljato Chapter of Navajo Tribe v. Train*, 515 F.2d 654, 666-67 (D.C. Cir. 1975).

BACKGROUND

On December 29, 2015, the Nevada Department of Environmental Protection (NVDEP) published notice of proposed action on an Application for a Class II Air Quality Operating Permit AP5051-3711, FIN A1917, submitted by Aqua Metals, Inc. to construct and operate a used lead acid battery recycler, also known as a secondary lead processing facility.[1] The facility is proposed to be located in the Tahoe-Reno Industrial Center at 2500 Peru Drive, McCarran, Storey County, Nevada.[2]

The facility "is designed to operate 24 hours per day, seven days per week and will recycle approximately 150 tons of used [lead-acid batteries] and produce approximately 80 tons of reclaimed lead per day."[3] The facility also states that it is a "'first of its kind' battery recycling plant" that will use "a novel and proprietary [lead-acid battery] recycling technique that does not utilize any smelting processes."[4]

The notice states that NVDEP proposes to grant the application. As a basis for this, the notice states the following about the expected air emissions of the facility:

- Emissions from the facility will not exceed 5.02 tons/year of PM_{10}, 5.02 tons/year of $PM_{2.5}$, 0.06 tons/year of SO_2, 7.10 tons/year of NO_X, 5.77 tons/year of CO, 0.41 tons/year of VOC, and 1.23 tons/year of HAPs (which includes up to 1.11 tons/year of lead).[5]
- No adverse ambient air quality impacts are expected.[6]

The permit application describes at least three substantial emission points, including two ingoting kettles (which each have the potential to emit 0.19 tons per year of lead) and an ingoting casting unit (0.72 tpy of lead). Even though it proposes to recycle batteries, store and process lead, and emit a substantial amount of lead per year, the permit application does not include any terms or conditions to meet the Secondary Lead Smelting NESHAP. It appears that is because this source believes it is not subject to the Secondary Lead Smelting NESHAP.

---

[1] *See* NVDEP, Notice of Proposed Action (Dec. 2015), *available at* http://ndep.nv.gov/docs_15/Aqua%205051-3711_p.pdf (notice proposing to grant air permit application submitted by Aqua Metals, Inc., 1010 Atlantic Avenue, Alameda, CA 94501).

[2] Aqua Metals, Application for Class II Air Quality Operating Permit at PDF 4.

[3] *Id.* at PDF 77.

[4] *Id.*

[5] Notice, *supra* n.1.

[6] *Id.*

NEW INFORMATION ON A TYPE OF SECONDARY LEAD PROCESSING

Petitioners were not aware of this potential facility at the time EPA revised the emission standards in 2012. The permit application was not available and NVDEP had not proposed to grant it. Therefore, the permit application and NVDEP's proposed action on that permit application constitute "new information" within the meaning of § 7607(b), and *Oljato*, 515 F.2d 654, warranting EPA to review and revise the emission standards, as discussed below.

EPA SHOULD REVISE THE EMISSION STANDARDS TO CLEARLY APPLY TO ALL SECONDARY LEAD PROCESSING FACILITIES AND ALL BATTERY RECYCLERS.

The Clean Air Act requires EPA to list categories of sources that emit the hazardous air pollutants listed under 42 U.S.C. § 7412(b), and to review and update the list of source categories. *Id.* § 7412(c)(1). Then, EPA must set emission standards for listed source categories under § 7412(d), and must regularly review and update those standards as directed by § 7412(d)(6) and § 7412(f)(2). *Id.* § 7412(c)(2), (d)(1)-(3), (d)(6), (f)(2).

In 1992, EPA listed the source category of "secondary lead smelting." *See* EPA, Notice, Initial List of Categories of Sources Under Section 112(c)(1) of the Clean Air Act, 57 Fed. Reg. 31,576 (July 16, 1992). EPA then set emission standards for this source category, and as of the most recent revision to the standards in 2012, the applicability provision states that the standards apply as follows:

> You are subject to this subpart if you own or operate any of the following **affected sources at a secondary lead smelter**: Blast, reverberatory, rotary, and electric furnaces; refining kettles; agglomerating furnaces; dryers; process fugitive emissions sources; buildings containing lead bearing materials; and fugitive dust sources. The provisions of this subpart do not apply to primary lead processors, lead refiners, or lead remelters.

40 C.F.R. § 63.541 (Applicability) (emphasis added). The standards further define "secondary lead smelter" as:

> any facility at which lead-bearing scrap material, primarily, but not limited to, lead-acid batteries, is recycled into elemental lead or lead alloys **by smelting.**

Id. § 63.542 (emphasis added). And, the term "smelting" is defined as:

> the chemical reduction of lead compounds to elemental lead or lead alloys **through processing in high-temperature (greater than 980 Celsius) furnaces** including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

Id. (emphasis added).

Aqua Metals appears to believe that its facility does not meet these definitions. It states in the narrative section of the permit application that it has no "smelting" process. Yet, it is still transporting and storing processing lead-acid batteries, recycling them using kettles and other processes, and it recognizes that it will emit lead and other air toxics. The fact that it is not using high-temperature furnaces is not alone a rational basis to exempt them from all of the types of protections the NESHAP includes – including the enclosure, fugitive dust, and other protections from lead, as well as the emission testing, monitoring, and reporting requirements. *See* 40 C.F.R. Part 63 Subpart X. And the kettles, casting unit and any other emission points also must have stronger lead limits and necessary pollution controls.

Thus, to prevent Aqua Metals from being allowed to operate without necessary clean air protections, EPA should revise the applicability provision and definitions to apply to "sources at a secondary lead smelter, **battery recycler, or other secondary lead processing facility**." In addition, EPA should ensure that all emission points at the Aqua Metals facility are plainly covered as "affected sources" at such a facility. And, EPA should add or revise all other definitions, as needed, to ensure that all emission points at Aqua Metals will be covered by national air toxics standards.

Alternatively, or in addition, EPA should redefine "smelter" to include **all secondary lead processing facilities**, not just such processing that occurs in a high-temperature furnace, and to add all emission points at Aqua Metals to receive full coverage under the national standards.

In the Document for Development of the Initial Source Category List, EPA described the source category of "secondary lead smelting" as follows:

> The Secondary Lead Smelting source category includes any facility engaged in the production of purified lead from lead scrap by melting and separating lead from metal and nonmetallic contaminants and by reducing lead compounds to elemental lead. The category includes processes associated with secondary lead smelting such as battery breaking, smelting in reverberatory, blast, rotary and electric furnaces, refining, alloying and casting.[7]

If EPA determines that changes to the NESHAP alone would be insufficient to cover Aqua Metals under the secondary lead smelting source category standards, and that it must revise the source category listing, then EPA should update the listed source category in the same rulemaking. EPA has the necessary authority to revise a source category listing pursuant to the Act's source category review and revision provision. 42 U.S.C. § 7412(c)(1).

EPA has previously addressed a similar situation for primary lead processors. In the primary lead smelting rulemaking, EPA recognized that a new type of technology needed to be fully covered by the standards to avoid a potential new facility that intended to process lead from

[7] EPA, Ofc. of Air Qual. Planning & Standards, EPA-450/3-91-030, *Documentation for Developing the Initial Source Category List, Final Report* at A-9 (July 1992).

evading important clean air protections. Therefore, EPA revised the applicability provision to apply to "primary lead processing" and not just smelting. *See* National Emission Standards for Hazardous Air Pollutants: Primary Lead Smelting: Residual Risk and Technology Review; Final Rule, 76 Fed. Reg. 70,834, 70,835, 70,843 (Nov. 15, 2011) ("revising the applicability of the Primary Lead Smelting NESHAP to apply to any facility that produces lead metal from lead ore concentrates and is changing the title of the rule to reference Primary Lead Processing" after EPA "became aware of a new primary lead processing and production technology"). EPA should take similar action for secondary lead facilities to ensure that a new type of secondary lead processing facility cannot evade the standards applicable to other similar facilities.

To protect public health and the environment, the Aqua Metals facility must be required to meet facility-specific lead and other toxic air emission standards. The facility is proposed to be sited a few miles outside of Reno, NV, near the Truckee River.[8] Petitioner Sierra Club has members who live near the proposed facility, and who seek to protect the Truckee River and downstream watershed from the deposition of lead and other toxic air contaminants. As shown by both the secondary lead smelting rule docket and Petitioners' comments and reconsideration petitions submitted to EPA regarding the 2012 rulemaking pursuant to § 7607(d)(7)(B)[9]:

Lead is a potent neurotoxin that has no safe level of human exposure. The best way to protect public health from the devastating harm lead can cause is prevention. Children exposed early in life are particularly vulnerable to irreversible neurological harm. Lead exposure also causes cardiovascular harm and is a probable carcinogen. Lead bioaccumulates and persists in the environment, increasing the exposure for affected communities beyond just inhalation, and increasing the long-term harm to exposed wildlife and natural resources. There is consensus that the amount of lead currently in Americans' bodies is too high. In 2010, an estimated 535,000 children had a blood lead level of 5 µg/dL, according to EPA data.[10] The Department of Health and Human Services has set specific goals of reducing the level of blood and urine concentrations of lead for all Americans, and, specifically, to reduce the blood-lead levels and

---

[8] *See* Tahoe Reno Industrial Center, *Sites*, http://www.tahoereno.com/sites/ (last accessed Feb. 5, 2016).

[9] *See* 77 Fed. Reg. 556, 562-64 (Jan. 5, 2012) (finding health risks from toxic air pollution emitted by secondary lead facilities to be "unacceptable" under the Clean Air Act); *see also* Docket EPA-HQ-OAR-2011-0344, including: Final Residual Risk Assessment (Dec. 2011), EPA-HQ-OAR-2011-0344-0160; Supplement to Reconsideration Petition (Jan. 31, 2014); Supplement to Reconsideration Petition (June 21, 2012), EPA-HQ-OAR-2011-0344-0189; Reconsideration Petition (Mar. 5, 2012), EPA-HQ-OAR-2011-0344-0211; Comments (July 26, 2011), EPA-HQ-OAR-2011-0344-0098. This petition incorporates the record of that rulemaking and the accompanying reconsideration docket by reference.

[10] EPA, Children's Environmental Health Facts, Lead Exposure, http://www2.epa.gov/children/childrens-environmental-health-facts (last updated Apr. 6, 2015).

average blood-lead levels for children ages 1-5 by at least 10% by 2020.[11] And, in addition to lead, Aqua Metals also expects to emit other toxic air pollutants and carcinogens and EPA also must ensure all such emitted pollutants are controlled as the law directs.

CONCLUSION

For all of the above reasons, EPA should revise the national standards and, if necessary, revise the source category listing to ensure that the Aqua Metals facility, and any others like it that may be proposed in the future, are clearly regulated by these standards, and cannot evade important clean air protections designed to reduce human exposure and protect public health.

As EPA has granted Petitioners' petition for reconsideration on the 2012 rule but not yet proposed or completed action, we respectfully request that EPA update the applicability, definition, and/or source category listing as part of that reconsideration rulemaking, and to complete all combined actions as expeditiously as possible. Petitioners also respectfully request that EPA notify NVDEP that it intends to complete any revisions needed to assure that Aqua Metals will be covered by the national standards, so that NVDEP, at least, incorporates those standards into the air permit for this facility to assure, at least, the protections for public health and the environment that those standards provide.[12]

In support of this petition, Petitioners attach the three public permit documents for the Aqua Metals facility – the Public Notice; Permit Application; and Director's Review, as well as a supplement to reconsideration filed with EPA and cited here that does not appear to be available on the public docket, for ease of EPA's reference.

---

[11] *See id.*, Healthy People 2020, Environmental Health Goals EH-8.1, 8.2 (Reduce blood lead level in children aged 1–5 years to 5.2 µg/dL or lower; Reduce the mean blood lead levels in children to 1.6 µg/dL or lower); Environmental Health Goal EH-20.3 (Reduce exposure to lead in the population, as measured by blood and urine concentrations of the substance or its metabolites; from the baseline which was the concentration level of lead in blood samples at which 95 percent of the population aged 1 year and older is below the measured level in 2003–04, of 4.2 µg/dL to 2.94 µg/dL or lower), https://www.healthypeople.gov/2020/topics-objectives/topic/environmental-health/objectives.

[12] The current petition aims to assure that NVDEP does not permit a new secondary lead processing facility without, at least, ensuring that facility's permit fully incorporates all requirements contained in the NESHAP, as well as any more stringent protections EPA should put in place as it updates the national standards in the future. As noted, Petitioners continue to urge EPA to act expeditiously on their petition for reconsideration to do just that, and complete a new rulemaking to strengthen those standards for all secondary lead facilities.

Please contact me at (202) 745-5220 or echeuse@earthjustice.org if I can provide any additional information regarding our concerns or this petition.

Thank you for your time and consideration of this matter.

Sincerely,

Emma C. Cheuse
Staff Attorney
Earthjustice
(202) 745-5220
echeuse@earthjustice.org

Counsel for Petitioners Sierra Club and California Communities Against Toxics

NOTICE OF PROPOSED ACTION
by the
State of Nevada
Division of Environmental Protection
Bureau of Air Pollution Control

PUBLIC NOTICE

Pursuant to Nevada Revised Statutes (NRS) Chapter 445B, the Nevada Administrative Code (NAC) Chapter 445B, and the Clean Air Act, the Division of Environmental Protection is issuing the following notice.

The Director received an application for a new Class II Air Quality Operating Permit AP5051-3711, FIN A1917 from:

Aqua Metals, Inc.
1010 Atlantic Avenue
Alameda, CA 94501

The project will be located in the Tahoe-Reno Industrial Center at 2500 Peru Drive, McCarran, Storey County, Nevada. The Director has prepared tentative determinations regarding the operating permit that, in brief, are the following:

- The new operating permit is for construction and operation of a used lead acid battery recycling facility.
- Emissions from the facility will not exceed 5.02 tons/year of PM_{10}, 5.02 tons/year of $PM_{2.5}$, 0.06 tons/year of SO_2, 7.10 tons/year of NOx, 5.77 tons/year of CO, 0.41 tons/year of VOC, and 1.23 tons/year of HAPs (which includes up to 1.11 tons/year of lead).
- No adverse ambient air quality impacts are expected.

On the basis of the preliminary review of the application and supporting information review and the requirements of the NRS, the NAC and the Clean Air Act, the Director is hereby announcing his intent to issue a new Class II Air Quality Operating Permit. Persons wishing to comment upon the proposed determinations by the Director regarding this proposed action should submit their comments in writing either in person or by mail or fax within thirty (**30**) days to:

Randy Phillips
Division of Environmental Protection
Nevada Bureau of Air Pollution Control
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701
e-mail: rphillip@ndep.nv.gov
(775) 687-9362
(775) 687-6396 FAX

The application, Director's review, and other relevant information may be copied at the above address or copies may be obtained by requesting in writing at the above address. A copy of the application, Director's review, and other relevant information will also be located at the Storey County Library located at 95 S. R. Street, Virginia City, NV 89440. Written comments or objections, will be received at the Division of Environmental Protection, above address, until close of business on **February 5, 2016**, and will be retained and considered prior to final action on the new Class II operating permit.

Please bring the foregoing notice to the attention of all persons whom you know may be interested in this matter.

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES
DIVISION OF ENVIRONMENTAL PROTECTION
BUREAU OF AIR POLLUTION CONTROL

Director's Review and Preliminary Determination to Issue Permit for Aqua Metals, Inc. December 28, 2015

Aqua Metals, Inc. has submitted a Class II application to the Nevada Division of Environmental Protection, Bureau of Air Pollution Control (BAPC) for a new Class II Air Quality Operating Permit AP5051-3711, FIN A1917. The new operating permit is for a used lead acid battery recycling facility.

The application materials related to the new Class II operating permit were received by BAPC on November 23, 2015. The permit application was deemed administratively complete on December 7, 2015. Aqua Metals, Inc. will be located in the Tahoe-Reno Industrial Center, in Storey County, Nevada at approximately 285.75 km East by 4,378.36 km North, UTM Zone 11, NAD 83 (Section 10, Township 19 North, Range 23 East in Hydrographic Area 83). The Standard Industrial Classification (SIC) number for the facility is 5051 – Metals Service Centers.

As proposed, Aqua Metals, Inc. will be a Class II source under the new operating permit. The potential-to-emit (PTE) of each regulated air pollutant is less than the 100 ton per year threshold for major source designation. The facility will be subject to 40 CFR Part 60 Subpart IIII NSPS and 40 CFR Part 63 Subpart ZZZZ NESHAP requirements for an emergency diesel generator.

Proposed Annual Emissions		
Pollutant(s)		**tons/yr**
PM_{10}	Particulate matter <10 microns in diameter	**5.02**
$PM_{2.5}$	Particulate matter <2.5 microns in diameter	**5.02**
SO_2	Sulfur Dioxide	**0.06**
NOx	Nitrogen Oxides	**7.10**
CO	Carbon Dioxide	**5.77**
VOCs	Volatile Organic Compounds	**0.41**
Total HAPs	Hazardous Air Pollutants	**1.23**
Pb	Lead (included in total HAPs)	**1.11**
CO_2equiv	Carbon Dioxide Equivalant	**13,054**

An ambient air impact analyses will be completed to support the proposed determination to issue the new Class II Air Quality Operating Permit. The ambient air quality analyses will demonstrate that the emissions from the proposed source will not cause or contribute to a violation of any applicable federal or state ambient air quality standards.

The BAPC has made a preliminary determination to issue this new Class II Air Quality Operating Permit. The proposed source must comply with all State and Federal air quality requirements and all conditions established within the new Class II Air Quality Operating Permit.

EARTHJUSTICE

ALASKA CALIFORNIA FLORIDA MID-PACIFIC NORTHEAST NORTHERN ROCKIES
NORTHWEST ROCKY MOUNTAIN WASHINGTON, DC INTERNATIONAL

January 31, 2014

Administrator Gina McCarthy
Office of the Administrator
U.S. EPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W., Mail Code 1101A
Washington, DC 20460
(McCarthy.Gina@epa.gov)

Janet McCabe
Acting Assistant Administrator for Air and Radiation
U.S. EPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W., Mail Code 6101A
Washington, DC 20460
(McCabe.Janet@epa.gov)

Associate General Counsel for the Air and Radiation Law Office
Office of General Counsel, U.S. EPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, N.W., Mail Code 2344A
Washington, DC 20460

Nathan Topham
Office of Air Quality Planning and Standards
Sector Policies and Programs Division
U.S. Environmental Protection Agency
Research Triangle Park, NC 27711
(Topham.Nathan@epa.gov)

VIA MAIL AND EMAIL

Re: Supplement to Granted Petition for Reconsideration of National Emissions Standards for Hazardous Air Pollutants From Secondary Lead Smelting, 77 Fed. Reg. 556 (Jan. 5, 2012), Dkt. ID No. EPA-HQ-OAR-2011-0344

Dear Administrator McCarthy and Acting Assistant Administrator McCabe:

This is a supplement to an administrative petition under Clean Air Act § 307(d)(7)(B), 42 U.S.C. § 7607(d)(7)(B) filed on March 5, 2012, seeking reconsideration of EPA's secondary lead smelting standards, 77 Fed. Reg. 556 (Jan. 5, 2012), entitled National Emissions Standards for Hazardous Air Pollutants From Secondary Lead Smelting; Final Rule. The following parties filed and hereby supplement that petition: California Communities Against Toxics (P.O. Box 845, Rosamond, CA 93560); Frisco Unleaded (P.O. Box 5661, Frisco, TX, 75035); Missouri

1625 MASSACHUSETTS AVENUE NW SUITE 702 WASHINGTON, DC 20036
T: 202.667.4500 F: 202.667.2356 E: dcoffice@earthjustice.org W: www.earthjustice.org

Coalition for the Environment Foundation (6267 Delmar Blvd., Suite 2E, St. Louis, MO 63130; Telephone: (314) 727-0600); Sierra Club (85 Second Street, Second Floor, San Francisco, CA 94105; Telephone: (415) 977-5500); and Natural Resources Defense Council (40 West 20th Street, New York, NY 10011; Telephone (415) 875-6100). On June 21, 2012, Petitioners sent a prior supplement to their petition for reconsideration of this rule to bring to EPA's attention important new information on the hazards of low-level lead exposures and the increased susceptibility of vulnerable populations, including a new scientific study showing that reliance on the National Ambient Air Quality Standard ("NAAQS") for lead is not sufficient to protect the most vulnerable communities; and the new decision by the Center for Disease Control to recognize that harm to public health can occur at blood-lead levels well below 10.0 µg/dL.

On December 10, 2012, EPA granted these parties' petition for reconsideration of the Final Rule on at least one issue: Petitioners' contention that the "ample margin of safety" analysis performed for the final rule considered only cost, emissions reductions and cost effectiveness, and did not include consideration of health and other metrics. Letter from Gina McCarthy, Assistant Administrator, to Emma Cheuse *et al.* (Dec. 10, 2012). EPA stated that it is continuing to consider other issues raised in the administrative petition. Petitioners respectfully request that EPA consider the information presented here as part of the agency's reconsideration of the Final Rule.

In particular, Petitioners submit this supplement to present new information relevant to the reconsideration of the Final Rule including: recent health risk assessments and monitoring data from secondary lead smelters in Southern California and information on a new rule and enforcement actions taken by California regulators to address these health threats. To the extent this petition refers to petitioners' prior reconsideration petition and comments, those are reincorporated by reference. Petitioners urge EPA to publish a *Federal Register* notice initiating a Notice and Comment rulemaking to strengthen the Final Rule without delay.

The additional information described herein and submitted as an Appendix to this letter provides support for EPA strengthening the Final Rule for secondary lead smelting. In particular: (1) EPA must consider the new information on emissions and risk as part of an updated assessment of residual risk under section 112(f)(2) that accounts for more of the risk faced by the most exposed individual; and (2) to provide the requisite "ample margin of safety to protect public health" under section 112(f)(2)(A), EPA must set stronger emission standards that provide at least the level of protection created by the new South Coast Air Quality Management District (SCAQMD) Rule.

As part of its reconsideration, Petitioners welcome the opportunity to discuss these issues further with EPA staff. Petitioners also respectfully request that EPA contact the SCAQMD to discuss the data it has collected and its effort to strengthen the health protections that apply to secondary lead smelters.

* * *

EPA MUST REVISE THE RESIDUAL RISK ASSESSMENT AND AMPLE MARGIN OF SAFETY DETERMINATION FOR SECONDARY LEAD SMELTING TO STRENGTHEN PROTECTION FROM LEAD, ARSENIC, AND OTHER POLLUTANTS.

Recent developments in Los Angeles County at two secondary lead smelters, Exide Technologies in Vernon and Quemetco Inc. in Industry, and recent regulatory actions by the local regulator, SCAQMD, illustrate that EPA must reconsider and strengthen the Final Rule. To satisfy its statutory duty under section 112(f)(2) to prevent unacceptable risk and provide an ample margin of safety to protect public health EPA must review the standards set by SCAQMD and the information collected by the SCAQMD, and consider bolstering the national standards to at least the equivalent level. EPA also must update its residual risk assessment (RRA) to reflect the best available data, including the new monitoring data and other information presented in this petition.

(1) New South Coast Air Quality Management District Rule

On January 10, 2014, SCAQMD amended its Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Facilities to strengthen lead standards and enforcement of these standards, and establish standards for arsenic, benzene, and 1,3-butadiene. SCAQMD, Press Release, *SCAQMD Adopts Tough Controls for Arsenic and Other Toxic Emissions from Lead Smelting Plants* (Jan. 10, 2014) [hereinafter "SCAQMD Press Release"), *available at* http://aqmd.gov/news1/2014/bs011014.htm; SCAQMD, Board Meeting, Jan. 10, 2014 Synopsis and Attachments, Agenda No. 19B, http://www.aqmd.gov/hb/attachments/2011-2015/2014Jan/2014-Jan10-019b.pdf (including Proposed Amended Rule 1420.1 and Errata Sheet as Attachments).

SCAQMD predicts that Rule 1420.1 will reduce arsenic, benzene, and 1,3-butadiene emissions well below what both Exide and Quemetco have been achieving. *See* SCAQMD Press Release; SCAQMD, Draft Staff Report at 2-5, Tbls. 2-1, 2-2 (Dec. 2013) (predicting reduction in arsenic emissions of 50-67%; benzene by 62-87%; and 1,3-butadiene by 61-94%).

This Rule would require emission reductions beyond those required by EPA's Final Rule and the 2008 Lead NAAQS, on which EPA's Final Rule is based. The Staff Report provides a comparative analysis of this rule and EPA's NESHAP, illustrating how much stronger protection the SCAQMD Rule will provide. *See* SCAQMD, Draft Staff Report at 3-3 to 3-6, Tbl. 3-1 (comparative analysis). The January 10 Board Meeting package also included a summary of the rule, as Attachment A. http://www.aqmd.gov/hb/attachments/2011-2015/2014Jan/2014-Jan10-019b.pdf.

Specifically:

- By February 1, 2014, secondary lead smelters must achieve an ambient air concentration of arsenic below 10 nanograms per cubic meter (ng/m^3) (averaged from two samples over a 24-hour period). SCAQMD Amended Rule §§ 1420.1(d)(2)(A),

(6). Facilities that contribute to arsenic ambient air concentrations in excess of 10 ng/m^3 averaged over 30 days must develop a compliance plan to reduce emissions under 10 ng/m^3 and reduce feedstock by 15%. *Id.* § 1420.1(p).

- Facilities that contribute to lead ambient air concentrations in excess of 0.15 micrograms per cubic meter ($\mu g/m^3$) for an average of 30 days must develop a compliance plan to reduce emissions under 0.12 $\mu g/m^3$ and reduce feedstock by 15%. *Id.* § 1420.1(p).
- The Rule also establishes additional mandatory daily process curtailment requirements if lead or arsenic ambient air concentrations increase beyond the above levels. *Id.* § 1420.1(p).
- In addition, the Rule sets the following hourly mass emission limits:
    - (A) No later than 60 days after the date of adoption, the total facility emission rate for a large lead-acid battery recycling facility from all point sources shall not exceed 0.00285 pound of arsenic per hour. (B) No later than January 1, 2015, the total facility emission rate for a large lead-acid battery recycling facility from all point sources shall not exceed 0.00114 pound of arsenic per hour. (C) No later than January 1, 2015, the total emission rate for a large lead-acid battery recycling facility from all point sources excluding point sources from emission control devices on total enclosures shall not exceed the following: (i) 0.0514 pound of benzene per hour; and (ii) 0.00342 pound of 1,3-butadiene per hour. *Id.* § 1420.1(f)(2).
- By January 1, 2015, annual arsenic emissions must be less than 10 pounds, annual benzene emissions must be less than 450 pounds, and annual 1,3-butadiene emissions must be less than 30 pounds per year. *Id.* §§ 1420.1(d)(2)(B)-(C).
- Ventilation of the total enclosure at any opening must be maintained continuously at negative pressure. Pressure within the enclosure must be monitored by at least one building digital differential pressure monitoring system. *Id.* §§ 1420.1(e)(3)-(4).
- For each furnace, the facility must use a monitoring device to measure and record the static differential furnace pressure in inches water column. Each smelting furnace shall be operated such that static differential furnace pressure, in inches of water column averaged over 15 minutes, is maintained at a value -0.02 or more negative and meets the listed requirements in § 1420.1(f)(3).

To further prevent facilities from threatening the health of local residents, SCAQMD also adopted a separate rule for a facility's contributions to heightened maximum individual cancer risk (MICR). If the MICR from multiple pollutants potentially exceeds 25 in a million, then the facility must submit a Risk Reduction Plan (RRP) reducing the MICR below 25 in a million within 3 years. SCAQMD Rule § 1402(e) (ATTACHED).

(2) **New Monitoring Data and Enforcement Actions**

EPA must consider both lead monitoring data from secondary lead smelters and monitoring data for other harmful pollutants emitted by these facilities. Recent lead monitoring data in the SCAQMD continues to show lead ambient air concentrations in excess of 0.15 $\mu g/m^3$, even reaching concentrations of 0.32 and 0.30 $\mu g/m^3$. *See* SCAQMD, *Lead Monitoring at Exide Technologies* (Jan. 9, 2013), http://www.aqmd.gov/prdas/AB2588/Exide/Exide-Lead-Jan3.pdf. During the past four months, SCAQMD has issued three notice of violations (NOV) to Exide for lead concentrations in excess of 0.15 $\mu g/m^3$ averaged over a 30-day period. http://www.aqmd.gov/prdas/AB2588/Exide/Exide.html#RECENT_EVENTS_; SCAQMD Rule § 1420.1(d)(2); SCAQMD, *Lead Monitoring at Exide Technologies* (Jan. 9, 2013), *available at* http://www.aqmd.gov/prdas/AB2588/Exide/Exide-Lead-Jan3.pdf.

Moreover, emissions from pollutants other than lead are contributing to significant health risks. SCAQMD, *Arsenic Monitoring at Exide* (Sept. 28, 2013), *available at* http://www.aqmd.gov/prdas/AB2588/Exide/Exide-Arsenic-Sept28.pdf. In September 2013, Exide's monitors recorded arsenic concentrations, reported as a monthly average, "consistently above the average arsenic level measured during the fourth Multiple Air Toxics Exposure Study (MATES IV), a study conducted by the SCAQMD to characterize the carcinogenic risk from exposure to air toxics." *Id.* at 1. Exide's most recent Health Risk Assessment (HRA) shows ninety percent of the cancer risk from Exide emissions is from exposure to arsenic, 1,3-butadiene, benzene, and chromium VI. HRA, Exide at ES.viii. Due to the dangerous level of emissions and Exide's inability to develop an adequate plan for stemming emissions, SCAQMD has petitioned for Exide's shutdown. Petition for Order of Abatement, *SCAQMD v. Exide*, Case No. 3151-29 (Oct. 18, 2013) (alleging violation of "good operating practices" requirement by insufficient and inconsistent negative air pressure in blast furnace, leading to escape of gaseous forms of arsenic into baghouses not designed to control gaseous arsenic); Letter from Mohsen Nazemi, SCAQMD Deputy Executive Officer, to John Hogarth, Exide Technologies (Oct. 24, 2013), *available at* https://www.aqmd.gov/prdas/AB2588/Exide/1025-ExideLetter.pdf.

Recently, SCAQMD inspectors discovered that arsenic emissions from another secondary lead smelter, Quemetco, are potentially contributing to a cancer risk in excess of 25 in a million. Steve Scauzillo, *Second battery recycling plant emitting more arsenic*, San Gabriel Valley Trib., Dec. 20, 2013, *available at* http://www.sgvtribune.com/environment-and-nature/20131220/second-battery-recycling-plant-emitting-more-arsenic; Jessica Garrison, *Arsenic levels at second battery recycler draw concerns*, L.A. Times, Dec. 18, 2013, *available at* http://articles.latimes.com/2013/dec/18/local/la-me-arsenic-20131219; *see also* SCAQMD, Arsenic Monitoring at Exide Technologies (Sept. 28, 2013), *available at* http://www.aqmd.gov/prdas/AB2588/Exide/Exide-Arsenic-Sept28.pdf. EPA must evaluate both earlier monitoring data collected from Quemetco for purposes of amending Rule 1420.1 and risk assessment data that Quemetco is required to submit by May 2014 due to its most recent spike in arsenic emissions. South Coast Air Quality Management District (SCAQMD) Rule §§ 1402(c)-(d); SCAQMD, Arsenic, Lead, Benzene, and 1,3-Butadiene Emissions (Dec. 6, 2013), *available at* http://www.aqmd.gov/rules/proposed/1420-1/2013SCAQMDSTatQuemetco.pdf.

In addition to the high air concentrations of emitted pollutants near the facilities, California's Department of Toxic Substances Control (DTSC) uncovered dust and soil with lead and other metals at or near hazardous waste level within 1,500 feet of Exide. CA Dep't of Toxic Substances Control, Letter from Peter Ruttan, DTSC, to Fredrick Ganster, Exide (Dec. 17, 2013) at 1-2, *available at* http://www.dtsc.ca.gov/HazardousWaste/Projects/upload/Exide_Technologies_Letter_Emergency_Response_Intertim_Measure.pdf. As stated, "DTSC considers the elevated concentrations of lead and other contaminants stated in the Report an immediate threat to human health and the environment (i.e., the Los Angeles River) that will require implementing emergency response interim measures." *Id.* at 2. Therefore, DTSC ordered Exide to clean up all dust, soil, and sediment found with concentrations of metal at or above hazardous waste level near the facility within 45 days—by January 31, 2014. *Id.* at 2. The DTSC's letter to Exide did not disclose the concentrations near residential areas. To satisfy its statutory duty to assess multipathway exposure and ensure that it provides an ample margin of safety to protect public health in reconsidering the Final Rule, EPA must review the information available from DTSC which shows the need for greater protection from harmful air deposition of lead and other hazardous metals which persist or bioaccumulate.

Based on the above-described information, particularly the information about arsenic, EPA must update its multipathway assessment and risk determination to account for arsenic impacts as Petitioners have urged the agency to do in our comments on the rule and our reconsideration petition. The data provided here suggest that EPA may be ignoring a significant amount of the health risk due to soil exposure to deposited arsenic.

In addition, the new violations found for Exide and the new monitoring data provide reason for EPA to strengthen the emission testing and reporting requirements in the Final Rule. The new information shows that EPA must require compliance tests for lead, arsenic, and all other pollutants at least annually, without the potential exceptions that the current rule (40 C.F.R. § 63.543) allows in certain circumstances. For dioxins/furans, testing every six years after the initial test (as also allowed by this rule) is not often enough and tests must be required at least annually. In addition, EPA should require continuous emission monitoring for all pollutants for which this technology is available. Based on the recent problems found, as outlined in this supplement, EPA must set monitoring and testing requirements that allow regulators and affected communities to assess and assure compliance promptly. Strong monitoring, testing, and reporting requirements are also vital to follow through on EPA's stated commitment to environmental justice.

(3) **New Risk Assessment Information**

In addition to the emission data itself, EPA must evaluate the information contained in the 2013 Exide HRA prepared in response to the high risk found at the Exide plant. The HRA found greater impacts than EPA's Residual Risk Assessment (RRA) for the Final Rule, and EPA must consider the information in the HRA as reason to update its RRA during reconsideration.

For example, in its Residual Risk Assessment, EPA found a maximum individual cancer risk of at least ten in a million for 700 people in the U.S., and that 80,000 people are exposed to a cancer risk of 1 in 1 million or more. EPA Residual Risk Assessment for the Secondary Lead Smelting Source Category [hereinafter "RRA"], Dkt. ID EPA-HQ-OAR-2011-0344-0160 (Dec. 2011) at 31. But, Exide's HRA found exposure to these levels of cancer risk are higher for that facility alone. Specifically, the Exide HRA found that 111,422 people in the Los Angeles area are exposed to a cancer risk of at least ten in 1 million, and that 3,556,896 are exposed to a cancer risk of at least 1 in 1 million. Revised AB2588 Health Risk Assessment (Jan. 2013), Exide Technologies: Vernon, California at ES.viii. Thus, EPA should revise its RRA to recognize that there is a greater number of people exposed to a cancer risk above section 112(f)(2)'s statutory threshold of 1 in 1 million -- which the D.C. Circuit has called the "aspirational goal" under this provision -- and above the level of 10 in 1 million, which EPA also has recognized is relevant to this rulemaking in the RRA. *NRDC v. EPA*, 529 F.3d 1077 (D.C. Cir. 2008).

EPA should also reassess whether it correctly determined that, based on actual emissions, no community resident would be exposed to a maximum individual lifetime cancer risk (what EPA calls "MIR") of at least 100 in 1 million. The Exide HRA found a maximum worker receptor risk of 156 in 1 million. *Id.* This information suggests that at this or other secondary lead smelters nearby residents may well be exposed to higher than 100 in 1 million cancer risk, depending on their location, wind direction, fugitive emission levels, and other relevant factors EPA should consider. Yet, EPA found that the MIR was 50 in 1 million based on actual emissions, and that based on allowable emissions it would be 200 in 1 million (4 times the risk EPA found based on "actual" emissions). 77 Fed. Reg. at 563; Residual Risk Assessment (-0160) at 31. EPA should evaluate the HRA, particularly to consider the significance of the high worker receptor risk, and should revise its RRA to assess whether the MIR based on allowable emissions should, instead, be four times 156 (or over 600 in 1 million) for people exposed nearby, at the level of a worker's potential exposure. *See* 77 Fed. Reg. at 563.

The Exide HRA also found a non-cancer chronic hazard index (HI) of 63, non-cancer acute HI of 3.8, and a cancer burden of 10. Staff Report at 1-3. These hazard indices for non-cancer chronic and acute risk are significantly higher than the indices used by EPA in its RRA, at 31. EPA also must evaluate why its assessment so underestimated risk compared to the Exide HRA, and ensure that it is adequately assessing non-cancer risk and providing an ample margin of safety to protect public health from such risk.

CONCLUSION

Petitioners respectfully request that EPA review the new data on risk and emissions described and attached to this supplement, and the actions taken by SCAQMD to protect local residents as EPA conducts its reconsideration of the Final Rule for Secondary Lead Smelting. In addition to the information provided here, the SCAQMD regularly updates the most recent information at: http://www.aqmd.gov/prdas/AB2588/Exide/Exide.html.

In support of this supplement to our granted petition, petitioners attach a list of documents as an Appendix by mail on an accompanying CD-ROM. Please contact us at (202) 667-4500 if you would like additional information regarding this matter.

Thank you for your time and consideration.

Sincerely,

Emma Cheuse
echeuse@earthjustice.org

James Pew
jpew@earthjustice.org

CONTENTS OF APPENDIX

11. Petition for Order of Abatement, *SCAQMD v. Exide*, Case No. 3151-29 (Oct. 18, 2013), *available at* http://www.aqmd.gov/prdas/AB2588/Exide/Exide-OrderForAbatement.pdf.

12. Letter from Mohsen Nazemi, SCAQMD Deputy Executive Officer, to John Hogarth, Exide Technologies (Oct. 24, 2013), *available at* https://www.aqmd.gov/prdas/AB2588/Exide/1025-ExideLetter.pdf.

13. CA Dep't of Toxic Substances Control, Letter from Peter Ruttan, DTSC, to Fredrick Ganster, Exide (Dec. 17, 2013), *available at* http://www.dtsc.ca.gov/HazardousWaste/Projects/upload/Exide_Technologies_Letter_Emergency_Response_Intertim_Measure.pdf.

14. SCAQMD Letter to Exide Approving HRA (Mar. 2013)

15. SCAQMD Letter to Exide Rejecting RRP (Oct. 2013)

16. Sierra Club *et al.* Petition for Reconsideration (March 5, 2012)

17. EPA Response to Petition for Reconsideration (Dec. 10, 2012)