August 17, 2018

Via electronic submission: vw.settlement@mass.gov

Susan Lyon Massachusetts Department of Environmental Protection 1 Winter St., 6th Floor Boston, MA 02108

Re: Comments on the draft Massachusetts Volkswagen Settlement Beneficiary Mitigation Plan issued on July 19, 2018

Dear Ms. Lyon,

The undersigned organizations would like to thank Massachusetts Department of Environmental Protection (MassDEP) for the robust process it has conducted to date to solicit feedback and information on how Massachusetts should spend the ~\$75 million allocated through the Volkswagen Settlement.

We appreciate this opportunity to comment on the draft Beneficiary Mitigation Plan (BMP), which outlines year one funding of \$23.5 million. The Volkswagen Settlement presents the Commonwealth with a critical opportunity to reduce nitrogen oxides (NOx) and other mobile source air pollutants, to improve the health of all residents, particularly those most heavily burdened by air pollution, and to accelerate the electrification of our transportation sector, which is necessary to meet our air quality and climate goals.

Given the nature of the opportunity, we believe several elements of the draft beneficiary plan are very positive and offer recommendations to amplify the impact of the settlement funds.

First, we offer our strong support for the following elements of the draft year one plan:

- MassDEP's stated goals of prioritizing projects that, in addition to reducing NOx, help reduce all forms of air pollution and achieve GHG emission reduction targets, and drive technological and policy progress;
- MassDEP's prioritization of electrification of the State's transportation fleet exemplified by the allocation of \$11 million for the purchase of a total of thirteen electric transit buses for Pioneer Valley Transit Authority (PVTA) and Martha's Vineyard Transit Authority (MVTA) and expenditure of \$5 million for electric vehicle supply equipment (EVSE) during the first year of funding; and
- MassDEP's goal of prioritizing projects that serve environmental justice (EJ) communities, thereby benefiting residents in the Bay State who are most heavily burdened by pollution.

Second, we encourage MassDEP to consider the following recommendations to maximize the impact of the VW Settlement funds:

MassDEP should consider a larger expenditure on electric transit and school buses
We reiterate our support for prioritizing investments to procure electric public transit and school buses. (See prior comments from July 18, 2017¹ and May 18, 2017²)

Switching transit and school buses to electric fuel is more cost-effective on a total cost of ownership basis, and the resulting operations and maintenance (O&M) savings allow for additional investment in clean buses while driving down costs. At the same time, electrifying bus fleets will work to advance and transform the market, thereby contributing to already sharply falling battery and electric bus costs. Moreover, electric buses offer the most cost-effective NOx reductions³, as well as the biggest reductions in air pollution and greenhouse gas emissions of available technologies.

Based on replacement criteria including vehicle mileage and age, over 350 transit buses⁴ in Massachusetts, representing cost savings of up to \$22.8 million, currently present the most cost-effective opportunities for electrification. Massachusetts should consider using the Volkswagen settlement funds to support bulk purchase of electric buses by transit agencies.

Further, we strongly discourage the use of the funds to invest in new diesel or compressed natural gas (CNG) vehicles. While newer diesel or CNG may emit less NOx at the tailpipe than conventional vehicles, they do not provide meaningful incremental reductions in other pollutants such as greenhouse gases, carbon monoxide and ultrafine particulate emissions. These investments would lock us into many more years of fossil fuel emissions that threaten our air quality and our health and that undermine the objective of the settlement and the BMP.

Leverage the \$11 million currently allocated for the purchase of electric transit buses to facilitate deployment of a greater number of electric transit buses

We commend the substantial allocation of \$11 million of year-one funding for the purchase of electric buses; however, rather than utilizing these dollars to cover the full up-front cost of 13 buses by two transit agencies, we urge you to maximize the impact of settlement funds by pairing them with complementary resources to help purchase more buses in the first year.

¹ Joint response submitted electronically on July 18, 2017 to Massachusetts Department for Environmental Protection's solicitation of comments on how to best utilize funds for the Volkswagen Settlement

² Joint response submitted electronically on May 18, 2018 in response to Massachusetts Department for Environmental Protection's Request for Information (RFI)

³https://www.sierraclub.org/sites/www.sierraclub.org/files/sce/new-jersey-

chapter/Handouts/VW_Zero_Emission_Bus_Factsheet.pdf

⁴ Massachusetts Fleet Electrification Opportunities Study, December 22, 2017 available at

https://www.mass.gov/files/documents/2018/01/19/MA%20State%20Fleet%20Electrification%20Report-%20Final%2012.22.17.pdf

The VW settlement authorizes states to cover *up to* prescribed percentages of the replacement cost of vehicles depending on the vehicle type and the nature of the entity whose vehicle is being replaced. This leaves states with a great deal of discretion in determining the appropriate amount of settlement money to contribute to leverage other resources and maximize the impact of the settlement funds. Importantly, Appendix D funds can be used to eliminate the upfront cost differential between technologies and supplement existing funding streams. This cost-effective use of settlement funds will support the procurement of additional zero emission electric buses, accelerate the electrification of our state transportation network and yield significant air pollution and emission reduction benefits.

Other state beneficiaries are using this strategy to further support electrification. For instance, the Colorado mitigation plan⁵ proposes to use a combination of existing state and federal funds together with Volkswagen funds to provide grants in an amount equivalent to 110% of the incremental cost of a new electric vehicle and charging infrastructure, addressing the incremental cost difference while also making electric vehicles comparatively cheaper than conventional vehicles.

Similarly, to overcome the high upfront costs of purchasing electric transit buses, Washington D.C.⁶ has committed 62 percent of their settlement funds to the *District Electrification and Low-NOx Program* (DEAL Program) that will cover ~80 percent (up to \$425,000) of the incremental cost of purchasing electric vehicle technologies. Transit vehicles that serve areas of the city with high asthma prevalence for 60 percent of their service time are eligible to receive these funds. Additional funding will be available for procuring electric transit vehicles that operate in wards that are most vulnerable and impacted by air pollution.

 Coordinate Deployment of Electric Vehicle Supply Equipment (EVSE) with utility programs and Electrify America

We encourage that Massachusetts use the \$5 million for installation of electric vehicle supply equipment (EVSE) to complement existing Electrify America and utility investments, which include Eversource's approved transportation electrification program to deploy approximately 4,000 Level 2 ports and 72 Direct Current Fast Charging ports in the company's service area and National Grid's pending program to deploy 1,200 Level 2 ports and 80 Direct Current Fast Charging ports in its service area. However, much more charging infrastructure is needed to support state Zero Emissions Vehicle goals - as demonstrated by the National Renewable Energy Laboratory's EV charging infrastructure demand analysis⁷ - and additional Appendix D

⁵ CDPHE, Beneficiary Mitigation Plan Volkswagen, Audi and Porsche Clean Air Act Settlements (March 21, 2018) https://www.colorado.gov/pacific/sites/default/files/AP_VW_Beneficiary_Mitigation_Plan.pdf

⁶ The District of Columbia's Spending Plan for Volkswagen Settlement Funds (Beneficiary Mitigation Plan), July 6, 2018, available at

https://doee.dc.gov/sites/default/files/dc/sites/ddoe/page_content/attachments/The%20District%20of%20Colum bia%27s%20Spending%20Plan%20for%20Volkswagen%20Settlement%20Funds.pdf

⁷ Wood et al., *Regional Charging Infrastructure for Plug-In Electric Vehicles: A Case Study of Massachusetts*, January 2017 available at: <u>https://www.nrel.gov/docs/fy17osti/67436.pdf</u>

investment provides a path for maximizing the impact of limited utility customer funds in service of achieving state policy goals.

We support MassDEP's decision to prioritize installation of charging stations in EJ areas, encourage speedy deployment, and support geographic coverage across the state during the project selection process. We recommend that criteria to select EVSE projects for funding also consider ability of the investment to enable new EV ownership, prioritize deployment in areas where a significant fraction of the population does not have dedicated off-street parking, and include placement of charging stations in proximity to multi-unit dwellings and workplaces. To best increase low-income and EJ community access to EVs, the Commonwealth needs to explore additional dedicated programs, including low income rebates, to complement EVSE installations in these communities.

The Commonwealth should also consider leveraging private sector investment in order to stretch the settlement funds and maximize EVSE deployment by providing rebates or incentives that defray but do not eliminate the costs associated with purchasing and installing charging infrastructure.

Diesel Emissions Reduction Act (DERA) Option

Under the DERA option, we advocate that settlement funds prioritize projects that lead to the adoption of electric vehicle technology relative to other alternatives to maximize the immediate and long-term NOx reductions and provide additional benefits of reduced fuel, maintenance and operation costs.

Additional information on criteria that will be used to rank projects proposed through the open solicitation process

We are pleased that while allocating the \$7.5 million available in this current round of funding, particular attention will be given to projects that best achieve the plan's goals at all stages of the competitive grant process. We would like more clarification on how criteria for scoring and selecting projects will be ranked with respect to the goals identified in the draft beneficiary mitigation plan.

Although the primary focus of the VW settlement is to reduce NOx emissions, we urge the Commonwealth to evaluate EMAs in a manner that gives consideration and weightage to reducing greenhouse gas (GHG) and other air pollution in the transportation network.

This is significant considering that three Massachusetts cities feature in the top 20 challenging places to live with asthma in the nation. Springfield, Massachusetts was recently named the 2018 asthma capital of the U.S.⁸, with Boston and Worcester ranking 11th and 12th in asthma prevalence and asthma related emergency room visits. Reducing air pollution will benefit vulnerable populations and communities that bear a disproportionate share of transportation pollution.

⁸ Asthma Capitals 2018, The Most Challenging Places to Live with Asthma, Asthma and Allergy Foundation of America available at http://www.aafa.org/media/AAFA-2018-Asthma-Capitals-Report.pdf

The VW settlement offers a transformative opportunity to accelerate the state's effort to meet greenhouse gas reduction targets, lower air pollution and help environmental justice areas break free from fossil fuel dependence. It is difficult to overstate the importance of prioritizing investment in zero-emissions technologies in the BMP. It is likely that if continued investments are made in diesel and CNG technology now, these vulnerable communities will find themselves in the same position within a few years, as the vehicle emissions technology purchased begins to wear down.

In addition, we recommend that the criteria for scoring and selecting projects incorporate cost effectiveness of the project on a life cycle basis rather than upfront cost basis.

Plan and timeframe for using rest of Massachusetts's VW funding allocation

We appreciate the proposal to spend \$23.5 million, close to one third of the total funding of ~\$75 million that the state is allowed to expend, in the first year. The myriad benefits discussed above will begin to accrue as soon as the investments are made, making early investment particularly desirable. Given that the plan does not provide information on the timing or nature of expenditures for the remaining funds, we look forward to MassDEP providing additional clarification on how and when the remainder of the money will be spent along with opportunities for future stakeholder comment.

Thank you for your consideration of these comments. We look forward to continuing to work with you and support the transformative and cost-effective use of the Volkswagen Settlement funds in Massachusetts.

Sincerely,

Deb Pasternak Interim Chapter Director Massachusetts Sierra Club

Amy Laura Cahn Interim Director Healthy Communities & Environmental Justice Program Conservation Law Foundation

Mark LeBel, Staff Attorney Emily Lewis, Policy Analyst Acadia Center Jack Spence Co-Chair Transportation Working Group of 350MA

Dr. Burton Jaffe The Environmental Forum at the Harvard Institute of Learning in Retirement

Mark Renburke Executive Director Drive Electric Cars New England / Drive Electric America

Noah Garcia Transportation Policy Analyst Natural Resources Defense Council

Eugenia T. Gibbons Clean Energy Programs Director Mass Energy Consumers Alliance

Lee Matsueda Political Director Alternatives for Community & Environment (ACE)

Maria Belen Power Associate Executive Director GreenRoots

Addendum Answer Responsive to Section VI B

Comments on this Draft BMP should include:

1. The name, address, phone number, website (if applicable), and brief description of the commenting individual/entity;

2. The name, title, phone number and email address of the entity's contact person; and,

3. The Commenter's name on every page.

Deb Pasternak Interim Chapter Director Massachusetts Sierra Club 50 Federal Street, 3rd Floor Boston, MA 02110 617 423 5775 deb.pasternak@sierraclub.org https://www.sierraclub.org/massachusetts

Sierra Club is a grassroots environmental nonprofit organization with more than 3 million members and supporters nationwide. Our mission is to explore, enjoy, and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystems and resources; to educate and enlist humanity to protect and restore the quality of the natural and human environment; and to use all lawful means to carry out these objectives. Consistent with this mission, the Sierra Club works to decarbonize our economy in order to avoid the worst impacts of climate change. This includes increasing deployment of electric vehicles and increasing access to electrified transportation. With regard to investments in electric vehicles and associated charging infrastructure, Sierra Club has been actively engaged in proceedings or working groups in at least sixteens states regarding utility investments to promote deployment of electric vehicle charging infrastructure. Sierra Club has also provided comments to Electrify America regarding its use of Appendix C funds under the VW settlements. And Sierra Club has engaged with the relevant agencies in the majority of states around the country regarding the development of their mitigation trust plans. Sierra Club was founded in 1892 and has been in operation for 126 years.

Amy Laura Cahn

Interim Director Healthy Communities & Environmental Justice Program Conservation Law Foundation 62 Summer Street Boston, MA 02110 alcahn@clf.org https://www.clf.org 617-850-1730 Conservation Law Foundation (CLF) protects New England's environment for the benefit of all people. We use the law, science and the market to create solutions that preserve our natural resources, build healthy communities, and sustain a vibrant economy. CLF has a long history of working on behalf of its members to create a more affordable, accessible, sustainable, and equitable transportation system that reduces greenhouse gas emissions. CLF also has a decades-long record of advocacy in support of clean and efficient energy production in New England. In 2015, CLF, with Sierra Club and Acadia Center, released a report that outlines actions that utilities, states, and the auto industry should take to boost electric cars across New England. One of CLF's advocates is a member of the Massachusetts Zero Emission Vehicle Commission as a representative of the environmental community. CLF was founded in 1966.

Mark LeBel, Staff Attorney Emily Lewis, Policy Analyst Acadia Center 31 Milk Street, Suite 501 Boston, MA 02109 mlebel@acadiacenter.org elewis@acadiacenter.org www.acadiacenter.org

Acadia Center is a non-profit organization committed to advancing the clean energy future. Through research and advocacy, it works to empower consumers and offer real-world solutions to the climate crisis for all.

Jack Spence

State Steering Team of 350Ma % 350Mass/Better Future Project 30 Bow Street Cambridge, MA 02138 617 945 5242 350mass-sst@googlegroups.com 617 232 8188 (land); 617 610 5613 (M) jackspence3@gmail.com https://350mass.betterfutureproject.org/

The Transportation Working Group (TWG) of 350 Massachusetts/Better Future Project organizes to stop the use of fossil fuels and to promote the use of renewables. TWG is a Climate Action Team of 350 Mass. TWG works for the drastic reduction of transportation-related greenhouse gas (GHG) emissions, in a socially-just manner. Transportation accounts for 39% of the GHG emissions in Massachusetts, the largest of any energy sector. An average single occupant vehicle (SOV)emits 9 times as many GHG as a fully-loaded heavy-rail subway train like those on Boston's Red Line, thus we promote public transit driven by clean electricity and zero emission transportation particularly safe biking and walking infrastructure, and battery electric buses. Low-GHG, socially equitable transportation is an essential public good.

Dr. Burton Jaffe

The Environmental Forum at the Harvard Institute of Learning in Retirement 1 Huntington Ave #203 Boston, MA 02116 617-306-2203 bjaffe80@aol.com

We are a group of seniors devoted to learning about global warming and renewable energy by giving lectures and courses, and to advocate ways to mitigate global warming by letter writing, attending protests, and attending hearings at our local cities and the state house.

Mark Renburke, Executive Director

Drive Electric Cars New England / Drive Electric America 100 Brooklyn Road, Pomfret Center, CT (860) 336-7295 <u>mark@driveelectricamerica.org</u> <u>http://driveelectricamerica.org</u>

Drive Electric America (DrEAm) /Drive Electric Cars New England is a non-profit education and outreach group and chapter of the Electric Auto Association 501 (C)(3) with the mission to actively engage and inform the public of the compelling personal and societal benefits of driving electric thereby accelerating drivers towards making the switch to their first plug in electric car.

Noah Garcia

Natural Resources Defense Council 40 W. 20th Street New York, NY 10011 ngarcia@nrdc.org nrdc.org

Natural Resources Defense Council (NRDC), an international nonprofit environmental organization with more than three million members and online activists. Since 1970, our lawyers, scientists, and other environmental specialists have worked to protect the world's natural resources, public health, and the environment.

Eugenia T. Gibbons Mass Energy Consumers Alliance 284 Amory Street Boston, MA 02130 617-524-3950 eugenia@massenergy.org https://www.massenergy.org/

Energy Consumers Alliance of New England, Inc. (ECANE) d/b/a Mass Energy Consumers Alliance is a nonprofit consumer and environmental advocacy organization dedicated, since 1982, to making energy affordable and environmentally sustainable. Our mission is to harness our collective power as energy consumers to accelerate the transition to a low carbon future.

Lee Matsueda

Political Director Alternatives for Community & Environment (ACE) 2201 Washington Street, Suite 302 Roxbury, MA 02119 617-442-3343 lee@ace-ej.org https://www.ace-ej.org

ACE is a person-of-color led environmental justice organization that builds the power of communities of color and low-income communities in Massachusetts to eradicate environmental racism and classism, and create healthy, sustainable communities.

Maria Belen Power

Associate Executive Director GreenRoots 227 Marginal Street, Suite 1 Chelsea, MA 02150 (617) 466-3076 mariabelenp@greenrootschelsea.org http://www.greenrootschelsea.org/

GreenRoots is a community-based organization dedicated to improving and enhancing the urban environment and public health in Chelsea and surrounding communities. We do so through deep community engagement and empowerment, youth leadership and implementation of innovative projects and campaigns. GreenRoots works to achieve environmental justice and greater quality of life through collective action, unity, education and youth leadership across neighborhoods and communities.