

Public comment: MPCA questions

MPCA is seeking comment on the development of our Volkswagen (VW) Settlement Phase II State Plan through August 16, 2019. Please submit comments via email: vwsettlement.pca@state.mn.us.

The MPCA has been implementing Phase I of our VW settlement program since 2018. Through our work developing the Phase I State Plan and implementing Phase I, we have questions that we would particularly appreciate input on. We welcome comment on anything related to the VW program, so please do not feel you must follow the questions in this document in order to submit a comment. These are simply questions that we are particularly interested in exploring. Feel free to answer any, all, or none of the questions below as they relate to your interests and expertise. For all questions, please provide an explanation for your response.

- To refresh your memory on what activities are allowed for funding under the national VW settlement, read more [here](#).
- To refresh your memory on how the MPCA decided to spend the Phase I funds, read the Minnesota State Plan [here](#).
- To explore progress on Minnesota's 10-year goals for the funds, click [here](#).

Part 1: Funding categories

The VW settlement allows states to replace older, more polluting heavy-duty diesel vehicles and equipment (trucks, buses, switcher locomotives, tow boats, etc.) with newer technology. In Phase I, MPCA funded five grant categories:

Grant category	Targeted percent of Phase I funds	Targeted dollar amount for Phase I	Number of projects	Estimated emissions reductions (tons)
School bus replacements	20%	\$2.35 million	127	NO _x : 27 PM _{2.5} : 2 GHGs: 2,700
Local truck and transit bus* replacements	35%	\$4.11 million	137	NO _x : 494-564 PM _{2.5} : 17-34 GHGs: 12,543-23,160
Heavy-duty off-road equipment (switcher locomotives, ferries, tug boats, construction equipment, etc.)**	15%	\$1.76 million	12	NO _x : 2,000 PM _{2.5} : 150 GHGs: 10,800
Replacing heavy-duty diesel vehicles with electric alternatives*	15%	\$1.76 million	14	NO _x : 15-16 PM _{2.5} : 0.5-1.0 GHGs: 1,855-4,508
Electric vehicle charging stations*	15%	\$1.76 million	Fast: 22 Level 2: 45	NO _x : 1.1 PM _{2.5} : 0.05 GHGs: 4,632

***Emission reduction numbers for these grant categories are estimates calculated at the time of State Plan development, not based on project results.**

****Emission reduction numbers for the heavy-duty off-road grant are for the first grant round (2018) only.**

1. Do you agree with the grant categories we funded in Phase I? Do you feel they make sense? Should we eliminate some? Are there new ones we should add? Please provide your reasoning.
2. Did the category groupings make sense? Should they be regrouped?
3. Did you agree with the funding distribution across the grant categories in Phase I? Do you feel they make sense? Would you provide more or less funding to some categories for Phase II? Please provide your reasoning.
4. Should MPCA continue to fund many smaller projects, or instead a few big ones? For example a large train engine or river tug boat, electric transit buses, or electric vehicle charging mobility hubs. If so, on what basis should we judge/select such a project(s)?

Part 2: General program structure

5. This spring MPCA surveyed people about the grant application process. Many people indicated that we could make improvements on simplifying and clarifying the application process. Do you have specific recommendations that would help clarify the process and improve your experience?
6. In Phase I (two years), MPCA issued one request for proposals (RFP) for each grant category. Phase II will be four years long. In Phase II, would you prefer the MPCA offer a few large grant opportunities or distribute the funds across smaller grant rounds across more years? I.e. For Phase II, should the MPCA issue one RFP per grant category or divide the funds for each category into two or more grant rounds of smaller amounts of money at a time? Does it matter which category?
7. Did the timing of the grant rounds work for you? Are there timing issues (length of RFP being open, time of year it opens, etc.) that we should consider?
8. Do you support the methods MPCA used to select projects (see RFPs for reference [here](#))? Are there criteria we should consider that we didn't use? Do you have concerns about existing criteria?
9. Should the MPCA limit the total amount an individual applicant can receive by number of projects or total dollars?

Part 3: Goals

In MPCA's State Plan for the VW funds, we outlined five goals for the 10 years of the program. Those goals are:

- Achieve significant emission reductions:
 - 4,000 tons nitrogen oxides (NOX)
 - 150 tons fine particles (PM2.5)
 - 100,000 tons greenhouse gases (GHG)
 - Benefit all parts of the state:
 - Invest 60% of the funds in the Twin Cities metropolitan area
 - Invest 40% of the funds in Greater Minnesota
 - Help people and places disproportionately affected by air pollution:
 - Invest at least 20% of the funds in disproportionately affected areas of the Twin Cities metro area
 - Invest at least 20% of the funds in disproportionately affected areas of Greater Minnesota
 - Reduce exposures to harmful air pollutants and maximize health benefits
 - Balance cost effectiveness with other goals
10. Should MPCA ensure that 60% of funds for each RFP go to the Twin Cities and 40% for each RFP go to Greater Minnesota? Or is it alright as long as the overall funding for all the RFPs together is split 60/40?
 11. So far in Phase I, MPCA is on track to surpass its NO_x reduction goals. How should the MPCA respond? Should the agency focus more funds on future technologies, such as alternative fuels or electric equipment that might not be as cost-effective at reducing NO_x, but might serve to accomplish other state goals? Should we put more funds towards the types of projects that are achieving the largest emission reductions? Should we set more aggressive goals?

Part 4: Electric vehicle (EV) charging stations

In Phase I, MPCA allocated the maximum-allowed 15% (\$1.76 million) of the funds for electric vehicle charging stations.

12. Should the MPCA continue to allocate the maximum-allowed 15% of the funds for Phase II to electric vehicle charging stations?
13. In Phase I, MPCA dedicated 90% of its EV funds to fast charging stations along highway corridors and 10% of its funds to slower level 2 charging stations. If MPCA funds EV charging stations in Phase II, what fast charger/level 2 split do you recommend? Why?
14. In Phase I, MPCA considered charging stations that will rely on renewable energy more favorably in the project selection process. What is the best/easiest way for station owners to demonstrate that they will either sign up for a utility-provided renewable energy program or have sufficient on-site renewable energy to cover the charging station?
15. Should MPCA require energy star ratings for electric vehicle charging stations?
16. Should MPCA only fund fast chargers along highways outside of the Twin Cities metro area or should MPCA fund fast chargers in the Twin Cities metro area?

If MPCA decides to fund fast charging stations along highway corridors for Phase II:

17. What should MPCA consider in selecting highway corridors for future fast charging funding?
18. In Phase I, MPCA required applicants to apply for all the stations along a given corridor. In Phase II, should MPCA continue to require applications for full corridors or allow applications for individual stations?
19. In Phase I, MPCA funded 50kW stations along highway corridors in order to install a larger number of stations than could be achieved by funding faster, more expensive 150kW stations. In Phase II, should MPCA fund 50kW stations or higher-power and significantly more expensive 150kW stations?
20. In Phase I, MPCA offered to cover some ongoing maintenance expenses of the fast charging stations to help cover costs in early years when stations may not be used as much as in the future. In Phase II, should MPCA fund ongoing maintenance of stations?
21. In Phase I, MPCA covered a maximum of 80% of project costs, up to \$170,000 for total project costs per 150 kW fast charging station or \$70,000 of the costs per 50 kW station. Is that the correct match level? The MPCA could potentially fund more stations if it covered less of the cost of the stations: would applicants still be interested if the MPCA covered less of the cost?
22. Should MPCA require applicants to have station locations and mockups developed and submitted as part of the application process?
23. Phase I funding will provide a basic charging network along selected highways with stations 50-70 miles and only a single 50kW station at each location. Should MPCA offer funds for additional stations (creating backup or at new locations) along already-funded corridors?
24. Should MPCA offer funds to upgrade stations along already-funded corridors to have additional higher-powered stations? (This would be relatively be cost effective as the electrical power is already present.)

If MPCA decides to fund level 2 charging stations for Phase II:

25. In Phase I, MPCA considered multi-unit housing, public places, and work places equally in the scoring criteria. For Phase II should MPCA continue to consider them together or should we have separate amounts for certain use types?

Part 5: Heavy-duty electric vehicles and equipment

In Phase I, MPCA allocated 15% of the funds (\$1.76 million) to replacing heavy-duty diesel equipment with electric alternatives.

If MPCA decides to fund heavy-duty electric alternatives again:

26. How much of a financial incentive does MPCA need to offer to encourage the purchase of an EV over a traditionally fueled vehicle?
27. Should there be money set aside for the charging infrastructure of these vehicles?
28. Should money be set aside for electric school buses? If so, what level of funding (reimbursement percentage) is needed to incentivize the purchase of these buses, which are significantly more expensive than diesel and propane school buses?
29. Should funding be set aside for electric transit buses? If so, what level of funding (reimbursement percentage) is needed to incentivize the purchase of these buses, which are significantly more expensive than diesel and propane school buses?

Part 6: Heavy-duty on-road vehicles (trucks and transit buses)

In Phase I, MPCA allocated 35% of the funds (\$4.1 million) to replacing heavy-duty on-road diesel vehicles (trucks and transit buses). There are approximately 200,000 of these vehicles in Minnesota. Replacements partly funded by the settlement could be any diesel, propane, natural gas, electric, or a hybrid (gasoline vehicles are not eligible for funding under the federal settlement).

If MPCA decides to fund heavy-duty on-road vehicles again:

30. Should the MPCA continue to cap the grant amount available at \$40,000 or 25% of the total cost of the vehicles? Is more incentive needed to replace more expensive vehicles? For example a garbage truck costs \$265,000.
31. For Phase I, MPCA offered the same award amount (25% or \$40,000 max) for all fuel types (diesel, propane, natural gas, hybrid, or electric) for the replacement vehicles. However, alternative fuel vehicles (propane, natural gas, hybrid, electric) both achieve greater emission reductions than diesel and are more expensive than their diesel counterparts. Should we offer higher grant amounts to incentivize the purchase of alternative fuel vehicles?
32. The purpose of the settlement funds is to achieve diesel pollution reductions by retiring older, dirtier vehicles before they otherwise would have retired. In Phase I, MPCA allowed funding to go towards replacing trucks between model years 1992-2009. Should MPCA consider only allowing replacements of vehicles starting with model years 1995 or 1997 (instead of 1992), recognizing that vehicles older than this should have been replaced already? Should the MPCA consider offering a smaller financial incentive for replacing the oldest trucks?

Part 7: School buses

In Phase I, MPCA allocated 20%, or \$2.35 million to replacing diesel school buses. Replacements partly funded by the settlement could be any diesel, propane, natural gas, electric, or a hybrid (gasoline vehicles are not eligible for funding under the federal settlement).

33. During Phase I, MPCA received significantly more applications for school bus replacements than we had funding to cover. Does this level of interest indicate that MPCA could have offered a lower amount of funding per bus and therefore replaced more buses? Should MPCA adjust the amount of reimbursement funding offered for each bus?

34. For Phase I, MPCA offered the same award amount for all fuel types (diesel, propane, natural gas, hybrid, or electric) for the replacement vehicles. However, alternative fuel vehicles (propane, natural gas, hybrid, electric) both achieve greater emission reductions than diesel and are more expensive than their diesel counterparts. Should we offer higher grant amounts to incentivize the purchase of alternative fuel vehicles?

Part 8: Heavy-duty, off-road equipment and engines

In Phase I, MPCA allocated 15%, or \$1.76 million to replacing diesel heavy-duty, off-road equipment and engines. Replacements partly funded by the settlement could be any diesel, propane, natural gas, electric, or a hybrid (gasoline equipment are not eligible for funding under the federal settlement).

35. For Phase I, MPCA offered the same award amount for all fuel types (diesel, propane, natural gas, hybrid, or electric) for the replacement vehicles. However, alternative fuel vehicles (propane, natural gas, hybrid, electric) both achieve greater emission reductions than diesel and are more expensive than their diesel counterparts. Should we offer higher grant amounts to incentivize the purchase of alternative fuel vehicles?
36. During Phase I, off-road equipment and engine replacements achieved the largest and most cost-effective emissions reductions of any funded projects. What could the MPCA do to encourage more owners of this type of equipment to apply for funding?