

Combustion Freight and Marine Projects

Summary of Appendix D-4 Funding Requests

The California Air Resources Board (CARB) is submitting the attached five funding requests (D-4s) covering all potential Eligible Mitigation Actions (EMAs) under California's Combustion Freight and Marine and Zero-Emission Class 8 projects, funding categories specifically identified in the State's Beneficiary Mitigation Plan (Plan). Each D-4 represents one of the following EMAs:

CFM and ZE Class 8 EMAs	Estimated Equipment Amount from Trust	Estimated Admin Amount from Trust	Estimated Total Amount from Trust
EMA 1: Class 8 Freight and Port Drayage Trucks	\$17,151,963.00	\$3,328,884.87	\$20,480,847.87
EMA 3: Freight Switchers	\$35,374,920.00	\$3,385,246.92	\$38,760,166.92
EMA 4: Ferries/Tugs	\$15,293,124.00	\$2,108,373.03	\$17,401,497.03
EMA 6: Class 7 Local Freight Trucks	\$2,575,112.00	\$868,063.40	\$3,443,175.40
EMA 1: ZE Class 8 Freight and Port Drayage Trucks	\$79,604,881.00	\$7,960,488.10	\$2,903,950.68

California's Plan originally allocated \$60 million in vehicle and equipment funding for Combustion Freight and Marine Projects, with up to an additional 15 percent allocation for a reserve that includes administrative costs. California's plan also allows for up to 20 percent of a project category to be moved without CARB Board approval. This D-4 reallocation submission shifts 11.55 percent out of Zero-Emission Class 8 Trucks into Combustion Freight and Marine's EMA 3 for zero-emission Freight Switchers and shifts funds from EMAs 1 and 6 to EMAs 3 and 4. In total, the attached D-4s budget for Combustion Freight and Marine is \$70,395,199 for vehicle and equipment funding and \$9,690,568.22 for administrative costs, for an overall project funding category total of \$80,085,687.22.

Each D-4 is a stand-alone funding request, as required by the Trustee. As stated in CARB's Plan, at least two statewide solicitations, each containing all 4 EMAs, will be released two years apart. Therefore, CARB developed a funding scenario that takes into account the all-electric engine, Tier 4 hybrid engine, compressed natural gas (CNG) engine, and vehicle technology readiness for heavy-duty applications; their current market demand; the cost-effectiveness of each of the four EMAs; the regulatory requirements already in place for each; and funding available through other CARB-implemented programs. The individual D-4s represent the estimates based on that funding scenario.

Developing and implementing the programs for the Combustion Freight and Marine Projects and Zero-Emission Class 8 Freight and Port Drayage Truck is a labor-intensive process, which includes, but is not limited to, conducting a public process, meetings, and outreach; developing solicitation materials; and scoring applications. This results in administrative costs for every potential EMA, regardless of whether or not the EMA is ultimately funded. However, once projects are selected following the solicitations, CARB will amend the D-4s as necessary. For any EMAs that are not selected, CARB will ensure that any unspent administrative costs previously disbursed from the Trust will be returned, and new funding requests for the appropriate EMAs will be submitted.

CARB requests that all five of the attached D-4s be processed simultaneously if possible. This will help us and the third-party administrator in tracking the pending requests and keeping the D-4s for this multiple-EMA project funding category together.

APPENDIX D-4
Beneficiary Eligible Mitigation Action Certification

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary _____

Lead Agency Authorized to Act on Behalf of the Beneficiary _____
(Any authorized person with delegation of such authority to direct the Trustee delivered to the Trustee pursuant to a Delegation of Authority and Certificate of Incumbency)

Action Title:	
Beneficiary's Project ID:	
Funding Request No.	(sequential)
Request Type: (select one or more)	<input type="checkbox"/> Reimbursement <input type="checkbox"/> Advance <input type="checkbox"/> Other (specify): _____
Payment to be made to: (select one or more)	<input type="checkbox"/> Beneficiary <input type="checkbox"/> Other (specify): _____
Funding Request & Direction (Attachment A)	<input type="checkbox"/> Attached to this Certification <input type="checkbox"/> To be Provided Separately

SUMMARY

Eligible Mitigation Action <input type="checkbox"/> Appendix D-2 item (specify): _____ Action Type <input type="checkbox"/> Item 10 - DERA Option (5.2.12) (specify and attach DERA Proposal): _____
Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1):
Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):
Estimate of Anticipated NOx Reductions (5.2.3):
Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure Compliance with Applicable Law (5.2.7.1):
Describe how the Beneficiary will make documentation publicly available (5.2.7.2).
Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8).
Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9).

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

ATTACHMENTS
(CHECK BOX IF ATTACHED)

- ☐ **Attachment A** **Funding Request and Direction.**
- ☐ **Attachment B** **Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline (5.2.4).**
- ☐ **Attachment C** **Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11).**
- ☐ **Attachment D** **Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6). [Attach only if project involves vendor expenditures exceeding \$25,000.]**
- ☐ **Attachment E** **DERA Option (5.2.12). [Attach only if using DERA option.]**
- ☐ **Attachment F** **Attachment specifying amount of requested funding to be debited against each beneficiary's allocation (5.2.13). [Attach only if this is a joint application involving multiple beneficiaries.]**

CERTIFICATIONS

By submitting this application, the Lead Agency makes the following certifications:

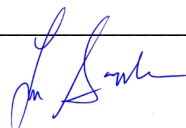
- 1. This application is submitted on behalf of Beneficiary _____, and the person executing this certification has authority to make this certification on behalf of the Lead Agency and Beneficiary, pursuant to the Certification for Beneficiary Status filed with the Court.**
- 2. Beneficiary requests and directs that the Trustee make the payments described in this application and Attachment A to this Form.**
- 3. This application contains all information and certifications required by Paragraph 5.2 of the Trust Agreement, and the Trustee may rely on this application, Attachment A, and related certifications in making disbursements of trust funds for the aforementioned Project ID.**
- 4. Any vendors were or will be selected in accordance with a jurisdiction's public contracting law as applicable. (5.2.5)**
- 5. Beneficiary will maintain and make publicly available all documentation submitted in**

support of this funding request and all records supporting all expenditures of eligible mitigation action funds subject to applicable laws governing the publication of confidential business information and personally identifiable information. (5.2.7.2)

DATED: _____

[NAME]

[TITLE]



[LEAD AGENCY]

for

[BENEFICIARY]

BENEFICIARY ELIGIBLE MITIGATION ACTION CERTIFICATION

Beneficiary: State of California

Lead Agency: California Air Resources Board

Action Title:	Combustion Freight/Marine – Switchers
Beneficiary's Project ID:	SCAQMD – Comb Freight/Marine – Switchers
Funding Request No.	(<i>sequential</i>) 2

SUMMARY

Explanation of how funding request fits into Beneficiary's Mitigation Plan (5.2.1):

California developed a Beneficiary Mitigation Plan (Plan) with valuable public input with a priority to fully mitigate the excess NOx caused by Volkswagen's illegal actions while furthering the State's progress toward its zero-emission vehicle and climate protection goals. The Plan specifically identifies combustion freight and marine projects as a project funding category for the State's Environmental Mitigation Trust allocation. Within that project funding category, the Plan specifically identifies freight switcher locomotive replacements or engine repowers with a Tier 4 or cleaner engine as an eligible project type. Note that the Plan's funding category also includes other combustion freight and marine Eligible Mitigation Actions (EMAs), which will be solicited together with this EMA, but for which separate D-4s are being submitted. This funding request for Tier 4 or cleaner freight switcher locomotives and engine repowers is part of the overall program to replace older freight and marine equipment with lower emission technologies. These actions will support early adoption of advanced technologies while reducing community health impacts from large freight facilities.

The Plan originally allocated \$60 million in vehicle and equipment funding for the combustion freight and marine project funding category with up to an additional 15 percent allocation for a reserve that includes administrative costs. The following amendments include shifting \$28,532,802.13 out of EMA 1 and \$10,463,393.60 out of EMA 6, to EMAs 3 and 4. Additionally, \$11,813,840.22 is to be moved from Zero-Emission Class 8 Trucks into EMA 3, Freight Switchers, increasing the total Combustion Freight and Marine project category to \$80,085,687.22.

Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):

Freight switcher locomotive owners will be offered funding opportunities to scrap and replace older, dirtier switcher locomotives and engines with lower emission units certified to the Tier 4 engine standard, or cleaner. Funding for these potential projects will be available at the same time as other combustion freight and marine projects (including ferry, tugboat, and towboat repowers; Compressed Natural Gas (CNG) Class 7 freight trucks and engine repowers; and CNG Class 8 freight trucks and engine repowers). The most cost-effective, eligible projects across all of the above equipment types will be funded. The South Coast Air Quality Management District (SCAQMD) will administer the funding statewide with CARB providing program and fiscal oversight. As stated above, administrative costs will be additional and will not exceed 15 percent.

The switcher replacements or repowers funded in this category will reduce NOx emissions, diesel particulate matter, and other harmful pollutants. The solicitations for this project will include criteria that

ensures that at least 50 percent of the overall equipment funds in this project funding category will go to projects that benefit disadvantaged or low-income communities.

Estimate of Anticipated NOx Reductions (5.2.3):

The funding for this project will result in an estimated 1,208 tons of NOx emission reductions for 21 switcher replacements or repowers over a 10-year period. Because this funding will be available at the same time as the other EMAs, and there are potentially three other EMAs that could also be funded within the funding category identified in California's Beneficiary Mitigation Plan, this estimation is the result of a funding scenario CARB developed for this Appendix D-4. The scenario takes into account the Tier 4 or cleaner engine and CNG technology readiness for heavy-duty applications; their current market demand; the cost-effectiveness of each of the four EMAs; the regulatory requirements already in place for each; and funding available through other CARB-implemented programs. The reductions resulting from this funding for Tier 4 or cleaner switcher replacements or repowers will be direct and surplus to regulatory requirements in place when the Plan was approved by the CARB Board.

Identification of Governmental Entity Responsible for Reviewing and Auditing Expenditures of Eligible Mitigation Action Funds to Ensure compliance with Applicable Law (5.2.7.1):

California Air Resources Board

Describe how the Beneficiary will make documentation publicly available (5.2.7.2):

As the lead agency acting on the Beneficiary's (California's) behalf, CARB has established a website for the State's implementation of its Trust allocation: <https://ww2.arb.ca.gov/our-work/programs/volkswagen-environmental-mitigation-trust-california>. The website includes the Beneficiary Mitigation Plan, an opportunity for the public to subscribe to an email list for announcements regarding Plan implementation, meeting schedules and materials, and information to assist funding applicants. CARB will additionally post to the website all approved funding requests, semi-annual reports to the Trustee, and annual reports to the State Legislature. CARB will provide access to all public records upon request unless the law provides an exemption from disclosure.

Describe any cost share requirement to be placed on each NOx source proposed to be mitigated (5.2.8):

Trust funds will provide up to \$1,620,000 for a Tier 4 or cleaner switcher replacement or repower. Actual equipment costs are expected to be significantly higher than will be provided by the Trust, resulting in a significant per-switcher cost share. As required by the Consent Decree, total Trust funding per unit must not exceed 40 percent for non-government owned switcher repowers, 25 percent for non-government owned switcher replacements, and 100 percent for government owned switcher replacements and repowers.

Describe how the Beneficiary complied with subparagraph 4.2.8, related to notice to U.S. Government Agencies (5.2.9):

On February 16, 2018, CARB emailed and mailed notification letters to the government agency contacts listed in subparagraph 4.2.8. Each notification letter included information on fund availability, a description of the administration process, and instructions on accessing more information via CARB's website and subscribing to CARB's email list to remain informed.

If applicable, describe how the mitigation action will mitigate the impacts of NOx emissions on communities that have historically borne a disproportionate share of the adverse impacts of such emissions (5.2.10).

Replacing older, high-emitting switchers or their engines with lower emission Tier 4 or cleaner engines will result in improved ambient air quality and human health in communities located in nonattainment areas, in areas with historical air quality issues, and in disadvantaged or low-income areas that bear a disproportionate share of the air pollution burden. At the same time, this funding will provide benefits to the local economy and the welfare of residents in those communities. California Senate Bill 92 (Committee on Budgets and Fiscal Review, Chapter 26, Statutes of 2017) requires CARB to ensure that 35 percent of the State's Trust allocation benefit disadvantaged or low-income communities. As stated above, at least 50 percent of the overall equipment funds in this project funding category is expected to benefit disadvantaged or low-income communities.

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Attachment B

Eligible Mitigation Action Management Plan Including Detailed Budget and Implementation and Expenditures Timeline

Project Management Plan

Project Schedule and Milestones

Task	Start Date	Completion Date
Project Planning and Development	October 2017	December 2019
Solicit for Applications (includes outreach to potential applicants)	Fall 2019	June 2020
Application Selection for Projects to be Funded	December 2019	September 2020
Quarterly and Semi-Annual Reports	Every 3-6 months or when requesting additional funds, whichever is sooner, through completion of the project	
Generate Contracts for Selected Applicant(s)	December 2019	September 2020
	December 2021	February 2023
Repeat Solicitation and contracts with selected applicant(s) as needed if unspent direct project funds remain	March 2024	June 2025
Project monitoring, inspections, oversight	December 2019	December 2027
Final Report		May 2028

Project Budget

Period of Performance: Oct 2017 - May 2028			
Category	Total Approved Budget	Share of Total Budget to be Funded by the Trust	Cost Share (if applicable)
Equipment	\$35,374,920.00	\$35,374,920.00	
SCAQMD Administrative Costs Program development, outreach, administration	\$2,060,199.50	\$2,060,199.50	
CARB Administrative Costs Program planning, development, oversight	\$1,325,047.42	\$1,325,047.42	
Total	\$38,760,166.92	\$38,760,166.92	

The above funding amounts estimates that 21 switcher replacements or repowers will be funded. The budgeted equipment funds above will provide up to \$1,620,000 for each switcher replacement or repower to a certified Tier 4 or cleaner switcher or engine. As required by the Consent Decree, total Trust funding per switcher replacement will not exceed 25 percent for non-government owned units and 100 percent for government owned units; total Trust funding per switcher repower will not exceed 40 percent for non-government owned units and 100 percent for government owned units. California's Beneficiary Mitigation Plan specifies this

project funding category will be available in two separate solicitations. The first drawdown of funds for 2019 includes administrative costs for program planning, development, outreach, solicitations, and application scoring for the first installment. Equipment costs and additional administrative costs will be requested in subsequent drawdowns.

Budget Attachment

EMA 3 - Freight Switchers	Est. Number of Units	Est. Equip. Funds from Trust	Estimated Cost Share	Est. Total Equipment Cost
	21	\$35,374,920.00	\$13,650,000.00	\$49,024,920.00

SCAQMD Estimated Administrative Costs

	2018-June 2024	2024	2025	2026	2027	2028	Total
Estimated costs (including indirect costs for admin, supplies, facilities, outreach, subcontracts, workshops, media, meetings, travel, etc.)	\$187,500.00	\$374,539.00	\$374,539.00	\$374,539.00	\$374,539.00	\$374,543.50	\$2,060,199.50
Total Estimated SCAQMD Admin	\$187,500.00	\$374,539.00	\$374,539.00	\$374,539.00	\$374,539.00	\$374,543.50	\$2,060,199.50

CARB Estimated Administrative Costs

	2018-June 2024	2024	2025	2026	2027	2028	Total
Estimated Staffing Costs (including indirect costs for admin, supplies, facilities, travel, etc.)	\$28,782.26	\$259,253.03	\$259,253.03	\$259,253.03	\$259,253.03	\$259,253.04	\$1,325,047.42
Total CARB Estimated Admin	\$28,782.26	\$259,253.03	\$259,253.03	\$259,253.03	\$259,253.03	\$259,253.04	\$1,325,047.42
Total Combined Estimated Admin	\$216,282.26	\$633,792.03	\$633,792.03	\$633,792.03	\$633,792.03	\$633,796.54	\$3,385,246.92
Total Estimated Trust Funds (Equip + Admin)							\$38,760,166.92

Attachment C

Detailed Plan for Reporting on Eligible Mitigation Action Implementation (5.2.11)

As the Lead Agency acting on California's behalf, CARB will provide reporting on eligible mitigation action implementation in three ways: 1) semi-annual reports to the Trustee as required by subparagraph 5.3 of the Environmental Mitigation Trust Agreement for State Beneficiaries; 2) annual reports to the State Legislature as required by California Senate Bill 92 (Committee on Budgets and Fiscal Review, Chapter 26, Statutes of 2017); and 3) timely updates to CARB's Mitigation Trust implementation website at <https://ww2.arb.ca.gov/our-work/programs/volkswagen-environmental-mitigation-trust-california>.

Attachment D

Detailed cost estimates from selected or potential vendors for each proposed expenditure exceeding \$25,000 (5.2.6)

Equipment Category	Estimated Cost
Freight Switcher Repower	\$120,000 - \$150,000 plus installation
Freight Switcher Replacement	~ \$2,000,000

Cost estimates are per unit were provided by technology providers or from information received for other CARB-implemented funding programs or technology assessments. More detailed cost estimates will be obtained at the time of contract.