Zero-Emission Freight and Marine Project Summary of Appendix D-4 Funding Requests

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

	Estimated Equipment Amount from Trust	Estimated Admin Amount from Trust	Estimated Total Amount from Trust		
EMA 4: Ferries/Tugs	\$32,429,000.00	\$4,358,364.23	\$36,787,364.23		
EMA 5: Ocean Going Vessels Shorepower	\$15,100,750.00	\$2,076,231.00	\$17,176,981.00		
EMA 7: Airport Ground Support Equipment	\$520,400.00	\$171,910.77	\$692,310.77		
EMA 8: Forklifts and Port Cargo Handling Equipment	\$21,949,850.00	\$3,017,927.00	\$24,967,777.00		

California's Plan allocates \$70 million in vehicle and equipment funding for Zero- Emission Freight and Marine Projects, with up to an additional 15 percent allocation for a reserve that includes administrative costs. In total, the attached D-4s budget \$70 million for vehicle and equipment funding and \$9,624,433 for administrative costs, for an overall project funding category total of \$79,624,433.

Each D-4 is a stand-alone funding request, as required by the Trustee. As stated in CARB's Plan, the third-party administrator will conduct one or more solicitations with funding available statewide. CARB has developed a funding scenario that takes into account the zero-emission technology readiness for these heavy-duty applications; their current market demand; the cost-effectiveness of each of the four EMAs; the regulatory requirements already in place for each; demand for equipment; and funding available through other CARB-implemented programs. The individual D-4s represent the estimates based on that funding scenario.

Developing the Zero-Emission Freight and Marine Projects program 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 four 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							
beneficiary							
	Act on Behalf of the Beneficiary						
	delegation of such authority to direct the Trustee delivered to the						
Trustee pursuant to a Delega	tion of Authority and Certificate of Incumbency)						
Action Title:							
Beneficiary's Project ID:							
Funding Request No.	(sequential)						
Request Type:	☐ Reimbursement ☐ Advance						
(select one or more)	Other (specify):						
Payment to be made to:	☐ Beneficiary						
(select one or more)	☐ Other (specify):						
Funding Request &	☐ Attached to this Certification						
Direction (Attachment A)	☐ To be Provided Separately						
	SUMMARY						
	Appendix D-2 item (specify):						
Action Type ☐ 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):						
D. C. C. C. C.							
Detailed Description of Mitig	Detailed Description of Mitigation Action Item Including Community and Air Quality Benefits (5.2.2):						
Estimate of Anticipated NOx Reductions (5.2.3):							
	al Entity Responsible for Reviewing and Auditing Expenditures of Eligible						
Mitigation Action Funds to E	Ensure Compliance with Applicable Law (5.2.7.1):						
Describe how the Beneficiary will make documentation publicly available (5.2.7.2).							
Describe only cost shows requirement to be plead on each NOv source and delicated (# 2.0)							
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:	ZE Freight/Marine – GSE				
Beneficiary's Project ID:	BAAQMD – ZE Freight/Marine – GSE				
Funding Request No.	(sequential) 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 zero-emission 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 airport ground support equipment (GSE) as an eligible project type. Note that the Plan's funding category also includes other zero-emission freight Eligible Mitigation Actions (EMAs), which will be solicited together with this EMA, but for which separate D-4s will be submitted. This funding request for airport GSE is part of the overall program to invest in zero-emission freight and marine projects. These actions will support early adoption of zero-emission and zero-emission enabling technologies while reducing community health impacts from large freight facilities. The Plan allocates \$70 million in vehicle and equipment funding for the project funding category with up to an additional 15 percent allocation for a reserve that includes administrative costs.

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

Airport GSE owners will be offered funding opportunities to scrap and replace older internal combustion GSE with zero-emission technologies. California will provide funding opportunities via multiple solicitations. The Bay Area Air Quality Management District (BAAQMD) 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.

Only GSE vehicles that are compliant with regulations at the time of application are eligible for funding. The GSE replacements funded in this category will reduce NOx emissions, diesel particulate matter, greenhouse gases, and other harmful pollutants. Funding in this category is expected to help drive wide-scale adoption of zero-emission technologies in a sector that has typically relied on conventional diesel technologies. These deployments will help to act as models for other freight applications to encourage zero-emission transformation. The solicitations for this project will include criteria that ensures that at least 75 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 these vehicles will result in an estimated 2.4 tons of NOx emission reductions for about 8 GSE vehicles over a 10-year period. Because this funding will be solicited in multiple installments, and there are potentially three other eligible mitigation actions (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 zero-emission 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 airport GSE will be direct and surplus to regulatory requirements.

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 (CARB)

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):

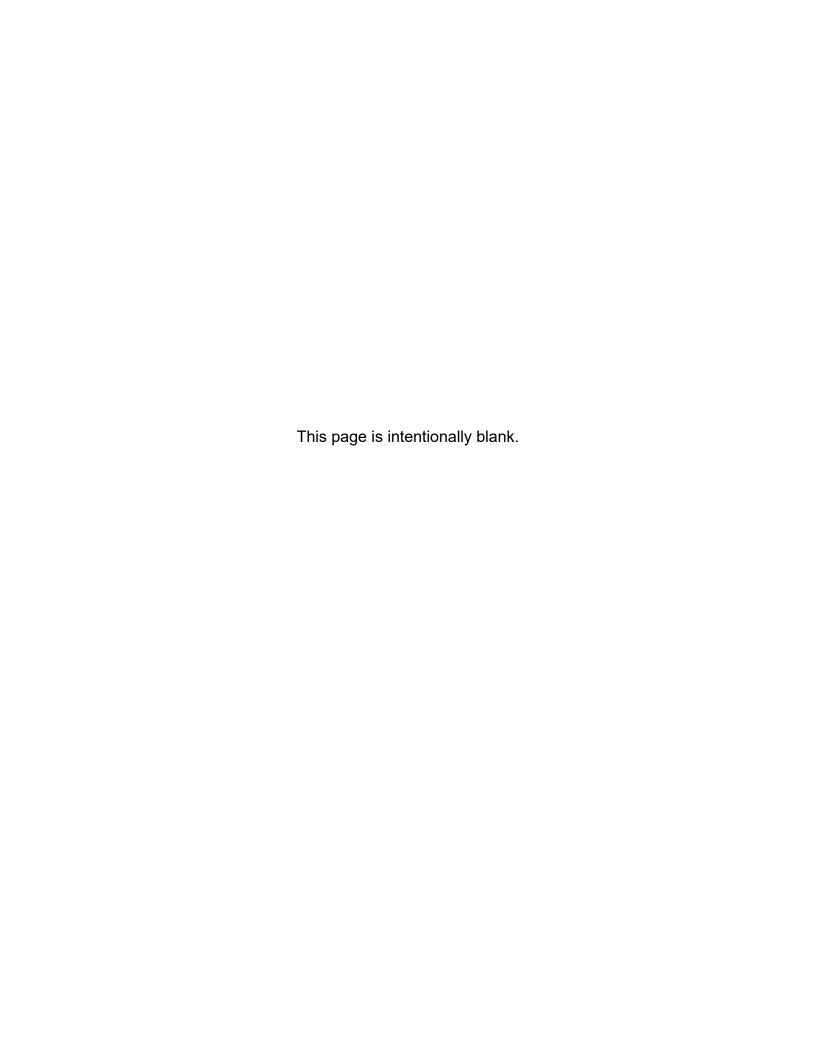
Trust funds will provide up to the full cost-effective amount of a new zero-emission airport GSE vehicle compared to a conventionally-fueled unit. CARB has estimated this to be between \$30,000 and \$100,000, with the average being about \$60,000 per piece of equipment; however, amounts will vary according to the type of GSE to be funded. Actual equipment costs are significantly higher than will be provided by the Trust, resulting in a significant per-vehicle cost share. As required by the Consent Decree, total Trust funding per GSE must not exceed 75 percent for non-government owned GSE and 100 percent for government owned GSE.

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 airport GSE with zero-emission technologies 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 75 percent of the overall equipment funds in this project funding category is expected to benefit disadvantaged or low-income communities.



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	June 2020			
Solicit for Applications (includes outreach to potential applicants)	Fall 2019	June 2020			
Application Selection for Projects to be Funded	December 2019	September 2027			
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 2026			
Repeat Solicitation and contracts with selected applicant(s) as needed if unspent direct project funds remain	Summer 2023	July 2027			
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	\$520,400.00	\$520,400.00						
BAAQMD Administrative Costs Program development, outreach, administration	\$52,040.00	\$52,040.00						
CARB Administrative Costs Program planning, development, oversight	\$119,870.77	\$119,870.77						
Total	\$692,310.77	\$692,310.77						

CARB estimates that about 8 airport GSE will be funded. The budgeted equipment funds above will provide up to full cost-effective amount of a new zero-emission airport GSE vehicle compared to a conventionally-fueled unit. CARB has estimated this to be about \$60,000 per vehicle, but amounts will vary according to the type of GSE to be funded. Remaining equipment costs come from the GSE owner. As required by the Consent Decree, total Trust funding per GSE will not exceed 75 percent for non-government owned units and 100 percent for government owned units. California's Beneficiary Mitigation Plan specifies this overall project funding category will be solicited in multiple solicitations. The first drawdown of funds for 2019 includes administrative costs for program planning, development, outreach, solicitations, and application scoring for the first solicitation. Equipment costs and additional administrative costs will be requested in subsequent drawdowns.

Budget Attachment

EMA 7 - Airport GSE	Est. Number of Units	ı	quipment unds from Trust 520,400	Estimated Cost Share \$ 130,000		Est. Total uipment Cost 650,400					
BAAQMD Estimated Administrative Costs		Г						_		г	Total
	2018-June 2024		2024	2025		2026	2027		2028		Total
Estimated costs (including indirect costs for admin, supplies, facilities, etc.)	\$ 52,040.00	\$	-	\$ -	\$	-	\$ -	\$	-	\$	52,040.00
Total BAAQMD Estimated Admin	\$ 52,040.00	\$	-	\$ -	\$	-	\$ -	\$	-	\$	52,040.00
CARB Estimated Administrative Costs							Total				
	2018-June 2024		2024	2025		2026	2027		2028		TOLAI
Estimated Staffing Costs (including indirect costs for admin, supplies, facilities, travel, etc.)	\$ 119,870.77	\$	-	\$ -	\$	-	\$ -	\$	-	\$	119,870.77
Total CARB Estimated Admin	\$ 119,870.77	\$	-	\$ -	\$	-	\$ -	\$	-	\$	119,870.77
Total Combined Estimated Admin	\$ 171,910.77	\$	-	\$ -	\$	-	\$ -	\$	-	\$	171,910.77
Total EstimatedTrust Funds (Equip + Admin)										\$	692,310.77

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
Airport GSE	\$30,000 - \$100,000

Cost estimates above are per unit incremental costs for zero-emission GSE compared to conventionally-fueled GSE and were extracted from information received for other CARB-implemented funding programs and regulations. Airport GSE types include, but are not limited to, aircraft tractors, baggage tugs, cargo loaders, cargo tractors, lifts, and sweepers.