

To: Jessica Bautista, Port of Los Angeles

From: Meghan Reese, HCBF Interim Executive Director

Date: July 15, 2024

Subject: Air Quality Mitigation Program - Round 3 Grant Award, Transfer of Trust Funds

INTRODUCTION

Harbor Community Benefit Foundation (HCBF) is the administrator of the Independent Air Quality Mitigation Fund (AQMF), in accordance with Resolution 21-9929, APPROVAL OF THE MEMORANDUM OF AGREEMENT (MOA) WITH THE HARBOR COMMUNITY BENEFIT FOUNDATION AND CHINA SHIPPING PETITIONERS NAMING HARBOR COMMUNITY BENEFIT FOUNDATION AS ADMINISTRORS OF THE AIR QUALITY MITIGATION FUND. As of November 4, 2021 the MOA between the parties was in effect for 5 years, ending May 31, 2026.

As stated in the MOA, the California Community Foundation (CCF) serves as the independent financial manager of the AQMF trust fund. As stipulated in the MOA, the Port of Los Angeles Board of Harbor Commissioners (BOHC) must approve requests for funding disbursements.

SUMMARY

In accordance with Resolution 21-9929, the Operating Agreement of the China Shipping Memorandum of Understanding, Section 5.f.vi Presentation of HCBF Proposals to the Board of Commissioners (BOHC), the Harbor Community Benefit Foundation hereby submits a request to approve a transfer of funds from the Air Quality Mitigation Fund (AQMF) in support of its Air Quality Mitigation Grant Program.

As of May 31, 2024 combined funds held in the trust fund and the program fund, available for Port of Los Angeles-related emissions reduction projects and programs, equaled \$2,442,662.93.

Harbor Community Benefit Foundation hereby requests the BOHC to:

- 1. Concur with the HCBF Board-approved action to fund Round 3 of the Air Quality Mitigation Program, in the amount of \$2,116,183.74 for projects to reduce port-related air emissions in the San Pedro Bay area, awarding an equal share of \$705,394.58 to each of the three grantees: AERAS, STAX, and 4G Management, Inc.
- 2. Approve the transfer of funds from the Air Quality Mitigation Fund to HCBF, in one lump sum, not-to-exceed \$2,327,802.11, including a 10% administrative fee of \$211,618.37, by issuing a joint letter of authorization to California Community Foundation (CCF), the independent Financial Manager, to be executed by a) the BOHC, or its designee, and b) the Interim Executive Director of Harbor Community Benefit Foundation.

BACKGROUND

The Air Quality Mitigation Fund program provides approximately \$5 million in total for projects to reduce port-related air emissions in the San Pedro Bay area.

The goal of the AQMF Grant Program is to support viable technology companies in reducing port-related air emissions from cargo transport and handling within 25 miles of the San Pedro Bay throughout the duration of the project. Achieving a high rate of success makes it likely that these companies will continue reducing emissions well beyond the grant period.

As specified in Resolution 21-9929, the Memorandum of Agreement:

HCBF Role and Responsibilities - HCBF is an independent legal entity that serves as the neutral, third-party to administer the AQMF and solicit, develop, and select projects for grant funding. HCBF must request the BOHC to approve the selected projects and approve a transfer of funds from the AQMF to fund grant awards. All awards must be Tidelands Trust-compliant and meet the following MOU requirements:

Project Requirements- HCBF shall administer the monies in the AQMF special program account exclusively for projects that are reasonably calculated to reduce Port-related air emissions. This includes emissions resulting from the transport and handling of cargo within, into, out of, to, or from the Port of Los Angeles, including cargo transport and handling by ships, harbor craft, trucks, locomotives, or cargo handling equipment.

HCBF shall prioritize funding the demonstration or implementation of zero or near-zero emission freight movement technologies and other emerging technologies that seek to demonstrate significant emissions reductions from conventional diesel-fueled vehicles and equipment that operate in and around the Port (including ships, harbor craft, trucks, locomotives, or cargo handling equipment).

Not less than a majority of AQMF funds shall be spent towards the demonstration or implementation of such technologies. Priority shall also be given to technologies that, if they were widely deployed, would significantly reduce air emissions and/or air quality related health risks from the largest sources of air pollution from port operations, namely ships, harbor craft, trucks, locomotives, or cargo handling equipment.

Geographical Boundaries- The projects funded by the AQMF are expected primarily to benefit the communities of San Pedro and Wilmington. Projects funded by HCBF shall demonstrate achievable emissions reduction benefits in communities within approximately 25 miles of the San Pedro Bay, with a primary benefit occurring in the communities of San Pedro and Wilmington, although the benefits may also extend beyond the 25-mile boundary.

Other Criteria. HCBF shall consult with the Petitioners and City regarding HCBF's criteria, including sharing draft criteria with the Petitioners and City and soliciting the Petitioners' and City's input. Such criteria shall include the organizational capacity of the applicant to complete the project, the benefits of the project, the project's community impact, cost-effectiveness,

feasibility, potential for reducing emissions and/or health risks, the project's potential to advance deployment of near zero or zero emission technologies or emerging technologies, whether the project is or will receive other additional funding such that the AQMF funds are being leveraged, and other relevant criteria to ensure reduction of Port-related air emissions.

HCBF carefully monitors each funded project by requesting monthly reports and milestone reports, which serve as the basis for disbursements, as well as final reports. This diligent oversight ensures projects stay on track and achieve their intended outcomes.

AIR QUALITY MITIGATION FUND GRANTS - ROUND 1 & 2 RECAP

Round 1

The AQMF program aimed to fund projects presenting technology ready for demonstration to reduce Port-related air emissions. Proposed projects included zero-emission, near-zero emission, or emission reduction technologies in all source categories. These projects needed to demonstrate emissions reduction benefits within a 25-mile boundary of San Pedro Bay, though benefits could extend beyond this limit.

The program had an estimated funding availability of \$5,000,000, with expectations to award one or more cooperative agreements. Eligible applicants who passed the initial screening were invited to submit full proposals, requiring a demonstration or implementation partner within the 25-mile boundary of San Pedro Bay, such as a terminal operator or shipping line.

To solicit qualified projects for funding, staff and a technical consultant (Kat Janowicz from 3COTECH, Inc.) hosted a webinar to provide background on the program and to share information about the application process. Resources and insights from the webinar were shared on the AQMF webpage.

Eligible projects focused on demonstrating or implementing zero or near-zero emission freight movement technologies, significantly reducing emissions from diesel-fueled vehicles and equipment operating in and around the Port. These technologies, if widely deployed, would significantly reduce air emissions and health risks from major port pollution sources, including ships, harbor craft, trucks, locomotives, and cargo handling equipment. All projects complied with the City of Los Angeles Tidelands Trust Grant Act, federal, state, and local laws, and the China Shipping Amended Stipulated Judgment. Ineligible projects included technologies not applicable to port-related freight movement, fuel additives, and technologies in the conceptual or R&D phase.

Awardee

Upon review and deliberation of Staff's recommendation, the HCBF Board of Directors approved funding one application to Effenco Development Inc. totaling \$823,050. The program was approved by the Board of Harbor Commissioners on November 21, 2019. The project aimed to demonstrate that Effenco's Active Stop-Start electric hybrid technology was efficient, cost-effective, and scalable to significantly reduce yard tractor emissions in the San Pedro Bay Port Complex while providing immediate fuel savings. The systems offered to reduce engine

operating hours, maintenance costs, and noise. Zero-emission operation was expected to become possible in the next phases of technology development. The project included a full operations demonstration of Effenco's Active Stop-Start, a zero-emission idling technology for vocational trucks like port terminal tractors, retrofitting a total of 16 tractors to demonstrate the technology on a meaningful number of vehicles. Effenco's project partner was Yussen Terminals at the Port of LA (YTI).

The initial project duration was approximately one year, with eight months of in-service operations, and included in-use emission testing using portable emission measuring systems. The Active Stop-Start System™ allowed immediate reduction of criteria and GHG emissions without waiting for fleet renewal. Its cost-effectiveness and the lack of infrastructure requirements set the stage for large deployment and rapid adoption. This led to an immediate and significant impact, with potential installation on all yard tractors, both new and existing, reducing thousands of tons of GHG and emissions otherwise not tackled by other technologies, although it required vehicle upgrades.

Effenco faced three significant challenges. The first was the impact of the global pandemic, causing seventeen months of lockdowns, quarantines, production shutdowns, and shipment delays, leading to substantial project delays and increased expenses. The second challenge involved the installation of the units. Initially, Effenco planned to tow vehicles off-site for installation under direct supervision. However, due to PCMC's acquisition of TESI and YTI's requirement that installations be performed by in-house PCMC union mechanics, Effenco couldn't control the installation timing, quality, or cost, resulting in unexpected expenses. The third challenge was vehicle operations. Unlike other terminals, it was difficult to train the large pool of rotating drivers at Southern California ports and ensure they avoided idling, leading to inconsistent usage and unreliable data. Effenco was unaware of the rotation of union workers when working on the proposal.

Despite these challenges, the project did achieve success in technology performance, installation expertise, and initial operational results. The Effenco Active Stop-Start electric hybrid technology performed well in the demanding terminal environment. YTI management expressed continued interest in the technology, believing it could significantly reduce their GHG emissions. Despite delays and initial issues, YTI fully supported the project. The Effenco systems achieved the expected results when fully operational through a shift, with predictions from the initial proposal expected to be met once additional vehicles were running and in use throughout full shifts. Towards the end of the grant term, Effenco filed for bankruptcy, which impacted the overall trajectory and future inclusion of the project in subsequent rounds.

Round 2

In accordance with Resolution 21-9929, the Operating Agreement of the China Shipping Memorandum of Understanding, Section 5.f.vi Presentation of HCBF Proposals to BOHC, the Harbor Community Benefit Foundation submitted a request to approve a transfer of funds from the Air Quality Mitigation Fund in support of its Air Quality Mitigation Grant Program.

HCBF announced the availability of up to \$4 million in grants for Round 2 and released a

Request for Letters of Interest for the Air Quality Mitigation Fund Grant Program. To solicit qualified projects for funding, staff and technical consultant Kat Janowicz from 3COTECH, Inc. hosted a webinar to provide background on the program and to share information about the application process. Resources and insights from the webinar were shared on the AQMF webpage.

Round 2 applications were due in March 2022. Requests totaling four times the available funds were received.

Applications were reviewed by HCBF staff and its technical consultant, the HCBF Board ad-hoc committee, and an external review panel comprised of technical experts from SCAQMD, CARB, and community stakeholders. Assessment was based on responsiveness to the criteria stated in the RFP, organizational capacity, feasibility, budget, timeline, and project benefits to the community.

On March 16, 2023 the Board of Harbor Commissioners approved the Harbor Community Benefit Foundation request to fund Round 2 of the Air Quality Mitigation Program, allocating \$2,000,000 for projects aimed at reducing port-related air emissions in the San Pedro Bay area. They also approved the transfer of funds from the Air Quality Mitigation Fund to HCBF in one lump sum, not to exceed \$2,200,000, including an administrative fee of \$200,000. This transfer was executed through a joint letter of authorization to the California Community Foundation, the independent Financial Manager, signed by both the BOHC, or its designee, and the Executive Director of HCBF.

Awardee

The project, awarded to WattEV, successfully established the largest publicly available truck charging station at the Port of Long Beach and was commissioned on July 24, 2023. Strategically located at 2406 Pier A Way, Long Beach, CA, near significant access points to the San Pedro Bay Ports and crucial movement corridors, this station has an initial capacity of 5MW. The facility allows for simultaneous charging of up to 26 trucks, signifying a substantial stride in minimizing emissions within the South Coast Air Quality Management Plan developed by South Coast AQMD.

Throughout the project, WattEV focused on developing cost-effective and reliable charging solutions for heavy-duty electric vehicles (HDBEVs) through its Truck-as-a-Service (TaaS) initiative. Despite challenges such as the global pandemic and operational hurdles, WattEV completed the construction of the charging depot within a 14-month timeframe. The project received \$2,000,000 in grant funding from HCBF, disbursed in milestone payments.

Funding was used to deploy 13 360-kilowatt (kW) Combined Charging System (CCS) direct current fast chargers (DCFCs) as well as a 2.57-megawatt (MW) battery energy storage system (BESS). The initial state of infrastructure required extra efforts to stabilize the equipment's performance. WattEV made several changes to the charger configuration to ensure the chargers' availability and stable performance during charging sessions. Starting with a charger downtime of around 30%, the figure was successfully reduced to 10-15% by the time the final

report was made.

The successful completion of this project marked a significant milestone in advancing the electrification of the goods movement sector. It supported the broader goals of reducing emissions and enhancing environmental sustainability in the San Pedro Bay Port Complex.

ROUND 3

HCBF solicited applications from eligible entities for projects aimed at meeting the goals of the AQMF program. The objectives of the AQMF program included implementing programs, projects, and approaches to reduce Port-related air emissions in San Pedro and Wilmington or within a 25-mile boundary of the San Pedro Bay. AQMF Round 3 focused specifically on oceangoing vessels.

To solicit qualified projects for funding, staff and technical consultant Kat Janowicz from 3COTECH, Inc. hosted a webinar to provide background on the program and to share information about the application process. Resources and insights from the webinar were shared on the AQMF webpage.

Letters of Interest (LOI), submitted electronically, were released on December 21, 2022, and due on or before February 24, 2023. Staff received 4 LOIs which were then reviewed by HCBF Staff, the HCBF Board ad-hoc committee, and the technical consultant. Four qualified applicants were invited to submit a full application.

Full applications in response to the RFP were due by May 23, 2023. Four companies submitted full applications for review. Funding requests totaled \$15,476,500, nearly four times the available funds. An overview of the submissions is found in Appendix A.

All applications were reviewed by HCBF staff and its technical consultant, the HCBF Board adhoc committee, and an external review panel comprised of technical experts from SCAQMD, the CARB, and community stakeholders. HCBF also consulted with Port staff in the Environmental Division throughout the review process.

Assessment was based on responsiveness to the criteria stated in the RFP, organizational capacity, feasibility, budget, timeline, and project benefits to the community.

EVALUATION CRITERIA

To qualify, Applicants were required to prove that the project would benefit the communities of San Pedro and/or Wilmington or an area within a 25-mile radius of the Port of Los Angeles.

Standardized criteria were applied for evaluation of each application; the table can be found in TRANSMITTAL 2.

AD-HOC COMMITTEE & PANEL OF EXTERNAL REVIEWERS

Each round of funding decisions involved applications review by several entities. The HCBF

Board ad-hoc AQMF Review Committee met with HCBF staff and technical consultant Kat Janowicz to initially consider and evaluate grant applications. For Round 3, the HCBF Board ad-hoc AQMF Review Committee was comprised of Board Members Ed Avol (a USC Professor), Richard Havenick (a community stakeholder), and Jayme Wilson (a community stakeholder, local businessman, and member of LA County Supervisor Janice Hahn's staff).

HCBF established a panel of external reviewers to assist the ad-hoc committee in determining finalists for each round of funding. External reviewers consisted of stakeholders with demonstrated expertise in port-related technology, zero, near-zero emission and relevant emission reduction technology, AQMF MOA/China Shipping, and community impacts in San Pedro and Wilmington. The external review panel included representatives from government agencies (California Air Resources Board & South Coast Air Quality Management District), local residents, academic institutions, industry, and non-profit organizations.

The HCBF AQMF ad-hoc sub-committee carefully considered the comments and feedback from the external review panel and the technical consultant. HCBF staff conducted follow-up calls as necessary to answer questions posed either through evaluation or during ad-hoc committee review.

PUBLIC PRESENTATIONS - GRANT APPLICATION - FINALISTS

On October 28th, 2023 during a regularly scheduled board meeting, representatives from the four applications made ten-minute presentations to the Harbor Community Benefit Foundation (HCBF) Board of Directors, followed by five minutes of Q&A from the public.

The four companies that presented their proposals included: 4G Management Inc.
AERAS
STAX
T2M Global, LLC

ROUND 3 AD-HOC COMMITTEE RECOMMENDATION

Public comments and technical reviews were all taken into consideration during final deliberations. Careful review of received applications using the evaluation criteria (see TRANSMITTAL 1), public comment, and technical reviewer input resulted in a recommendation to advance three applications for possible funding.

During the regular Board meeting on January 26, 2024, HCBF staff, with input from its technical consultant, ad hoc committee, and review panel members, presented its funding recommendation to the HCBF Board of Directors to award equal grant amounts to AERAS, STAX, and 4G Management, Inc. totaling \$2,116,183.74. See TRANSMITTAL 2 for grantee details.

NEXUS TO PORT OF LOS ANGELES AND PORT-RELATED IMPACTS

Grants awarded in the Air Quality Mitigation Program are funded through the Air Quality Mitigation Fund. As such, all awards must be Tidelands-trust compliant and should be "given to technologies that, if they were widely deployed, would significantly reduce air emissions and/or air quality related health risks from the largest sources of air pollution from port operations." Applicants were required to prove that the project would benefit the communities of San Pedro and/or Wilmington or an area within a 25-mile radius of the Port. HCBF's Board found that the project it approved for funding addresses Port-related emissions and is consistent with the Tidelands Trust.

AQMF STATUS REPORT: FUND BALANCE UPDATE

Pursuant to the Memorandum of Agreement (MOA) 21-9842 among the City of Los Angeles, HCBF and the China Shipping Petitioners regarding the Independent Air Quality Mitigation Program required by the China Shipping Amended Stipulated Judgment.

Section 5.b Program Account: HCBF shall maintain a special program account for the AQMF, to be administered by HCBF, which cannot be comingled with any other funds raised or controlled by HCBF. Said Program Account is held by Bank of America.

Pursuant to Section 5.f.vi - The table below summarizes the unaudited balance of Program Funds and Trust Funds dedicated to Air Quality Mitigation, as of 7/3/2024 (trust account reconciled to 5/31/24 and Bank of America checking account reconciled as of 6/30/24).

ADMINISTRATIVE COSTS

Pursuant to the MOA, Section 5.g. HCBF shall annually withdraw fund from the AQMF special program account to pay for administrative costs. Withdrawals to cover administrative costs generally shall not exceed 10% (ten percent) of the dollar amount of the grants approved annually by the BOHC after the first year from the Effective Date. Costs may include but not be limited to costs for staff time managing and overseeing the implementation of this Agreement, insurance, legal costs including without limitation those related to mediation and arbitration under this Agreement, program management to ensure timely progress and oral written reporting, contract administration time for contracts and invoices, and technical and legal support for the purpose of determining whether ap proposed project is consistent with this Agreement shall be treated as part of the administrative costs of HCBF. In the event HCBF determines that the amount of administrative costs will exceed the 10% (ten percent) limit, HCBF may request an increase in the amount in any given year by submitting a request to the Harbor Department.

Air Quality N	/litigation	Funding Re	ecap from Ir	nception to	07/03/202	4				
	2016	2017	2018	2019	2020	2021	2022	2023	7/3/2024	Totals
Program Funds - BANK OF AMERICA (BofA)										
Port Funds Contributed to Administative Fund PER MOA	250,000									250,000
Bank of America Beginning Balance		250,000	250,000	214,308	132,915	284,555	243,711	183,128	64,374	
AQMF Consultants - Technical Experts			(32,942)	(51,309)	(8,321)	(10,359)	(28,083)	(36,450)	(8,166)	(175,630)
HCBF Administrative Costs			(2,750)	(30,084)	(31,089)	(30,485)	(32,500)			(126,908)
Administrative Costs per MOA Section 5.g. (10% of approved grants Round 1)								(82,305)		(82,305)
Grant Cancelled - Reallocated Funds					191,050					191,050
Bank of America Ending Balance (BofA) - Non Interest Bearing	250,000	250,000	214,308	132,915	284,555	243,711	183,128	64,374	56,207	56,207
Trust Account - AQMF California Community Foundation (CCF)										
INVESTMENT ACTIVITY	4,976,944									4,976,944
Trust Fund Beginning Balance (CCF)		4,976,944	5,001,055	5,075,176	4,351,191	4,374,375	4,360,550	4,396,486	2,338,082	(000 000)
Withdrawals - Grant Award (Round 1)				(823,050)				(0.000.000)		(823,050)
Withdrawals - Grant Award (Round 2)								(2,000,000)		(2,000,000)
Interest & Dividends		64,590	92,191	124,868	58,076	22,611	62,700	146,266	47,588	618,890
Mkt Value Change - Unrealized		(21,747)	4,680	(1,348)	(14,316)	(16,357)	(6,884)	10,929	6,029	(39,014)
Investment Mgmt Fee (paid to California Community Foundation)		(18,732)	(22,750)	(24,455)	(20,576)	(20,079)	(19,879)	(15,599)	(5,244)	(147,314)
Administrative Costs per MOA Section 5.g. (10% of approved grants Round 2)		5.004.055	E 07E 470	1.051.101	1071075	1 000 550	1 000 100	(200,000)	0.000.450	(200,000)
Trust Fund Ending Balance (CCF)		5,001,055	5,075,176	4,351,191	4,374,375	4,360,550	4,396,486	2,338,082	2,386,456	2,386,456
SubTotal Available Funds (CCF and BofA)	250,000	5,251,055	5,289,484	4,484,106	4,658,930	4,604,261	4,579,615	2,402,456	2,442,663	2,442,663
Grant Round 3 Awards Pending										(2,116,184)
Administrative Costs per MOA Section 5.g. (10% of approved grants Round 3)										(211,618)
Uncommitted Funds (BofA and CCF Trust Account)	_	-	-	-	-	-	-	-	-	(2,327,802)

HCBF BOARD ACTIONS

- 1. On January 26, 2024, the HCBF Board of Directors, by unanimous vote, approved the recommendation to fund Round 3 of the Air Quality Mitigation Program, in the amount of \$2,116,183.74 for projects to reduce port-related air emissions in the San Pedro Bay area, awarding an equal share of \$705,395 to each of the three grantees: AERAS, STAX, and 4G Management, Inc.
- 2. Approve the transfer of funds from the Air Quality Mitigation Fund to HCBF, in one lump sum, not-to-exceed \$2,327,802.11, including a 10% administrative fee of \$211,618.37, by issuing a joint letter of authorization to California Community Foundation (CCF), the independent Financial Manager, to be executed by a) the BOHC, or its designee, and b) the Interim Executive Director of Harbor Community Benefit Foundation.

TRANSMITTALS

TRANSMITTAL 1 - Evaluation Criteria

TRANSMITTAL 2 - Overview of Recommended Grants

TRANSMITTAL 3 - Request for Proposals for Air Quality Mitigation Program, Round 3

TRANSMITTAL 4 - Draft Grant Agreement Template

VI. Appendix A: Evaluation Criteria

Evaluation Criteria

1. Emission Reduction

- The project reduces emissions per project demonstration period, including
 - o Criteria pollutants 1
 - o GHG emissions 2
 - VOC or other air toxics pollutant emissions ^{3, 4}
- Emission reductions and the basis for the projections shall be calculated, not extrapolated to larger scale implementation.
- The calculations must be based on the specific number of hours during which the demonstrated technology will be operational as agreed with the identified project partners.
- Calculations should include related emissions from auxiliary equipment, if relevant.
- The duration of technology in-service during the project and beyond.

2. Cost Effectiveness & Budget

- The project results in a high benefit/cost score defined as the amount of reduced lifecycle emissions (weighted emissions)—both criteria pollutants and GHG—over the project duration per dollar of funding from HCBF.
- The calculations must be based on the specific number of hours during which the demonstrated technology will be operational as agreed with the identified project partners.
- Calculations should be based on the Carl Moyer Program Guidelines, available at the California Air Resources Board (CARB) website.
- Project should reflect reasonable assumptions of technology in operation, as it impacts the amount of emissions reduced and ultimately the cost effectiveness.
- Examples of assumptions include types of ships, sizes of ships, the number of hours the technology will be operational during the demonstration period, time to assemble/disassemble the technology, maintenance needed, etc. The assumptions must be based on agreements with the project partners and included in the support (participation) letters.
- All this information is the basis for calculating the project-specific emission reduction and subsequent cost effectiveness.
- For example: the equipment is intended to work 5 days, 10 hours a day, totaling 50 hours. The project would reduce emissions during 50 hours of operation. The project cost

quality-iag/technical-overview-volatile-organic-compounds

https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants.

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¹ Six criteria pollutants: Ground-level Ozone, Particulate Matter (PM), Carbon Monoxide (CO), Lead (Pb), Sulfur Dioxide (SO2), Nitrogen Dioxide (NO2). https://www.epa.gov/criteria-air-pollutants.

² Greenhouse gases (GHGs): CO2, CH4, N2O, and fluorinated gases. Sources: https://www.epa.gov/ghgemissions/overview-greenhouse-gases, and https://ww2.arb.ca.gov/ghg-

descriptions-sources
3 USEPA. Technical Overview of Volatile Organic Compounds. https://www.epa.gov/indoor-air-

⁴ CARB, 2020d. CARB Identified Toxic Air Contaminants.

effectiveness would amount to the reduced emissions (weighted emissions) over the project demonstration per dollar of requested funding from HCBF.

- The proposed budget addresses the priorities of the AQMF program.
- The Applicant demonstrates the need for AQMF funds.
- The Applicant demonstrates responsible fund spending based on previous grant funding opportunities, if applicable.
- The project continues to drive down previous costs of technology integration, build, procurement, and demonstration.
- Matched funds are documented, committed, allocated, and readily available for the project.
- Additional resources are leveraged beyond the AQMF grant funds awarded to support the project activities.

3. Potential to Advance Technology, Feasibility, Readiness, and Commercial Availability

- The technology is innovative and includes advances of zero emission (ZE), near-zero emission (NZE), and emission reduction technologies (ER), with special consideration given to ZE. Technologies that mitigate pollution from ocean going vessels largely fall into emission-reduction category.
- Demonstration or implementation of technologies that seek to demonstrate significant emissions reductions from conventional oceangoing diesel-fueled vehicles and equipment that operate in and around the Port, including ships or harbor craft.
- Technology that, if widely deployed, would significantly reduce air emissions and/or air quality related health risks from the largest sources of air pollution from port operations, namely ships and harbor craft.
- The targeted market and size for the technology are appropriately matched.
- If the project is a demonstration project or small-scale deployment, the scope of the project (including, but not limited to the number of vehicles/equipment units demonstrated, type(s) of vehicles/equipment units demonstrated, length of demonstration, and duty cycles) is appropriate to help lead the technology to commercial adoption.
- The project demonstrates that the technology has the potential to be a cost-competitive purchase option that will lead to commercial adoption.
- The barriers and challenges to market penetration and commercial adoption for the technology are known, identified, and addressed by the project.
- The Applicant presents credible, complete, and viable strategies that will lead the technology to commercial adoption, including existing relationships with major OEMs.
- The tasks in the Scope of Work and the proposed project schedule are complete, sequential, and will lead to successful and timely completion of the project.
- The fueling/power infrastructure is available and sufficient to support the project.
- The proposed project is comprehensive and addresses topics including, but not limited to fuel/power supply, fueling/power practice, costs, fuel/energy consumption, and other appropriate elements to be included in data collection.
- The proposed customer and vehicle/equipment support service in the field is appropriate and will contribute to the overall success of the project.

4. Project Partner

- The Applicant has secured a project demonstration or implementation partner who operates within a 25-mile boundary of the San Pedro Bay.
- The Applicant has secured site access for the proposed project, including site access related to fueling/power infrastructure and the proposed demonstration or implementation. Examples include an ocean carrier for the demonstration of ship emission-reduction equipment.

• The applicants in coordination with the project partner/s must determine the number of hours the proposed technology will be operational during the demonstration period. These specific hours must serve as the basis for emission reduction and cost effectiveness calculations, and be included in the support (participation) letters.

5. Community, Economic, and Other Benefits

- The projects funded by the AQMF are expected primarily to benefit the communities of San Pedro and Wilmington.
- The project will create job opportunities, especially for residents living in the communities of Wilmington and San Pedro.
- The project will increase economic activity within local, regional, and statewide economies.
- Project funding (both reimbursable and match share) benefit and are paid to Californiabased entities.
- The project will provide cost-effective solutions to the community.
- The project provides other environmental benefits, including reducing impacts related to water, stormwater, soil, and waste.
- The project creates by-product synergy (BPS) opportunities. As defined by the United States Business Council for Sustainable Development (US BCSD) and the U.S. Environmental Protection Agency (EPA), BPS represents the synergy among diverse industries, agriculture, and communities resulting in profitable conversion of by-products and wastes to resources promoting sustainability.

6. Certifications, Licenses, Permits, Organizational Capacity and Qualifications

- The Applicant has secured verifications, certifications, and/or recognitions of the proposed technology's feasibility, reliability, and performance by a known regulatory, academic, or industrial agency or institution.
- If the necessary certifications or permits are pending, the applicant shall provide a suitable explanation and estimated timeline for securing such certification.
- The project team's experience and qualifications are well-rounded and suitable to the tasks described in the proposed Scope of Work.
- The Applicant demonstrates the ability to meet project deadlines and milestones for past and current technology demonstration projects.
- The Applicant will respond to and mitigate project delays and issues that may arise during the project.
- The Applicant demonstrates corporate sustainability practices.

Grantee Recommendation Overview for AQMF Round 3

	1	2	3
	4G Management Inc.	AERAS	STAX
Project Title	Maritime Emissions Capture & Control System (MECCS)	AERAS Technologies: Barge-based Emission Capture and Control for RoRo and Bulk	Build and Operate an Emission Control System for Ocean Going Vessels at Berth
Brief Description of Technology Technology, Infrastructure	A shore base or barge-based system, operated on Renewable Natural Gas, consisting of a floating platform, tower, emission collection device, emission treatment system, CEMS system, and fuel system. Emission Reduction	A barge-mounted emission capture and treatment platform that provides CARB-compliant removal of diesel particulates, NOx, and reactive organic gasses. Emission Reduction	The STAX system, commercially available, is in operation at the LA and Long Beach ports servicing container and auto carrier vessels. The system captures vessel emissions using a system that connects to the vessel's exhaust pipes, collects exhaust gas, and conveys the exhaust gas to the STAXbox TM purification system Emission Reduction
Vehicle Category (project)	OGVs	OGVs	OGVs
Project Description	first barge-based capture and control system in the Port of Los Angeles after receiving their CARB Executive Order in August of 2015. The new system being developed will be used on container vessels calling the San Pedro Bay Complex. The systems needed for this work will be located on a barge platform once completed. Utilizing a harbor tug, the barge is pushed to the berthing location of the ship requiring service and secured to the offshore side of the ship. 4G's on deck equipment will be deployed to attach to the ship's auxiliary engine stack. 4G'S equipment shall remain	AERAS is completing demonstration testing on Container vessels in the LA/Long Beach Port complex. AERAS has innovated to offer marine systems that integrate a series of proven emission capture and control technologies, that exceed the reliability and effectiveness of previously deployed units. AERAS is currently providing services to Container vessels. With support of HCBF, AERAS will modify and demonstrate the system on RoRo and Bulk vessels. The result: a CARB-approved barge-based emission capture and control system to treat emissions from RoRo and Bulk vessels. Currently there are no such systems in San Pedro Bay. Upon successful completion of testing, AERAS plans to deploy a fleet of these systems to serve CA ports.	new barge-based emissions control system for servicing ocean going vessels (OGV) while at berth. The system will use a specially designed placement arm to collect the exhaust from the ships exhaust pipe and transport it to the barge based control equipment for removal of criteria and toxic
Hours in operation	Demonstration Times 5 tests (72 hrs) - total 200 hrs	Demonstration 500 hrs of commissioning and durability testing on RoRo vessels and Bulk vessels total (250 hours for each vessel type) Post-demo Annual - RoRo – 500 hrs (approx. 50 vessel calls) - Bulk – 2000 hrs (approx. 28 vessel calls) - Container – 4000 hrs (approx. 84 vessel calls)	Demonstration 1,000 hours of emission control services in 2024 Post-demo Annual After the project is completed, the system is expected to operate at least 6,000 hours per year for 20 years or longer. The average service call will be approximately 50 hours. The number of vessels serviced will be between 100 to 150 per year.
Vessel types	Container vessels Depending on who built the system, the barges operating under a Container Vessel EO, should be able to operate on a bulk vessel and roro vessel, however additional Capture Efficiency testing with multiple stack connections would need to be approved by CARB for boiler	Container vessels RoRo Vessels Bulk Vessels	Service vessels of all types, focus on auto carriers (RoRo)

AIR QUALITY MITIGATION FUND ROUND 3 REQUEST FOR PROPOSALS (RFP)

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I. FUNDING OPPORTUNITY ANNOUNCEMENT

A. Background

As part of a settlement associated with the approval of the China Shipping Container Terminal Project (China Shipping) in 2004, the Port of Los Angeles (POLA) set aside funding for air quality mitigation. In 2015, POLA and the Harbor Community Benefit Foundation (HCBF) signed a Memorandum of Agreement (MOA) establishing an Air Quality Mitigation Fund (AQMF) totaling approximately \$5 million of the funds for projects to reduce Port-related air emissions in nearby communities. As a result of the MOA, HCBF, a non-profit organization dedicated to mitigating impacts from POLA on the two neighboring communities of San Pedro and Wilmington, California, administers the fund.

As specified in the MOA, the HCBF, with the approval of the POLA Board of Harbor Commissioners, is empowered to award funding to third parties "...exclusively for projects that are reasonably calculated to reduce Port-related air emissions. This includes emissions resulting from the transport and handling of cargo, within, into, out of, to, or from the Port of Los Angeles."

B. Screening

HCBF requests proposals from eligible entities. This solicitation will provide the HCBF Board with applicant information upon which to make funding determinations.

C. Project Objectives

HCBF is soliciting applications from eligible entities, as described in Section II of this announcement, for projects to meet the goals of the <u>AQMF program</u>. AQMF program goals are to implement programs, projects, and approaches that reduce Port-related air emissions. **This AQMF Round 3 is focused specifically on oceangoing vessels.**

Projects funded by the AQMF are expected to demonstrate achievable emissions reduction benefits (1) in San Pedro and Wilmington, or (2) within a 25-mile boundary of the San Pedro Bay, in that prioritized order. Additional derivative benefits may also extend beyond the 25-mile boundary.

Projects shall include demonstration or implementation of one of the following technologies:

- zero-emissions technologies (preferred),
- near-zero-emissions technologies, or
- emission-reduction technologies.

D. Availability of Funds

The available funding for this expedited Round 3 of the Air Quality Mitigation Program is approximately **\$2,000,000**.

E. Number of Awards

HCBF anticipates awarding one or more agreements from this announcement, subject to availability of funds, the quality of applications received, and other applicable considerations.

II. ELIGIBILITY INFORMATION

A. Eligible Applicants

All applicants, any public or private entity, must identify a project demonstration or implementation partner who operates within a 25-mile boundary of the San Pedro Bay in the submittal of the proposal. An example includes an ocean carrier for the demonstration of ship emission-reduction equipment. A letter of support (participation) should include the number of hours for the technology in demonstration.

The partner's contact information will be expected in the actual full proposal submission.

B. Eligible Projects

The eligible projects using Air Quality Mitigation Program funds should be responsive to the following priorities set forth below:

- 1) Demonstration or implementation of emission-reduction technologies that seek to reduce emissions from oceangoing vessels;
- 2) Technologies that, if they were widely deployed, would significantly reduce air emissions and/or air quality related health risks from the largest sources of air pollution from port operations, namely ships;
- 3) The project demonstration must begin within one year from the date of the executed agreement.
- 4) The applicants, in coordination with the project demonstration or implementation partner/s, must determine the number of hours the proposed technology will be operational during the demonstration period (the project duration). These specific hours must serve as the basis for emission reduction and cost effectiveness calculations, and be included in the support (participation) letters. The lack of project-specific calculations of emission reductions and/or cost effectiveness may disqualify the project from consideration.

All projects must be consistent with the conditions prescribed in the City of Los Angeles Tidelands Trust Grant Act, all Federal, State, and local laws, and the China Shipping Amended Stipulated Judgment (described in the Memorandum of Agreement, and available on HCBF's website or by request).

Project types **not** eligible for AQMF funding include:

- Technologies that are not applicable to port-related shipping movement
- Fuel additives
- Technologies in the conceptual or R&D phase

Please read through the Evaluation Criteria for further specifications (Appendix A).

C. Eligible Costs and Match Funding

Eligible costs for AQMF funding include: design and engineering, materials, equipment, construction, emissions testing, data tracking and systems integration, and specific demonstration costs.

Costs **not** eligible for AQMF funding include:

- Administrative overhead
- Travel
- Marketing and promotional costs
- Fuel and other consumables
- Labor to operate the equipment not directly associated with the project.

All costs are to be tracked, documented, and made available upon request for HCBF oversight review.

Match funding is not required; however, match funding will be considered as beneficial during the project evaluation phase. If match funding is included, it must be documented, committed, allocated, and readily available for the project.

The project must be cost-effective and result in a high benefit/cost score defined as the amount of reduced lifecycle emissions over the project duration per funding from HCBF. For the purpose of determining cost effectiveness, the project duration refers to the specific number of hours during which the demonstrated technology will be operational based on the agreements with the identified project partners.

D. Violations & Compliance

The applicant shall report to HCBF in writing any and all notices, complaints, determinations, judgments or citations of environmental and/or labor violations pertaining to its operations and those of its partners, consultants, or sub-grantees within the past three years and while the grant contract is in effect. HCBF reserves the right to terminate the contract if the applicant has been found by a state or federal agency or a court to have violated environmental and/or labor laws. The applicant shall include this requirement in all their subcontracts.

310. **Exclusions**

AQMF grant funding is a grant, not a loan. Proposals shall not include provision for repayment or reimbursement of the grant funds to HCBF. Applicant shall not include as part of their proposal a donation or payment to HCBF of any kind.

III. SUBMITTAL PROCESS

Interested applicants must submit their full proposal using the online form via **Submittable**.

Information to be provided in response to this RFP will include **all of the following and address components of the evaluation criteria**:

- A detailed description of the technology, including:
 - o How does the technology work?
 - What is the stage of development of the technology? Please be specific and note that technologies in the conceptual or R&D phase are not eligible. Demonstration should begin within a year from the agreement execution.
 - o Is the technology currently in use? Where?
 - What are other applications for the technology?
 - o What are the plans for the technology commercialization, if applicable?

- A detailed description of the proposed demonstration/implementation project. A marketing brochure or description by the firms involved in the project is not considered a project nor technology description. The narrative should include:
 - o Project goals and objectives.
 - Specific project requirements, e.g., size of space needed, other equipment necessary for the technology to work.
 - o The scope of work including tasks, milestones, and deliverables.
 - o The duration of the project and detailed schedule from start to completion.
 - o Project partners.
- Available certifications, plans for permits and approvals for verification and certification, as needed. If the necessary certifications or permits are pending, the applicant shall provide a suitable explanation and estimated timeline for securing such certification.
- Description of project benefits demonstrating project emission reductions and other community and economic benefits:
 - A detailed explanation as to how the proposed projects will reduce air toxics (e.g., diesel PM, benzene), criteria pollutants (e.g., NOx, CO), and greenhouse gas (i.e., CO2-equivalent) emissions.
 - A description as to if and how the project will leverage AQMF funding to achieve benefits beyond the scope of the proposed project.
 - Calculations of the emission reductions per identified air pollutant, and the timeframe in which those reductions will occur relative to a baseline scenario. The calculations must be based on the specific number of hours during which the demonstrated technology will be operational as agreed with the identified project partners, and included in the support (participation) letters.
- Calculated project cost-effectiveness which is the measure of dollars provided to a project
 for each ton of covered emissions reduced. The calculations must be based on the specific
 number of hours during which the demonstrated technology will be operational as agreed
 with the identified project partners. The Carl Moyer Program Guidelines, available at the
 California Air Resources Board (CARB) website, describe the Cost-Effectiveness Calculation
 Methodology and provide reference materials. In addition, Emission Reduction and Cost
 Effectiveness Calculations guidelines are included in Appendix B.
- Budget with detailed total project cost estimate and funding request:
 - Describe project-related costs for equipment, materials, travel, and labor, and any matched funds.
 - A detailed budget of operational costs of the project once deployed, and specification as to who will be responsible for operational costs if not covered in the project.
- Description of the company and the project team:
 - A brief description of the prior relevant experience of the assembled team to accomplish the proposed work effort.
 - Past experience with grant and other funding, including how previously received funds were spent.
 - o Key team members with their qualifications and capabilities.

Please review the evaluation criteria for further details (**Appendix A**).

Electronic application submissions must be through <u>Submittable</u>. Materials may be accessed via <u>https://hcbf.org/aqmf-invitation/</u>. **Hard-copy submissions will not be accepted.**

Due date: February 24, 2023 by 5 P.M. PST.

Deadline to submit questions: February 10, 2023.

HCBF will host a virtual webinar prior to the due date to provide an overview of the RFP requirements, the application process, and to answer questions. Please join the HCBF mailing list to receive webinar and program related updates.

Please contact Submittable directly for submission issues; HCBF Staff does not have access to draft applications.

HCBF Contacts:

Meghan Reese, Executive Director Harbor Community Benefit Foundation 302 West 5th Street, Suite 300 San Pedro CA 90731 meghan@hcbf.org (310) 997-7116

Tamanna Rahman, PhD, MPH
Program Director (Executive Director effective January 28, 2023)
Harbor Community Benefit Foundation
302 West 5th Street, Suite 300
San Pedro CA 90731
tamanna@hcbf.org
(310) 997-7116

Application-related questions must be addressed solely to the HCBF contacts identified above.

Applicants that contact members of the HCBF Board of Directors, ad-hoc committee, or any other HCBF personnel for any reason after release of this RFP and prior to award (except at the Board meeting at which the grant award will be made) will be subject to disqualification.

Public Information Notice:

All documents submitted to HCBF are considered public records. Proposals are subject to public disclosure once the funding selection process has been completed and HCBF funding selections have been made.

We discourage inclusion of confidential information at this stage of the process, but if you find it necessary to include confidential or proprietary information in your proposal, you should clearly

mark it "CONFIDENTIAL." We will withhold from public disclosure any information that we determine is truly confidential, including financial information, trademarked or patented processes, and the like.

IV. Evaluation Process

A. Project Evaluation Process

HCBF staff is responsible for making a funding recommendation to the HCBF Board of Directors. If the HCBF Board of Directors approves a project (or projects) for funding, the approved projects will then be forwarded to the Board of Harbor Commissioners (BOHC) of the Port of Los Angeles for approval. The BOHC will then have sixty days to review HCBF Recommendations and vote on the approval of the decision. The BOHC's review may take into account only the factors outlined in Paragraph V.f.vii of the Memorandum of Agreement.

HCBF staff will consult with experts as necessary in reviewing the applications and developing recommendations. Staff will convene an ad hoc committee of the HCBF Board of Directors to advise on the recommendation. As set forth in Paragraph V.f.v of the Memorandum of Agreement, "HCBF staff will research whether a proposed project, through information provided in the proposals and any other sources of information that it may in its discretion choose to use, meets the project criteria developed by HCBF, and HCBF staff shall make a recommendation of its findings to the Board of Directors of HCBF."

HCBF anticipates that it will establish a special AQMF review panel, consisting of an HCBF ad hoc board committee, selected stakeholders, and to-be-identified external personnel with demonstrated expertise in evaluation of zero-, near-zero, and emission reduction technologies for freight-movement technologies. The panel will review the received applications and provide feedback to HCBF's ad hoc board committee and staff. HCBF staff, with guidance from its ad hoc board committee and technical consultants, as well as the feedback from the review panel members, will make its recommendations to the HCBF Board.

B. Project Evaluation Criteria

Evaluation criteria for this program have been developed in consultation with the Settlement Petitioners (Natural Resources Defense Council [NRDC], San Pedro and Peninsula Homeowners' Coalition [SPPHC], San Pedro Peninsula Homeowners' United {SPPHU], and the Coalition for Clean Air [CCA]), the City of Los Angeles (as represented by the Port of Los Angeles), and in agreement with the Tidelands Trust and the 2015 MOU.

Evaluation criteria for submitted project applications are presented in **Appendix A**. These categories are not listed in order of preference or priority. Although there is no prioritization implied, **HCBF** does emphasize environmental and community benefits within the neighborhoods of Wilmington and San Pedro.

C. Project Evaluation Limited to Four Corners of the Application

Project applications will be evaluated solely on the basis of the information contained in the submitted application. After the deadline for submittal of applications, HCBF will not accept additional material or information pertaining to the application. Applicants who submit additional information after the deadline for submittal or who propose additional terms to the Board at the meeting at which grant awards will be made may be disqualified from consideration.

V. ADMINISTRATION AND NEXT STEPS

A. AQMF Oversight and Financial Control

Upon approval by both the HCBF Board of Directors and the BOHC, a contract will be executed for the proposal(s) selected for funding. Agreements detailing funding and program oversight of approved projects will be between HCBF and its grantees.

B. Reporting and Invoicing Requirements - Project Evaluation Process

Grantees should anticipate regular written progress reports with HCBF, which includes Monthly Update Reports and Milestone Reports (Interim & Final) (**Appendix C**). Reporting shall describe quantitative and qualitative measures of success such as actual accomplishments, cost status, schedule changes, change in approach, actual and anticipated problems and delays, and their resolution. In addition to the project scope and expenditures status updates, Grantee will provide the following (at the minimum in the milestone and final reports):

- Demonstration results and analysis
- Project performance
- Data collected
- Emission reduction status update (including GHG, criteria pollutants, and other air toxics)
- Project cost effectiveness update
- Lessons learned, including technical, business operations, legal, and regulatory issues and policy implications, customer experience and satisfaction

Grantee shall also submit a final budget report to reconcile the expenditures of Grant Funds, compared to the original budget.

In addition, an annual Grantee meeting will be held to provide an opportunity for Grantees to give an update on project progress and status to the HCBF Board as well as to the China Shipping Petitioners (NRDC, San Pedro and Peninsula Homeowners' Coalition, San Pedro Peninsula Homeowners United, and CCA), City of Los Angeles, and BOHC.

HCBF shall disburse funds to the awarded grantees on a schedule established with each grantee, at its sole discretion, and may include performance benchmarks for a given project, at the discretion of HCBF.

VI. Appendix A: Evaluation Criteria

Evaluation Criteria

1. Emission Reduction

- The project reduces emissions per project demonstration period, including
 - o Criteria pollutants 1
 - o GHG emissions 2
 - o VOC or other air toxics pollutant emissions 3,4
- Emission reductions and the basis for the projections shall be calculated, not extrapolated to larger scale implementation.
- The calculations must be based on the specific number of hours during which the demonstrated technology will be operational as agreed with the identified project partners.
- Calculations should include related emissions from auxiliary equipment, if relevant.
- The duration of technology in-service during the project and beyond.

2. Cost Effectiveness & Budget

- The project results in a high benefit/cost score defined as the amount of reduced lifecycle emissions (weighted emissions)—both criteria pollutants and GHG—over the project duration per dollar of funding from HCBF.
- The calculations must be based on the specific number of hours during which the demonstrated technology will be operational as agreed with the identified project partners.
- Calculations should be based on the Carl Moyer Program Guidelines, available at the California Air Resources Board (CARB) website.
- Project should reflect reasonable assumptions of technology in operation, as it impacts the amount of emissions reduced and ultimately the cost effectiveness.
- Examples of assumptions include types of ships, sizes of ships, the number of hours the technology will be operational during the demonstration period, time to assemble/disassemble the technology, maintenance needed, etc. The assumptions must be based on agreements with the project partners and included in the support (participation) letters.
- All this information is the basis for calculating the project-specific emission reduction and subsequent cost effectiveness.
- For example: the equipment is intended to work 5 days, 10 hours a day, totaling 50 hours. The project would reduce emissions during 50 hours of operation. The project cost

¹ Six criteria pollutants: Ground-level Ozone, Particulate Matter (PM), Carbon Monoxide (CO), Lead (Pb), Sulfur Dioxide (SO2), Nitrogen Dioxide (NO2). https://www.epa.gov/criteria-air-pollutants.

² Greenhouse gases (GHGs): CO2, CH4, N2O, and fluorinated gases. Sources: https://www.epa.gov/ghgemissions/overview-greenhouse-gases, and https://ww2.arb.ca.gov/ghg-

descriptions-sources

³ USEPA. Technical Overview of Volatile Organic Compounds. https://www.epa.gov/indoor-air-quality-iaq/technical-overview-volatile-organic-compounds

⁴ CARB, 2020d. CARB Identified Toxic Air Contaminants.

https://ww2.arb.ca.gov/resources/documents/carb-identified-toxic-air-contaminants.

effectiveness would amount to the reduced emissions (weighted emissions) over the project demonstration per dollar of requested funding from HCBF.

- The proposed budget addresses the priorities of the AQMF program.
- The Applicant demonstrates the need for AQMF funds.
- The Applicant demonstrates responsible fund spending based on previous grant funding opportunities, if applicable.
- The project continues to drive down previous costs of technology integration, build, procurement, and demonstration.
- Matched funds are documented, committed, allocated, and readily available for the project.
- Additional resources are leveraged beyond the AQMF grant funds awarded to support the project activities.

3. Potential to Advance Technology, Feasibility, Readiness, and Commercial Availability

- The technology is innovative and includes advances of zero emission (ZE), near-zero emission (NZE), and emission reduction technologies (ER), with special consideration given to ZE. Technologies that mitigate pollution from ocean going vessels largely fall into emission-reduction category.
- Demonstration or implementation of technologies that seek to demonstrate significant emissions reductions from conventional oceangoing diesel-fueled vehicles and equipment that operate in and around the Port, including ships or harbor craft.
- Technology that, if widely deployed, would significantly reduce air emissions and/or air quality related health risks from the largest sources of air pollution from port operations, namely ships and harbor craft.
- The targeted market and size for the technology are appropriately matched.
- If the project is a demonstration project or small-scale deployment, the scope of the project (including, but not limited to the number of vehicles/equipment units demonstrated, type(s) of vehicles/equipment units demonstrated, length of demonstration, and duty cycles) is appropriate to help lead the technology to commercial adoption.
- The project demonstrates that the technology has the potential to be a cost-competitive purchase option that will lead to commercial adoption.
- The barriers and challenges to market penetration and commercial adoption for the technology are known, identified, and addressed by the project.
- The Applicant presents credible, complete, and viable strategies that will lead the technology to commercial adoption, including existing relationships with major OEMs.
- The tasks in the Scope of Work and the proposed project schedule are complete, sequential, and will lead to successful and timely completion of the project.
- The fueling/power infrastructure is available and sufficient to support the project.
- The proposed project is comprehensive and addresses topics including, but not limited to fuel/power supply, fueling/power practice, costs, fuel/energy consumption, and other appropriate elements to be included in data collection.
- The proposed customer and vehicle/equipment support service in the field is appropriate and will contribute to the overall success of the project.

4. Project Partner

- The Applicant has secured a project demonstration or implementation partner who operates within a 25-mile boundary of the San Pedro Bay.
- The Applicant has secured site access for the proposed project, including site access related to fueling/power infrastructure and the proposed demonstration or implementation. Examples include an ocean carrier for the demonstration of ship emission-reduction equipment.

• The applicants in coordination with the project partner/s must determine the number of hours the proposed technology will be operational during the demonstration period. These specific hours must serve as the basis for emission reduction and cost effectiveness calculations, and be included in the support (participation) letters.

5. Community, Economic, and Other Benefits

- The projects funded by the AQMF are expected primarily to benefit the communities of San Pedro and Wilmington.
- The project will create job opportunities, especially for residents living in the communities of Wilmington and San Pedro.
- The project will increase economic activity within local, regional, and statewide economies.
- Project funding (both reimbursable and match share) benefit and are paid to Californiabased entities.
- The project will provide cost-effective solutions to the community.
- The project provides other environmental benefits, including reducing impacts related to water, stormwater, soil, and waste.
- The project creates by-product synergy (BPS) opportunities. As defined by the United States Business Council for Sustainable Development (US BCSD) and the U.S. Environmental Protection Agency (EPA), BPS represents the synergy among diverse industries, agriculture, and communities resulting in profitable conversion of by-products and wastes to resources promoting sustainability.

6. Certifications, Licenses, Permits, Organizational Capacity and Qualifications

- The Applicant has secured verifications, certifications, and/or recognitions of the proposed technology's feasibility, reliability, and performance by a known regulatory, academic, or industrial agency or institution.
- If the necessary certifications or permits are pending, the applicant shall provide a suitable explanation and estimated timeline for securing such certification.
- The project team's experience and qualifications are well-rounded and suitable to the tasks described in the proposed Scope of Work.
- The Applicant demonstrates the ability to meet project deadlines and milestones for past and current technology demonstration projects.
- The Applicant will respond to and mitigate project delays and issues that may arise during the project.
- The Applicant demonstrates corporate sustainability practices.

VII. Appendix B: Emission Reduction and Cost Effectiveness Calculations Guidelines

A. Emission Reduction Calculations

Use the appropriate formula to determine the annual surplus emission reductions by pollutant. Formula C-4, C-5, C-6, C-7, or C-8 must be completed for each pollutant (including NOx, ROG, and PM) for the baseline technology and the reduced technology. Formula C-4 is the general calculation and can be applied to any project, whereas Formulas C-5, C-6, C-7 and C-8 are specific variations of Formula C-4 for use with mileage, hours of operation, fuel use, and shore power systems, respectively. All five formulas involve multiplying the engine emission factor (found in Appendix D, see the links in the resource section) by the annual activity level and by other adjustment factors (such as load factor in the case of off-road equipment calculations) as specified for the calculation methodologies presented. Emission factors are also adjusted to account for in-use deterioration where applicable.

Emission factors and deterioration rates in Appendix D can be used to determine the emissions of the baseline engine and reduced engine or zero-emission vehicle; consequently, the engine or motor model year and applicable emission standard will determine the relevant emission factors. Emission reductions for hybrid conversion systems must be based on the projected reduced usage of the baseline engine in the converted vehicle compared to the original vehicle. This can be based on estimated usage reductions for the specific application or vocation type provided by the dealer, installer, or manufacturer. The emission factors and deterioration rates contained in Appendix D are based on CARB mobile source emissions inventory model (EMFAC) values.

Formula C-4: Estimated annual emissions (tons/yr)

Annual emissions by pollutant (tons/yr) = (emission factor + deterioration product (if applicable)) * annual activity * adjustment factor(s) (if applicable) * percentage operation in California / 907,200 (g/ton)

Deterioration product = deterioration rate * total equipment activity

Total equipment activity = annual activity * deterioration life (yrs)

Deterioration life (baseline equipment) (yrs) = expected first year of operation – baseline engine model year + (project life / 2)

Deterioration life (reduced equipment) (yrs) = project life / 2

The Moyer Program allows the emission reductions from a project to be calculated using a variety of methods, but mileage and hours of operation are the primary methods. Specific activity factors allowed for each project category may differ and are identified in the source category chapters.

a. Calculating Annual Emissions Based on Annual Miles Traveled

Calculations based on annual miles traveled are used for on-road projects only. Mileage records must be maintained by the engine owner as described in Chapter 4: On-Road Heavy-Duty Vehicles. Formula C-5 below describes the method for calculating pollutant emissions based on miles traveled, including the method for calculating mile-based deterioration products.

Formula C-5: Estimated annual emissions based on mileage (tons/yr)

Annual emissions by pollutant (tons/yr) = (emission factor (g/mi) + deterioration product (g/mi) (if applicable)) * annual activity (mi/yr) * percentage operation in California / 907,200 (g/ton)

Mile-based deterioration product (g/mi) = deterioration rate (g/mi-10,000 mi) * total equipment activity (mi)

Total equipment activity (mi) = annual activity (mi/yr) * deterioration life (yrs)

Deterioration life (baseline equipment) (yrs) = expected first year of operation – baseline engine model year + (project life / 2)

Deterioration life (reduced equipment) (yrs) = project life / 2

b. Calculating Annual Emissions Based on Hours of Operation

When hours of equipment operation are the basis for determining emissions, the horsepower rating of the engine and an engine load factor found in Appendix D must be used. The method for calculating emissions based on hours of operation is described in Formula C-6 below, and includes the method for calculating hour based deterioration product.

(b) Total equipment activity for mile-based calculations is limited to 400,000 miles for school buses or 800,000 miles for other on-road vehicles. Used heavy heavy-duty replacement vehicles add 500,000 miles, medium heavy-duty vehicles add 250,000 miles, or light heavy-duty vehicles add 150,000 miles.

Formula C-6: Estimated annual emissions based on hours of operation (tons/yr)

Annual emissions by pollutant (tons/yr) = (emission factor (g/bhp-hr) + deterioration product (g/bhp-hr) (if applicable)) * horsepower (hp) * load factor * annual activity (hrs/yr) * percentage operation in California / 907,200 (g/ton)

Hour-based deterioration product (g/bhp-hr) = deterioration rate (g/bhp-hr-hr) * total equipment activity (hrs)

Total equipment activity (hrs) = annual activity (hrs/yr) * deterioration life (yrs)

Deterioration life (baseline equipment) (yrs) = expected first year of operation – baseline engine model year + (project life / 2)

Deterioration life (reduced equipment) (yrs) = project life / 2

The engine load factor is an indicator of the nominal amount of work done by the engine for a particular application. It is given as a fraction of the rated horsepower of the engine and varies with engine application. Load factors for a variety of equipment types may be found in Appendix D.

c. Calculating Annual Emissions Based on Fuel Consumption

In some cases as outlined in each source category chapter, fuel consumption may be used to calculate annual emissions. In such cases a fuel consumption rate factor must be used to convert emissions given in g/bhp-hr to units of grams of emissions per gallon of fuel used (g/gal). The fuel consumption rate factor is a number that combines the effects of engine efficiency and the energy content of the fuel used in that engine into an approximation of the amount of work output by an engine for each unit of fuel consumed. Formula C-7 below is used to calculate the annual emissions based on annual fuel consumed.

(c) Total equipment activity for hour-based calculations is limited to a maximum of 12,000 hours for diesel engines, 3,500 hours for large-spark ignition (LSI) engines with a model year of 2006 or older, or 5,000 hours for LSI engines with a model year of 2007 or newer.

Formula C-7: Estimated annual emissions based on fuel consumption (tons/yr)

Annual emissions by pollutant (tons/yr) = emission factor (g/bhp-hr) * fuel consumption rate factor (bhp-hr/gal) * annual activity (gal/yr) * percentage operation in California / 907,200 (g/ton)

d. Calculating Annual Emissions for Shore Power Systems

For marine shore power systems, calculate the estimated annual emissions by pollutant as shown in Formula C-8 below.

Formula C-8: Estimated annual emissions for shore power systems (tons/yr)

Annual emissions by pollutant (tons/yr) = ship emission factor (g/kW-hr) * power requirements (kW) * berthing time (hrs/visit) * annual number of visits (visits/yr) * 0.9 / 907,200 (g/ton)

(2) Calculating Annual Surplus Emission Reductions by Pollutant

Subtract the annual emissions for the reduced technology from the annual emissions for the baseline technology as shown in Formula C-9 below, for NOx, ROG and PM emissions.

Formula C-9: Annual surplus emission reductions (tons/yr)

Annual surplus emission reductions by pollutant (tons/yr) = annual emissions for the baseline technology (tons/yr) – annual emissions for the reduced technology (tons/yr)

For marine vessels with a wet exhaust system, a wet exhaust factor of 0.80 must be applied; calculate the annual surplus emission reductions as shown in Formula C-10 below.

Formula C-10: Annual surplus emission reductions for marine vessels with wet exhaust systems (tons/yr)

Annual surplus emission reductions by pollutant (tons/yr) = 0.80 * (annual emissions for the baseline technology (tons/yr) – annual emissions for the reduced technology (tons/yr))

For retrofits, multiply the baseline technology pollutant emissions by the percentage of emission reductions that the CARB-verified reduced technology is verified to following Formula C-11 below.

Formula C-11: Annual surplus emission reductions for retrofits (tons/yr)

Annual surplus emission reductions by pollutant (tons/yr) = annual emissions for the baseline technology (tons/yr) * reduced technology verification percentage

For on-road heavy-duty projects, the baseline will be the newer vehicle emissions.

For marine vessel hybrid systems, calculate the annual surplus emission reductions as shown in Formula C-12 below.

Formula C-12: Annual surplus emission reductions for marine vessel hybrid systems (tons/yr)

Annual surplus emission reductions by pollutant (tons/yr) = total annual emissions (all engines on vessel) for the baseline technology (tons/yr) - (total annual emissions (all engines on vessel) for the baseline technology (tons/yr) * reduced technology verification percentage)

For marine vessels, calculate the annual surplus emission reductions for each pollutant as shown in Formula C-13 below.

Formula C-13: Total annual surplus emission reductions for marine vessels (tons/yr)

Total annual surplus emission reductions for marine vessels by pollutant (tons/yr) = (propulsion engine annual surplus emission reductions (tons/yr) * number of propulsion engines) + (auxiliary engine annual surplus emission reductions (tons/yr) * number of auxiliary engines)

(B) The potential grant amount based on maximum percentage of eligible cost is a measure of the incremental cost as determined by multiplying the cost of the reduced technology by the maximum percentage of eligible cost (from the applicable chapter) as described in Formula C-14 below.

B. Weighted Emission Reductions Calculation

Formula C-3: Annual weighted surplus emission reductions (weighted tons/yr)

Weighted emission reductions (weighted tons/yr) = NOx reductions (tons/yr) + ROG reductions (tons/yr) + (20 * PM reductions (tons/yr))

The result of Formula C-3 is used to complete Formula C-18 to determine the cost-effectiveness of a grant amount.

C. Cost Effectiveness Calculations

The cost-effectiveness of a grant amount is determined by multiplying the CRF (Capital Recovery Factor) as calculated in Formula C-18 by the grant amount and dividing that by the annual weighted surplus emission reductions that will be achieved by the project as calculated in Formula C-3.

Formula C-18: Cost-effectiveness of weighted surplus emission reductions (\$/tons)

Cost-effectiveness (\$/tons) = grant amount (\$) * CRF / annual weighted surplus emission reductions (weighted tons/yr)

Resources

Carl Moyer Program Guidelines https://ww2.arb.ca.gov/guidelines-carl-moyer

C-5, Appendix C, Cost-Effectiveness Calculation Methodology, 11/19/2021 https://ww2.arb.ca.gov/sites/default/files/2022-01/FINAL_2017_gl_appendix_c_ADA_2021%20Board%20Approved%20Changes_11.19.21%20v1.2.pdf

Sample Calculations

https://ww2.arb.ca.gov/sites/default/files/classic/msprog/moyer/guidelines/2017/final_sample_calculations_09_18_18_%20%20tables_color_fixed.pdf

Updates to On-Road Example Calculations (Updated 2/24/2022) https://ww2.arb.ca.gov/sites/default/files/2022-02/Updated%20OnRoad%20Example%20Calculations%20022422.pdf

Appendix D https://ww2.arb.ca.gov/sites/default/files/2022-02/2022vipguidelines.pdf

Information on EMFAC is available at: http://www.arb.ca.gov/msei/modeling.htm

VIII. Appendix C: Reporting Requirements

Monthly Reporting

- Written updates limited to one-page emailed report (within the email, Word doc, or pdf) to the Executive Director.
- Reporting period ends the last business day of each month. Due by the 8th of the following month.
- Update should include status on deliverables within that month, including any completed tasks.

Milestone Reporting Requirements

- Executive Summary
 - Project background (Purpose, location, Project partner(s), project team, challenges, successes, etc.)
 - Technology overview
 - o Include challenges on deliverables and tasks to date.
 - o Clear communication of project data and analysis
- Provide geographic context for project
- Demonstration results and analysis
- Data collected (emissions, cost effectiveness, environmental benefits, etc.)
 - o Installation
 - Operations
 - Comparison to proposed performance
 - o Emission reduction status update
 - o Cost effective calculations for HCBF's funding
 - o Raw data
 - Provide spreadsheet with formulas for all pollutants separate and weighted, including baseline comparison information for original formulas.
- Provide input/feedback from project partner(s).
 - Letter/update from project partner(s) lessons learned, challenges, & successes
 - Provide information about the project partners, including location of the project, reasons behind their participation, intent following the in-use demonstration, etc. Explain any changes.
- Clarify project timeline, budget, scope of work
 - o Updated Timeline, Scope of Work, and Budget and budget narrative.
 - o Provide original, revised, and the difference (compare with the budget & budget narrative from the application).
 - o For timeline, please use calendar months instead of project month number.
 - o Explain any changes to the scope of work.
 - o Grantee shall submit final budget report to reconcile the expenditures of grant funds, compared to the original budget.
- Lessons learned, including technical, business operations, legal, and regulatory issues and policy implications, customer experience and satisfaction.

HCBF TRANSMITTAL 4



[BOHC Board Approval Date]

Contact Address

This Grant Agreement ("Agreement") is made and entered into by and between Harbor Community Benefit Foundation ("Foundation") and [] ("Grantee").

The Board of Directors of the Harbor Community Benefit Foundation ("Foundation") and the Board of Harbor Commissioners authorized a grant of \$ ("Grant Funds") to ("Grantee"), to support HCBF's Air Quality Mitigation Program requirement of reducing Port-related air emissions.

This grant is awarded by the Foundation subject to the following terms and conditions:

I. PAYMENT.

Funding from the Air Quality Mitigation Fund (AQMF) to the Air Quality Mitigation Program administered by the Foundation is subject to public review and consideration by the Port of Los Angeles Board of Harbor Commissioners (BOHC). Awards from the Air Quality Mitigation Program to Grantees are also contingent upon the Grantee's compliance with this Agreement, including timely receipt of required reports.

Grant Funds shall be payable in [] installments: [TBD based on length of grant]

- 1. \$[] within 30 calendar days after full execution of this Agreement and receipt of organization's W9.
- 2. \$[] within 30 calendar days after Foundation's receipt and approval of the mandatory [three-month] progress report.
- 3. \$[] within 30 calendar days after Foundation's receipt and approval of the mandatory [six-month] progress report.

The Foundation's disbursement of payment is contingent upon the Foundation's review of your work in connection with this grant and its determination (a) that you are in compliance with all terms and conditions of this grant agreement and (b) that satisfactory progress and performance has occurred and is likely to continue to occur. Funding may be modified, curtailed, or discontinued, and any unexpended grant funds must be repaid, if at any time the Foundation determines that the purposes of the grant are not being met.

II. <u>USE OF FUNDS & GRANT TERM.</u>

This Air Quality Mitigation grant period shall begin on **December 1, 2019** and shall end [].

Project Description and Scope of Work: [ATTACHMENT] (described below and attached, including project goals and objective, uniqueness (incl. potential scalability in deployment), demonstration configuration (incl. phases), project approach

Project Location:

Timeline, Schedule and Milestones: [ATTACHMENT] (explained below and/or attached)
Include timeline of major events related to design, engineering, production, system integration and installation, permitting, equipment delivery, permitting, certification, in-use demonstration, emission reduction testing, execution of agreements.

Project Partners:

[As described in the Scope of Work]

In case the project partners change during the contract, the Foundation shall be notified immediately. The Foundation reserves the right to terminate this agreement due to the changes with project partners.

Use of Local Resources (Job Creation):

As described in the proposal and committed to

Ownership of Equipment / Project:

Grantee must describe the ownership of the project elements, particularly equipment, parts, vehicles, etc. Representation and warranties

Equipment Maintenance:

Grantee shall be responsible for the maintenance and operational performance during the demonstration phase of the project.

..... shall be responsible for the equipment maintenance after the equipment delivery.

..... shall be responsible for the equipment maintenance after the successful project delivery and/or after completion of the demonstration phase of the project.

Grantee shall provide the Preventive Maintenance plan to the appropriate party after completion of the demonstration phase of the project.

Training:

Grantee shall provide necessary training to the to the appropriate parties before and/or after completion of the demonstration phase of the project.

Emission Reduction

Grantee has committed to achieving a specific emission reduction during the duration of the project and after the demonstration phase. shall be responsible for the

Project Benefits:

Project benefits as described in the proposal shall be binding.

Deliverables: (explained below and/or attached)

Budget

Program/Project Expenses	
Line Items	Amount

Total	

Grantee shall use the Grant Funds, including all accrued interest or other gains, solely for the Grant Purpose and substantially in accordance with this Agreement. Any significant changes to the Grant Purpose must be reported within 30 days of the change, and approved in writing by the Foundation. Grant Funds are to be applied to expenses incurred for the period from the Effective Date to the one-year (12 month) anniversary of the Effective Date ("Grant Term"), unless otherwise agreed upon in writing by the Foundation. This grant is made with the understanding that the Foundation has no obligation to provide other or additional support or grants to the Grantee.

Expenditures of grant funds must be made substantially in accordance with the grant budget. Any material changes (greater than 10%) from the budget (relative to HCBF funds only) must be approved in advance by the Foundation. All changes must be reflected in the Final Report.

Grant funding is non-transferable to other parties... (Does the XVI. No Assignment cover this requirement?)

III. REPORTING.

Grantee shall submit periodic Progress Reports to the Foundation describing quantitative and qualitative measures of success such as actual accomplishments, cost status, schedule changes, change in approach, actual and anticipated problems and delays, and their resolution.

In addition to the project scope and expenditures status updates, Grantee will provide the following (at the minimum in the milestone and final reports):

- Demonstration results and analysis
- Project performance
- Data collected
- Emission reduction status update (including GHG, criteria pollutants, and other air toxics)
- Project cost effectiveness
- Lessons learned, Including technical, business operations, legal, and regulatory issues and policy implications, customer experience and satisfaction

Reporting should be conducted based on milestones (as described below or attached).

Grantee shall also submit a final budget report to reconcile the expenditures of Grant Funds, compared to the original budget.

REPORTING	Report Type	Reporting Period End	Report Due	Submission Req.
Monthly Update	Written update – HCBF	Period ends the last	[list dates]	Via email to
	required template attached	business day of each	Due by 8 th of the	Executive Director
	to contract	month	following month	
Quarterly	Written & Verbal -	Period ends the	[list dates]	Via
Report	HCBF required	last day of each	Due by 8 th of the	Submittable
	template attached to	quarter	following month	& phone call
	contract			with ED –
				reminder
				email will
				include link
Milestone	Written - HCBF	Ends when	[list date]	Via
Report	required template	milestone is	Within 15 business	Submittable
	attached to contract	complete per the	days of milestone	– reminder
		Scope of Work	completion	email will
				include link
FINAL	Written - HCBF	End of Agreement	[list date]	

required template	term	Within 30 days of	
attached to contract		Agreement end	
		date	

IV. GRANTEE'S STATUS.

This grant is specifically conditioned upon Grantee's (or Fiscal Sponsor) status as an eligible grantee of the Harbor Community Benefit Foundation in accordance with this section.

V. MANAGEMENT AND ORGANIZATIONAL CHANGES.

Grantee shall also provide written notice (see attached Change Request Form) to the Foundation if significant changes or events occur during the term of this grant which could potentially impact the progress, delivery, timing or outcome of the grant, including but not limited to changes in Grantee's management, key personnel, partners, and/or increases or losses of matching funding.

VI. RECORDS, AUDITS, SITE VISITS.

Grantee is responsible for maintaining adequate financial records of this grant. Grant Funds shall be accounted for separately in the Grantee's books and records. All expenditures made in furtherance of the Grant Purpose shall be charged off against the grant and shall appear on those books. Grantee shall keep adequate records to substantiate such expenditures. The Foundation, or a designated representative, reserves the right, upon written notice, to audit Grantee's books and records relating to the expenditure of any funds provided by the Foundation. Grantee shall make such books and records available to Foundation at reasonable times for review and audit. Grantee shall keep copies of all relevant books and records and all reports to the Foundation for at least 4 years after completion of the use of the Grant Funds.

VII. MARKETING, GRANT ANNOUNCEMENTS, PROMOTIONAL MATERIALS.

Grantee shall ensure that the Foundation is clearly identified as a funding source for any written, electronic, or other communications materials produced with support from this grant, as well as in all publications and press releases regarding the subject matter of the grant. Grantee may not, however, use the Foundation's logo without the Foundation's prior written consent.

As a courtesy, Grantee will provide a copy of promotional materials to the Foundation, including any external communications regarding this grant or referencing the Foundation.

The Foundation may include information about this grant and the Grantee in its public communications and reports and may also refer to the grant and Grantee in press releases, speeches and public comments. The Foundation may also provide information about the grant and the Grantee on its website, including project descriptions, logos, and links to Grantee's website.

Any tangible or intangible property, including copyrights, obtained or created by Grantee as part of the activity funded by this grant shall remain the property of Grantee; however, Grantee shall grant a royalty-free license to the Foundation to use, reprint, or distribute any such copyrighted materials for informational or promotional purposes. Also, any information and images submitted as part of Grantee's reports may be used by the Foundation for informational or promotional purposes.

VIII. RETURN OF UNEXPENDED FUNDS.

Grantee shall repay to the Foundation Grant Funds not expended or committed for the Grant Purpose within the Grant Term, unless an extension is approved in writing at Grantee's request and in the Foundation's sole discretion.

IX. SMALL/VERY SMALL BUSINESS ENTERPRISE PROGRAM AND LOCAL BUSINESS PREFERENCE PROGRAMS

Prior to being awarded a contract with the Harbor Department, all consultants and subconsultants must be registered on the City's Contracts Management and Opportunities Database, Los Angeles Business Assistance Virtual Network (LABAVN), at http://www.labavn.org.

X. BUSINESS TAX REGISTRATION CERTIFICATE

The City of Los Angeles, Office of Finance requires the implementation and enforcement of Los Angeles Municipal Code Section 21.09 et seq. This section provides that every person, other than a municipal employee, who engages in any business within the City of Los Angeles, is required to obtain the necessary Business Tax Registration Certificate and pay business taxes. The City Controller has determined that this Code Section applies to consulting firms that are doing work for the Los Angeles Harbor Department.

XI. CONFLICT OF INTEREST

During the term of this Agreement, Consultant shall inform the Department when Consultant, or any of its Subconsultants, employs or hires in any capacity, and for any length of time, a person who has worked for the Department as a Commissioner, officer or employee.

XII. STATE TIDELANDS GRANTS

Consultant agrees that any interpretation of the Agreement and the terms contained therein must be consistent with any limitations, conditions, restrictions and reservations related to the An Act Granting to the City of Los Angeles the Tidelands and Submerged Lands of the State Within the Boundaries of Said City.

XIII. REMEDIES ON DEFAULT.

In the event the Foundation determines, in its sole discretion, that Grantee has breached or failed to carry out any material provision of this Agreement, the Foundation may, in addition to any other legal remedies it may have, including the termination of this Agreement, refuse to make any further grant payments to Grantee, and the Foundation may demand in writing the return of all or part of the unexpended Grant Funds, which the Grantee shall immediately repay to the Foundation. The amount of such unexpended Grant Funds to be repaid to the Foundation shall not include funds needed to meet obligations incurred by Grantee to third parties, in good faith, for the Grant Purpose, prior to Grantee's receipt of the Foundation's written demand for repayment. In addition to the rights reserved to the Foundation in the first sentence of this paragraph, the Foundation may also terminate this Agreement and take the actions described above with respect to unexpended Grant Funds if it determines, in the exercise of its reasonable discretion, that circumstances relevant to the Grantee, including, by way of illustration, those respecting its tax-exempt status, or organization or financial condition, are such that the Foundation has reason to conclude that satisfactory completion of the objectives contemplated by this grant are in jeopardy.

XIV. NO AGENCY.

Grantee is solely responsible for the activity supported by the Grant Funds, including the preparation of all plans and specifications, supervision and administrative control, and the operation thereof. All activity shall be operated under Grantee's name. This Agreement shall not be deemed to create any relationship of agency, partnership, or joint venture between the parties hereto, and Grantee shall make no such representation to anyone.

XV. PARTNERS/SUBGRANTEES.

Grantee must ensure all partners, consultants, or sub-grantees ("sub-grantees") must be disclosed, and pre-approved. Sub-grantees may not be changed, without prior written approval, and must use the Grant Funds in a manner consistent with this Agreement. Neither Grantee nor its sub-grantees may make any oral or written statement or otherwise imply to anyone that the Foundation supports the activities of any sub-grantee. Furthermore, Grantee acknowledges that there is no agreement, oral or written, whereby the Foundation has earmarked or otherwise designated any part of the Grant Funds for any specific sub-grantee.

XVI. NO ASSIGNMENT.

This agreement is not assignable by Grantee without express written consent of the Foundation. Any attempt by Grantee to assign any performance of the terms of this agreement shall be null and void and shall constitute a material breach of this contract.

XVII. PROHIBITED USE OF FUNDS.

The Grant Funds are not designated or earmarked for the carrying on of propaganda or attempting to influence legislation. If the Grant Purpose involves public policy issues, the Foundation is relying upon Grantee's representations, made in Grantee's application that the Grant Funds do not exceed the amount budgeted by Grantee for activities that are not attempts to influence legislation.

No part of these grant funds shall be disbursed to any Foundation director, officer, employee, their affiliates, family, household members or other related parties; for any purpose.

Use of any of the Grant Funds (a) to participate in or influence the outcome of any specific public election of any candidate for public office or to carry on, directly or indirectly, any other activity that is prohibited to a public charity, (b) to provide material support to any person or entity that engages in violent or terrorist activities, or (c) for religious purposes, is prohibited.

Grantee shall not use any of the funds from this grant in a manner inconsistent with Section 501(c)(3) of the Code.

XVIII. NO LIABILITY; INDEMNIFICATION.

Except for the sole negligence or willful misconduct of the City of Los Angeles ("City"), or any of its Boards, Officers, Agents, Employees, Assigns and Successors in Interest, and of HCBF, Grantee undertakes and agrees to defend, indemnify and hold harmless the City and any of its Boards, Officers, Agents, Employees, Assigns, and Successors in Interest and HCBF from and against all suits and causes of action, claims, losses, demands and expenses, including, but not limited to, attorney's fees (both in house and outside counsel) and cost of litigation (including all actual litigation costs incurred by the City and HCBF, including but not limited to, costs of experts and consultants), damages or liability of any nature whatsoever, for death or injury to any person, including Grantee's employees and agents, or damage or destruction of any property of either party hereto or of third parties, arising in any manner by reason of the negligent acts, errors, omissions or willful misconduct incident to the performance of this Agreement by Grantee or its subcontractors of any tier. Rights and remedies available to the City and HCBF under this provision are cumulative of those provided for elsewhere in this Agreement and those allowed under the laws of the United States, the State of California, and the City.

Limitation of liability (e.g. equipment failure, HCBF is not liable)

XIX. INSURANCE.

Grantee shall provide, pay for, and maintain in full force and effect during the Grant Term evidence of either 1) a Certificate of Self Funding of Insurance Obligation or, 2) the following insurance to cover Grantee's own operations and to enable Grantee to fully indemnify and defend the Foundation there under:

- 1. **Commercial General Liability Insurance**. Grantee shall maintain commercial general liability insurance (CGL) with a limit of not less than \$1,000,000 each occurrence/\$2,000,000 in the annual aggregate.
- 2. **Business Auto Liability Policy**. Grantee shall maintain business auto liability insurance and, with a limit of not less than \$1,000,000 each accident.
- 3. **Professional Liability (Errors and Omissions) Insurance**. Grantee shall maintain professional liability insurance appropriate to the grantee's profession with a limit not less than \$1,000,000 each occurrence/\$2,000,000 in the annual aggregate.
- 4. **Workers' Compensation and Employer's Liability Insurance**. Grantee shall maintain workers' compensation insurance as required by the State of California and Employer's Liability

Insurance in the amount of \$1,000,000 per accident for bodily injury or disease.

- 5. Minimum Scope of Insurance. CGL insurance shall cover liability arising from premises, operations, independent contractors, products-completed operations, personal injury and advertising injury liability assumed under an insured contract (including the tort liability of another assumed in a business contract). Business Auto Insurance shall cover liability arising out of any auto (including owned, hired, and non-owned autos).
- Subrogation. The insurer shall agree to waive all rights of subrogation against HCBF, its officers,
 officials, employees and volunteers for losses arising from activities and operations of the
 Grantee in the performance of Grant Purpose under this agreement.
- 7. Verification of Coverage. Grantee shall furnish HCBF evidence of current coverage required by this section. HCBF reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications.

Insurance requirements shall be applicable to the Grantee, project partners, equipment owner, or all?

XX. NO WAIVER.

The failure of the Foundation to exercise any of its rights under this Agreement shall not be deemed to be a waiver of such rights.

XXI. ORDER OF PRECEDENCE.

The order of precedence for interpreting inconsistencies, if any, shall be this Agreement.

XXII. ENTIRE AGREEMENT; AMENDMENTS.

This Agreement constitutes the entire agreement of the parties with respect to its subject matter and supersedes any and all prior written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may not be amended or modified, except in a writing signed by both parties.

XXIII. GOVERNING LAW.

This Agreement shall be governed by the laws of the State of California.

XXIV. REPRESENTATIONS AND WARRANTIES

Grantee represents and warrants to the Foundation that, to the actual knowledge of Grantee, all delivered products and materials, including training and maintenance plans, do not infringe any patent, trademark, copyright or other proprietary rights.

XXV. COMPLIANCE WITH LAW.

Grantee shall at all times comply with all Federal, State, and local laws. Grantee specifically acknowledges that this Agreement is entered into in furtherance of and as a benefit to the State Tidelands Grant and the trust created thereby. Therefore, this Agreement is at all times subject to the limitations, conditions, restrictions and reservations contained in and prescribed by the Act of the Legislature of the State of California entitled "An Act Granting to the City of Los Angeles the Tidelands and Submerged Lands of the State Within the Boundaries of Said City," approved June 3, 1929 (Stats. 1929, Ch. 651), as amended, and provisions of Article VI of the Charter of the City of Los Angeles relating to such lands. Grantee agrees that any interpretation of this Agreement and the terms contained herein must be consistent with such limitations, conditions, restrictions and reservations.

XXVI. EQUAL EMPLOYMENT OPPORTUNITY.

Grantee represents and agrees that it does not and will not discriminate against any employee or applicant for employment because of race, religion, color, medical condition, sex, sexual orientation, national origin, political affiliation or opinion, or pregnancy or pregnancy related condition.

XXVII. NOTICES.

All notices and disbursements to the Grantee shall be directed to the following person(s):

		y Contact		Secondary Contact	
	Name:			Name:	
	Title:			Title:	
	Email:			Email:	
	Phone:		ŀ	Phone:	
plea	_	nt correctly sets forth your understan appropriate officer authorized to sig	_		ınt,
All	questions, no	otices and reports related to this gran	nt should be dire	ected to:	
		Harbor Community Benefit Founda	ntion		
		302 W. 5 th Street, Suite 300	4		
		San Pedro, CA 90731			
		Attn:			
		Email:			
		Office: (310) 997-7116			
XXVIII.	TERMINATI	I <mark>ON</mark> . (confirm this statement)			
		ation shall have the right to terminate	_		•
		rantee. If this Agreement is so termin			
	-	se charges which have accrued but n		_	
		grees to accept such amount, plus all	amounts previo	ously paid, as full payment a	ınd satisfaction
	of all obliga	tions of Foundation to Grantee.			
XXIX.	DISPUTES				
			,		
Accepted	d on behalf o	of Grantee by:			
					_
Authoriz	ed Signature		Da	ate	
					_
Printed N	Name		Ti	tle	
Federal E	EIN:		<u>.</u>		
Final app	proval on be	half of Harbor Community Benefit Fo	oundation by:		
	1.61				_
Authoriz	ed Signature		Da	ate	

Printed Name	Title

Federal EIN: <u>45-2487333</u>

