City and County of San Francisco
Master Report

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 241217 **File Type:** Resolution **Status:** Passed

Enacted: 006-25 **Effective:** 01/16/2025

Version: 2 **In Control:** Clerk of the Board

File Name: Accept and Expend Grant - Environmental Protection Agency - Clean Ports Program - $55,386,000 **Date Introduced:** 12/17/2024

Requester: Port **Cost:** **Final Action:** 01/16/2025

Comment: **(Fiscal Impact; No Budget and Legislative Analyst Report)**

Title: Resolution authorizing the Port of San Francisco, contingent on Port Commission approval, to accept and expend a grant award in the amount of $55,386,000 from the United States Environmental Protection Agency (EPA), to fund the San Francisco Waterfront Emissions-Free Ferry System for the period of January 1, 2025, through December 31, 2028.

Sponsors: Mayor; Dorsey and Walton

History of Legislative File 241217

Ver	Acting Body	Date	Action	Sent To	Due Date	Result
1	President	12/17/2024	RECEIVED AND ASSIGNED	Budget and Finance Committee		
1	Board of Supervisors	01/14/2025	AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE			Passed
2	Board of Supervisors	01/14/2025	ADOPTED AS AMENDED			Passed
2	Board of Supervisors	01/14/2025	CALLED FROM COMMITTEE			
	1/14/2025 - The Board of Supervisors approved Motion No. M25-001 to call this matter from the Budget and Finance Committee and consider it during a Committee of the Whole on the same day.					
2	Mayor	01/16/2025	APPROVED			

FILE NO. 241217

AMENDED IN BOARD
1/14/2025

RESOLUTION NO. 6-25

[Accept and Expend Grant - Environmental Protection Agency - Clean Ports Program - $55,386,000]

Resolution authorizing the Port of San Francisco, contingent on Port Commission approval, to accept and expend a grant award in the amount of $55,386,000 from the United States Environmental Protection Agency (EPA), to fund the San Francisco Waterfront Emissions-Free Ferry System for the period of January 1, 2025, through December 31, 2028.

WHEREAS, The Port manages the San Francisco waterfront within its jurisdictional boundaries as the gateway to a world class city, and advances environmentally and financially sustainable maritime, recreational and economic opportunities to serve the City, Bay Area, California, and nation; and

WHEREAS, The Port of San Francisco is an economic engine welcoming millions of people to its jurisdiction each year while supporting operations that provide sustainable jobs for people in the community; and

WHEREAS, On August 16, 2022, President Biden signed the Inflation Reduction Act into law, marking one of the largest investments in the American economy, energy security, and climate that Congress has made in the nation's history; and

WHEREAS, The Inflation Reduction Act of 2022 provides EPA with $3 billion to fund zero-emission port equipment and infrastructure as well as climate and air quality planning at U.S. ports; and

WHEREAS, On February 28, 2024, the EPA announced the availability of $3 billion in grant funding through the Clean Ports Program to help ports transition to zero-emissions operations, reduce diesel pollution, engage with the local community, create a safer

workplace for our maritime workforce, and to develop a plan to mitigate air emissions while promoting equity and environmental justice; and

WHEREAS, On May 24, 2024, the Port of San Francisco and San Francisco Bay Ferry submitted a $55.4 million grant application to fund the San Francisco Waterfront Emissions-Free Ferry System; and

WHEREAS, The EPA Clean Ports Program grant requires a 10% match, but the Port of San Francisco proposed a 22% match totaling $15.5 million to improve the competitiveness of its application; and

WHEREAS, The San Francisco Public Utilities Commission has committed $13.6 million in bond proceeds to support installation of critical electrification infrastructure to the Downtown Ferry Terminal, subject to future bond issuances and appropriations, to support the required match; and

WHEREAS, The San Francisco Bay Ferry has committed $1.9 million in grant pass-through funding, including $0.9 million Regional Measure 3 and $1.0 million Transit and Intercity Rail Capital Program funding to support the required match; and

WHEREAS, On October 16, 2024, the EPA announced the Port of San Francisco was selected to receive an EPA award for the full funding request of $55.4 to fund the San Francisco Waterfront Emissions-Free System Project; and

WHEREAS, The San Francisco Waterfront Emissions-Free Ferry System Project will fund four unique components including construction of the Mission Bay Ferry Landing, electrification infrastructure at the Downtown San Francisco Ferry Terminal, a zero-emission 400-passenger fast ferry, and a maritime workforce development program; and

WHEREAS, This funding will build out a zero-emission network that connects the communities served by SF Bay Ferry, including Oakland, Richmond, Vallejo and Alameda with financial and biotech employment centers; and

WHEREAS, These projects under SF Bay Ferry's Rapid Electric Emission-Free (REEF) Ferry Program will accelerate a new standard for clean ferries nationwide and serve as a training platform for the Bay Area's maritime workforce development program; and

WHEREAS, The grant also includes funding to support a maritime workforce development program operated by the Working Waterfront Coalition that will train more than 200 apprentices aimed at establishing a skilled workforce pipeline to address the shortage of maritime professionals crucial for the operation and expansion of comprehensive regional ferry service; and

WHEREAS, The EPA grant provides crucial funding that leverages more than $115 million from other local, state, and federal sources, including Regional Measure 3, CalSTA Transit and Intercity Rail Capital Program, FTA Rapid Electric Emission-Free Ferry funding, City and County of San Francisco Capital Funds, San Francisco Sales Tax, and private funding; and

WHEREAS, This grant does not create any new positions and will not require an amendment to the Annual Salary Ordinance; and

WHEREAS, Indirect costs were not included in the grant to improve the competitiveness of the grant application; and

WHEREAS, Administrative Code, Section 2.6-3, requires the Budget Analyst to review legislation and report on matters that are deemed to have fiscal impact and the Budget and Legislative Analyst determined this matter has fiscal impact and requires a fiscal impact report be submitted prior to the legislation being heard in a fiscal committee; now, therefore, be it

RESOLVED, Due to the lack of a fiscal impact report, as required by Administrative Code, Section 2.6-3, the funds accepted for this grant shall be placed into the Board of Supervisors' reserve until released; and, be it

FURTHER RESOLVED, That the Board of Supervisors hereby authorizes the Port of San Francisco to accept $55,386,000 from the United State Environmental Protection Agency Clean Ports Program, to fund the San Francisco Waterfront Emissions-Free Ferry System Project; and, be it

FURTHER RESOLVED, Once the fiscal impact requirements of Administrative Code, Section 2.6-3 have been resolved, the Board of Supervisors delegates their authority to release these funds to the Budget and Finance Committee and the Clerk of the Board is directed to schedule a hearing at the Budget and Finance Committee to duly review the complete file and consider the release of the funds to the Port; and, be it

FURTHER RESOLVED, That the Port shall be hereby authorized to expend the grant award of $55,386,000 upon the release of funds from the Board of Supervisors' Reserve; and, be it

FURTHER RESOLVED, That the Port, subject to the Board of Supervisors' approval, authorizes the Executive Director or her designee to execute for and on behalf of the City and County, any documents necessary to enter into the grant agreement with the United States Environmental Protection Agency, including any extensions, augmentations, or amendments, thereof; and, be it

FURTHER RESOLVED, That within thirty (30) days of the Grant Agreement being fully executed by all parties, the Port Executive Director shall provide the final agreement to the Clerk of the Board of Supervisors for inclusion into the official file.

Recommended:

/s/

Elaine Forbes

Executive Director

Port of San Francisco

Approved: /s/

Benjamin McCloskey,

Interim Mayor's Budget Director

Approved: /s/Jocelyn Quintos for Greg Wagner

Greg Wagner, Controller

City and County of San Francisco
Tails
Resolution

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

File Number: 241217 **Date Passed:** January 14, 2025

Resolution authorizing the Port of San Francisco, contingent on Port Commission approval, to accept and expend a grant award in the amount of $55,386,000 from the United States Environmental Protection Agency (EPA), to fund the San Francisco Waterfront Emissions-Free Ferry System for the period of January 1, 2025, through December 31, 2028.

January 14, 2025 Board of Supervisors - AMENDED, AN AMENDMENT OF THE WHOLE BEARING NEW TITLE

Ayes: 11 - Chan, Chen, Dorsey, Engardio, Fielder, Mahmood, Mandelman, Melgar, Sauter, Sherrill and Walton

January 14, 2025 Board of Supervisors - ADOPTED AS AMENDED

Ayes: 11 - Chan, Chen, Dorsey, Engardio, Fielder, Mahmood, Mandelman, Melgar, Sauter, Sherrill and Walton

File No. 241217

I hereby certify that the foregoing Resolution was ADOPTED AS AMENDED on 1/14/2025 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

Daniel Lurie
Mayor

1.16.2025

Date Approved

File Number: 241217
(Provided by Clerk of Board of Supervisors)

Grant Resolution Information Form

(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: Accept and Expend Grant – Environmental Protection Agency Clean Ports Program- $55,386,000

2. Department: **Port of San Francisco**

3. Contact Person: **Boris Delepine** Telephone: **415.274.0400**

4. Grant Approval Status (check one):

   [] Approved by funding agency [**X**] Not yet approved **[in progress with finalizing workplan and grant documentation]**

5. Amount of Grant Funding Approved or Applied for: **$55,386,000**
6. a. Matching Funds Required: **$15,537,000**
   b. Source(s) of matching funds (if applicable): **SFPUC bond proceeds and San Francisco Bay Ferry sources (See Section 12 below for more details)**

7. a. Grant Source Agency: **United States Environmental Protection Agency**
   b. Grant Pass-Through Agency (if applicable): **NA**

8. Proposed Grant Project Summary: **This funding will complete the nation's first-ever high-speed zero-emission ferry network connecting critical transportation hubs.**

Specifically, the funding will support:

- **Electrification infrastructure at the Downtown San Francisco Ferry Terminal**
- **Construction of a high-speed 400-passenger zero-emission vessel**
- **Building a new ferry terminal in San Francisco's Mission Bay neighborhood, and**
- **A regional maritime workforce development program.**

9. Grant Project Schedule, as allowed in approval documents, or as proposed:
   Start-Date: **January 1, 2025** End-Date: **December 31, 2028**

10. a. Amount budgeted for contractual services: **$2.89 million**
    b. Will contractual services be put out to bid? **Yes**
    c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? **Federal funding prohibits LBE program requirements**
    d. Is this likely to be a one-time or ongoing request for contracting out?

11. a. Does the budget include indirect costs?
    [ ] Yes **[X] No**
    b. 1. If yes, how much?
    b. 2. How was the amount calculated?

    c. 1. If no, why are indirect costs not included? **N/A**

[ ] Not allowed by granting agency [X] To maximize use of grant funds on direct services
[ ] Other (please explain):

c. 2. If no indirect costs are included, what would have been the indirect costs? **N/A**

12. Any other significant grant requirements or comments:

EPA GRANT MATCHING FUNDS

In addition to the $55.4 million (48%) grant request, the Project budget includes $15.5 million (22%) matching funds from a variety of local and state sources:

SFPUC ($13.6 million). The SFPUC is contributing $13.6 million in matching funds to the project to complete the upgrades needed to meet this project's charging needs by 2027. As detailed in the SFPUC's letter of commitment, these funds are part of a $31 million investment in the construction of a transmission level substation and associated power transmission and distribution facilities that will connect to key Port locations along the waterfront. While bonds have not yet been issued to complete this work, future proceeds will be appropriated to the following chart fields:

Account	567000 - Bldgs,Struct&Imprv Proj-Budget
Fund	25338 - HHP 2025 Bond Fund
Dept	298648 - HHP0903 Energy Services
Authority	22329 - Grid Connections
Agency	N/A
Project	10039723 - Dwntwn Ferry & So. Beach Elec.
Activity	0001 - Dwntwn Ferry & So. Beach Ele

SF Bay Ferry ($1.9 million). The Port and SF Bay Ferry will rely on their established, long-term partnership and experience in large-scale project implementation to bring new, zero emission technology to the Downtown Waterfront through this project. SF Bay Ferry has committed $1.9 million in direct match for eligible expenses and $85.6 million in leveraged funding related to delivery of early phase and non-eligible project components, including three smaller vessels, a shore power system, and utility infrastructure. SF Bay Ferry will retain ownership of the vessel and equipment purchased under the grant.

- **CalSTA/ Transit and Intercity Rail Capital Program (TIRCP) ($1.0 million).** The State of California's TIRCP funds have been awarded to SF Bay Ferry to support behind the meter infrastructure costs.
- **Regional Measure 3 ($0.9 million).** Regional Measure 3 (RM3) was approved by a majority of voters in the nine Bay Area counties in 2018 and authorized a three-dollar bridge toll increase on the Bay Area's state-owned bridges to fund a comprehensive program of regional transportation improvements. RM3 includes capital funds for WETA, of which $0.9 million is provided to support BTM infrastructure costs.

MISSION BAY FERRY LANDING FUNDING PLAN

In addition to the EPA grant and matching funds, the Mission Bay Ferry Landing Project funding plan will require the appropriation of $36.5 million additional funding. In early 2025, the Port anticipates bringing accept and expend legislation to the Board of Supervisors for the following funding sources to support the completion of a new ferry landing at Mission Bay:

- University of California San Francisco ($4.0 million), anticipated gift.
- California Transportation Agency ($4.5 million), anticipated grant.
- San Francisco Bay Ferry ($28.0 million), anticipated grant passing through $26.0 million Regional Measure 3 and $2.0 million CalSTA/ Transit and Intercity Rail Capital Program funding.

****Disability Access Checklist***(Department must forward a copy of all completed Grant Information Forms to the Mayor's Office of Disability)**

13. This Grant is intended for activities at (check all that apply):

[**X**] Existing Site(s)	[ ] Existing Structure(s)	[ ] Existing Program(s) or Service(s)
[] Rehabilitated Site(s)	[ ] Rehabilitated Structure(s)	[ ] New Program(s) or Service(s)
[] New Site(s)	[**X**] New Structure(s)	

14. The Departmental ADA Coordinator or the Mayor's Office on Disability have reviewed the proposal and concluded that the project as proposed will be in compliance with the Americans with Disabilities Act and all other Federal, State and local disability rights laws and regulations and will allow the full inclusion of persons with disabilities. These requirements include, but are not limited to:

1. Having staff trained in how to provide reasonable modifications in policies, practices and procedures;
2. Having auxiliary aids and services available in a timely manner in order to ensure communication access;
3. Ensuring that any service areas and related facilities open to the public are architecturally accessible and have been inspected and approved by the DPW Access Compliance Officer or the Mayor's Office on Disability Compliance Officers.

If such access would be technically infeasible, this is described in the comments section below:

Comments:

Departmental ADA Coordinator or Mayor's Office of Disability Reviewer:

Wendy Proctor
(Name)

Port of San Francisco ADA Coordinator
(Title)

Date Reviewed: 12/16/2024

Wendy Proctor
(Signature Required)

Department Head or Designee Approval of Grant Information Form:

Elaine Forbes
(Name)

Executive Director
(Title)

Date Reviewed: 12/16/2024


(Signature Required)

U.S. ENVIRONMENTAL PROTECTION AGENCY

Grant Agreement

GRANT NUMBER (FAIN): 97T27501 **MODIFICATION NUMBER:** 0 **PROGRAM CODE:** 5Y	**DATE OF AWARD** 12/11/2024
TYPE OF ACTION New	**MAILING DATE** 12/16/2024
PAYMENT METHOD: ASAP	**ACH#** 90419

RECIPIENT TYPE:
County

Send Payment Request to:
Contact EPA RTPFC at: rtpfc-grants@epa.gov

RECIPIENT:
CITY & COUNTY OF SAN FRANCISCO
PIER 1
The Embarcadero
SAN FRANCISCO, CA 94111-2027
EIN: 94-1705778

PAYEE:
CITY & COUNTY OF SAN FRANCISCO
PIER 1
The Embarcadero
SAN FRANCISCO, CA 94111-2027

PROJECT MANAGER	EPA PROJECT OFFICER	EPA GRANT SPECIALIST
Boris Delepine PORT OF SAN FRANCISCO PIER 1 THE EMBARCADERO SAN FRANCISCO, CA 94111 **Email:** boris.delepine9sfport.com **Phone:** 415-818-5768	Nidia Trejo 75 Hawthorne Street, AIR-1 San Francisco, CA 94105 **Email:** Trejo.Nidia@epa.gov **Phone:** 415-972-3968	Danielle Tucker Grants Branch, MSD-6 75 Hawthorne Street San Francisco, CA 94105 **Email:** Tucker.Danielle.E@epa.gov **Phone:** 415-972-3871

PROJECT TITLE AND DESCRIPTION

Inflation Reduction Act – Clean Ports Program

See Attachment 1 for project description.

BUDGET PERIOD	PROJECT PERIOD	TOTAL BUDGET PERIOD COST	TOTAL PROJECT PERIOD COST
01/01/2025 - 10/01/2028	01/01/2025 - 10/01/2028	$ 70,923,000.00	$ 70,923,000.00

NOTICE OF AWARD

Based on your Application dated 05/24/2024 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards $ 55,386,000.00. EPA agrees to cost-share 78.09% of all approved budget period costs incurred, up to and not exceeding total federal funding of $ 55,386,000.00. Recipient's signature is not required on this agreement. The recipient demonstrates its commitment to carry out this award by either: 1) drawing down funds within 21 days after the EPA award or amendment mailing date; or 2) not filing a notice of disagreement with the award terms and conditions within 21 days after the EPA award or amendment mailing date. If the recipient disagrees with the terms and conditions specified in this award, the authorized representative of the recipient must furnish a notice of disagreement to the EPA Award Official within 21 days after the EPA award or amendment mailing date. In case of disagreement, and until the disagreement is resolved, the recipient should not draw down on the funds provided by this award/amendment, and any costs incurred by the recipient are at its own risk. This agreement is subject to applicable EPA regulatory and statutory provisions, all terms and conditions of this agreement and any attachments.

ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)	AWARD APPROVAL OFFICE
ORGANIZATION / ADDRESS	**ORGANIZATION / ADDRESS**
U.S. EPA, Region 9, U.S. EPA, Region 9 Grants Branch, MSD-6 75 Hawthorne Street San Francisco, CA 94105	U.S. EPA, Region 9, Air and Radiation Division, AIR-1 R9 - Region 9 75 Hawthorne Street San Francisco, CA 94105

THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY

Digital signature applied by EPA Award Official Carolyn Truong - Grants Management Officer	**DATE** 12/11/2024

EPA Funding Information

FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	$ 0	$ 55,386,000	$ 55,386,000
EPA In-Kind Amount	$ 0	$ 0	$ 0
Unexpended Prior Year Balance	$ 0	$ 0	$ 0
Other Federal Funds	$ 0	$ 0	$ 0
Recipient Contribution	$ 0	$ 0	$ 0
State Contribution	$ 0	$ 1,000,000	$ 1,000,000
Local Contribution	$ 0	$ 14,537,000	$ 14,537,000
Other Contribution	$ 0	$ 0	$ 0
Allowable Project Cost	$ 0	$ 70,923,000	$ 70,923,000

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.051 - Clean Ports Program	Inflation Reduction Act: Sec. 60102 Clean Air Act: Sec. 133	2 CFR 200, 2 CFR 1500 and 40 CFR 33

Fiscal									
Site Name	Req No	FY	Approp. Code	Budget Organization	PRC	Object Class	Site/Project	Cost Organization	Obligation / Deobligation
-	2509M9S059	2227	E4SF6	09M2	000AVFXY3	4166	-	-	$ 55,386,000
									$ 55,386,000

Budget Summary Page

Table A - Object Class Category (Non-Construction)	Total Approved Allowable Budget Period Cost
1. Personnel	$ 151,000
2. Fringe Benefits	$ 51,000
3. Travel	$ 0
4. Equipment	$ 0
5. Supplies	$ 0
6. Contractual	$ 2,894,000
7. Construction	$ 2,065,000
8. Other	$ 65,762,000
9. Total Direct Charges	$ 70,923,000
10. Indirect Costs: 0.00 % Base	$ 0
11. Total (Share: Recipient 21.91 % Federal 78.09 %)	$ 70,923,000
12. Total Approved Assistance Amount	$ 55,386,000
13. Program Income	$ 0
14. Total EPA Amount Awarded This Action	$ 55,386,000
15. Total EPA Amount Awarded To Date	$ 55,386,000

Attachment 1 - Project Description

The purpose of this award is to provide funding under the Inflation Reduction Act to the Port of San Francisco. Specifically, the recipient will improve air quality and reduce pollution at the San Francisco and Alameda County Ports and in the surrounding area through the deployment of zero-emission equipment and infrastructure at the ports.

This assistance agreement provides full federal funding in the amount of $55,386,000.00.

The activities include the purchase and deployment of zero-emission equipment, technologies, and related infrastructure, as well as near-port community engagement and workforce development. The anticipated deliverables include the purchase and deployment of one new zero-emission electric ferry vessel and two vessel shore power charging systems with 17 kW total capacity. Other deliverables include zero-emission technology and equipment training for underserved communities, long-term community engagement forums, and institutional and operational changes that allow for future deployment of additional zero-emission technologies.

The expected outcomes include reduced CO2 emissions, reduced fuel consumption, noise reduction and health benefits to surrounding disadvantaged communities, workforce development, and community and stakeholder engagement and awareness.

The intended beneficiaries include the Port of San Francisco (grantee); the San Francisco Public Utilities Commission (partner), which will support upgrades needed for the charging needs; the San Francisco Bay Ferry (partner), which will support large scale implementation and funding, and the Working Waterfront Coalition (partner), which is a workforce program for maintenance workers and repair operators. Indirect beneficiaries include near-port communities which will experience improved ambient air quality.

There will be subawards for the delivery of critical equipment, infrastructure, and workforce development services. The SF Bay Ferry will manage the construction of the high-speed electric ferry vessel, behind the meter infrastructure as well as procure a shore power and anchoring system. The subaward to SF Bay Ferry includes the workforce development services from the Working Waterfront Coalition that will directly support ongoing operations of the electrified ferry system. The San Francisco Public Utilities Commission will deliver behind the meter infrastructure to the shore power and anchoring systems, and is responsible for planning, designing, and engineering its electrical service facilities and service laterals using standards for design, materials, and construction.

Administrative Conditions

General Terms and Conditions

The recipient agrees to comply with the current Environmental Protection Agency (EPA) general terms and conditions available at: https://www.epa.gov/grants/epa-general-terms-and-conditions-effective-october-1-2024-or-later

These terms and conditions are in addition to the assurances and certifications made as a part of the award and the terms, conditions, or restrictions cited throughout the award.

The EPA repository for the general terms and conditions by year can be found at: https://www.epa.gov/grants/grant-terms-and-conditions#general.

A. Federal Financial Reporting (FFR)

For awards with cumulative project and budget periods greater than 12 months, the recipient will submit an annual FFR (SF 425) covering the period from "project/budget period start date" to **September 30** of each calendar year to the EPA Finance Center in Research Triangle Park, NC. The annual FFR will be submitted electronically to rtpfc-grants@epa.gov no later than **December 30** of the same calendar year. Find additional information at https://www.epa.gov/financial/grants. (Per 2 CFR § 200.344(b), the recipient must submit the Final FFR to rtpfc-grants@epa.gov within 120 days after the end of the project period.)

B. Procurement

The recipient will ensure all procurement transactions will be conducted in a manner providing full and open competition consistent with 2 CFR § 200.319. In accordance with 2 CFR § 200.324, the recipient and subawardee(s) must perform a cost or price analysis in connection with applicable procurement actions, including contract modifications. *State and Tribal government entities must follow procurement standards as outlined in 2 CFR § 200.317.*

C. MBE/WBE Reporting, 40 CFR, Part 33, Subpart E (EPA Form 5700-52A)

The recipient agrees to submit a “MBE/WBE Utilization Under Federal Grants and Cooperative Agreements” report (EPA Form 5700-52A) annually for the duration of the project period. The current EPA Form 5700-52A with instructions is located at https://www.epa.gov/grants/epa-grantee-forms

This provision represents an approved exception from the MBE/WBE reporting requirements as described in 40 CFR Section 33.502.

Reporting is required for assistance agreements where funds are budgeted for procuring construction, equipment, services and supplies (including funds budgeted for direct procurement by the recipient or procurement under subawards or loans in the “Other” category) with a cumulative total that exceed the **Simplified Acquisition Threshold (SAT) currently set at $250,000** (the dollar threshold will be automatically revised whenever the SAT is adjusted; See 2 CFR Section 200.1), including amendments and/or modifications. All procurement actions are reportable when reporting is required, not just the portion which exceeds the SAT.

Recipients with expended and/or budgeted funds for procurement are required to report annually whether the planned procurements take place during the reporting period or not. If no budgeted procurements take place during the reporting period, the recipient should check the box in section 4A when completing the form.

When completing the annual report, recipients are instructed to check the box titled “annual” in section 1B of the form. For the final report, recipients are instructed to check the box indicated for the “Final Report (project completed)” in section 1B of the form.

The annual reports are due by October 30th of each calendar year and the final report is due within 120 days after the end of the project period, whichever comes first. The recipient will submit the MBE/WBE report(s) and/or questions to GrantsRegion9@epa.gov and the EPA Grants Specialist identified on page 1 of the award document.

D. Indirect Costs

The Cost Principles under 2 CFR Part 200, Subpart E apply to this award. Since there are no indirect costs included in the assistance budget, they are not allowable under this Assistance Agreement.

E. Subaward(s)

The recipient's approved budget includes subaward(s). As applicable, the recipient will comply with the General Term and Condition on reporting of first tier subawards to www.fsrs.gov per “Reporting Subawards and Executive Compensation” requirement.

F. Non-Federal Third-Party Contributions

This award includes non-federal third party contributions. Third party contributions counting towards satisfying a cost sharing requirement must be verifiable from the recipient's records and its subgrantee (s). As applicable, these records must reflect how the value is placed on third party contributions. The value of third party contributions must be applicable to the period to which the cost sharing requirement apply (2 CFR § 200.306).

Programmatic Conditions

Clean Ports Zero-Emission Technology Deployment Competition Programmatic Terms and Conditions

a. Final Approved Workplan and Modifications

1. Recipient agrees to carry out the project in accordance with the final approved workplan.

2. Recipients are required to report deviations from budget or project scope or objective, and must request prior written approval from the EPA for:

a. any change in the scope or objective of the project (even if there is no associated budget revision requiring prior written approval);

b. any change in a key personnel (including employees and contractors) that are identified by name or position in the Federal award specified in the application or workplan; the disengagement from the project for more than three months, or a 25% reduction in time and effort devoted to the Federal award over the course of the period of performance, by the approved project director or project manager;

c. The inclusion of costs that require prior approval in accordance with 2 CFR Part 200 Subpart E—Cost Principles or 48 CFR part 31, “Contract Cost Principles and Procedures,” as applicable;

d. the transfer of funds budgeted for participant support costs to other budget categories as defined in 2 CFR Section 200.1 Definitions to other categories of expense;

e. unless described in the final approved workplan and budget, the subawarding, transferring or contracting out of any work under the award;

f. changes in the total approved cost-sharing provided by the recipient; or the need arises for additional Federal funds to complete the project.

Requests for proposed modifications to the approved workplan or budget, including additions, deletions, or changes in the schedule, must be submitted in a timely manner to the EPA Project Officer for approval, to minimize project delays. Depending on the type or scope of changes, a formal amendment to the award may be necessary. Major project modifications which include changes to the approved types and number of partners and equipment, or to the approved project partners and location(s) may not be allowed.

b. Performance Reporting and Final Performance Report

b1. Performance Reports – Content

In accordance with 2 CFR 200.329, the recipient agrees to complete and submit electronic performance reports using reporting template(s), including the approved Clean Ports Project Reporting Template (EPA Form Number: 5900-690 or future revisions, as applicable), which will be provided by the project officer. The purpose of performance reports is to provide updates on implementation of each project, including information on each of the following areas:

1. A comparison of accomplishments to the outputs/outcomes established in the assistance agreement work plan for the reporting period, including detailed technical information on new mobile equipment and electric charging and hydrogen fueling infrastructure deployed, and the retirement of older equipment, as appropriate;

2. The reasons why any established outputs/outcomes were not met;

3. Additional information, analysis and explanation of cost overruns or higher than-expected-unit costs.

Additionally, the recipient agrees to notify the EPA when a significant development occurs that could impact the award. Examples of significant developments can include:

- events that enable meeting milestones and objectives sooner or at less cost than anticipated;
- events that produce different beneficial results than originally planned; or
- problems, delays, or adverse conditions which will impact the ability to meet the milestones or objectives of the award, including outputs/outcomes specified in the assistance agreement work plan.

If a significant development negatively impacts the award, the recipient must include information on their plan for corrective action and any assistance needed to resolve the situation.

The final project report will include all categories of information required for semi-annual reporting, including a final, detailed description of all zero-emission technology deployment activities completed at each project location. The final project report will also include a narrative summary of the project and the successes and lessons learned for the entire project.

b2. Performance Reports - Frequency

Throughout the 4-year performance period, the recipient agrees to submit **semi-annual** performance reports electronically to the EPA Project Officer by the due date following the conclusion of each semi-annual reporting period. The semi-annual reporting periods are:

January 1 – June 30: Report due date July 30.

July 1 – December 31: Report due date January 30

Additional reporting may be required if the grant is extended or at the discretion of the EPA Project Officer. The recipient must submit the final performance report no later than 120 calendar days after the end date of the period of performance.

b3. Subaward Performance Reporting

The recipient must report on its subaward monitoring activities under 2 CFR 200.332(e). Examples of items that must be reported are:

1. Summaries of results of reviews of financial and programmatic reports.

2. Summaries of findings from site visits and/or desk reviews to ensure effective subrecipient

performance.

3. Environmental results the subrecipient achieved.

4. Summaries of audit findings and related pass-through entity management decisions.

5. Actions the pass-through entity has taken to correct deficiencies such as those specified at 2 CFR 200.332(f), 2 CFR 200.208, and the 2 CFR Part 200.339 Remedies for Noncompliance.

If the recipient is unable to obtain this information, the recipient must report to EPA why the information is not available.

c. Cybersecurity Condition

Cybersecurity Grant Condition for Other Recipients, Including Intertribal Consortia

1. The recipient agrees that when collecting and managing environmental data under this assistance agreement, it will protect the data by following all applicable State or Tribal law cybersecurity requirements.

2.a. The EPA must ensure that any connections between the recipient's network or information system and EPA networks used by the recipient to transfer data under this agreement, are secure. For purposes of this Section, a connection is defined as a dedicated persistent interface between an Agency IT system and an external IT system for the purpose of transferring information. Transitory, user-controlled connections such as website browsing are excluded from this definition.

If the recipient's connections as defined above do not go through the Environmental Information Exchange Network or the EPA's Central Data Exchange, the recipient agrees to contact the EPA Project Officer (PO) no later than 90 days after the date of this award and work with the designated Regional/Headquarters Information Security Officer to ensure that the connections meet EPA security requirements, including entering into Interconnection Service Agreements as appropriate. This condition does not apply to manual entry of data by the recipient into systems operated and used by the EPA's regulatory programs for the submission of reporting and/or compliance data.

b. The recipient agrees that any subawards it makes under this agreement will require the subrecipient to comply with the requirements in 2.a if the subrecipient's network or information system is connected to EPA networks to transfer data to the Agency using systems other than the Environmental Information Exchange Network or the EPA's Central Data Exchange. The recipient will be in compliance with this condition: by including this requirement in subaward agreements; and during subrecipient monitoring deemed necessary by the recipient under 2 CFR 200.332(e), by inquiring whether the subrecipient has contacted the EPA Project Officer. Nothing in this condition requires the recipient to contact the EPA Project Officer on behalf of a subrecipient or to be involved in the negotiation of an Interconnection Service Agreement between the subrecipient and the EPA.

d. Project Transparency

The recipient agrees to engage with near-port communities about the project during the performance period. Examples of appropriate community engagement during the project period are outlined on pg. 45 of the Notice of Funding Opportunity. Community engagement activities conducted as part of the final

approved workplan should be reported in performance reporting described in Programmatic Term and Condition B (Performance Reporting and Final Performance Report).

1. The recipient agrees to publicly share, such as on a webpage, a detailed written summary of the results of the emissions inventory and/or emission reduction plan included in the final workplan.

e. Automated Standard Application Payments (ASAP) and Proper Payment Draw Down

The recipient is subject to the Automated Standard Application Payments (ASAP) and Proper Payment Draw Down General Term and Condition. See the “Financial Information” section of the General Terms and Conditions.

The recipient is required to notify the EPA Project Officer of draws from ASAP in excess of 50% of the award within a 24-hour period. The recipient is required to provide such notification within 3 business days of the draw amount being surpassed.

The recipient is subject to the Management Fees General Term and Condition, which includes the following requirements that prohibit profit on the part of the recipient:

1. Management fees or similar charges in excess of the direct costs and approved indirect rates are not allowable.

2. Management fees or similar charges may not be used to improve or expand the project funded under this agreement, except to the extent authorized as a direct cost of carrying out the scope of work. See the “Selected Items of Cost” section of the General Terms and Conditions.

f. Public or Media Events

The recipient agrees to notify the EPA Project Officer listed in this award document of public or media events publicizing the accomplishment of significant events related to construction projects as a result of this agreement and provide the opportunity for attendance and participation by federal representatives with at least ten (10) working days' notice.

g. Program Beneficiary

Program beneficiaries must abide by requirements to ensure that the funds are used only for authorized purposes.

h. Procurement Procedures

As provided in 2 CFR 200.317, with limited exceptions, states and Indian Tribes must follow the same policies and procedures they follow for procurements financed with non-Federal funds. If such policies and procedures do not exist, States and Indian Tribes must follow the procurement standards in §§ 200.318 through 200.327. In addition to its own policies and procedures, a State or Indian Tribe must also comply with the following procurement standards: §§ 200.321, 200.322, 200.323, and 200.327. All other recipients and subrecipients, including subrecipients of a State or Indian Tribe, must follow the procurement standards in §§ 200.318 through 200.327.

The recipient must follow applicable procurement procedures. The EPA will not be a party to these

transactions. If the EPA funds are used to purchase goods or services, recipient agrees to compete the contracts for those goods and services and conduct cost and price analyses to the extent required by the fair and open competition for procurement provisions of 2 CFR §§200.318 – 327. Approval of a funding application does not relieve recipients of their obligations to compete service contracts and conduct cost and price analyses.

i. Quality Assurance

Authority: Quality Assurance applies to all assistance agreements involving environmentally related data operations, including environmental data collection, production, or use. 2 CFR 1500.12 Quality Assurance.

The recipient shall ensure that subawards involving environmental information that are issued under this agreement include appropriate quality requirements for the work. The recipient shall ensure sub-award recipients develop and implement a Quality Assurance (QA) planning document in accordance with this term and condition; and/or ensure sub-award recipients implement all applicable approved QA planning documents.

1. Quality Management Plan (QMP)

a. Prior to beginning environmental information operations, the recipient must:

i. Develop a QMP,

ii. Prepare the QMP in accordance with the current version of the EPA's Quality Management Plan Standard. Submit the document for EPA review, and

iii. Obtain the EPA Quality Assurance Manager or designee (hereafter referred to as QAM) approval.

OR

i. Submit a previously EPA-approved and current QMP.

ii. The EPA Quality Assurance Manager or designee (hereafter referred to as QAM) will notify the recipient and the EPA Project Officer (PO) in writing if the QMP is acceptable for this agreement.

b. The recipient must review their approved QMP at least annually. These documented reviews shall be made available to the sponsoring EPA organization if requested. When necessary, the recipient shall revise its QMP to incorporate minor changes and notify the EPA PO and QAM of the changes. If significant changes have been made to the Quality Program that affect the performance of environmental information operations, it may be necessary to re-submit the entire QMP for re-approval. In general, a copy of any QMP revision(s) made during the year should be submitted to the EPA PO and QAM in writing when such changes occur. Conditions requiring the revision and resubmittal of an approved QMP can be found in section 6 of the EPA's Quality Management Plan (QMP) Standard.

2. Quality Assurance Project Plan (QAPP)

a. Prior to beginning environmental information operations, the recipient must:

i. Develop a QAPP,

ii. Prepare QAPP in accordance with the current version of the EPA's Quality Assurance Project Plan (QAPP) Standard,

iii. Submit the document for EPA review, and

iv. Obtain the EPA Quality Assurance Manager or designee (hereafter referred to as QAM) approval.

OR

i. Submit a previously EPA-approved QAPP proposed to ensure the collected, produced, evaluated, or used environmental information is of known and documented quality for the intended use(s).

ii. The EPA Quality Assurance Manager or designee (hereafter referred to as QAM) will notify the recipient and the EPA Project Officer (PO) in writing if the previously EPA-approved QAPP is acceptable for this agreement.

OR

i. Provide the EPA a copy of the recipient-approved QAPP if the recipient (a) has an EPA-approved Quality Management Plan and (b) holds a current EPA delegation to review and approve QAPPs.

a. The recipient shall notify the PO and QAM when substantive changes are needed to the QAPP. The EPA may require the QAPP be updated and re-submitted for approval.

b. The recipient must review their approved QAPP at least annually. The results of the QAPP review and any revisions must be submitted to the PO and the QAM at least annually and may also be submitted when changes occur.

For Reference:

• Quality Management Plan (QMP) Standard and EPA's Quality Assurance Project Plan (QAPP) Standard; contain quality specifications for the EPA and non-EPA organizations and definitions applicable to these terms and conditions.

• EPA QA/G-5: *Guidance for Quality Assurance Project Plans*.

• The EPA's Quality Program website has a list of QA managers, and Specifications for EPA and Non-EPA Organizations

• The Office of Grants and Debarment Implementation of Quality Assurance Requirements for Organizations Receiving EPA Financial Assistance.

j. Climate Resilience

To the extent practicable, the recipient agrees to incorporate current and future climate change risk in planning, siting, design, and operation of the project. Approaches for incorporating climate change risk may make use of climate change data and information (e.g., projections and emission scenarios) that are

reflective of the project's anticipated lifespan. This includes consideration of the climate change risks posed to the individuals, communities, local governments, organizations, or other entities served by the project over its anticipated lifespan.

k. Use of Logos

If the EPA logo is appearing along with logos from other participating entities on websites, outreach materials, or reports, the EPA logo must **not** be prominently displayed in a way that may imply that any of the recipient or subrecipient's activities are being conducted by the EPA. Instead, the EPA logo should be accompanied with a statement indicating that the Port of San Francisco received financial support from the EPA under an Assistance Agreement. More information is available at: https://www.epa.gov/stylebook/using-epa-seal-and-logo#policy

l. Build America, Buy America (BABA) Requirements

All projects under this competition are subject to the domestic sourcing requirements under the Build America, Buy America (BABA) provisions of the Infrastructure Investment and Jobs Act (IIJA) (P.L. 117-58, §§ 70911-70917) when using federal funds for the purchase of goods, products, and materials on any form of construction, alteration, maintenance, or repair of infrastructure in the United States. The Buy America preference requirement applies to all of the iron and steel, manufactured products, and construction materials used for the infrastructure project under an award for identified EPA financial assistance funding programs.

These sourcing requirements require that all iron, steel, manufactured products, and construction materials used in Federally funded infrastructure projects must be produced in the United States, as defined in P.L 117-58 § 70912(6). The recipient must implement these requirements in its procurements, and this article must flow down to all subawards and contracts. For legal definitions and sourcing requirements, the recipient must consult EPA's Build America, Buy America website.

Clean Ports Program grants are subject to the requirements of BABA, which requires applicants to comply with Buy America preference requirements or apply for a waiver for each infrastructure project. The following potentially eligible projects under this competition meet the definition of “infrastructure” and are subject to Buy America preference requirements under BABA:

• Structures, facilities, and equipment that generate, transport, and distribute energy - including electric vehicle (EV) charging equipment.

• Any other permanent public structure that meets the qualifies as “infrastructure” as addressed in OMB Memorandum M-24-02 and 2 C.F.R. section 184.4(c).

Questions regarding BABA applicability to specific Clean Ports Program projects should be submitted to BABA-OTAQ@epa.gov.

When necessary and supported by rationale provided in P.L 117-58 § 70914, the recipient may submit a project-specific waiver request to EPA or notify EPA when using an existing waiver. The recipient should request guidance on submitting a BABA waiver request from the EPA Project Officer. A list of existing approved EPA waivers is available on the EPA Build America, Buy America website. Please continue to monitor this website for further BABA guidance or any future EPA waivers that may impact the Clean Ports grants program.

See EPA's “Build America, Buy America” general term and condition for additional requirements: https://www.epa.gov/grants/grant-terms-and-conditions.

m. Eligible and Ineligible Project Costs

1. Project Implementation Costs: Eligible project costs include those costs directly related to the implementation, management, and oversight of the project, including the proportion of recipient and subrecipient personnel and benefit costs expended in relation to the award, equipment, contractual, travel, supplies, subgrants and rebates, and indirect costs. See 2 C.F.R. Part 200, Sections 200.412-200.415.

2. Zero-Emissions (ZE) Mobile Equipment Costs.

a. Recipient shall only use assistance funding to purchase ZE mobile equipment that will directly serve at least one port for a minimum of three years.

b. For purposes of this assistance program, a port is either a water port or a dry port, as defined below:

i. Water port: places on land alongside navigable water (e.g., oceans, rivers, or lakes) with one or more facilities in close proximity for the loading and unloading of passengers or cargo from ships, ferries, and other commercial vessels. This includes facilities that support non-commercial Tribal fishing operations.

ii. Dry port: an intermodal truck-rail facility that is included in the 2024 Federal Highway Administration's (FHWA) Intermodal Connector Database based on meeting the criteria set in 23 C.F.R. Part 470. These criteria include having more than 50,000 TEUs (20-foot equivalent units) per year or other units measured that would convert to more than 100 trucks per day, or comprising more than 20 percent of freight volumes handled by any mode within a State.

c. For purposes of this assistance program, “zero emission” mobile equipment is that which:

i. produces zero tailpipe emissions of any criteria pollutant, air toxics, or greenhouse gas other than water vapor;

ii. has an onboard powertrain and is:

• self-propelled by the powertrain;

• intended to be propelled while performing its function; or

• portable or transportable, meaning designed to be and capable of being carried or moved from one location to another (e.g., has wheels, skids, carrying handles, dolly, trailer or platform) and is moved as part of normal operations (i.e., it does not stay in one location for more than 12 consecutive months or the full annual operating period of a seasonal operation); and

iii. is limited to electric and hydrogen fuel cell technologies for which there is an equivalent model with an internal combustion engine available in the marketplace.

This definition is derived from the definitions of “Mobile sources” in 40 CFR § 51.491 and “Nonroad engine” in 40 CFR § 1068.30.

d. Eligible project costs include the purchase and deployment of new eligible battery-electric or hydrogen fuel cell vehicles, vessels, powertrains, and other mobile equipment that directly serve at least one port for a minimum of three years according to the following minimum parameters for each mobile equipment category.

i. Cargo handling equipment (terminal tractors, forklifts, top handlers, side picks, straddle carriers, etc.): at least 90% of annual usage (hours) will take place at the port(s) identified in the award.

ii. Drayage Trucks: at least 100 visits/year will take place at the port(s) identified in the award.

iii. Locomotives (switchers, railcar movers): (1) at least 75% of its annual usage (hours) will take place at the port(s) identified in the application, (2) shall visit the port(s) identified in the award on a minimum of 200 days per year, and (3) must exclusively perform short-haul runs between the port(s) identified in the award and a second point of rest, e.g., a terminal, interchange, or yard.

iv. Harbor craft and other vessels (commercial and Tribal fishing vessels, tugs, ferries, patrol boats, workboats, dredges, pilot boats, barges, etc.): at least 60% of its annual usage (hours and port visits) will take place at the port(s) identified in the award.

v. Other eligible mobile source equipment: at least 90% of annual usage (hours and operating days) must take place at the port(s) identified in the award.

e. Mobile equipment must be human-operated and human-maintained.

f. Recipient shall not use assistance funding for any of the following types of equipment or activities.

i. Equipment which uses a non-ZE powertrain, including hybrid technologies powered in part by internal combustion engines, unless the non-ZE power source is mandated by safety regulations, and functions solely as a source of emergency backup power.

ii. First-of-a-kind demonstration and pilot projects designed to determine the technical feasibility and economic potential of technologies at either a pilot or prototype stage.

iii. Research and development projects. Research is defined as a systematic study directed toward fuller scientific knowledge or understanding of the subject studied. Development is defined as the systematic use of knowledge and understanding gained from research, and directed toward the production of technologies, devices, systems, or methods, including design and development of prototypes and processes.

iv. Ship modifications to allow vessels to accept shore-based electrical power, unless the modification is part of a project to replace the internal combustion engine(s) of a marine vessel with a ZE powertrain.

v. Light-duty vehicles.

vi. Expenses related to repowering and/or replacing engines for existing onroad vehicles.

vii. Expenses related to replacing internal combustion engines in existing nonroad equipment, locomotives, and marine vessels with ZE powertrains where the updated nonroad equipment, locomotive, or marine vessel includes a non-ZE powertrain, unless the non-ZE power source is mandated by safety regulations, and functions solely as a source of emergency backup power.

viii. Expenses related to replacing cabs, axles, paint, brakes, mufflers, or any other parts or materials that are not required to ensure the effective installation and functioning of the replacement of an internal combustion engine in existing nonroad equipment, locomotives, or marine vessels with a ZE powertrain.

3. Fueling Infrastructure Costs:

a. Recipient agrees that any infrastructure purchased or installed using EPA assistance funding may only be used to purchase or install infrastructure which will directly serve at least one port, as defined above in M.2.b. for a minimum of three years and according to the following parameters:

i. All infrastructure (except for vessel shore power) must directly serve eligible ZE mobile equipment purchased as part of the award. However, equipment not purchased as part of the grant may also utilize the fueling infrastructure.

ii. Infrastructure serving any mobile equipment (besides drayage trucks and locomotives) must be located on-site or in close proximity to port facilities identified in the award.

iii. Infrastructure serving drayage trucks or locomotives must be located on-site or in close proximity to port facilities identified in the applications, or at the first point of rest from the port facilities identified in the award (i.e., a terminal, depot, interchange, or yard where an eligible ZE mobile equipment purchased as part of the grant will fuel).

b. Infrastructure must be human-operated and human maintained.

c. For shore power projects, shore power-capable vessels docked at a berth where shore power is available must be required to turn off the vessel's engines and use the shore power system, with limited exceptions for extreme circumstances.

d. Electric charging infrastructure must be located at or behind the meter (on the customer side) except for minor grid upgrades in front of the meter (utility side) if the work is necessary to connect an eligible charging station to the electric distribution network.

e. Alternating Current (AC) Level 2 charging infrastructure must be EPA ENERGY STAR certified at the time of purchase.

f. Electric charging infrastructure must meet the following installation requirements: Electricians installing, operating, or maintaining electric charging infrastructure purchased through this program are required to be certified under the Electric Vehicle Infrastructure Training Program or another program approved by the EPA in consultation with the Department of Labor and Department of Transportation, as will be reflected in the terms of this grant award. For projects requiring more than one electrician, at least one of the electricians performing each phase of the infrastructure work should meet the requirements above.

g. Recipient agrees not to use EPA assistance funding for any of the following ineligible infrastructure

costs:

i. Front of the meter costs related to purchase or installation of electric infrastructure. This includes but is not limited to: major grid upgrades to utility-owned power distribution equipment (such as longer power line extensions, improvements to offsite power generation, bulk power transmission, or substations); transformers located on the utility side of the meter and their installation; and operation and maintenance performed on utility systems.

ii. Infrastructure which relies on air polluting components (e.g., backup generators or auxiliary power units), unless the non-ZE component is mandated by safety regulations, and functions solely as an emergency backup power source.

iii. Power generation systems (including non-renewable powered backup generators), except for solar and wind power generation systems that primarily power mobile equipment and which are located on land.

iv. Hydrogen production systems (e.g., electrolyzers, conversion facilities), associated infrastructure, and their installation.

v. Transmission (e.g., piping and pipelines) and/or transportation of hydrogen outside of the port.

h. Marine shore power projects must meet applicable international shore power design standards (IEC/ISO/IEEE 80005-1:2019/AMD 2:2023 High Voltage Shore Connection Systems or the IEC/PAS 80005-3:2014 Low Voltage Shore Connection Systems).

i. Solar or wind power generation systems must be located on land in close proximity to the port facilities identified in the award; or at the first point of rest from the port facilities for infrastructure serving drayage trucks or locomotives. Offshore wind and floating solar/wind infrastructure purchases and installation are not permitted.

4. Ineligible Technology Deployment Support Costs: The recipient may not use EPA assistance funding for the following purposes:

a. Feasibility assessment of ZE technology. Technology feasibility assessment is a preliminary exploration of a candidate technology to determine its merits and viability for successful deployment in regular service. A feasibility assessment can include the evaluation of key technical, operational, labor, economic, legal/regulatory, and deployment (timeline/schedule) issues. Feasibility assessment results are used to create a realistic project plan, schedule, and budget. [These activities are eligible for funding in the separate NOFO for Climate and Air Quality Planning projects under Funding Opportunity Number EPA-R-OAR-CPP-24-05. However, please note that applicants requesting funding for technology deployment under this ZE Technology Deployment Competition are expected to have conducted necessary feasibility assessments prior to applying and should not be planning to conduct further feasibility assessments prior to deployment.]

b. Costs for resiliency measures not directly related to protecting equipment purchased as part of the grant award from extreme weather events.

c. Leasing vehicles or equipment. If financing is necessary, the purchase should be financed with a conventional purchase loan.

d. Fuel and electricity expenses.

5. Other Ineligible Costs: As proscribed in Section 825 of the National Defense Authorization Act, no funds may be awarded to an entity that uses in part or in whole: the national transportation logistics public information platform (commonly referred to as ‘LOGINK'); any national transportation logistics information platform provided by or sponsored by the People's Republic of China, or a controlled commercial entity; or a similar system provided by Chinese state-affiliated entities.

n. Program Audit

In addition to the provisions of EPA's General Terms and Conditions which relate to audits and access to records, the recipient agrees to comply with random EPA reviews of the recipient to protect against waste, fraud, and abuse. As part of this process, EPA, or its authorized representatives, may request copies of grant documents from prior recipients who have received grants, or may request documentation from current recipients and sub-awardees, to verify statements made on the application and reporting documents. Recipients may be selected for advanced monitoring, including a potential site visit to confirm project details. EPA, or its authorized representatives, may also conduct site visits to confirm documentation is on hand and that purchased equipment and infrastructure is in service at the ports named in the award, as well as confirm applicable infrastructure adheres to Build America, Buy America (BABA) requirements (see BABA Programmatic Term and Condition for more details). Recipients are expected to comply with site visit requests and recordkeeping requirements and must supply EPA with any requested documents for as long as the records are retained, or risk cancellation of an active grant application or other enforcement action.

o. Record Retention

Recipients must keep all financial records, supporting documents, accounting books and other evidence of Grant Program activities for three years from the date of submission of the final financial report. If any litigation, claim, or audit is started before the expiration of the three-year period, the recipient must maintain all appropriate records until these actions are completed and all issues resolved.

p. Operation and Maintenance

The recipient will ensure the continued proper operation and maintenance of equipment and devices funded under this agreement. Such equipment and infrastructure shall be operated and maintained for the expected lifespan of the specific measure and in accordance with commonly accepted design standards and specifications. The recipient shall include a provision in every applicable sub-agreement (subgrant or contract) awarded under this grant requiring that the equipment and devices funded under this agreement be properly operated and maintained. Likewise, the sub-agreement will assure that similar provisions are included in any sub-agreements that are awarded by the sub-recipient.

q. Foreign Entity of Concern

1. As part of carrying out this award, recipient agrees that they are not:

a. an entity owned by, controlled by, or subject to the direction of a government of a “covered nation” as defined at 10 U.S.C. § 4872(d);

b. an entity headquartered in a “covered nation” as defined at 10 U.S.C. § 4872(d); or

c. a subsidiary of an entity described in (A) or (B).

Note: Paragraph 1 applies to the recipient of this award only and not subrecipients.

2. Additionally, awarded funds may not be used by the recipient or subrecipients for the purchase of a crane manufactured by (A) any entity owned by, controlled by, or subject to the direction of a government of a covered nation “covered nation” as defined at 10 U.S.C. § 4872(d); or (B) any entity headquartered in a covered nation “covered nation” as defined at 10 U.S.C. § 4872(d).

As of the date these terms and conditions become effective, covered nations under 10 U.S.C. § 4872(d) are the Democratic People's Republic of North Korea; the People's Republic of China; the Russian Federation; and the Islamic Republic of Iran.

r. Emissions Inventories

The recipient agrees to follow the EPA's Port Emissions Inventory Guidance, when developing the emissions inventories included in the workplan. This guidance may be found at: https://www.epa.gov/ports-initiative/port-and-goods-movement-emission-inventories.

s. Competency Policy

Competency of Organizations Generating Environmental Measurement Data

In accordance with Agency Policy Directive Number FEM-2012-02, Policy to Assure the Competency of Organizations Generating Environmental Measurement Data under Agency-Funded Assistance Agreements, Recipient agrees, by entering into this agreement, that it has demonstrated competency prior to award, or alternatively, where a pre-award demonstration of competency is not practicable, Recipient agrees to demonstrate competency prior to carrying out any activities under the award involving the generation or use of environmental data. Recipient shall maintain competency for the duration of the project period of this agreement and this will be documented during the annual reporting process. A copy of the policy is available online at https://www.epa.gov/sites/default/files/2017-05/documents/policy_to_assure_the_competency_of_organizations.pdf or a copy may also be requested by contacting the EPA Project Officer for this award.

Reference: https://www.epa.gov/sites/default/files/2017-05/documents/policy_to_assure_the_competency_of_organizations.pdf

t. Geospatial Data Standards

All geospatial data created must be consistent with Federal Geographic Data Committee (FGDC) endorsed standards. Information on these standards may be found at https://www.fgdc.gov/.

u. Mandatory Cost Share Requirement

This award and the resulting federal funding share (as shown under “Notice of Award” in the award document) is based on estimated costs requested in the recipient's final approved workplan. While actual total costs may differ than those estimates, the recipient is required to provide no less than the cost-share percentages outlined below, as applicable, of the final Zero-Emission (ZE) Technology Deployment Grant Competition costs. The EPA's participation shall not exceed the total amount of

federal funds awarded or the maximum federal cost-share percentages outlined below, as applicable, of the final equipment costs. Recipients must satisfy any applicable cost share requirements with allowable costs as set forth in 2 CFR § 200.306. The cost share requirement is as follows:

Tier B (Water or Dry Ports): EPA Share of Total Project Cost (Maximum) = 90%, Mandatory Cost Share of Total Project Costs = 10%

Total Project cost refers to total allowable costs incurred under a Federal award and all required cost sharing and voluntary committed cost sharing, including third-party contributions.

v. Voluntary Cost Share

This award and the resulting federal funding of $55,386,000 is based on estimated costs requested in the recipient's application at the later of (a) the time this funding opportunity closed on May 28, 2024, or (b) when negotiations concluded. Included in these costs is a voluntary cost-share contribution of $15,537,000 by the recipient in the form of a voluntary cost-share or overmatch (providing more than any minimum mandatory cost-share) that the recipient included in its proposal dated 5/24/2024. The recipient must provide this voluntary cost-share contribution during performance of this award unless the EPA agrees otherwise in a modification to this agreement. While actual total costs may differ from the estimates in the recipient's application, the EPA's participation shall not exceed the total amount of federal funds awarded.

If the recipient fails to provide the voluntary cost-share contribution during the period of award performance, and the EPA does not agree to modify the agreement to reduce the cost share, the recipient is in violation of the terms of the agreement. In addition to other remedies available under 2 CFR Part 200, the Agency may consider this factor in evaluating future proposals from the recipient. In addition, if the voluntary cost-share contribution does not materialize during the period of award performance then the EPA may reconsider the legitimacy of the award; if the EPA determines that the recipient knowingly or recklessly provided inaccurate information regarding the voluntary cost-share or overmatch the recipient described in its proposal dated 5/24/2024. The EPA may take action as authorized by 2 CFR Part 200 and/or 2 CFR Part 180 as applicable.

w. Equipment Disposition

Equipment purchased under this award must directly serve the port(s) identified in the award for a minimum of three years. After this period of time, in accordance with 2 CFR 200.313, when original or replacement equipment acquired under this agreement is no longer needed for the original project or program or for other activities currently or previously supported by the EPA, the recipient must request disposition instructions from the EPA Project Officer. Disposition instructions will be one of the following:

1. Equipment with a current fair market value of $10,000 or less (per unit) may be retained, sold, or otherwise disposed of with no further obligation to the EPA or pass-through entity.

2. Except as provided in 2 CFR 200.312(b), or if EPA or the pass-through entity fails to provide requested disposition instructions within 120 days, items of equipment with a current fair market value in excess of $10,000 (per unit) may be retained or sold by the recipient or subrecipient. EPA is entitled to an amount calculated by multiplying the percentage of the EPA's contribution towards the original purchase by the current market value or proceeds from the sale. If the equipment is sold, EPA or the pass-through entity may permit the recipient or subrecipient to retain, from the Federal share $1,000 of

the proceeds, to cover expenses associated with the selling and handling of the equipment.

3. The recipient or subrecipient may transfer title to the property to the Federal Government or to an eligible third party provided that the recipient or subrecipient must be entitled to compensation for its attributable percentage of the current fair market value of the property.

4. In cases where a recipient or subrecipient fails to take appropriate disposition actions, EPA or the pass-through entity may direct the recipient to take disposition actions.

x. National Programmatic Term and Condition for Fellowship, Internship Programs and Similar Programs Supported by EPA Financial Assistance

1. The EPA funds for this program may only be used for participant support cost payments, scholarships, tuition remission and other forms of student aid for citizens of the United States, its territories, or possessions, or for individuals lawfully admitted to the United States for permanent residence.

2. The recipient and program participants are responsible for taxes, if any, on payments made to or on behalf of individuals participating in this program that are allowable as participant support costs under 2 CFR 200.1 or 2 CFR 200.456 and scholarships and other forms of student aid such as tuition remission under 2 CFR 200.466. The EPA encourages recipients and program participants to consult their tax advisers, the U.S. Internal Revenue Service, or state and local tax authorities regarding the taxability of stipends, tuition remission and other payments. However, the EPA does not provide advice on tax issues relating to these payments.

3. Participant support cost payments, scholarships, and other forms of student aid such as tuition remission are lower tiered covered Nonprocurement transactions for the purposes of 2 CFR 180.300 and the EPA's Suspension and Debarment Term and Condition. Recipients, therefore, may not make participant support cost payments to individuals who are excluded from participation in Federal Nonprocurement programs under 2 CFR Part 180. Recipients are responsible for checking the eligibility of program participants in the System for Award Management (SAM) or obtaining eligibility certifications from the program participants.

See the EPA Guidance on Participant Support Costs.

y. Davis-Bacon and Related Acts (DBRA) Term and Condition

1. Program Applicability

a. Program Name – Clean Ports Program

b. Statute requiring compliance with Davis-Bacon – Clean Air Act Section 314

c. Activities subject to Davis-Bacon – any construction activities funded by this grant.

d. The recipient must work with the appropriate authorities to determine wage classifications for the specific project(s) or activities subject to Davis Bacon under this grant (or cooperative agreement).

2. Davis-Bacon and Related Acts

Davis-Bacon and Related Acts (DBRA) (https://www.dol.gov/agencies/whd/government-contracts/construction) is a collection of labor standards provisions administered by the Department of Labor, that are applicable to grants involving construction. These labor standards include the:

• Davis-Bacon Act, which requires payment of prevailing wage rates for laborers and mechanics on construction contracts of $2,000 or more

• Copeland "Anti-Kickback" Act, which prohibits a contractor or subcontractor from inducing an employee into giving up any part of the compensation to which he or she is entitled; and

• Contract Work Hours and Safety Standards Act, which requires overtime wages to be paid for over 40 hours of work per week, under contracts in excess of $100,000.

3. Recipient Responsibilities When Entering Into and Managing Contracts:

a. Solicitation and Contract Requirements:

i. Include the Correct Wage Determinations in Bid Solicitations and Contracts: Recipients are responsible for complying with the procedures provided in 29 CFR 1.6 when soliciting bids and awarding contracts.

ii. Include DBRA Requirements in All Contracts: Include the following text on all contracts under this grant:

"By accepting this contract, the contractor acknowledges and agrees to the terms provided in the DBRA Requirements for Contractors and Subcontractors Under EPA Grants."

b. After Award of Contract:

i. Approve and Submit Requests for Additional Wages Rates: Work with contractors to request additional wage rates if required for contracts under this grant, as provided in 29 CFR 5.5(a)(1)(iii).

ii. Provide Oversight of Contractors to Ensure Compliance with DBRA Provisions: Ensure contractor compliance with the terms of the contract, as required by 29 CFR 5.6.

4. Recipient Responsibilities When Establishing and Managing Additional Subawards: a. Include DBRA Requirements in All Subawards (including Loans):

Include the following text on all subawards under this grant:

"By accepting this award, the EPA subrecipient acknowledges and agrees to the terms and conditions provided in the DBRA Requirements for EPA Subrecipients."

Provide Oversight to Ensure Compliance with DBRA Provisions: Recipients are responsible for oversight of subrecipients and must ensure subrecipients comply with the requirements in 29 CFR 5.6.

z. Voluntary Scrappage

1. Recipient must provide, in the semi-annual and final reports, evidence of appropriate scrappage and evidence of appropriate disposal for all internal combustion engine equipment or vehicles identified for

scrappage in the final workplan, and in accordance with scrappage plans described in the proposal dated May 28, 2024.

2. Participating fleet owners must attest to the appropriate disposal in a signed scrappage statement. A sample scrappage statement (EPA Form 5900-684) may be found at https://www.epa.gov/system/files/documents/2024-02/2024-clean-ports-sample-scrappage-stmt-2024-02.pdf. The scrappage statement must include: vehicle owner's name and address; vehicle make, vehicle model, vehicle model year, VIN, odometer/usage meter reading, engine make, engine model, engine model year, engine horsepower, engine ID or serial number, as applicable; Name, address, and signature of dismantler; Date engine and/or vehicle/equipment was scrapped. Recipients must include or attach the following photos with the scrappage statement according to guidance provided by Project Officer, to demonstrate compliance with scrappage requirements: side profile of the vehicle, prior to disabling; VIN tag or equipment serial number; Engine label (showing serial number, engine family number, and engine model year); Engine block, prior to hole; Engine block, after hole; and Cut frame rails.

a. If the recipient for any reason does not scrap the vehicle/piece of equipment described in the application project narrative dated May 28, 2024, or listed on the Supplemental Application Template (“4b. Scrappage Information” tab), an equivalent vehicle/piece of equipment or must be scrapped instead, with approval of the project officer.

b. Equipment identified for scrappage may not be resold or donated instead of being scrapped.

3. The existing vehicle/equipment must be scrapped or rendered permanently disabled within two years of delivery of the equivalent new zero-emissions vehicle/equipment, or before the end of the project performance period, whichever comes first.

a. Cutting a three-inch-by-three-inch hole in the engine block (the part of the engine containing the cylinders) is the preferred method for scrappage. Other acceptable scrappage methods may be considered and will require prior EPA approval.

b. Disabling the chassis may be completed by cutting through the frame or frame rails on each side at a point located between the front and rear axles.

c. Recipients seeking approval for alternate scrappage methods must submit an alternative scrappage plan to the EPA project officer detailing how the method will destroy and/or disable the engine and must, if approved, comply with the evidence requirements listed below, including digital photographs.

4. Equipment and vehicle components that are not part of the engine or chassis may be salvaged from the unit being scrapped (e.g., seats, tires, etc.).

a. If disabled engines, disabled vehicles, disabled equipment, or parts are to be sold, program income requirements apply.

5. Equipment to be scrapped must meet ownership, usage, and remaining life criteria defined in 5.a. through 5.g.:

a. The existing equipment being scrapped must be fully operational. Operational equipment must be able to start, move, and have all necessary parts to perform its function.

b. The participating fleet owner must currently own and operate the existing equipment and have owned and operated it during the two years prior to upgrade.

c. The existing equipment being scrapped must have at least three years of remaining life at the time of scrappage. Remaining life is the owner's estimate of the number of years until the unit would have been retired from service if the unit were not being scrapped because of the grant funding. The remaining life estimate includes years of service expected after being rebuilt or sold to another fleet. Remaining life depends on the current age and condition of the vehicle at the time of upgrade, as well as factors like usage, maintenance, and climate.

d. Equivalent Replacement: The existing engine/equipment being scrapped must have similar horsepower as the new engine/equipment being purchased (within 40%).

e. Highway Usage:

i. To be eligible, the existing certified highway vehicle must have accumulated at least 7,000 miles/year during the two years prior to scrappage.

ii. Exception: If an applicant can demonstrate that a certified highway vehicle is being used in a predominately nonroad application (e.g., those that idle for long periods to power an auxiliary apparatus), the definition below under “Nonroad Usage” of engine operating hours may be used if approved by the project officer. The EPA will review and approve this exception on a case-by-case basis.

iii. The mileage of two or more units may be combined to reach the thresholds above, where two or more units will be scrapped and replaced with a single unit.

f. Nonroad Usage:

i. To be eligible, nonroad engines should operate at least 500 hours/year during the two years prior to scrappage.

ii. The engine operating hours of two or more units may be combined to reach the thresholds above where two or more units will be scrapped and replaced with a single unit.

g. Locomotive and Marine Usage:

i. Existing locomotive and marine engines to be scrapped must operate at least 1,000 hours/year during the two years prior to scrappage.

ii. The engine operating hours of two or more units may be combined to reach the thresholds above where two or more units will be scrapped and replaced with a single unit.

6. Participating fleet owners must attest to each of the above criterion in a signed eligibility statement which includes each equipment make, model, year, vehicle or other unique identification number, odometer/usage meter reading, engine make, model, year, horsepower, engine ID or serial number, and vehicle/equipment/vessel registration/licensing number and state. This documentation must be submitted as part of the grantee's programmatic reporting to the EPA.

aa. Historic Preservation

National Historic Preservation Act (NHPA)

Section 106 of the NHPA requires all federal agencies to consider the effects of their undertakings, including the act of awarding a grant or cooperative agreement, on historic properties, and to provide the Advisory Council on Historic Preservation (ACHP) a reasonable opportunity to comment on such undertakings. The recipient must assist the EPA Project Officer in complying with NHPA if any activities funded under this grant impact a historic property. Historic properties include: (a) land or buildings listed in or eligible for listing on the National Register of Historic Places; (b) archaeologically sensitive areas or in an area where traditional cultural properties are located; and (c) properties that are associated with significant historic events, are associated with significant people, embody distinctive characteristics, and contain important precontact information.

The recipient should work with their Project Officer to ensure that subrecipients are available to work with EPA on any required consultation process with the State or Tribal Historic Preservation Office prior to commencing the project to ensure compliance with Section 106 of the NHPA.

If NHPA compliance is required, necessary Section 106 consultation activities, such as historic or architectural surveys, structural engineering analysis of buildings, public meetings, and archival photographs, can be considered allowable and allocable grant costs.

Archeological and Historic Preservation Act (AHPA)

This law applies if archeologically significant artifacts or similar items are discovered after an EPA-funded construction project has begun, and compliance may be coordinated with the NHPA, discussed above. The AHPA requires federal agencies to identify relics, specimens, and other forms of scientific, prehistorical, historical, or archaeologic data that may be lost during the construction of federally-sponsored projects to ensure that these resources are not inadvertently transferred, sold, demolished or substantially altered, or allowed to deteriorate significantly. The recipient must ensure that subrecipients performing construction projects are aware of this requirement, and the recipient must notify EPA if the AHPA is triggered.

bb. Other Federal Requirements

In addition to other statutes outlined in these programmatic terms and conditions, the recipient must comply with all federal cross-cutting requirements. These requirements include, but are not limited to:

• **Endangered Species Act, as specified in 50 CFR Part 402:** Non-Federal entities must identify any impact or activities that may involve a threatened or endangered species. Federal agencies have the responsibility to ensure that no adverse effects to a protected species or habitat occur from actions under Federal assistance awards and conduct the reviews required under the Endangered Species Act, as applicable.

• **Federal Funding Accountability and Transparency Act:** Recipients of financial assistance awards must comply with the requirements outlined in 2 CFR Part 170*, Reporting Subaward and Executive Compensation* and in the General Term and Condition “Reporting Subawards and Executive Compensation.”

• **Farmland Protection Policy Act:** This statute requires EPA to use criteria developed by the Natural Resources Conservation Service (NRCS) to identify the potential adverse effects of Federal programs on

farmland and its conversion to nonagricultural uses, to mitigate these effects, and to ensure that programs are carried out in a manner that is compatible with the farmland preservation policies of state and local governments, and private organizations. Recipients may need to work with EPA or NRCS, as appropriate, to ensure compliance.

• **Coastal Zone Management Act:** Projects funded under federal financial assistance agreements must be consistent with a coastal State's approved management program for the coastal zone.

cc. Intergovernmental Review Period

In accordance with 40 CFR Part 29, EPA must allow for an intergovernmental review comment period on this grant program. Accordingly, the Grantee may incur costs at its own risk but shall not draw down any funds associated with this award until the process is completed. This includes successful resolution of any issues identified during the comment period, which ends ***2/7/2025***.

END-OF-DOCUMENT

San Francisco Emissions-Free Ferry System
Budget

Line Item & Itemized Cost	EPA Funding	Non-Federal Cost Share
Personnel		
(1) Project Manager @ $119/hr x 10 hrs/wk x 100 wks	$95,000	$0
(2) Project manager @ $100/hr x 6 hrs/wk x 100 wks	$56,000	$0
TOTAL PERSONNEL	$151,000	$0
Fringe Benefits		
Full-time Employees @ 32% of Salary and Wages x Total Personnel	$51,000	$0
TOTAL FRINGE BENEFITS	$51,000	$0
Contractual		
Design, Entitlements, & Regulatory Fees	$500,000	0
Construction Management, Inspections, and Monitoring	$2,394,000	0
TOTAL CONTRACTUAL	$2,894,000	$0
Construction		
Behind the Meter Construction	1,128,000	$937,000
TOTAL CONTRUCTION	$1,128,000	$937,000
Other		
Subaward: San Francisco Bay Ferries	$47,762,000	$1,000,000
Shore Power & Anchoring Systems	*$14,000,000*	*$0*
Equipment: High Speed Vessel	*$28,000,000*	*$0*
Behind the Meter Construction	*$3,762,000*	*$1,000,000*
Workforce Development (Working Waterfront Coalition)	*$2,000,000*	$0
Subaward: San Francisco Public Utilities Commission	$3,400,000	$13,600,000
TOTAL OTHER	$51,162,000	$14,600,000
TOTAL FUNDING *Percent of Total Project*	**$55,386,000** *78%*	**$15,537,000** *22%*
TOTAL PROJECT COST		**$70,923,000**

ENVIRONMENTAL PROTECTION AGENCY (EPA)
2024 Clean Ports Program: Zero-Emission Technology Deployment Competition Notice of Funding Opportunity (NOFO)
EPA-R-OAR-CPP-24-04

I. Cover Page:

Project Title	San Francisco Waterfront Emissions-Free Ferry System
Applicant Information	Port of San Francisco
Type of Eligible Applicant	X Port authority __ State/ regional/ local agency with jurisdiction over a port authority or a port __ Tribal agency with jurisdiction over a port authority or a port __ Air pollution control agency __ Private entity meeting the requirements in Section III.A
Budget Summary	EPA Funding Requested: $55,386,000 | Applicant Costs: $15,537,000 | Total Project Cost: $70,923,000 Equipment and infrastructure costs are required to fully implement the project. The most scalable expense is the proposed subaward for workforce development.
Project Location(s)	**Name of Port(s) (or other project location and port(s) served):** ▪ San Francisco County (Port of San Francisco, Treasure Island) ▪ Alameda County (Oakland, Alameda) **Name of Port Authority, if applicable:** Port of San Francisco **County, City, State:** San Francisco, San Francisco, CA **Percent of time/activity in each county:** San Francisco County (Port of San Francisco, Treasure Island) 66%, Alameda County (Oakland, Alameda) 33%. X Small water port __ Dry port
Project Period	Project Start Date: Q4 – 2024 | Project End Date: Q1 - 2028
Short Project Description	The San Francisco Waterfront Emissions-Free Ferry System will allow for the operation of four zero emission (ZE) electric ferries serving three terminals located along the San Francisco waterfront and two terminals located in Alameda County. The System will include shore power charging systems to support rapid charging of the vessels at each of the three San Francisco terminals during passenger loading and unloading processes and sustain service during a typical operating day. Funding is included to support a regional maritime workforce development program that will train 200 participants in the marine trades and water transportation fields, including operating and maintaining ZE ferries and harbor craft. The ZE port equipment and infrastructure types included in the project include **1) Vessels and 2) Vessel shore power infrastructure.**
Other Potential Federal Funding Sources	N/A
Use of Logistics Software	Does the applicant use LOGINK or any other prohibited logistics platform as described in Section III.D. of the NOFO? __ Yes X No

II. Workplan:

Section 1 - Project Summary and Approach

a. Overall Project and Proposed Impact

The Port of San Francisco (the Port), in collaboration with the San Francisco Bay Water Emergency Transportation Authority (SF Bay Ferry or WETA), the San Francisco Public Utilities Commission (SFPUC), and the Working Waterfront Coalition (WWC), is requesting $55.4 million to fund the final, critical components needed to complete the San Francisco Waterfront Emissions-Free Ferry System: a zero-emission electric ferry servicing critical transportation hubs – the first of its kind in the United States.

Located along the eastern waterfront of San Francisco, the Port serves many of the City's densest residential communities and job centers. Unlike other ports that specialize in mostly cargo handling, the Port serves a diverse set of uses, including the handling of containerized and non-containerized cargo, cruise, tourism, leisure, and passenger transportation. Reducing emissions and environmental impacts at the Port is uniquely challenging and important because of these various uses, functions, and stakeholders. According to the latest San Francisco Climate Action Plan (2021), the transportation sector is responsible for 50% of emissions in San Francisco. This project presents a unique opportunity for the Port to effect transformative change, reduce emissions from the transportation sector, and improve the health of nearby communities by delivering a first-in-the-nation conversion of diesel ferry service to a high-speed ZE electric ferry service supporting critical transportation hubs around San Francisco Bay.

The San Francisco Waterfront Emissions-Free Ferry System (the project or the system) will allow for the operation of four ZE electric ferries serving three terminals located along the San Francisco waterfront as well as two terminals located in Alameda County. The system will include shore power charging systems at each terminal that facilitate rapid charging of the vessels during passenger loading and unloading processes.

This project has a strong foundation of initial investments in reducing emissions, secured through previous efforts by the project partners. These investments include passenger loading retrofits, which will accommodate the shore power charging systems, and three small ZE vessels to serve the waterfront on a limited basis. The Clean Ports grant program would provide the remaining $55.4 million necessary to fund the following components of the System:

- **Shore power charging systems** at the Downtown Ferry Terminal (DFT) and Mission Bay Ferry Landing (MBFL). These charging systems will provide sufficient capacity to rapidly charge the new, larger electric ferry, and will include major electrical components and equipment such as shore power and anchoring systems, switchgear, transformers, power converters, duct banks, electrical conduits, and feeders.
- **A fourth new ZE electric vessel**. With three small ZE electric vessels funded to date through the SF Bay Ferry partnership, the Port expects the first ZE electric vessel to be operating in limited revenue service in 2026. The fourth ZE electric vessel is necessary to complete the proposed service plan and replace emissions from larger existing vessels providing service to the Port. The fourth electric vessel would carry double the number of passengers and allow the service to grow and expand over time as well as carry passengers to more terminals to include not only San Francisco-bound passengers (Downtown, Mission Bay, Treasure Island) but also East Bay locations Oakland and Alameda. The larger capacity and expanded range will further reduce emissions through the system and lifetime of the vessel and allow for servicing more disadvantaged communities. Once delivered it will allow SF Bay Ferry to scrap an existing diesel vessel.

- **Workforce Development**. The requested grant funds for community partnerships would fund a ZE electric ferry workforce development and training initiative over a four-year period as the Port and SF Bay Ferry begin to deploy new ZE technologies in the ferry system. This program will be principally administered and managed by the Working Waterfront Coalition (WWC) and will provide training and skill development in the maritime industry with a specific focus on the new ZE technologies and equipment outlined in this grant request.

Successful Prior Deployments. The proposed ZE electric ferry system will be the first in the nation, and the Port and SF Bay Ferry are well positioned to deliver the project on time and successfully; both have an established track record of executing large, complicated, advanced technology projects. Both agencies have experience constructing State-of-the-Art ferry terminals within strict design standards meant to withstand major disasters and climate impacts: recent successful deployments and project delivery include the **$100 million Downtown San Francisco Ferry Terminal Expansion Project in 2020**. This project successfully deployed and integrated new regional fare collection equipment and security enhancements at each Downtown gate, successfully meeting the safety, performance, and durability expectations of the primary project stakeholders. SF Bay Ferry constructed a similar (not yet electrified) new **$20 million Richmond ferry terminal in 2019** that began operations supported by new high-speed ferries. The experienced team behind this will deliver the charging systems and vessel scoped in the San Francisco Waterfront Emissions-Free Ferry System. Additionally, the Port has completed the **$115 million James R. Herman Cruise Terminal in 2014**, which includes the state's first shore power system and now hosts over 100 cruise ship calls and more than 400,000 passengers every year and doubles as an indoor/outdoor event center on non-cruise days. Zero-emission ferries using the same design have been deployed extensively throughout Europe.

Domestic Sourcing. The project team has conducted extensive research and groundwork into compliance with Build America, Buy America for the project. It is confident about compliance and does not anticipate challenges in domestic sourcing; potential sourcing challenges are known and are eligible for coverage through existing program waivers. Although this emission-free system is new technology to the United States, it is proven abroad and ready for construction today: SF Bay Ferry, working with its marine engineering consulting team, has achieved a 90% design level for this new universal shore power delivery system that will be deployed at the Downtown San Francisco Ferry Terminal Gates E, F, and G for vessel charging. The project will create an estimated 300 direct jobs and 600 indirect jobs.

Working in Concert with Planned Future Assets and Supporting Investments. The San Francisco Waterfront Emissions-Free Ferry System is projected to carry approximately 1.3 million passengers per year beginning in FY 2028. All trips would be 100% zero emission. The replacement of a diesel vessel with the ZE electric vessel included with this project would reduce or avoid approximately 315,000 metric tons of Carbon Dioxide Equivalent (CO_2e) emissions over its anticipated useful life at the Port, benefiting the near-port, historically disadvantaged community of Bayview Hunters Point, as well as other disadvantaged communities in parts of Alameda County served by the project. Without full funding to deliver the system, SF Bay Ferry must either reduce frequency or use diesel vessels to provide its planned service to the Port of San Francisco. With the EPA Clean Ports grant, approximately 20% of total passenger ferry trips to and from the Port will be ZE by 2028. Installation of the shore power charging systems at the Port is a prerequisite to convert over 85% of total ferry trips to the Port to ZE by 2050, as other regional investments are made in ZE vessels, additional shore power charging systems, and systems management throughout San Francisco Bay.

b. Partnerships and Collaboration

Partnerships and collaboration are central to the delivery of the San Francisco Waterfront Emissions-Free Ferry System. In addition to dedicating its own staff and managing contracts and construction elements of the project, the Port is partnering with the SFPUC, SF Bay Ferry, and the Working Waterfront Coalition to deliver electrification infrastructure, shore power systems, vessels, and investments in workforce development. Upon grant award, the Port will enter formal memoranda of understanding with subaward recipients SF Bay Ferry and the SFPUC to clearly delineate project and financial responsibilities related to their subawards. SF Bay Ferry will contract with the Working Waterfront Coalition to deliver workforce benefits. Partnership responsibilities are described below.

Port of San Francisco. The Port oversees, manages, and holds 7.5 miles of waterfront lands, from Aquatic Park in Fisherman's Wharf to Heron's Head Park near India Basin, in public trust for the use and enjoyment of the people of California. The Port works to advance environmentally and financially sustainable maritime, recreational, and economic opportunities for the City, Bay Area, and California. The Port and other departments within the City and County of San Francisco have invested $29.4 million in early-phase project expenses for the Mission Bay Ferry Landing including design, permitting, and environmental mitigation.

San Francisco Public Utilities Commission (SFPUC). The SFPUC is a public utility enterprise that supplies water, sewer, and power to the City and County of San Francisco. The SFPUC is contributing $13.6 million in matching funds to the project to complete the upgrades needed to meet this project's charging needs by 2027. As detailed in the SFPUC's letter of commitment, these funds are part of a $31 million investment in the construction of a transmission level substation and associated power transmission and distribution facilities that will connect to key Port locations along the waterfront.

San Francisco Bay Ferry. The Port and SF Bay Ferry will rely on their established, long-term partnership and experience in large-scale project implementation to bring new, zero emission technology to the Downtown Waterfront through this project. SF Bay Ferry has committed $1.9 million in direct match for eligible expenses and $85.6 million in leveraged funding related to delivery of early phase and non-eligible project components, including three smaller vessels, a shore power system, and utility infrastructure. SF Bay Ferry will retain ownership of the vessel and equipment purchased under the grant.

Working Waterfront Coalition (WWC). The WWC is an industry-led regional maritime workforce development program that seeks to create a pipeline of ship maintenance and repair workers and vessel operators to address a serious shortage of regional workers capable of operating, maintaining, and expanding the maritime industry in the Bay Area including ferry service. The WWC's goal is to recruit and train a new generation of workers via innovative outreach to 18–24-year-old individuals from disadvantaged and low-income communities, as well as the re-entry population. The program features financial stipends for trainees, a full suite of wraparound services and first source hiring agreements with WWC members. Members of the WWC include maritime industry leaders, labor groups, local community-based organizations, educational institutions and county workforce development and probation departments. Under a contract with SF Bay Ferry, WWC will train over 200 apprentices and

expand collaboration with local community colleges and universities to adapt existing programs or develop new programs. This project will create an estimated 300 direct jobs and 600 indirect jobs.

c. Coordination with Complementary Initiatives

Delivery of the San Francisco Waterfront Emissions-Free Ferry System complements various other programs and initiatives to achieve the climate and transportation infrastructure goals of San Francisco, the Bay Area region, the State of California, and the Federal government. These include:

California Assembly Bill 617 (AB 617) implementation and the Bayview Hunters Point Community Emissions Reduction Plan (CERP). The Bay Area Air Quality Management District is currently partnering with the Bayview Hunters Point Community Advocates and the Marie Harrison Community Foundation to develop a CERP in the Bayview Hunters Point neighborhood, which is near the Mission Bay Ferry Landing, to identify strategies to reduce emissions in the area. These community groups have identified "port/maritime activities" as a major contributor of air pollutants in the area. This project supports the CERP by reducing vessel emissions in the Bayview Hunters Point neighborhood.

Metropolitan Transportation Commission Plan Bay Area 2050. Strategy 11b of the federally required Regional Transportation Plan (Plan Bay Area 2050) calls for transit electrification initiatives that reduce emissions and climate impacts. Achieving this Plan goal would be advanced by awarding funds from this project for the electrification of ferry service at the Downtown, Mission Bay, and Treasure Island ferry terminals – all projects included in the Plan.

San Francisco Bay Ferry 2050 Service Vision. The 2050 Service Vision outlines system electrification as a key priority for the next 25 years, including fully electric ferry service along the Port of San Francisco Waterfront. The Vision was developed through extensive stakeholder outreach and engagement, including targeted outreach to community-based organizations representing disadvantaged communities. **The award of subrecipient funding from this project to San Francisco Bay Ferry will advance the larger Vision of create a regional ZE ferry system**. That service vision relies on two important federal and state funding initiatives:

- **Federal Transit Administration (FTA) Ferry Boat Programs.** SF Bay Ferry has utilized competitive funding available to the FTA to plan for one of the three small electric vessels integral to this EPA proposed project serving Downtown SF, Mission Bay, and Treasure Island. Once the current proposed project is built and charging infrastructure is in place, SF Bay Ferry plans to utilize $53 million in FTA formula funding to replace its (at that point) last remaining two diesel vessels with large battery-electric vessels. FTA has also provided funding for electrification infrastructure at the Main Street and Downtown Terminal that will complement the proposed service in this application.
- **Transit and Intercity Rail Capital Program (TIRCP**). The TIRCP is a State of California initiative utilizing Cap and Trade sale proceeds to achieve transformative capital improvements that will significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion. SF Bay Ferry has received over $38 million in funding through this program. Part of the funding will be used to build two of the three smaller ZE electric vessels that will serve Downtown, Mission Bay and Treasure Island. Additional TIRCP funding will retrofit the Treasure Island terminal with electric infrastructure and provide some of the funding needed to electrify Mission Bay and Downtown San Francisco. Funding was also recently awarded to provide electric infrastructure connections in Alameda to electrify the SF Bay Ferry's Main Street Terminal and Central Bay Maintenance Facility. The funding for electrification of the Maintenance Facility will ensure that the newly funded ZE

electric vessels have enough shore power at night and during maintenance activities and provide the opportunity for workforce development activities to occur at that facility on the new vessels.

San Francisco's Climate Action Plan 2021—TLU.3-5. Transportation and Land Use Strategy 3, supporting action #5, calls for the implementation of ferry service between Treasure Island and the Downtown San Francisco Ferry Terminal to help reduce congestion, reduce emissions, and create a more equitable transportation system that advances the use of low carbon modes especially in the Bay Bridge corridor. SF Bay Ferry has secured 100% of the capital dollars needed to complete a shore power charging system at Treasure Island for electric ferry service. An additional $1.7 million was recently secured in Lifeline Transportation Program (LTP) Cycle 4 operating funds from the San Francisco County Transportation Authority (SFCTA) for Treasure Island electric ferry operations in 2026. With the requested grant funding from EPA, the Port and SF Bay Ferry will be able to fully construct a shore power charging system at the Downtown San Francisco Ferry Terminal, which is a critical component in delivering ZE service on the Treasure Island route and making progress towards local emission reduction goals.

d. Project Risk Mitigation

The Port will ensure success of the project through close coordination with SF Bay Ferry to adequately analyze and prepare for project risks. The Port and SF Bay Ferry have demonstrated success in working together to deliver complex infrastructure projects. The Downtown San Francisco Ferry Terminal Expansion Project (project details below) was a similar scale and complexity compared to the proposed project. The project involved intensive above-water and in-water construction work in a busy urban waterfront. The ferry's team of managers, engineers, and contractors coordinated closely with the Port to manage project risks and successfully deliver the project. The Port would establish a similar project delivery arrangement for the San Francisco Waterfront Emissions-Free Ferry System and has completed a preliminary risk analysis to identify potential barriers to successful project implementation. Primary strategies for overcoming those barriers are outlined below:

Technical Risks (Low). SF Bay Ferry has contracted with a proven electrical systems integrator, Wartsila, who has delivered comparable all battery electric high speed aluminum catamaran ferries in Europe. Wartsila provides integration of all advanced technical components for the new ferry vessels and shore power systems. SF Bay Ferry is also contracting with multiple well known naval architecture design firms to complete the vessel design and integrate with the Wartsila systems. Additionally, the SF Bay Ferry team is contracting with several electrical and civil engineering firms with extensive experience in transit and transportation electrification.

Financial Risks (Moderate). Vessel, shore power, and infrastructure improvements will be completed under competitively bid commercial contracts and total cost will not be known until award and final acceptance. The marine repair and construction market has seen higher inflation rates than other industries and the technology being purchased, including large lithium-ion batteries and industrial-scale transformers which are subject to intensive price volatility. Pricing risks are tempered by the funding sources' low risk; matching non-federal funds are reliable and not subject to instability.

Security Risks (Low). Regarding physical security, ferry terminals are subject to US Coast Guard Security requirements. The terminal facilities are secured property and vessels exclusively operate at those secured terminals with monitored access and 24-7 surveillance. All onboard access points to vessel operating systems are physically locked when passengers are onboard. Cybersecurity threats are limited to access of vessel operating systems which are operating on a separate encrypted Wi-Fi data signal for shore monitoring. Software system architecture and security protocols are managed by our electrical systems integrator. System operating data access would have no impact on our operations should an

external threat gain access to our data systems. Internal threats from ferry operators or maintenance staff would be the largest vulnerability, however all such staff are vetted and monitored.

Organizational Risks (Low). The Project management team has extensive experience with marine systems delivery and complex capital infrastructure projects, with a long history of working together. The management team overhead is low with limited bureaucracy. Decision making is clearly delegated and does not require multiple level adjudication.

Execution Risks (Moderate). Current lead times for electrical components are rapidly changing in the rush to electrify multiple industries worldwide. Further, these projects push the boundaries of current regulatory and permitting related regulations which can induce schedule delays in system selection and permitting approvals. SF Bay Ferry is well underway with project designs, has identified regulatory pinch points, and is coordinating around potential issues. While capacity for local utilities and interconnection timelines for power distribution to terminal facilities poses some risk, the management team is engaged with utility providers to mitigate risks and meet implementation timelines.

e. Applicant Fleet and Infrastructure Description

Shore Power and Anchoring Systems at Mission Bay Ferry Landing (MBFL). The Project includes installation of a shore power and anchoring system as a component of MBFL. The MBFL is in the Mission Bay neighborhood near the intersection of Terry A. Francois Boulevard and 16th Street, adjacent to Agua Vista Park and near the planned Bayfront Park. The MBFL project involves the construction of a ferry terminal and equipment installation, including a floating shore power and anchoring system capable of mooring and charging ferry vessels. The MBFL project includes a fixed pier with canopy, a gangway, and shoreside public access and open space improvements. The project requires a terminal electrification plan that does not use traditional shore power pedestals but, instead, utilizes an equipment-based floating shore power and anchoring system. This system enables rapid ferry vessel charging during short turn-around stops while passenger load and unload the vessels. The shore power system will support 2MW rapid charging of electric ferries on both the port and starboard sides (4MW total), supplied via internally loaded power monitoring and conversion equipment coupled with 1350kWh of lithium-ion battery storage. The anticipated usage is 28 vessel landing and charging events per day with an average charge time of 8 minutes and a 160kWH power transfer at each event. Estimated total annual energy provided is 1,600MWh.

Downtown San Francisco Ferry Terminal (DFT) Electrification Project. The Project includes a request for funding towards behind the meter (BTM) electrical equipment and infrastructure to electrify the DFT. The Port, SF Bay Ferry, and SFPUC are working together to extend electrical infrastructure to the San Francisco Waterfront. This electrical grid extension and enhancement supports vessel charging for ferry routes serving the SF Bay Ferry's DFT. Charging at DFT will occur with three shore power systems at Gates E, F and G, like what will be installed at MBFL. These shore power systems at DFT are part of a separately funded project and will provide up to seventeen megawatts (17MW) of power including ten megawatts (10MW) of power from the electric grid and seven megawatts (7MW) of power from the battery energy storage systems installed in the floating shore power docks.

New ZE Electric Vessel. SF Bay Ferry is preparing to construct a fleet initially consisting of three 149-passenger ZE electric passenger ferries. Procurement of those vessels is expected by summer of 2024. Concurrent with that effort, SF Bay Ferry staff are developing plans and specifications for 400-passsenger vessels including the one proposed as part of this project. This 400-passenger ferry vessel will have a total battery capacity of 1,603kWh. Operating with this capacity will allow a range of 40-minute cross-bay transits. During normal operation, rapid vessel charging will take 5 to 8 minutes.

Opportunity charging will occur at terminals when unloading and loading passengers. This will allow continuous operation of the vessel throughout the day. The vessel will be newly constructed with a model year 2026. The vessels are designed to be fully accessible to passengers with disabilities in accordance with the Americans with Disability Act. The ferry will offer multilingual support and signage to accommodate passengers from different linguistic backgrounds, fostering a welcoming and inclusive environment for all passengers. The vessel will allow SF Bay Ferry to scrap an existing large diesel ferry. Additional details for the proposed new ZE vessel are provided in the Supplemental Application.

Buy America Act and Build America, Buy America Act Compliance. SF Bay Ferry has enlisted the services of specialists to review plans and specifications to evaluate Buy America Act and Build America, Buy America Act (BABA) Compliance; analysis indicated that the vessels, shore power systems and electrical infrastructure can be constructed in compliance with BABA. If components of the vessels or shore power systems are not fully compliant, the Port is confident that the compliance could be achieved under the provisions of the existing time-limited waivers under the Clean Ports Program.

Section 2 - Environmental Results—Outcomes, Outputs and Performance Measures

a. Expected Project Outputs and Outcomes

Table 1. Anticipated Outputs and Outcomes

Anticipated Outputs and Outcomes		
Activities	**Outputs**	**Outcomes**
1. Deployment of new ZE Electric Ferry Vessel	One new large, fast, ZE electric ferry vessel to be operated in place of a diesel vessel that would be relegated to backup spare use.	1) Approximately 88,000 tons of CO2 equivalent emissions avoided over the lifetime of the vessel. 2) Approximately 350,000 gallons of fuel consumption avoided over the lifetime of the vessel.
2. Deployment of Shore Power Charging Systems	Two shore power charging systems with total capacity of 17 (kW) to charge zero emission electric ferry vessels.	Systems perform reliably and support the successful and consistent operation of four zero emission electric ferries with expanded service relative to today.
3. Ferry system operations impact Environmental Justice	Project activities are designed to provide benefits to near-port communities impacted by Port emissions.	The project provides health benefits, noise reduction, and air quality improvements to disadvantaged communities.
4. Training and Workforce Development	200 participants from underserved communities will receive training and develop skills in the maritime industry with a specific focus on the new ZE technologies and equipment.	The workforce development program successfully contributes to creating a sufficiently large pool of crew and engineers qualified to operate and maintain ZE equipment. Current crews receive training and qualifications necessary to transition to work operating and maintaining ZE equipment.
5. Public Engagement and Outreach	Long-term recurring forums to engage communities and a publicly documented process for addressing community concerns; Documented	Community members and stakeholders are engaged and aware of the project and have contributed feedback that has been incorporated into its design, development, and operation.

	efforts to make residents aware of project and to solicit feedback.	
6. Organizational Development	Institutionalization of operational changes to accommodate future deployment of additional ZE technologies. Dissemination of experience and information gained by Port and partners (San Francisco Bay Ferry and SFPUC) in designing and deploying ZE vessels and equipment to support ZE ferry operations.	1) Support future deployment of additional ZE technologies as measured by share of total Port ferry arrivals and departures converted to zero emissions. 2) Implementation of SFPUC Capital Improvement Plan projects for shore power improvements along Port jurisdiction. 3) Submittal of project report to National Academy of Science Transportation Research Board for dissemination and publication.

b. **Performance Measures and Plan**

Table 2. Measurement of Outputs and Outcomes

Measurement of Outputs and Outcomes		
Activities	**Performance Measures**	**Timelines, Reporting, and Evaluation**
1. New ZE Electric Ferry Vessel	Emission reduction of new ZE electric ferry to be measured by: 1) Tons of CO2 equivalent emissions avoided annually and over the lifetime of the vessel relative to baseline 2) Gallons of fuel consumption avoided annually and over the lifetime of the vessel relative to baseline	1) Performance period: progress tracked in emissions against baseline inventory and diesel ferry operation; reported annually and evaluated against operational milestones and goals for service offerings 2) Long-term: progress in emissions tracked and evaluated against larger emissions reductions milestones (2030, 2050) for complementary programs and transparently reported with those results
2. Shore power Charging Systems	Reliability and performance of charging systems to be measured by: 1) System availability 2) Schedule adherence of ZE electric ferries 3) On-time trip performance of ZE electric ferries	1) Performance period: progress tracked by % of days charging systems are fully operational, number of trips made v. trips scheduled, and % of trips arriving within 10 minutes of schedule; reported quarterly and evaluated against regional transit performance standards 2) Long-term: progress measured by conversion of other regional ferry services currently serving the Port to ZE
3. Ferry operations impacting Environmental Justice	Improvement in non-attainment status of air quality standards in near-port disadvantaged communities to be measured by air toxics levels relative to baseline at the end of the performance period.	1) Project Performance Period: progress will be indicated by improvement in non-attainment air quality status in near-port disadvantaged communities; reported on cyclitic basis as evaluated by the County of San Francisco, Bay Area AQMD and California ARB 2) Long-term: progress will be evaluated by the ridership of the zero-emission ferry system; reported transparently and evaluated against project ridership projections

4. Training and Workforce Development	Adequate pool of qualified crews and engineers, and retention of existing employees measured by: 1) Quality of program 2) Position vacancy rates for crews and engineers operating and maintaining ZE equipment 3) Average employee tenure	1) Performance period: progress tracked by the completion rate of enrolled workforce development program participants; reported annually by Workforce Development Coalition and evaluated against the number of ZE operators and maintenance staff required. 2) Long-term: progress measured by average employee tenure and job classification vacancy rates in relevant work areas.
5. Public Engagement and Outreach	Effectiveness of project in creating awareness, and soliciting and responding to community feedback to be measured by: 1) Public awareness of project 2) On-line survey of community members and stakeholders.	1) Performance period: progress tracked by number of quarterly project social media and web-based impressions, and number of forums and community meetings hosted annually; effectiveness tracked by two surveys conducted during the performance period evaluating results against goals of soliciting and incorporating community input into project
6. Organizational Development	Successful organizational development and scalability of ZE deployment, including knowledge dissemination, to be measured by: 1) Dissemination of knowledge and experience to industry stakeholders 2) Number of total Port ferry arrivals and departures converted to zero emissions.	1) Performance period: progress tracked by presentation of project information at minimum of one conference or symposium annually and the % of total Port ferry arrivals and departures converted to zero emissions reported on an annual basis 2) Long-term: progress measured by conversion of other regional ferry services currently serving the Port to ZE

c. Timeline and Milestones

Table 3. Project Timeline and Milestones

Project Timeline and Milestones by Calendar Year Quarters						
	Downtown Ferry Terminal Electrification Project		**MBFL Shore Power and Anchoring Systems**		**New Zero Emission Electric Vessel**	
Milestone	Start	End	Start	End	Start	End
Design	Q1 - 2024	Q3 - 2025	Q1 - 2023	Q4 - 2024	Q1 - 2023	Q3 - 2024
Procurement, Bidding, and Award	Q4 - 2025	Q1 - 2026	Q3 - 2025	Q4 - 2025	Q3 - 2024	Q4 - 2024
Construction &/or Installation	Q1 - 2026	Q2 - 2027	Q1 - 2026	Q4 - 2026	Q1 - 2026	Q1 - 2028
Substantial Completion	Q2 - 2027	Q2 - 2027	Q1 - 2027	Q1 - 2027	Q1 - 2028	Q1 - 2028
Final Acceptance	Q3 - 2027	Q3 - 2027	Q2 - 2027	Q2 - 2027	Q1 - 2028	Q1 - 2028

Date of Operation	Q3 - 2027	Q2 - 2027	Q1 – 2028
Semi-Annual Reporting*	March 1 and Sept. 1	March 1 and Sept. 1	March 1 and Sept 1
Final Report Preparation	December 31, 2027	December 31, 2027	July 1, 2028

Estimated timeline to be finalized by the EPA.

d. Scrappage

SF Bay Ferry will scrap one of its large diesel passenger vessels with delivery and commissioning of the new large electric vessel funded through this grant request. The capacity and service functionality of the scrapped diesel vessel will be equivalent to that of the new large electric vessel. Details related are contained in Tab 4b of the Clean Ports Supplemental application.

Section 3 - Programmatic Capability and Past Performance

a. Past Performance and Reporting Requirements

The five grant-funded projects below demonstrate the Port's experience and capability of successfully implementing capital projects utilizing federal and state funding. The Port has never failed to submit timely reports that adequately report progress toward achieving expected outcomes.

#1 Project Title:Amador Street Infrastructure Improvement Project

Agreement #:	693JF72344034
Agency/ Listing #:	US Department of Transportation Maritime Division - 20.823
Description:	The U.S. Department of Transportation Maritime Administration (MARAD) awarded the Port of San Francisco $9,607,500 through their fiscal year 2022 Port Infrastructure Development Program (PIDP) to complete the construction phase of the Amador Street reconstruction and pump station.
Work Plan:	The project was designed by San Francisco's Public Works staff and will perform the design support during construction. Construction Management will also be performed by Public Works staff. The project is anticipated to advertise Q2 2024 through a low bid process. Construction completion is anticipated in April 2026.
Reporting:	The Port has submitted the required quarterly reports as outlined in the grant agreement. The first required quarterly report was submitted on April 21, 2024.

#2 Project Title:Heron's Head Park Shoreline Resilience Project

Agreement #:	F22AP00603-00
Agency/ Listing #:	Coastal Wetlands Planning, Protection and Restoration - 15.614
Description:	The US Fish and Wildlife Service awarded a grant of $987,000 administered to the Port through the State Coastal Conservancy as part of the Coastal Wetlands Planning, Protection and Restoration Act—National Coastal Wetlands Conservation Grants. The grant is to be used to perform habitat restoration at the Port's Heron's Head Park.
Work Plan:	The Port had a fully funded project to construct a new shoreline and plantings at Heron's Head Park, which was completed in 2022. The Port has committed to do 10 years of monitoring and additional plantings and invasive plant species removal. The NCWC funds are currently being used to pay for the plantings and invasive species removal.

Reporting:	Under the grant agreement for NCWC funds, the Port is required to submit quarterly requests for distribution with documentation of expenditures and a progress report documenting work completed during the subject reporting period. To date, the Port has completed one year of the grant-funded work program and submitted requests for distribution and progress reports in accordance with the grant agreement.

#3 Project Title:19th and Georgia Street

Agreement #:	STPL-6169(013)
Agency/ Listing #:	0417000103
Description:	The Port received a grant from the Federal Highway Administration that was administered through the Metropolitan Transportation Commission and Caltrans. This was used to pay for construction of the project.
Work Plan:	The Port bid the project out for construction and completed construction. It complied with the requirements of the grant and submitted all the required paperwork to administer the grant.
Reporting:	The Port adjusted its contract documentation and construction management procedures to follow grant requirements. Staff submitted invoices monthly and followed the Caltrans Local Assistance Procedures Manual guidelines.

#4 Project Title:Roundhouse 2 Roof, Solarium, and Windows Replacement

Agreement #:	CA Senate Bill 170. An act to amend the Budget Act of 2021
Agency/ Listing #:	State Lands, 21.027
Description:	The Port received a grant administered by the State Lands Commission for work that was affected by COVID-19.
Work Plan:	The Port designed and is in construction for a project to perform building envelope improvements of a four-story concrete commercial building owned by the Port. The scope of work includes replacing windows, the roof, and a solarium structure.
Reporting:	The Port currently reports to the State Lands Commission on a biannual basis, every May and November.

#5 Project Title:Downtown Ferry Terminal Expansion Project

Agreement #:	CA-04-0160, CA-2017-045, CA-2019-096
Agency/ Listing #:	FTA20.507 /FHWA 20.205
Description:	SF Bay Ferry partnered with the Port to utilize funding from State, SF sales tax, FHWA and FTA funding for modernization and expansion of the Downtown Terminal. Port managed Sales Tax funding provided for the project while SF Bay Ferry managed remaining funds.
Work Plan:	Project developed and constructed a $100 million expansion of the Downtown San Francisco Ferry Terminal to increase berthing capacity, implement seismic upgrades, as well as modernize and enhance public access. This project was completed in 2021.
Reporting:	Expenditures of federal funds were reported quarterly to FTA and included expenditures as well as milestone progress against the schedule and budget.

b. Staff Expertise

Staff who will be managing and overseeing this project include highly experienced professionals with decades of experience in project delivery. Staff biographies are attached, and team highlights include:

Shannon Cairns, Port Program Manager: Over 15 years of experience managing complex interdisciplinary projects in both the private and public sector.

Kathryn Purcell, Port Program Manager: Over 25 years in environmental review and waterside development.

Jan Rybka, MS, PE, SF Bay Ferry Senior Project Manager & Marine Engineer: Over 20 years in marine engineering, professional licensed naval architect and marine engineer, and retired Coast Guard Officer.

Chad Mason BS, MA, SF Bay Ferry Senior Planner and Project Manager: Over 20 years of experience in environmental planning and ferry capital project delivery

Matthew C. Ho PE, SFPUC/Power, Senior Engineer, and Manager of Distribution Engineering: Over 20 years of experience in electrical engineering and distribution design.

Section 4 – Environmental Justice and Disadvantaged Communities

Table 4: Summary of Nonattainment Areas and Air Toxics Concerns

	Downtown San Francisco Ferry Terminal	**Mission Bay Ferry Landing**	**Alameda County**
Facility Information	Pier 1, The Embarcadero, San Francisco, CA 94111, San Francisco County	Central Waterfront, San Francisco, CA, 94111, San Francisco County	Oakland Ferry Terminal; Alameda Seaplane Lagoon Ferry Terminal
Project Activity Description & Share	Construction and ferry service; 33%	Construction and ferry service; 33%	Ferry service; 33%
Does the county contain PM2.5 or Ozone Nonattainment areas?	YES, moderate (PM2.5 2006) and marginal (Ozone 2008 & 2015 8hr Standards) non-attainment areas		
Does the county contain high ambient diesel PM concentration?	YES, High Ambient Diesel PM Concentration (>80th percentile, 2019 Air Toxics Screening Assessment)		

a. Disadvantaged Communities: Nonattainment Areas

The Port of San Francisco is in San Francisco County (FIPS 06075). The 2024 Clean Ports Disadvantaged Community County List identifies the county as meeting the disadvantaged community definition, with additional specific indicators for poor air quality and Nonattainment areas (see, **Table 4**). The project benefits identified in Section 2a will flow directly to these communities in the service area experiencing disproportionate climate, economic, and social burdens, including West Oakland which is in the 99th percentile of those most impacted by exposure to diesel particulate matter and the 99th percentile of asthma risk for sensitive populations (see, **Figure 1**).

Figure 1: Ferry terminal locations (points), Port Boundaries (green) and Justice40 DAC tracts (gray).

b. Disadvantaged Communities: Areas with Air Toxics Concerns

The census tract of the primary project location (06075017902) is in the 97th percentile for diesel PM exposure (2021 CEJST Screening tool), and >80th percentile for modeled ambient diesel concentration (2019 Air Toxics Screening Assessment, 0.38 µg/m3). The new ZE ferry would also operate in Alameda County, which contains moderate PM2.5 (2012) Non-Attainment Areas and marginal 8-Hour Ozone (2008, 2015) Non-Attainment Areas; the census tracts of the ferry terminals (06001428700 and 06001983200) are >80th percentile for modeled ambient diesel PM concentration.

c. Community Engagement Prior to Application and During Project

The Port and SF Bay Ferry utilize multiple outreach methods to ensure communities, including disadvantaged and low-income communities, are engaged in the agency's decision-making process, project planning and design of the project. SF Bay Ferry has taken an inclusive and targeted approach to outreach, offering many different types of forums for people to provide input on the projects and feedback. These forums include using community-based organizations to reach out to their constituents, participating in community events, holding formal public participation meetings at different times/days, online and onboard multilingual surveys, multilingual community open houses, local and regional government coordination meetings, focus groups and co-creation workshops, and small group conversations with business and non-profit representatives.

As a regional transit operator connecting different geographies in the Bay Area, WETA also engages communities on a broader scale throughout the cities and counties where ferry terminals are currently located (including the cities of Vallejo, Richmond, Alameda, Oakland, San Francisco and South San Francisco and the counties of Solano, Contra Costa, Alameda, San Francisco, and San Mateo.)

San Francisco and Bay Area residents, workers, and waterfront stakeholders have an appropriately high level of interest in how the Port manages and develops its lands. The Port Commission and staff rely on the discussions, ideas, and comments about waterfront improvements and Port operations that emerge from these public forums to modify its plans and how it manages the waterfront.

- The **Port Advisory Committee (PAC)** provides regular opportunities for public discussions about Port operations and improvements proposed along the waterfront. Members of the PACs, include [ADD MEMBERS]and provide the Port Commission and staff with important insights on neighborhood, business, tenant, maritime, land use planning, historic preservation, and environmental issues. PAC meetings provide for open, two-way exchange that over time has built a sophisticated public understanding about waterfront needs, financial realities, and trade-offs that must be balanced to achieve common goals and aspirations.
- The Port coordinates a **Maritime Commerce Advisory Committee (MCAC)** that includes representatives from organized labor and the Port's diverse maritime businesses and is open to the public. The MCAC helps keep the Port up to date on maritime business needs and changes. They provide a forum for addressing maritime market needs and opportunities, along with the balance between maritime requirements and other public trust and City needs.
- The Port convenes the **Southern Advisory Committee (SAC)** monthly to gain insight on neighborhood, business, tenant, maritime, land use planning, and environmental justice issues facing the Port's Southern Waterfront. Committee members are appointed by the Port's Executive Director and reflect the diversity of residents, business, and environmental interests in the area.

Prior to the application, the Port and its partners engaged frequently with the community to share plans for expanding ferry service in the Bay Area and transitioning to zero-emissions ferries. Community feedback highlighted the need to expand passenger services while reducing environmental impacts. This project responds to community feedback by accelerating the transition to zero-emission ferries. Prior engagement included the following:

- **Advisory Groups.** Between 2017 and the present, the Port has regularly conducted community outreach to the Port's advisory committees including the Maritime Commerce Advisory Committee, Southern Waterfront Advisory Committee, and the Southern Advisory Committee. The committees have been very active in providing input to staff on ferry enhancements to support operation of the Bay Area's first zero emission ferries. In addition, the Port is served by community advisory groups that are appointed by the Port Executive Director and represent stakeholders ranging from residents, neighborhood organizations, environmental advocates, economic development interest, transportation and parking advocates, parks and open space interest and Port tenants.
- **Community-Based Organizations (CBOs)**. Engaging CBOs has been paramount in gaining input from disadvantaged communities. In January 2023, SF Bay Ferry held listening sessions with nine community groups including Alameda Point Collaborative, One Treasure Island, Transport Oakland, Vallejo Project and many others discussing participant's transportation needs and opinions about existing and potential service, including the benefits of electrification to their communities. Feedback from this engagement resulted in the momentum to make several changes to SF Bay Ferry's programs and services including developing a more robust ferry service expansion plan, making SF Bay Ferry's Pandemic Recovery Program's temporary 30% reduction in fares permanent and fast tracking the electrification of ferry service on the San Francisco Bay.
- **Public Sector Working Groups.** In early 2023, SF Bay Ferry met regularly with five county working groups to discuss the future of ferry transportation, including elected officials, maritime operators, labor unions, and advocacy organizations from the counties of San Francisco, Alameda, Contra Costa, Solano, and San Mateo counties. Fifteen one-on-one stakeholder interviews, five focus groups, and an online questionnaire were conducted. SF Bay Ferry staff convened 44 stakeholders as part of the county working group's workshop. Participants discussed how the future could best be served by ferry service, including electrification of the Bay Area's ferry fleet. These groups took a deeper dive into technical elements and provided input on environmental impacts, especially those in sensitive protected shoreline areas. Port staff have been participating in the AB 617 working group, convened by the Bay Area Air Quality Management Group. This group works with other local air districts, community groups, community members, environmental organizations, regulated industries, and other key stakeholders to reduce harmful air pollutants, including developing strategies such as electrification of port properties and associated vessels.
- **Online Community Survey.** San Francisco Bay Ferry implemented an online survey over a three-month period in 2023 and received over 4,500 responses. The survey included six questions about the future ferry system and its trade-offs, including how to balance affordability, service frequency, service speed, coverage, and environmental sustainability. While trip frequency was listed as the top priority for current and potential ferry riders, environmental impact of ferry trips was listed as a priority when deciding whether to take the ferry over other travel modes, with zero emissions ferries listed as a top four desired outcome by survey participants.
- **Community Meetings.** For more detailed information, the use of community meetings provided the Port of San Francisco with the opportunity to engage the public on the Mission Bay Ferry Landing

project. At these meetings Port of San Francisco staff conveyed project information, while also obtaining input from participants on the project. The Port held over 100 community meetings and will continue through the duration of project implementation.

- **Online Information.** Providing online project information is a key communications strategy for any project, including those in this application. SF Bay Ferry created a website dedicated to the future of San Francisco Bay Area ferry service and provides public input to-date, including survey results, service vision information and more. The Port has a webpage dedicated to the MBFL project that provides a comprehensive overview of projects and plans as well as project updates.

d. Long-Term Community Engagement

Both the Port of San Francisco and SF Bay Ferry have a commitment to meaningful community engagement in the development and implementation of their projects and programs. The agencies have established community engagement policies that outline specific strategies for including near-port communities in decisions that affect them, including those that impact air quality.

Near-term (Year 1 and 2). San Francisco Bay Ferry will conduct outreach surveys and listening sessions as part of an awareness campaign during the summer of 2024 with East Bay Latinx and African American residents who do not normally ride the ferry to identify barriers to traveling to work, recreational and other opportunities in San Francisco, and will address the relevance of sustainability and air pollution prevention to riders. The agency will use learnings from the engagement to develop an outreach and awareness campaign in late 2024. SF Bay Ferry is part of a public private partnership formed to conduct a hydrogen vessel demonstration project to test and further understand hydrogen fuel cell technology. The demonstration project will start operating along the Port of San Francisco's waterfront from Pier 41 to the San Francisco Ferry building this June (2024) and will feature educational displays on zero emission vessel technology, the public health benefits of zero emission ferries and more about SF Bay Ferry's plans to transition to zero emissions. This demonstration project will be free to the public thanks to the public private partnership with United Airlines, Golden State Warriors, Golden Gate Ferry, and another soon to be announced partner. The Port of San Francisco will continue to use its advisory and community committees to gather feedback to ensure two-way engagement from residents and the maritime community.

Medium-term (Year 3 & 4). Medium-term engagement will convey the importance of electrification on near-port communities, including how electric ferries will reduce greenhouse gas emissions and air pollutants in the Bay Area; encourage the use of electric ferries, especially to those in disadvantaged communities; and provide ongoing information on project performance to the Bay Area public and stakeholders. The project's Community Engagement Plan will utilize advisory committees, community groups, televised and recorded meetings, pop-up engagements at existing and recurring popular events, digital promotions and newsletters, industry group-based outreach, public workshops, and local press.

Dedicated Resources. The Port has seven public relations and planning staff who regularly commit their time to community engagement, including through communications and public meetings such as waterfront advisory committees. SF Bay Ferry has several departments responsible for community engagement including public information and marketing, government & regulatory affairs, and planning. Between these departments, three full-time staff are dedicated to community outreach versed in specific expertise. SF Bay Ferry also dedicates $200,000 annually to contracts with community outreach firms that have established relationships with community-based organizations in particular areas.

Section 5 – Project Sustainability

a. Baseline port mobile source inventory for greenhouse gases, $PM_{2.5}$ and/or NO_x

Sources of mobile emissions at the Port include Port operations but are largely attributable to tenant operations. The Port of San Francisco hired consultants to prepare emissions inventories from mobile sources in 2005, 2010, and 2017. The two primary mobile sources were Ocean-Going Vessels and Harbor Craft. Ocean-Going Vessels were comprised of cruise ships (80%) and vehicle carriers (20%). Most cruise ships utilized shoreside power at berth. Harbor Craft were comprised of assist tugs, tug and barge, excursion ferries. In keeping with the first two inventories, the 2017 inventory excluded commuter ferry operations. The inventories provide estimates for emissions of five criteria pollutants:

- Reactive organic gases (ROG)
- Carbon monoxide (CO)
- Nitrogen oxides (NOx)
- Particulate matter, including diesel particulate matter (PM)
- Sulfur oxides (SOx)

The 2017 inventory also included three greenhouse gas (GHG) components: carbon dioxide, methane, and nitrous oxide, expressed as carbon dioxide equivalents that reflect the relative global warming potential of each. From 2005 to 2017 the most notable changes were decreases in NOx and SOx. ROG levels and CO increased very slightly and PM10 decreased. Excursion ferries comparisons were complicated by errors in 2010, but overall, emissions decreased. This is attributed to a slight reduction in excursion activity but also to a switch to cleaner engines. The California Air Resources Board (CARB) estimates ferries account for 11% of transportation related GHG emissions.

The Port commits to developing an updated Port Mobile Source Emission inventory that will include ferries and track progress in reducing mobile point source emissions in Port of San Francisco jurisdiction within the project performance period (< four years). This inventory will be made publicly available and specifically reviewed with stakeholders and community members in nearby disadvantaged communities.

b. Plan to reduce port mobile source emissions.

The Port's long-term goal is to achieve net-zero emissions for Port operations by 2050, a commitment reflected the Sustainability Goal of the Port's Strategic Plan. Interim steps include converting the Port fleet to zero-emissions and supporting alternative fuels for ferries. The Sustainability Goal is supported by the Port's Sustainability Framework, which provides a detailed and systematic assessment of sustainability targets for specific issues. Electrification is critical to achieving these goals and will build on innovative work the Port has accomplished.

To complement the efforts to reduce maritime mobile source emissions, the Port will be initiating a grant-funded project to reduce emissions from heavy-duty commercial trucks. A portion of Pier 96 is used to provide parking for Class-8 trucks owned by independent operators and small fleets. The project will assess the feasibility of upgrading infrastructure at Pier 96 to support fueling of both battery electric and hydrogen fuel-cell trucks and to provide resources to assist the independent operators to become early adopters of the zero-emission trucks. This would also reduce emissions that affect the Bay View Hunters Point community identified by the California Air Resources Board as a community that would benefit from emissions reduction strategies. The Port is committed to working with BAAQMD and the community on the CERP within the project performance period.

Section 6 – Job Quality and Equitable Workforce Development

Through this project, the Port of San Francisco will drive job creation to support a diverse economy, reinforcing the vital role of maritime industries in the Bay Area. The Port's approach will maximize the benefits of this funding opportunity, to create a racially diverse maritime workforce, while contributing to long-term economic growth and sustainability of maritime jobs in the Bay Area by providing the bellwether for recruitment efforts in the maritime workforce nationally.

a. Supporting high quality jobs

Project-Specific High-Quality Jobs Created and Supported. This project will create an estimated 300 direct jobs and 600 indirect jobs. In addition, the Workforce Development Program will train over 200 apprentices and expand collaboration with local community colleges and universities to adapt existing programs or develop new programs.

Workforce Training. The Port of San Francisco and the Water Emergency Transportation Authority will work with the WWC, a regional non-profit that provides workforce training in marine trades and water transportation careers specifically for 18–24-year-olds from low-income and disadvantaged communities in the greater Bay Area as well as re-entry individuals leaving the prison system. WWC partners include the Workforce Development Boards for Alameda, Contra Costa and Solano counties (an agreement with San Francisco County Workforce Development Board is currently under development); Alameda County Probation Department; maritime industry employers, such as commercial harbor craft operators including ferry operators and tug boat operators; shipyards and associated maritime suppliers; labor unions, such as the Machinist Institute, Inland boatmen's Union of the Pacific, International Order of Masters, Mates & Pilots, and the California Labor Federation; community based organizations such as West Oakland Job Resource Center and Five Keys Schools and Programs; and the California State University Maritime Academy.

WWC will provide paid training programs for up to 200 participants over four years who will participate in short-term focused training that will rapidly prepare them for work in the marine trades and water transportation fields, including operating and maintaining zero-emission ferries and harbor craft. The WWC is guided by an Industry Advisory Board (IAB) consisting of employer and worker representatives, along with industry experts to work collaboratively to develop accelerated short-term training curricula for participants, based upon industry need. The IAB has a First Source Hiring Agreement, to be signed by partner employers, that prioritizes WWC training graduates in hiring. For training on the project's equipment, WWC will work directly with the Port and WETA to develop training specific to the infrastructure and operation of the new vessel and shore power charging system, including electrical work required for the maintenance and repair of electric vessels.

The WWC can train workers quickly and will fill the current and future demand for jobs in the marine trades and water transportation sectors. The WWC also includes many wrap-around services to ensure the participants' success, including soft skill development courses, general resources, childcare and food assistance, and legal support to help overcome any barriers to gaining the required credentials to operate in the maritime industry. Those who complete the training will be placed in apprenticeships and employment in family-sustaining good jobs, including those on this project. The WWC has an administrative staff that provides graduating apprentices with ongoing job placement assistance. The design of the WWC training program supports high quality jobs with benefits such as health insurance, retirement plans, workers' compensation benefits, paid leave and care giving support and is fully aligned with the Good Jobs principles. WWC will offer three specific course types:

- **Marine trades**: WWC offers a 10-week course preparing participants in the following marine trades careers/skills directly related to this project: marine machinist; marine technician; marine welder; marine painter; marine carpenter; marine electrician; marine pipefitter; crane and forklift operator; drydock operator; and pile driver.
- **Water transportation**: WWC offers a 1–2-week course preparing students in the following careers/skills: masters (also called captains); mates; pilots; sailors, deckhands; marine oilers; station attendants; and ship engineers. This course is tailored to accommodate the additional training needed to address any differences between a combustion vehicle and an electric vehicle.
- **Electronic Drive Technician** (add-on training): WWC will work with Port of San Francisco and SF Bay Ferry staff to create an add-on training for mid-level electronics technicians to obtain the skills needed to maintain and repair electric vessels, including safety training, which will ensure the safety of staff while maintaining and repairing high voltage equipment.

Workforce Development Program. Ensuring that existing and future employees are adequately trained in the new equipment is critical to the success of the implementation of the zero-emission fleet transition. In 2021, SF Bay Ferry received a grant from the California Energy Commission, to support the development of a blueprint to transition to zero emissions. This plan included an assessment of the current workforce capabilities and identified the new roles, skills and training required for the existing workforce to operate and maintain the zero-emission technology that will be implemented through this project. In partnership with the Working Waterfront Coalition, the Workforce Development Program for this project is being developed based on the specific zero emission technology being implemented in this project, including development of a new electronic drive technician training course. Existing commissioning and new hire training protocols were modified based on the expected new ZE skills and safety training. Workforce-related risks were also identified, and appropriate risk mitigation strategies were proposed for the successful implementation of ZE technology. The final Workforce Development Program will also include procedures to overcome any workforce issues that could create risk for the successful implementation of a zero-emission ferry system. The Port and WETA will use this plan to ensure that the proposed project provides employment and workforce development and training benefits to the community, particularly to priority populations.

Worker and Passenger Safety. SF Bay Ferry has historically worked with unions to develop a project labor agreement (PLA) for large terminal construction projects that includes robust worker safety policies. For the WWC program, all marine trades students will complete the Occupational Safety and Health Administration (OSHA 10) Construction Safety training taught by industry employers and will receive a certificate of completion. In addition, project partners will provide training required for the manufacturing, maintenance and repair of electric vessels and charging equipment. All safety protocols will be updated to reflect safety requirements for the new equipment.

Ports that serve people must also consider the safety of everyday passengers when contemplating a transition to zero emissions, which is a unique challenge for the Port of San Francisco. As part of the project's early development, SF Bay Ferry has proactively engaged the United States Coast Guard, local building, and fire departments to advise on the design on the zero-emission equipment to ensure the highest level of safety and the groundwork for compliant and effective passenger safety protocols. The Port and SF Bay Ferry will share these passenger safety protocols with other ferry operators to accelerate the transition to zero-emission water transit.

Worker and Labor Engagement. The Port, in partnership with WWC, will recruit participants through partnerships with community-based organizations, county workforce development boards and

probation departments in Alameda, Contra Costa, Solano and San Francisco Counties and others. WWC will assist participants in securing well-paying jobs via First Source Hiring Agreements with Bay Area maritime employers. A First Source Hiring Agreement allows the member employers to have the first chance at hiring WWC graduates. WWC is working with the local unions, including the Inlandboatmen's Union (IBU) of Pacific, the International Organization of Masters, Mates and Pilots, and the Machinists District Lodge 190 to create the training program and to recruit and hire participants from low-income, disadvantaged communities and the re-entry population. Many of the positions will be union represented positions. The primary strategy for amplifying the worker's voice will be the inclusion of key worker representatives at the IAB (see attached letters of commitment). Worker representatives who have committed to participation in the IAB include the California Labor Federation; the Inland boatmen's Union of the Pacific; the International Organization of Masters, Mates and Pilots; and the Machinists Automotive Trades District Lodge 190. Worker members of the IAB will contribute to the design, implementation, and evaluation of the training program curriculum.

Benefits and Pay. The positions available to recent WWC graduates employed to operate equipment and maintain technology for this project will be high paying (prevailing wage) positions with full benefits including health insurance, retirement plans, workers' compensation benefits, paid leave and care giving support. The wages will be determined via negotiations with labor unions and companies. Additional benefits associated include many wrap-around services such as soft skill development courses, general resources, childcare and food assistance, and legal support.

b. Expanding access to high-quality jobs, including for people in low-income and disadvantaged near-port communities.

The Working Waterfront Coalition training program is designed to connect low-income workers from disadvantaged communities with good quality, high paying jobs, offering entry opportunities with pathways to advancement. Traditional word of mouth communication of job opportunities in the marine trades has significantly limited the maritime workforce's diversity. The Port and its workforce partners will use the following strategies for attracting, retaining, and placing individuals with low incomes from disadvantaged communities into high-quality jobs in the marine trades and water transportation fields:

- **Use of Community Groups, Workforce Boards and Internet in Recruitment**: The Port and WWC will partner with community-based organizations and workforce development boards in San Francisco, Contra Costa, Alameda and Solano Counties (letters of commitment attached) that work with underserved populations, including English Language Learners (ELLs) and immigrants, returning citizens, and youth, the project will reach out intentionally to communities that have not traditionally been exposed to career opportunities in the marine industry. The WWC has developed an effective advocacy program promoting its training opportunities online via targeted social media and internet marketing using social media experts in the 18–24-year-old range from disadvantaged communities such as Richmond, CA. This will enable WWC to expand its reach to those who would not normally have access to these opportunities.
- **Customize training and support**: To support the projects in this grant, WWC will work with San Francisco Bay Ferry staff to create a training for mid-level electronics technicians to obtain the skills needed to maintain and repair electric vessels. All participants will receive training in essential (soft) skills such as effective communication, customer relations, and good work habits, increasing their likelihood of placement and retention in marine employment. WWC will also provide a full suite of wrap-around services to ensure the success of the program's participants, including a stipend to

cover general expenses, transport to and from classes, access to child-care, nutrition assistance, soft skill development, legal assistance, and more.

- **Provide Hiring and Retention Support:** Employers will have direct input in designing WWC training around the specific needs of the industry, which will ensure that participants develop the relevant skills they need to be hired. Once participants enter apprenticeships or employment, there are clear pathways and a strong employer commitment to helping workers develop their skills and move to better paid employment. First Source Hiring Agreements signed by employers have been shown to increase placement of training participants in employment. Offering a wide array of career pathways to participants will also increase the likelihood that participants can select a pathway that aligns with their interests.

Section 7 – Project Resilience to Climate Impacts

The Port has been proactive in addressing the resilience of its waterfront jurisdiction to potential impacts from climate change, specifically in relation to sea-level rise. Specific to this project, several measures have been implemented or are proposed to ensure resilience to future climate impacts and protect grant-funded equipment and vessels. At all three terminal sites where shore power charging systems will be installed, wharf elevations will be raised to protect from total water levels projected to occur due to rising sea levels and increasing severe storms over the next 50-75 years. Components of the shore power charging systems would be secured to floating facilities that rise and fall with tides, preventing flooding or inundation during severe storm events. Access ramps connecting the wharf areas to floating facilities have been upsized to ensure safe and ADA compliant grades are maintained during all tidal conditions now and into the future. Lastly, wharf facilities have been designed to Essential Facilities Standards to address the potentially compounding risks of seismic activity near the project site as it relates to resiliency. Cooling systems for the shore power charging systems will be designed to account for future extreme heat events. The project site and grant-funded equipment are not vulnerable to extreme cold weather, drought, or wildfire risks.

Section 8 – Budget

a. Budget Detail

The San Francisco Bay Emissions-Free Ferry System budget is $70.9 million, including a request for $55.4 million (78%) EPA Clean Ports grant funding and $15.5 million (22%) matching funds. **Notably, $42.0 million (59%) of the total project budget will go directly to the purchase and installation of a high-speed electric vessel and a shore power and anchoring system to charge vessels.** The remaining $28.9 million (41%) will support costs associated with design, permitting, and construction management as well as deliver construction of behind the meter infrastructure.

Project Expenditures – The $70.9 million Project budget includes the following expenditure line items:

Project management staff ($0.2 million). The Port has assigned two project managers to oversee project implementation. While the hours vary from week to week, on average, staff will oversee the project for approximately 100 weeks at the following rates:

- Shannon Cairns, Project Manager: $119/hr. x 100 weeks x 10 hrs./week = $95,000
- Kathryn Purcell, Project Manager: $100/hr. x 100 weeks x 6 hrs./week = $56,000
    - Subtotal Salaries = $151,000
    - Fringe: 32% Fringe Rage x $151,000 total salaries = $51,000
    - *Total Salaries + Fringe = $203,000*

Contractual ($2.9 million). The Port is requesting funds to complete final design, permitting, and regulatory steps ($0.5 million) as well as for construction management, inspections, and monitoring ($2.4 million) of construction of electrification infrastructure and equipment.

Construction ($2.1 million). The Port will directly manage behind the meter construction at the Mission Bay Ferry Landing, totaling $2.1 million.

Other/ Subawards ($65.8 million). The Port is partnering with SF Bay Ferry and the SFPUC to deliver critical equipment, infrastructure, and workforce development services, as follows:

- SF Bay Ferry ($48.8 million) to manage construction of high-speed electric ferry vessel, behind the meter infrastructure as well and procure a shore power and anchoring system. This budget includes $2.0 million for the Working Waterfront Coalition to provide critical workforce development services that will directly support ongoing operations of the electrified ferry system.
- San Francisco Public Utilities Commission ($17.0 million) to deliver behind the meter infrastructure to the shore power and anchoring systems. This subaward includes an SFPUC match of $13.6 million to the $3.4 million EPA grant request. The SFPUC is responsible for planning, designing, and engineering its electrical service facilities and service laterals using well-developed and proven SFPUC standards for design, materials, and construction.

Project Sources/ Matching Funds – In addition to the $55.4 million (48%) grant request, the Project budget includes $15.5 million (22%) matching funds from a variety of local and state sources:

SFPUC ($13.6 million). The SFPUC has committed $31 million to expanding grid capacity along the waterfront to meet growing demand, including to serve cruise and other passenger vessels.

CalSTA/ Transit and Intercity Rail Capital Program (TIRCP) ($1.0 million). The State of California's TIRCP funds have been awarded to SF Bay Ferry to support behind the meter infrastructure costs.

Regional Measure 3 ($0.9 million). Regional Measure 3 (RM3) was approved by a majority of voters in the nine Bay Area counties in 2018 and authorized a three-dollar bridge toll increase on the Bay Area's state-owned bridges to fund a comprehensive program of regional transportation improvements. RM3 includes capital funds for WETA, of which $0.9 million is provided to support BTM infrastructure costs.

Leveraged Funds – Delivery of the entire ZE ferry service to San Francisco leverages over $115 million from other local, state, and federal sources that were applied to earlier phases or support ineligible expenses for the grant, such as front of meter infrastructure, environmental remediation of waterways approaching the ferry terminals, and ferry terminal infrastructure. These sources include:

Regional Measure 3 ($45.3 million). RM3 funding will fund three small electric vessels programmed to serve Downtown and Mission Bay and Treasure Island. This funding will also deliver non-grant eligible construction components such as the fixed pier, gangway, and front of meter infrastructure.

CalSTA/ Transit and Intercity Rail Capital Program ($27.2 million). The TIRCP funds support early design and procurement of shore power and anchoring systems needed for this service and two small electrified zero emission vessels. This funding will also fund delivery of non-grant eligible construction that are critical for full implementation of the project.

FTA/Rapid Electric Emission-Free (REEF) Ferry funding, ($13.1 million). These Federal Transit Administration (FTA) funds were awarded to support early procurement of one small electric vessel and the shorepower systems at the Downtown Terminal critical to full implementation of the project.

City and County of San Francisco Capital Funds ($20.9 million). Several departments within the City and

County of San Francisco, including the Port and the City's General Fund, funded early-phase project expenses including design, permitting, and environmental mitigation.

San Francisco Sales Tax ($4.5 million). This local funding is being used to support environmental mitigation of the waterways utilized by the ferry system.

Private ($4.0 million). A private business has pledged $4.0 million to the project, recognizing the benefit of improving and diversifying transportation options for its employees, to support environmental mitigation of the waterways utilized by the ferry system and other non-grant eligible expenses.

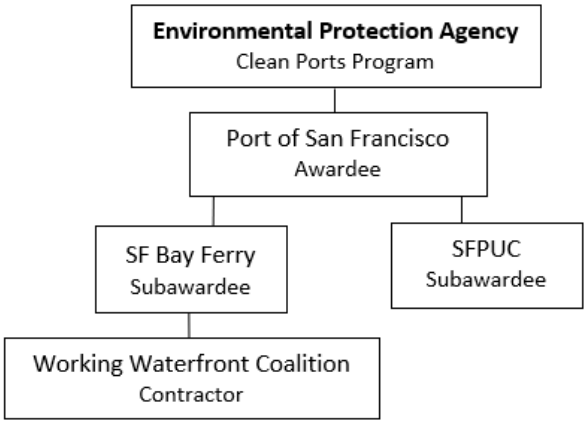
Table 5: Project Budget Overview

Line Item & Itemized Cost	EPA Funding	Non-Federal Cost Share
Personnel		
(1) Project Manager @ $119/hr x 10 hrs/wk x 100 wks	$95,000	$0
(2) Project manager @ $100/hr x 6 hrs/wk x 100 wks	$56,000	$0
TOTAL PERSONNEL	$151,000	$0
Fringe Benefits		
Full-time Employees @ 32% of Salary and Wages x Total Personnel	$51,000	$0
TOTAL FRINGE BENEFITS	$51,000	$0
Contractual		
Design, Entitlements, & Regulatory Fees	$500,000	0
Construction Management, Inspections, and Monitoring	$2,394,000	0
TOTAL CONTRACTUAL	$2,894,000	$0
Construction		
Behind the Meter Construction	1,128,000	$937,000
TOTAL CONTRUCTION	$1,128,000	$937,000
Other		
Subaward: San Francisco Bay Ferries	$47,762,000	$1,000,000
Shore Power & Anchoring Systems	*$14,000,000*	*$0*
Equipment: High Speed Vessel	*$28,000,000*	*$0*
Behind the Meter Construction	*$3,762,000*	*$1,000,000*
Workforce Development (Working Waterfront Coalition)	*$2,000,000*	$0
Subaward: San Francisco Public Utilities Commission	$3,400,000	$13,600,000
TOTAL OTHER	$51,162,000	$14,600,000
TOTAL FUNDING *Percent of Total Project*	**$55,386,000** *78%*	**$15,537,000** *22%*
TOTAL PROJECT COST		**$70,923,000**

ZE mobile source equipment *Percent of Total Project*	**$42,000,000** *59%*

b. Expenditure of Awarded Funds

Figure 2: Organization Chart



The Port, SF Bay Ferry and the SFPUC have been working collaboratively for several years on a plan to deliver the proposed project. Upon grant award, the Port will enter formal memoranda of understanding with subawardees SF Bay Ferry and the SFPUC to clearly delineate project and financial responsibilities related to their subawards (see Organization Chart, Figure 2). SF Bay Ferry will contract with the Working Waterfront Coalition and take responsibility for management of program outcomes for that entity. Additionally, each subawardee will develop a project controls team for each component to include engineering, finance, contractual, and communications managers to coordinate management of the project. Key to project controls is oversight of schedule and budget and will include financial staff experienced with managing federal funds to ensure compliance with EPA grant regulations and overarching OMB federal funding rules. Program management will follow best practices such as monthly meetings to review risk registers, cost-loaded schedules, potential delays, cashflow and delivery progress. Communication between the project staff and EPA will be prioritized to ensure responsiveness to the EPA's expectations and needs.

c. Reasonableness of Costs

Cost estimates were developed through close collaboration between the Port and its partners and utilizing input from utility and marine engineering firms.

Project management staff. Personnel costs are based on current hourly and fringe rates of the individuals assigned to the project and an estimate of staff time that will be dedicated to the project.

Contractual. The Port developed the cost estimate for design and permitting consultants utilizing service rates from a competitively procured contract with COWI/OLMM, JV. The Port will select a construction, management, and inspection firm from its as-needed engineering pool that was competitively selected in 2022. The anticipated cost of services is 10% of construction costs per prior project performance.

Construction. The Port completed several rounds of cost estimating for the construction of MBFL that includes escalation of a completed bid process in 2019 for the first phase of the project, which has already been completed. A cost estimator developed the current cost estimate by directly contacting manufacturers and by escalating expenses.

Other/ Subawards. The SFPUC and SF Bay Ferry each completed planning processes to develop cost estimates for the delivery of infrastructure, critical equipment, and workforce development:

- SF Bay Ferry – SF Bay Ferry will be delivering the vessel and shore power systems. Project management staff and industry leaders have developed a comprehensive plan to build out vessels and infrastructure. Over the past three years SF Bay Ferry has engaged with industry leaders including Aurora Marine Design, Elliott Bay Design Group, Liftech, and ARUP. Working closely with industry has allowed the agency to learn from recent electrification projects. Wartsila has been selected to act as the ferry system integrator to ensure engineering and design align with equipment

availability. Wartsila has extensive experience in Europe having successfully led zero-emissions ferry builds there. Liftech has, to date, acted as the structural engineer for the design work to date for the proposed shore power and anchoring system. Liftech was extensively involved in the original design and construction of the Downtown San Francisco facility. The design of the shore power system is currently 90% and is scheduled to begin procurement activities by the end of June 2024.

This is critical to ensuring that the vessels and systems are integrated and performing as a system to rapidly charge the vessels. Added to this knowledge is the decades of experience by the engineering team in managing vessel construction projects. Each class of vessel delivered by the team has brought new technology and emissions improvements. These costs have been escalated to the year of proposed delivery and the costs have been approved by the Executive Director of SF Bay Ferry, Seamus Murphy.

- SFPUC – The SFPUC will deliver a shared duct bank in Spear Street alignment segment of the DFT Electrification Project. The estimated cost for this segment is $10,000 per linear foot. This estimate was provided by the SFPUC based costs from a recent similar scope project completed by the SFPUC (Bay Corridor Transmission and Distribution Project).

Section 9 – Attachments

- *Statutory Partnership Agreement (Required, if applicable): Not Applicable.*
- *Intertribal Consortium documentation (Required, if applicable): Not Applicable.*
- **Applicant Fleet and Infrastructure Description (Required):** See attached.
- **Project Team Biographies**: See attached.
- *Negotiated Indirect Cost Rate Agreement: Not Applicable.*
- **Letters of Commitment**: See attached.
- **Letters of Support**: See attached.
- **Documentation of Partnership with Utility**: See attached.
- **Supplemental Application Template:** See attached.

From:	Delepine, Boris (PRT)
To:	Delepine, Boris (PRT)
Subject:	Notification of Selection: Clean Ports Program: Zero-Emission Technology Deployment Competition San Francisco Waterfront Emissions-Free Ferry System.
Date:	Monday, December 9, 2024 11:18:57 AM

From: Mak, Kimberly <Mak.Kimberly@epa.gov>
Sent: Thursday, October 17, 2024 2:48 PM
To: cleanports <cleanports@epa.gov>; shannon.cairns@sfport.com; Tarczynski, Jo (she/her/hers) <Tarczynski.Jo@epa.gov>; Trejo, Nidia (she/her/hers) <Trejo.Nidia@epa.gov>
Cc: McDaniel, Penelope <MCDANIEL.PENELOPE@EPA.GOV>; Israels, Ken (he/him/his) <Israels.Ken@epa.gov>; Bennett, Andrea <Bennett.Andrea@epa.gov>
Subject: RE: Notification of Selection: Clean Ports Program: Zero-Emission Technology Deployment Competition San Francisco Waterfront Emissions-Free Ferry System.

Hello Shannon,

Congratulations on your organization's selection!

The assigned Project Officer for this award is Nidia Trejo and the assigned Technical Lead is Jo Tarczynski. They will be your points of contact and will reach out to you to start finalizing the workplan and grant documentation.

Please note, 2 CFR 200 which guides grants has been updated and impacts many elements of a grants workplan including indirect cost rates, characterizing object class categories, thresholds. Please visit here: https://www.epa.gov/grants/whats-new-uniform-grants-guidance-2024-revision-2-cfr-200 for more information and you can also discuss this when you meet with your Project Officer and Technical Lead over the coming weeks. The updates, known as the Uniform Grants Guidance 2024 Revision, apply to projects that start on or after October 1, 2024.

Congrats again, and we look forward to working with you.

Best regards,
Kim

****
Kimberly Mak
Technology & Partnerships Office
Air and Radiation Division
U.S. Environmental Protection Agency, Region 9
415-947-4155
Mak.Kimberly@epa.gov

From: CleanPorts <cleanports@epa.gov>
Sent: Wednesday, October 16, 2024 6:33 PM
To: shannon.cairns@sfport.com

Cc: Mak, Kimberly <Mak.Kimberly@epa.gov>
Subject: Notification of Selection: Clean Ports Program: Zero-Emission Technology Deployment Competition San Francisco Waterfront Emissions-Free Ferry System.

October 16, 2024

Shannon Cairns
Port of San Francisco

RE: Notification of Selection: Clean Ports Program: Zero-Emission Technology Deployment Competition San Francisco Waterfront Emissions-Free Ferry System.

PLEASE DO NOT SHARE INFORMATION CONTAINED IN THIS EMAIL UNTIL EPA HAS PUBLICLY ANNOUNCED SELECTIONS FROM THIS COMPETITION LATER THIS MONTH.

Dear Shannon Cairns:

Congratulations! Your organization has been selected to take the next step to receive an EPA award under the Clean Ports Program: Zero-Emission Technology Deployment Competition (opportunity # EPA-R-OAR-CPP-24-04). Please note that this is NOT an official award document, and only an EPA Award Official can issue an award offer to you. This notification is the first step in the award process. EPA anticipates awarding your application with the requested funding amount of $55,386,000.00. If you wish to be considered for award, you are required to finalize your workplan and grant documentation.

During the next few weeks, your assigned EPA Project Officer will have one-on-one discussions with your organization via conference call, or Microsoft Teams. During these calls we will go over your budget, workplan, performance measures, and activity timeline. You will be contacted shortly to set up the date and time for the initial discussion. It may be necessary to have multiple calls to finalize all documentation.

Failure to respond timely during the finalization period may result in your project no longer being considered for an award.

Lastly, EPA plans to announce all selections later this month. We ask that you please do not share information contained in this email publicly until after that announcement.

Again, congratulations on your selection for award. If you have any questions, please feel free to contact cleanports@epa.gov.

Regards,

Sarah Froman
Clean Ports Program
US Environmental Protection Agency

TO: **Angela Calvillo, Clerk of the Board of Supervisors**

FROM: **Boris Delepine, Port of San Francisco**

DATE: **December 17, 2024**

SUBJECT: **Accept and Expend Resolution for Subject Grant**

GRANT TITLE: **San Francisco Emissions-Free Ferry System**

Attached please find the original* and 1 copy of each of the following:

_X__ Proposed grant resolution; original* signed by Department, Mayor, Controller

_X__ Grant information form, including disability checklist

_X__ Grant budget

__X_ Grant application

_X__ Grant award letter from funding agency

_NA__ Ethics Form 126 (if applicable)

__NA_ Contracts, Leases/Agreements (if applicable)

___ Other (Explain):

Special Timeline Requirements:

Departmental representative to receive a copy of the adopted resolution:

Name: Boris Delepine Phone: 415-571-6626

Interoffice Mail Address: Pier 1, The Embarcadero, San Francisco, Ca 94111

Certified copy required Yes ☐ No X

(Note: certified copies have the seal of the City/County affixed and are occasionally required by funding agencies. In most cases ordinary copies without the seal are sufficient).

Updated August 7, 2014

From:	Trejo, Sara (MYR)
To:	BOS Legislation, (BOS)
Cc:	Paulino, Tom (MYR); Delepine, Boris (PRT); Angulo, Sunny (BOS)
Subject:	Mayor -- Resolution -- Clean Ports Program Grant
Date:	Tuesday, December 17, 2024 3:07:52 PM
Attachments:	Cover and Checklist EPA CPP.doc EPA CPP A-E Resolution BOS.docx EPA CPP A-E Resolution BOS_12.17.24_Updated.pdf BOS Grant Information Form_EPA_CPP_EF.pdf EPA Clean Ports ZE Deployment Narrative_FINAL.pdf Notification of Selection_ Clean Ports Program_ Zero-Emission Technology Deployment Competition San Francisco Waterfront Emissions-Free Ferry System...pdf RE Port Resolution - US Environmental Protection Agency (EPA) - Clean Ports Grant $55386000.msg

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Hello Clerks,

Attached is a Resolution authorizing the Port of San Francisco, contingent on Port Commission approval, to apply for, accept, expend a grant award in the amount of $55,386,000 from the United States Environmental Protection Agency (EPA), to fund the San Francisco Waterfront Emissions-Free Ferry System for the period of January 1, 2025, through December 31, 2028.

Please note, President Peskin is a cosponsor of this item.

Best regards,

Sara Trejo
Legislative Aide
Office of the Mayor
City and County of San Francisco