

**INTERLOCAL AGREEMENT 069915 BETWEEN PORT OF TACOMA  
AND  
CITY OF TACOMA  
FOR  
SWITCHER LOCOMOTIVE REPOWER**

This Interlocal Agreement (“Agreement”) is made and entered into by the City of Tacoma, Department of Public Utilities, Beltline Division dba Tacoma Rail, a municipal corporation of the State of Washington, hereinafter called the “Tacoma Rail” and the Port of Tacoma, a port district organized under the laws of the State of Washington hereinafter called the “Port” pursuant to Chapter 39.34 RCW. As used in this Agreement, “Project” means Switcher Locomotive Repower as further described in Section 1. The Port and the Tacoma Rail are also referred to in this Agreement collectively as “the Parties”, and individually as a “Party”.

**WHEREAS**, RCW § 39.34.010 permits local governmental units to make the most efficient use of their powers by enabling them to cooperate with other agencies on a basis of mutual advantage; and

**WHEREAS**, the Project has been awarded cost share funding by the U. S. Environmental Protection Agency (EPA) in the amount of Six Hundred One Thousand Nine Hundred Forty Nine Dollars (\$601,949) allowing for the Project to commence (See Attachment A); and

**WHEREAS**, the City agreed to provide matching funds in the amount of Nine Hundred Two Thousand Nine Hundred Twenty Four Dollars (\$902,924.00) of cost share; and

**WHEREAS**, the Port has adopted the Northwest Ports Clean Air Strategy, the goal of which is to reduce air emissions from current and future maritime port operations in the Pacific Northwest through specific strategies and actions within each category of port operation; and

**WHEREAS**, it is in the interest of the Port, Tacoma Rail, and the region to reduce toxic air contaminant emissions and other air quality impacts associated with ocean going vessel operations; and

**WHEREAS**, Tacoma Rail has agreed to be in compliance with all Diesel Emissions Reduction Act (DERA) grant award conditions; and

**WHEREAS**, Tacoma Rail agrees to competitively engage, in accordance with EPA Procurement Regulations and State of Washington Procurement Regulations., the services of third-party contractors (“contractors”) in the procurement and installation of EPA approved suitable devices on one Tacoma Rail locomotive;

**NOW, THEREFORE**, the Port and Tacoma Rail agree as follows:

**1. Purpose.** The purpose of this Agreement is to establish criteria for Tacoma Rail to identify an EPA-approved suitable diesel/electric locomotive (hereafter “EPA-approved Equipment”), to establish procedures for the procurement of the EPA-approved Equipment as a replacement for a currently unregulated Tacoma Rail locomotive, and to establish procedures for the Port to reimburse Tacoma Rail for the grant-eligible cost of the EPA-approved Equipment’s procurement

and installation up to the not-to-exceed amount of \$601,949.00 stated in the Grant agreement between EPA and the Port. In addition, this Agreement establishes procedures for Tacoma Rail to follow in the event Tacoma Rail sells or relocates the EPA-approved Equipment/locomotive before the end of a five-year term that commences upon installation of the retrofit EPA-approved Equipment.

**2. Term.** The period of performance for this Agreement shall commence May 1, 2014, and it shall terminate on September 30, 2016. Any requirement related to the disposition or relocation of EPA-approved Equipment shall survive termination.

**3. Conditions of Reimbursement.** The funding budget and project scope were produced with best available information at the time of DERA application and subsequent award. Any cost increase due to change in scope or over-runs for Tacoma Rail's locomotive will be considered as Tacoma Rail's leveraged funds and will not be reimbursed by Grant funds nor by Port funding.

Tacoma Rail may submit reimbursement request(s) for the cost of eligible EPA-approved Equipment purchases and installations limited to the not-to-exceed amount of DERA grant funding as defined in the application package and subsequent grant award, provided Tacoma Rail adheres to the procurement requirements of the Port, City of Tacoma, and the State of Washington. Tacoma Rail reimbursement request(s) must be accompanied by appropriate supporting documentation (purchase order, receiving documents, and pay estimates submitted by contractors) to the Port's Contract Manager for costs incurred for EPA-approved Equipment purchase, installation and services for all materials on hand and work performed. In addition, Tacoma Rail's request for reimbursement shall include a written report documenting the services rendered or equipment to be installed.

The Port will review the reimbursement request and obtain funds as appropriate from the EPA. Any request which is considered as being without merit, lacking appropriate documentation or for some other reason is determined ineligible for reimbursement shall be returned to Tacoma Rail with a written explanation.

Tacoma Rail shall submit invoices to the Port's Contract Manager within thirty days of receipt from Tacoma Rail's contractor for equipment purchased or services rendered. Invoices should be sent to:

Ron Stuart, Project Manager – Environmental  
1 East Sitcum Plaza  
Tacoma, WA 98421

In no event shall Tacoma Rail submit a reimbursement request to the Port after June 15, 2016.

The Port shall submit a request for reimbursement to the EPA for any appropriately completed requests for reimbursement within thirty (30) days of Port's receipt. The final invoice must be submitted to EPA by the Port no later than June 30, 2016.

4. **Project Description.** Details of the Grant Project are included in the Attachment B - Revised Project Narrative, and are supplemented below:

4.1 **Title to** the EPA-approved Equipment property vests to Tacoma Rail. Tacoma Rail shall comply with 40 CFR 34.31 and 40 CFR 31.32

4.2 **Installations and Confirmation.** The vendor/contractor selected by Tacoma Rail will repower or replace one Tacoma Rail locomotive as described in Attachment B - Revised Project Narrative. If the locomotive is repowered, the Contractor will dispose or recycle all parts removed from locomotive in accordance with State and Federal laws. Emphasis for disposal shall be on recycling whenever possible. If parts are not recycled, Tacoma Rail shall provide an explanation in the Progress Report provided to the Port. Tacoma Rail's contractor shall be required by Tacoma Rail to provide a warranty statement to Tacoma Rail. Tacoma Rail shall provide a copy of said warranty to the Port.

4.3 **Warranty Claims.** For any EPA-approved Equipment components that require relief pursuant to the warranty, Tacoma Rail shall be responsible to notify the Port, acquire replacement components and install replacement components as provided under warranty.

5. **Tacoma Rail's Responsibilities.** Tacoma Rail shall perform the following duties to ensure the milestones described below under this Agreement are met:

Tacoma Rail Project Milestones	Estimated Completed Timeframe
EPA funding award	1st Qtr 2014
Begin RFP process	2nd Qtr 2014
Award Subcontract	3rd qtr 2014
Engineering & materials planning	4th qtr 2014
Begin replacement locomotive repower	1st qtr 2015
Complete replacement locomotive repower	4th Qtr 2015
Inspections and project closeout	1st qtr 2016
Final report and EPA grant closeout	3rd qtr 2016

5.1. **Tacoma Rail shall Ensure the EPA-approved Equipment (Retrofitted/Replacement) Locomotive Will Serve the Port and other Tacoma Rail customers within the Pierce County Non-Attainment Area for Five Years** (except in the case of national security reason or any emergency situation outside the control of Tacoma Rail). If Tacoma Rail plans to sell or relocate the EPA-approved Equipment engine/locomotive under this Agreement to a location outside of Pierce County prior to the expiration of the five-

year period, Tacoma Rail shall notify the Port's Environmental Programs Director and Contracts Director in writing, at least ninety days in advance of Tacoma Rail's intent to sell or relocate engine/locomotive. Tacoma Rail's written notification must include the following information: the identification of the locomotive, the date the EPA-approved Equipment retrofit device was installed, the new location/route of the locomotive and the intended date of relocation. Tacoma Rail also shall reimburse the Port for administrative expenses incurred in support of this grant if the EPA-approved Equipment components procured with grant funding are relocated outside of the Port Tidelands and **other areas of service for Tacoma Rail customers within the Pierce County Non-Attainment Area** within a five year period occurring after installation of the components.

## **5.2 Report Preparation**

Tacoma Rail shall provide written monthly progress reports to Mr. Ron Stuart, Port Project Manager or the Director, Port Environmental Programs. These reports shall contain a description of the work performed pursuant to this Agreement, equipment procured or the procurement status and an estimate of costs incurred to date.

Tacoma Rail shall submit an Interim Financial Status Report (FSR-SF269) to the Port's Finance Department 45 days after the Project period start date (May 1, 2014). A final report (SF 269) shall be submitted by Tacoma Rail to the Port's Finance Department 45 days after the expiration of the budget period end date (June 30, 2016), or as may be extended pursuant to Paragraph 8 herein.

Other DERA reporting may be required by the Federal Government. Tacoma Rail, as a sub-recipient, is required to comply with all reporting requirements of the Federal Government to which this Grant is subject.

## **6. The Port's Responsibilities.** The Port shall perform the following duties under this Agreement:

Provide administrative guidance and oversight for this project. Inspection and approval will be performed by the Port for Tacoma Rail's compliance with U. S. Environmental Protection Agency Grant 83561701 (Attachment A) and the Application Package EPA-OAR-OTAQ-14-02-February 13, 2014 (Attachment B). It is understood and agreed by both parties, the grant under which this Project is being accomplished was issued to the Port. As such, the Environmental Protection Agency holds the Port accountable and responsible for all aspects of this work and as such, the Port will review the work and administrative processes related to this work prior to approving a request for reimbursement.

**7. Communications.** The following persons shall be the contact persons for all communications regarding the performance of this Agreement.

<b>The Port</b>	<b>Tacoma Rail</b>
Ron Stuart	Alan Matheson
Environmental Project Manager	Tacoma Rail Chief Mechanical Officer
Port of Tacoma, USA	Tacoma Rail
One Sitcum Plaza, Tacoma, WA 98401-1837	2601 SR 509 N Frontage Road Tacoma, WA 98421
Phone: 253-830-5321	Phone: 253-502-8934
Fax: 253-593-4506	Fax: 253-396-3378
E-mail address: rstuart@portoftacoma.com	E-mail address: Alan.Matheson@cityoftacoma.org

**8. Extension of Project/Budget Period Expiration Date.** If a no-cost time extension is necessary to extend the period of availability of funds (budget period), Tacoma Rail must submit a written request as to why the additional time is needed and an estimated date of completion to the Port. The request must be accompanied by an interim FSR-SF 269. The Port will consider the request and if determined to have merit, will file a request for the extension with EPA. There is no obligation on the part of the Port or EPA to approve the request.

**9. Suspension and Debarment.** Tacoma Rail shall comply with Subpart C of 2 CFR Part 180 and 2 CFR Part 1532, entitled “Responsibilities of Participants Regarding Transactions (Doing Business with Other Persons).” Tacoma Rail is responsible for ensuring that any lower tier covered transaction as described in Subpart B of 2 CFR Part 180 and 2 CFR Part 1532, entitled “Covered Transactions,” includes a term or condition requiring compliance with Subpart C. Tacoma Rail is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transactions. Tacoma Rail acknowledges that failing to disclose the information as required at 2 CFR 180.335 may result in the delay or negation of this Agreement, or pursuance of legal remedies, including suspension and debarment by the Federal government, thereby preventing Tacoma Rail’s participation in future government contracts.

Tacoma Rail may access the Excluded Parties List System at [www.sam.gov](http://www.sam.gov).

**10. Trafficking Victim Protection Act of 2000.** To implement requirements of Section 106 of the Trafficking Victims Protection Act of 2000, as amended, the following provisions apply to this agreement:

a. The Federal Awarding Agency may unilaterally terminate this award, without penalty, if Tacoma Rail (1) is determined to have violated an applicable prohibition in the Prohibition Statement below; or (2) has an employee who is determined by the agency official authorized to terminate the award to have violated an applicable prohibition in the Prohibition Statement below through conduct that is either: (a) associated with the performance under this award; or (b) imputed to Tacoma Rail using

the standards and due process for imputing the conduct of an individual to an organization that are provided in 2 CFR part 180, “OMB Guidelines to Agencies on Government-side Debarment and Suspension (Nonprocurement),” as implemented by the EPA agency at 2 CFR part 1532. Tacoma Rail must inform the Port and EPA immediately of any information Tacoma Rail receives from any source alleging a violation of a prohibition in the Prohibition Statement below.

b. The Federal government’s right to terminate unilaterally is described in paragraph a of this award term: (1) implements section 106(g) of the Trafficking Victims Protection Act of 2000 (TVPA), as amended (22 U.S.C. 7104(g)), and (2) is in addition to all other remedies for noncompliance that are available to EPAs under this award.

c. Tacoma Rail must include the requirements of the Prohibition Statement below in any contract agreement made with another entity, including contractors and venders.

**PROHIBITION STATEMENT:** You, your employees, other recipients of funds under this award and their employees may not engage in forms of trafficking in persons during the period of time that the award is in effect; procure a commercial sex act during the period of time that the award is in effect, or use forced labor in the performance of this agreement under the awarded grant funds.

**11. Drug-Free Workplace Certification.** Tacoma Rail must make an ongoing, good faith effort to maintain a drug-free workplace pursuant to the specific requirements set forth in Title 2 CFR 1536, Subpart B. Additionally, in accordance with these regulations, Tacoma Rail must identify all known workplaces under its federal awards, and keep this information on file during the performance of this award.

**12. Lobbying and Litigation.** Tacoma Rail shall ensure that no funds received under this agreement are used to engage in lobbying of the Federal Government or in litigation against the United States unless authorized under existing law. Tacoma Rail shall abide by its respective OMB Circular (A-87), which prohibits the use of federal grant funds for litigation against the United States for lobbying or other political activities. Tacoma Rail agrees to comply with Title 40 CFR Part 34, New Restrictions on Lobbying. Tacoma Rail shall include the language of this provision in award documents for all sub-awards exceeding \$100,000 and require that sub-recipients submit certification and disclosure forms accordingly.

In accordance with the Byrd Anti-Lobbying Amendment, any recipient who makes a prohibited expenditure under Title 40 CFR Part 34 or fails to file the required certification or lobbying forms shall be subject to a civil penalty of not less than \$10,000.00 and not more than \$100,000.00 for each such expenditure.

**13. Recycling and Waste Prevention.** When directed to provide paper documents, Tacoma Rail agrees to use recycled paper and double-sided printing for all reports which are prepared as a part of this Agreement and delivered to the Port or EPA. This requirement does not apply to reports prepared on forms supplied by EPA.

**14. False Claim.** Tacoma Rail must promptly refer to the Port's Contract Manager, (Michael Keim), any credible evidence that a principal, employee, agent, contractor, subcontractor or other recipient of funds resulting from this agreement has submitted a false claim under the False Claims Act or has committed a criminal or civil violation of laws pertaining to fraud, conflict of interest, bribery, gratuity, or similar misconduct involving funds provided under this agreement.

**15. Civil Rights.** As a sub-recipient of funds, Tacoma Rail shall comply with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and a variety of program-specific statutes with nondiscrimination requirements.

Other civil rights laws may impose additional requirements on Tacoma Rail. These laws include, but are not limited to, Title VII of the Civil Rights Act of 1964 (prohibiting race, color, national origin, religion, and sex discrimination in employment and in services provided by State and local governments, businesses, and non-profit agencies), and the Fair Housing Act (prohibiting race, color, national original, age, family status, and disability discrimination in housing), as well as any other applicable civil rights laws.

For questions about these civil rights obligations, please call the EPA's Office of Civil Rights at 202-564-7272 or contact via email: <http://www.epa.gov/civilrights/comments.htm>.

**16. Disadvantaged Business Enterprise Requirements.** Tacoma Rail agrees to comply with the requirements of EPA's Program for Utilization of Small, Minority and Women's Business Enterprises in procurement agreements subject to funds covered under this Agreement. These requirements may be found in 40 CFR, Part 33. A FAIR SHARE objective has been set by EPA for the funds provided in the Grant. These goals apply to Tacoma Rail efforts in procurement and are as follows: MBE – Construction 10%, Supplies 8%, Services 10% and Equipment 8%; WBE – Construction 6%, Supplies 4%, Services 4% and Equipment 4%.

By signing this agreement, Tacoma Rail is accepting the FAIR SHARE objectives/goals stated above and attests to the fact that it is purchasing the same or similar construction, supplies, services and equipment, in the same or similarly relevant geographic buying market as **Washington Department of Ecology**.

Pursuant to 40 CFR, Section 33.301, Tacoma Rail agrees to make the following six good faith efforts whenever procuring construction, equipment, services and supplies related to this Agreement and to ensure that these requirements are flowed down to contractors and subcontractors performing work or providing goods related to this agreement. Records documenting compliance with the six good faith efforts shall be retained by Tacoma Rail and provided to the Port and other government agencies when requested.

1. Ensure Disadvantaged Business Enterprises (DBE) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. This will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. This includes dividing requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.
4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
5. Use the services and assistance of the Port, the SBA and the Minority Business Development Agency of the Department of Commerce.
6. If the prime contractor awards subcontracts, require the prime contractor to take the steps in subparagraphs 1-5 of this section.

Tacoma Rail shall complete and submit to the Port Contract Manager a “MBE/WBE Utilization Under Federal Grants, Cooperative Agreements and Interagency Agreements” report (EPA Form 5700-52A) for funds spent related to this Agreement. This report shall be completed semi-annually for the periods ending March 31 and September 30 and provided to the Port within ten working days of the period end.

**17. Quarterly Reporting and Environmental Results.** Quarterly progress reports by Tacoma Rail will be required. Quarterly reports are considered project status reports and will address the progress made regarding achieving the work plan goals. In general, quarterly reports will include summary information on technical progress, planned activities for next quarter and expenditures.

Reporting Period: July 1 – September 30, due date October 5  
Reporting Period: October 1 – December 31, due date January 5  
Reporting Period: January 1 – March 31, due date April 5  
Reporting Period: April 1 – June 30, due date July 5

This quarterly reporting schedule shall be repeated for the duration of the award Agreement.

**18. Final Report.** The final Project report prepared by Tacoma Rail will include a summary of the Project activity, actual results (outputs and outcomes) and costs, the successes and lessons learned for the Project as well as all categories of information required for quarterly reporting. This report shall be submitted by Tacoma Rail to the Port Project Manager within 45 days after the expiration or termination of this Agreement. Tacoma Rail shall work with the Port to determine actual emissions benefit calculations and to provide an updated detailed fleet description.



**19. Delays or Favorable Developments.** Tacoma Rail agrees that it will promptly notify the Port in writing of any problems, delays, or adverse conditions which may materially impair its ability to deliver on the outputs/outcomes specified in the grant application section 2. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation. Tacoma Rail agrees that it will also notify the Port of any favorable developments which may enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

**20. Program Income.** If program income is generated during the course of the Project, program income requirements apply to Tacoma Rail. "Program income" is defined as gross income received by Tacoma Rail directly generated as a consequence of activity funded by this Agreement during its period of performance. It may be used as follows:

1. Program income may be added to funds committed to the Project by the Port and used to further eligible project or program objectives. The program income shall be used for the purposes and under the conditions of this Agreement.
2. Program income may be used to finance the non-Federal share of the project or program, including any mandatory or voluntary cost-share.
3. Deducted from the total project or program allowable cost in determining the net allowable costs on which the Federal share of costs is based. This means that Tacoma Rail shall spend program income on project activities before spending grant funds for project activities.

Tacoma Rail shall maintain records adequate to document the extent to which transactions generate program income and the disposition of program income.

**21. Scrappage and/or Remanufacture.** Tacoma Rail agrees that the engine core replaced under this Agreement to improve energy efficiency or the environment shall be scrapped. Recycling should always be the primary consideration when disposing of anything related to this Project. Tacoma Rail further agrees any equipment acquired under this Agreement will be subject to the property disposition regulations at 40 CFR 30.34 and 31.32. and applicable Washington State statutes.

**22. Record Retention and Audit.** During the progress of the work on the Project and for a period not less than six (6) years from the date of final payment by the Port to the Tacoma Rail, the records and accounts pertaining to the Project and accounting thereof are to be kept available for inspection and audit by the Port and Tacoma Rail shall provide the Port with copies of all records, accounts,

documents, or other data pertaining to the Project upon the Port's request. If any litigation, claim, or audit is commenced, the records and accounts along with supporting documentation shall be retained until all litigation, claims, or audit finding has been resolved, even though such litigation, claim, or audit continues past the typical three year retention period. This provision is not intended to alter or amend records retention requirements established by applicable state and federal laws.

**23. Disputes.** The designated representatives herein under Paragraph 7, “Communications” shall use their best efforts to resolve disputes between the Parties. If the designated representatives are unable to resolve a dispute, then the responsible Project directors for each Party shall review the matter and attempt to resolve it. If the Project directors are unable to resolve the dispute, the matter shall be reviewed by the department director or chief executive officer of each Party or his or her designee. The Parties agree to exhaust each of these procedural steps before seeking to resolve disputes in a court of law or any other forum.

**24. Termination.** Awards may be terminated in whole or in part only if paragraph (a), (b) or (c) of this section applies.

(a) By the Port, if Tacoma Rail materially fails to comply with the terms and conditions of this award.

(b) By the Port with the consent of Tacoma Rail, in which case the two parties shall agree upon the termination conditions, including the effective date and, in the case of partial termination, the portion to be terminated.

(c) By Tacoma Rail upon sending to the Port written notification setting forth the reasons for such termination, the effective date, and in the case of partial termination, the portion to be terminated. However, if the Port determines in the case of partial termination that the reduced or modified portion of the grant will not accomplish the purposes for which the grant was made, it may terminate the grant in its entirety under either paragraphs (a) or (b) of this section.

In the event of termination of the Agreement, Port and Tacoma Rail agree to comply with applicable EPA Grant Award Conditions, and adhere to the process stated in Paragraph 3 and/or Paragraph 22 of this Agreement for (i) completed work and services for which no dispute is stated, (ii) partially completed work and services, and (iii) other property or services which are accepted by the Port. Both parties agree to the protection and preservation of property and assets realized by this Project for subsequent mitigation and assignment that will be determined by mediation.

**25. Venue/Mediation.** Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, which is not settled by agreement between the parties, shall be settled by mediation in the State of Washington, in Pierce County unless either party deems mediation would be unsuccessful. In this case, written notice shall be made by the party making this determination to the other party. This Agreement shall be construed and enforced according to the laws of the State of Washington. All litigation pursued in connection with this agreement shall be in the federal or state Courts located in Pierce County, Washington.

**26. Indemnification.** Tacoma Rail shall release, indemnify, defend and hold harmless the Port, its Commissioners, officers, employees and agents from and against any and all liability, loss, damage, expense, actions, or claims, including costs and attorney's fees which the Port, its Commissioners, officers, employees and agents may hereafter sustain, incur, or be required to pay asserting or arising directly or indirectly due to any act or omission of Tacoma Rail, its agents, employees or subcontractors, in the execution, performance or failure to adequately perform Tacoma Rail's

obligations pursuant to this Agreement; provided, however, this paragraph does not purport to indemnify the Port against liability for damages arising out of bodily injuries to persons or damages caused by or resulting from the sole negligence of the Port, its Commissioners, its officers, employees and agents in the execution, performance or failure to adequately perform its obligations pursuant to this Agreement.

**27. Industrial Insurance Coverage.** Tacoma Rail shall provide or purchase industrial insurance coverage prior to performing work under this Agreement and shall maintain full compliance with Chapter 51.12 RCW during the term of this Agreement. If Tacoma Rail is exempt from the requirements of Chapter 51.12 RCW, Tacoma Rail must carry appropriate liability insurance equivalent to the coverage provided under that chapter. The Port will not be responsible for the payment of industrial or liability insurance premiums or for any other claim or benefit for Tacoma Rail, or any subcontractor or employee of Tacoma Rail, which might arise under the industrial insurance laws during the performance of duties and services under this Agreement. If the Department of Labor and Industries, upon audit, determines that industrial insurance payments are due and owing as a result of work performed under this Agreement, those payments shall be made by Tacoma Rail; Tacoma Rail shall indemnify the Port and guarantee payment of such amounts. Once this work is accomplished and the Project is complete, insurance shall be in accordance with the existing lease agreement between the two parties.

**28. MODIFICATION OF AGREEMENT.** This Agreement may be amended at any time in writing, upon approval of each Parties' respective legislative body.

**29. Attorney's Fees.** In the event of litigation or other action brought to enforce Agreement terms, the prevailing party shall be entitled to its attorneys fees and costs.

**30. No Separate Entity Created.** This Agreement does not create any separate or administrative entity. This Agreement shall be administered by the Parties' representatives defined in Paragraph 7 "Communications" above.

**31. Notification.** Any notice required or permitted to be given pursuant to this Agreement shall be in writing, and shall be sent postage prepaid by U.S. Mail, return receipt requested, to the following addresses or be electronic mail to the Parties' representatives defined in Paragraph 7 herein, unless otherwise indicated by the Parties to this Agreement.

**32. No Third Party Beneficiaries.** This Agreement is entered into solely for the mutual benefit of the Parties. This Agreement is not entered into with the intent that it shall benefit any other person or entity and no other such person or entity shall be treated as a third-party beneficiary of this Agreement.

**33. Severability.** The provisions of this Agreement are hereby declared to be separate and severable, and the invalidity of any clause, sentence, paragraph, section, subsection, or portion of this Agreement or the invalidity of its application to any person or circumstance shall not affect the validity of its application to other persons and circumstances.

**34. Legal Obligation.** This Agreement does not relieve either Party of any obligation or responsibility imposed upon it by law.

**35. Copies Filed With County Auditor Or Posted On Parties' Web Site.** Copies of this Agreement shall either be filed with the Pierce County Auditor's Office after execution or posted on each parties' website listed by subject or other electronically retrievable public source, as allowed by RCW 39.34.040, and shall be filed with the respective party authorities.

*(This section left blank intentionally)*

**IN WITNESS HEREOF**, the undersigned have, on the date set next to their signatures, executed this Agreement on behalf of the parties hereto.

**CITY OF TACOMA**  
**Department of Public Utilities**

By: \_\_\_\_\_  
Dale W. King  
Superintendent, Tacoma Rail

Date: \_\_\_\_\_

Approved:

**PORT OF TACOMA**

By: \_\_\_\_\_  
Mark Little  
Director, Contracts & Purchasing

Date: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved:

By: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form:

By: \_\_\_\_\_  
William C. Fosbre  
Chief Deputy City Attorney

Date: \_\_\_\_\_

## **ATTACHMENT A**

U. S. Environmental Protection Agency Grant 83561701

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	<b>U.S. ENVIRONMENTAL PROTECTION AGENCY</b>  <b>Cooperative Agreement</b>	<b>GRANT NUMBER (FAIN):</b> 83561701	<b>DATE OF AWARD</b>
		<b>MODIFICATION NUMBER:</b> 0	03/26/2014
		<b>PROGRAM CODE:</b> DE	<b>MAILING DATE</b>
		<b>TYPE OF ACTION</b> New	04/02/2014
		<b>PAYMENT METHOD:</b> ACH	<b>ACH#</b> X0590
<b>RECIPIENT TYPE:</b> Special District		<b>Send Payment Request to:</b> Las Vegas Finance Center	
<b>RECIPIENT:</b> Port of Tacoma One Sitcum Plaza P.O. Box 1837 Tacoma, WA 98421-3000 EIN: 91-6001026		<b>PAYEE:</b> Senior Financial Analyst & Deputy Treasurer Port of Tacoma One Sitcum Plaza Tacoma, WA 98401-1831	
<b>PROJECT MANAGER</b> Ron Stuart Port of Tacoma One Sitcum Plaza Tacoma, WA 98401-1831 E-Mail: rstuart@portoftacoma.com Phone: 253-428-8696		<b>EPA PROJECT OFFICER</b> Faye Swift 1200 Pennsylvania Ave, NW, 6406J Washington, DC 20460 E-Mail: Swift.Faye@epa.gov Phone: 202-343-9147	<b>EPA GRANT SPECIALIST</b> Jessica Durand 1200 Pennsylvania Ave, NW Washington, DC 20460, 3903R E-Mail: Durand.Jessica@epa.gov Phone: 202-564-5317
<b>PROJECT TITLE AND DESCRIPTION</b> Port of Tacoma Switcher Locomotive Repower This project will improve air quality at the Port of Tacoma and the surrounding communities by reducing emissions from an in-use locomotive. This project will replace one Tier 0 switcher locomotive engine with a Tier 3 or better certified diesel engine equipped with Automatic Engine Start-Stop.			
<b>BUDGET PERIOD</b> 05/01/2014 - 09/30/2016	<b>PROJECT PERIOD</b> 05/01/2014 - 09/30/2016	<b>TOTAL BUDGET PERIOD COST</b> \$1,504,873.00	<b>TOTAL PROJECT PERIOD COST</b> \$1,504,873.00
<b>NOTICE OF AWARD</b>  Based on your Application dated 02/07/2014 including all modifications and amendments, the United States acting by and through the US Environmental Protection Agency (EPA) hereby awards \$601,949. EPA agrees to cost-share 40.00% of all approved budget period costs incurred, up to and not exceeding total federal funding of \$601,949. 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 statutory provisions. The applicable regulatory provisions are 40 CFR Chapter 1, Subchapter B, and all terms and conditions of this agreement and any attachments.			
<b>ISSUING OFFICE (GRANTS MANAGEMENT OFFICE)</b>		<b>AWARD APPROVAL OFFICE</b>	
<b>ORGANIZATION / ADDRESS</b> Grants and Interagency Agreement Management Division 1200 Pennsylvania Ave, NW Mail code 3903R Washington, DC 20460		<b>ORGANIZATION / ADDRESS</b> Environmental Protection Agency Office of Air and Radiation 1200 Pennsylvania Ave, NW Washington, DC 20460	
<b>THE UNITED STATES OF AMERICA BY THE U.S. ENVIRONMENTAL PROTECTION AGENCY</b>			
<b>Digital signature applied by EPA Award Official for Jill D. Young - Chief - Grants Management Branch A</b> Gary Carrozza - Award Official delegate			<b>DATE</b> 03/26/2014



## EPA Funding Information

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FUNDS	FORMER AWARD	THIS ACTION	AMENDED TOTAL
EPA Amount This Action	\$	\$ 601,949	\$ 601,949
EPA In-Kind Amount	\$	\$	\$ 0
Unexpended Prior Year Balance	\$	\$	\$ 0
Other Federal Funds	\$	\$	\$ 0
Recipient Contribution	\$	\$ 902,924	\$ 902,924
State Contribution	\$	\$	\$ 0
Local Contribution	\$	\$	\$ 0
Other Contribution	\$	\$	\$ 0
Allowable Project Cost	\$ 0	\$ 1,504,873	\$ 1,504,873

Assistance Program (CFDA)	Statutory Authority	Regulatory Authority
66.039 - National Clean Diesel Funding Assistance Program (B)	Diesel Emissions Reduction Act of 2010 codified at 42 U.S.C. 16131 et seq	40 CFR PART 31

## Fiscal

[illegible]



Budget Summary Page: Port of Tacoma Locomotive Engine Repower/Replacement Project

<b>Table A - Object Class Category (Non-construction)</b>	<b>Total Approved Allowable Budget Period Cost</b>
1. Personnel	\$0
2. Fringe Benefits	\$0
3. Travel	\$0
4. Equipment	\$0
5. Supplies	\$0
6. Contractual	\$0
7. Construction	\$0
8. Other	\$1,504,873
9. Total Direct Charges	\$1,504,873
10. Indirect Costs: 0.00% Base N/A	\$0
11. Total (Share: Recipient 60.00 % Federal 40.00 %.)	\$1,504,873
12. Total Approved Assistance Amount	\$601,949
13. Program Income	\$0
14. Total EPA Amount Awarded This Action	\$601,949
15. Total EPA Amount Awarded To Date	\$601,949

## **Administrative Conditions**

### **1. General Terms and Conditions**

The recipient agrees to comply with the applicable EPA general terms and conditions available at : <http://www.epa.gov/ogd/tc.htm>. These terms and conditions are in addition to the assurances and certifications made as part of the award and the terms, conditions or restrictions cited below .

2. In accordance with Section 2(d) of the Prompt Payment Act (P.L. 97-177), Federal funds may not be used by the recipient for the payment of interest penalties to contractors when bills are paid late nor may interest penalties be used to satisfy cost sharing requirements . Obligations to pay such interest penalties will not be obligations of the United States .

### **3. UTILIZATION OF SMALL , MINORITY AND WOMEN 'S BUSINESS ENTERPRISES**

#### **GENERAL COMPLIANCE , 40 CFR, Part 33**

The recipient agrees to comply with the requirements of EPA's Disadvantaged Business Enterprise (DBE) Program for procurement activities under assistance agreements, contained in 40 CFR, Part 33.

#### **FAIR SHARE OBJECTIVES , 40 CFR, Part 33, Subpart D**

A recipient must negotiate with the appropriate EPA award official, or his/her designee, fair share objectives for MBE and WBE participation in procurement under the financial assistance agreements .

In accordance with 40 CFR, Section 33.411 some recipients may be exempt from the fair share objectives requirements as described in 40 CFR, Part 33, Subpart D. Recipients should work with their DBE coordinator, if they think their organization may qualify for an exemption .

#### **Accepting the Fair Share Objectives /Goals of Another Recipient**

The dollar amount of this assistance agreement, or the total dollar amount of all of the recipient's financial assistance agreements in the current federal fiscal year from EPA is \$250,000, or more. The recipient accepts the applicable MBE/WBE fair share objectives/goals negotiated with EPA by the WASHINGTON DEPARTMENT OF ECOLOGY as follows:

	MBE	WBE
Construction	10%	6%
Supplies	8%	4%
Services	10%	4%
Equipment	8%	4%

By signing this financial assistance agreement, the recipient is accepting the fair share objectives/goals stated above and attests to the fact that it is purchasing the same or similar construction , supplies, services and equipment, in the same or similar relevant geographic buying market as the WASHINGTON DEPARTMENT OF ECOLOGY .

#### **Negotiating Fair Share Objectives /Goals, 40 CFR, Section 33.404**

The recipient has the option to negotiate its own MBE/WBE fair share objectives/goals. If the recipient wishes to negotiate its own MBE/WBE fair share objectives/goals, the recipient agrees to submit proposed MBE/WBE objectives/goals based on an availability analysis, or disparity study, of qualified MBEs and WBEs in their relevant geographic buying market for construction, services, supplies and equipment.

The submission of proposed fair share goals with the supporting analysis or disparity study means that the recipient is **not** accepting the fair share objectives/goals of another recipient. The recipient agrees to submit proposed fair share objectives/goals, together with the supporting availability analysis or disparity study, to the Regional MBE/WBE Coordinator within 120 days of its acceptance of the financial assistance

award. EPA will respond to the proposed fair share objective/goals within 30 days of receiving the submission. If proposed fair share objective/goals are not received within the 120 day time frame, the recipient may not expend its EPA funds for procurements until the proposed fair share objective/goals are submitted.

#### **SIX GOOD FAITH EFFORTS , 40 CFR, Part 33, Subpart C**

Pursuant to 40 CFR, Section 33.301, the recipient agrees to make the following good faith efforts whenever procuring construction, equipment, services and supplies under an EPA financial assistance agreement, and to require that sub-recipients, loan recipients, and prime contractors also comply. Records documenting compliance with the six good faith efforts shall be retained :

- (a) Ensure DBEs are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local and Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.
- (b) Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules , where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process . This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.
- (c) Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process .
- (d) Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.
- (e) Use the services and assistance of the SBA and the Minority Business Development Agency of the Department of Commerce.
- (f) If the prime contractor awards subcontracts , require the prime contractor to take the steps in paragraphs (a) through (e) of this section.

#### **MBE/WBE REPORTING , 40 CFR, Part 33, Subpart E**

MBE/WBE reporting is limited to annual reports and only required for assistance agreements where one or more the following conditions are met:

- (a) there are any funds budgeted in the contractual, equipment or construction lines of the award;
- (b) \$3,000 or more is included for supplies; or
- (c) there are funds budgeted for subawards or loans in which the expected budget(s) meet the conditions as described in items (a) and (b).

This award meets one or more of the conditions as described above, therefore, the recipient agrees to complete and submit a "MBE/WBE Utilization Under Federal Grants, Cooperative Agreements and Interagency Agreements" report (EPA Form 5700-52A) on an annual basis.

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 "last report" of the project in section 1B of the form. Annual reports are due by October 30<sup>th</sup> of each year. Final reports are due within 90 days after the end of the project period, whichever comes first.

The reporting requirement is based on planned procurements. Recipients with funds budgeted for

non-supply procurement and/or \$3,000 or more in supplies are required to report annually whether the planned procurements take place during the reporting period or not. If no procurements take place during the reporting period, the recipient should check the box in section 5B when completing the form.

MBE/WBE reports should be sent to Veronica Parker, U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue, NW Mail Code 3903R, Room 51225, Washington, DC 20460, 202-564-5347. The current EPA Form 5700-52A can be found at the EPA Office of Small Business Program's Home Page at [http://www.epa.gov/osbp/dbe\\_reporting.htm](http://www.epa.gov/osbp/dbe_reporting.htm)

This provision represents an approved deviation from the MBE/WBE reporting requirements as described in 40 CFR, Part 33, Section 33.502; however, the other requirements outlined in 40 CFR Part 33 remain in effect, including the Fair Share Objectives negotiation as described in 40 CFR Part 33 Subpart D.

#### **CONTRACT ADMINISTRATION PROVISIONS , 40 CFR, Section 33.302**

The recipient agrees to comply with the contract administration provisions of 40 CFR, Section 33.302.

#### **BIDDERS LIST , 40 CFR, Section 33.501(b) and (c)**

Recipients of a Continuing Environmental Program Grant or other annual reporting grant, agree to create and maintain a bidders list. Recipients of an EPA financial assistance agreement to capitalize a revolving loan fund also agree to require entities receiving identified loans to create and maintain a bidders list if the recipient of the loan is subject to, or chooses to follow, competitive bidding requirements. Please see 40 CFR, Section 33.501 (b) and (c) for specific requirements and exemptions.

4. Payment to consultants. EPA participation in the salary rate (excluding overhead) paid to individual consultants retained by recipients or by a recipient's contractors or subcontractors shall be limited to the maximum daily rate for a Level IV of the Executive Schedule (formerly GS-18), to be adjusted annually. This limit applies to consultation services of designated individuals with specialized skills who are paid at a daily or hourly rate. As of January 1, 2014, the limit is \$602.16 per day and \$75.27 per hour. This rate does not include transportation and subsistence costs for travel performed (the recipient will pay these in accordance with their normal travel reimbursement practices).

Contracts with firms for services which are awarded using the procurement requirements in 40 CFR 30 or 31, as applicable, are not affected by this limitation unless the terms of the contract provide the recipient with responsibility for the selection, direction, and control of the individuals who will be providing services under the contract at an hourly or daily rate of compensation. See 40 CFR 31.36(j) or 30.27(b).

#### **5. For-Profit Sub-recipients**

In addition to the EPA General Term and Condition #8 "Establishing and Managing Subawards", the recipient agrees to:

- 1) Utilize terms and conditions in all subgrants to for-profit sub-recipients that apply the following regulations to for-profit sub-recipients: 40 CFR Sections 30.2, 30.13, 30.14, 30.16, 30.17, 30.18, 30.20, 30.23, 30.25, 30.26(d), 30.28, 30.31, 30.34, 30.35, 30.36, 30.37, 30.40-.47, 30.51, 30.53, 30.61, 30.62. For the purposes of applying the listed regulations to for-profit sub-recipients, the Recipient shall perform the functions that the regulations provide will be performed by EPA.
- 2) Establish a procedure for resolving disputes with for-profit sub-recipients.
- 3) Not reimburse a for-profit sub-recipient until receipt of documentation that the sub-recipient has incurred eligible and allowable costs. Per 40 CFR 30.27, the allowability of costs incurred by for-profit organizations is determined in accordance with the provisions of the Federal Acquisition Regulation (FAR) at 48 CFR Part 31.
- 4) Obtain a final report detailing how the for-profit sub-recipient expended funds in a format prescribed by the Recipient.
- 5) Ensure that for-profit sub-recipients are aware of requirements imposed upon them by applicable Federal statutes, regulations, and these terms and conditions.



6. Rights to inventions made under this assistance agreement are subject to the provisions of Title 37 Code of Federal Regulations (CFR), Part 401, 'Rights to Inventions Made by Nonprofit Organizations and Small Business Firms under Government Grants, Contracts, and Cooperative Agreements', as revised through the date of this assistance agreement.

### **Programmatic Conditions**

1. **Substantial Federal Involvement for Cooperative Agreements**

EPA will provide substantial involvement in the form of technical assistance, development of outputs, and oversight. Specifically, substantial federal involvement will take the form of monitoring the project by EPA, participation and collaboration between EPA and the recipient in program content, review of project progress, and quantification and reporting of results.

2. **Emissions Control Technologies**

Emissions Reduction Projects funded by the recipient pursuant to this assistance agreement must use verified technologies and/or must use engines and engine configurations certified by EPA and, if applicable, CARB. Technologies are verified under EPA or California's Retrofit Technology Verification Programs. See <http://epa.gov/cleandiesel/verification/verif-list.htm> for an updated list of EPA's verified technologies and <http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm> for a list of CARB's verified technologies. Any question as to the eligibility or preference of a retrofit technology, including vehicle/equipment replacement and repowers, should be directed to the EPA Project Officer. Technology changes may not be allowed after a final workplan has been approved. If technology compatibility issues arise, EPA may elect to terminate the cooperative agreement, at which time assistance funds must be returned to EPA.

3. **Quarterly Reporting and Environmental Results**

Quarterly progress reports will be required. Quarterly reports are considered project status reports and will address the progress made achieving the work plan goals. In general, quarterly reports will include summary information on technical progress and expenditures, and planned activities for next quarter. A template for the quarterly report is available at <http://www.epa.gov/cleandiesel/grant-reporting.htm>.

Quarterly reports are due according to the following schedule. If a due date falls on a weekend or holiday, the report will be due on the next business day.

April 1 - June 30 Reporting Period: report due date July 30  
July 1 - September 30 Reporting Period: report due date October 30  
October 1 - December 31 Reporting Period: report due date January 30  
January 1 - March 31 Reporting Period: report due date April 30

If a project start date falls within a defined Reporting Period the recipient must report for that period by the given due date. This quarterly reporting schedule shall be repeated for the duration of the award agreement.

4. **Final Report:**

The final project report will include all categories of information required for quarterly reporting, including a final, detailed fleet description. The final project report will also include

a narrative summary of the project or activity, actual project results (outputs and outcomes) including actual emissions benefit calculations, and the successes and lessons learned for the entire project.

For projects involving vehicle/equipment replacement and repowers the recipient must provide in the final report: 1) Evidence that the replacement activity is an "early replacement," and would not have occurred through normal attrition/fleet turnover (i.e. without the financial assistance provided by EPA) within three years of the project period start date. Supporting evidence can include verification that the vehicles or equipment being replaced have useful life left and fleet characterization showing fleet age ranges and average turnover rates per the vehicle or fleet owner's budget plan, operating plan, standard procedures, or retirement schedule; 2) Evidence of appropriate scrappage or remanufacture (such as a photograph of the scrapped engine), including the engine serial number and/or the vehicle identification number (VIN); and 3) Specification of the model years and the emission standard levels for PM and NOx, for both the engine being replaced and the new engine.

For projects that take place in an area affected by, or includes vehicles, engines or equipment affected by federal law mandating emissions reductions, the recipient must provide in the final report evidence that emission reductions funded with EPA funds were implemented prior to the effective date of the mandate and/or are in excess of (above and beyond) those required by the applicable mandate.

The final report shall be submitted to the EPA Project Officer within 90 days after the project period end date or termination of the assistance agreement. A template for the final report is available at <http://www.epa.gov/cleandiesel/grant-reporting.htm>.

**5. Use of Funds Restriction :**

- 1) **Mandated Measures:** Recipient agrees that funds under this award cannot be used for emissions reductions that are mandated under federal law. This refers to specific compliance dates within the mandate, not when the mandate is passed. Voluntary or elective emissions reductions measures shall not be considered "mandated", regardless of whether the reductions are included in the State Implementation Plan of a State.
- 2) **Normal Attrition:** Recipient agrees that funds under this award cannot be used for emission reductions that result from vehicle/equipment replacements or repowers that would have occurred through normal attrition/fleet turnover within three years of the project start date. Any question as to eligibility of a vehicle/equipment replacement or repower should be directed to the EPA Project Officer.
- 3) **Fleet Expansion:** Recipient agrees that funds under this award, including subawards/subgrants, cannot be used for the purchase of vehicles, engines, or equipment to expand a fleet. The recipient agrees that:
  - i. The replacement vehicle, engine, or equipment will perform the same function and operation as the vehicle, engine, or equipment that is being replaced (e.g., an excavator used to dig pipelines would be replaced by an excavator that continues to dig pipelines);
  - ii. The replacement vehicle, engine, or equipment will be of the same type and similar gross vehicle weight rating or horsepower as the vehicle, engine, or equipment being replaced (e.g., a 300 horsepower bulldozer is replaced by a bulldozer of similar horsepower). Horsepower increases of more than 10 percent require written approval from the EPA Project Officer prior to purchase.
  - iii. The engine being replaced will be scrapped or rendered permanently disabled

within ninety (90) days of the replacement, or remanufactured to a certified cleaner emission standard. Permanently disabling the engine while retaining possession of the engine is an acceptable scrapping method. Disabling the engine may be completed by drilling a hole in the engine block (the part of the engine containing the cylinders) and manifold. Alternatively, disabling the engine may be completed by removing the engine oil from the crankcase, replacing it with a 40 percent solution of sodium silicate and running the engine for a short period of time at low speeds, thus rendering the engine inoperable. Remanufacturing shall be performed by the original engine manufacturer, or by a dealership/distributor that has a service program that is sponsored/backed by original engine manufacturer warranties (i.e. the new, remanufactured and upgraded engine is warranted by the OEM). Non-road engines shall be remanufactured to the cleanest certified emission standard possible. Highway engines shall be remanufactured to Model Year (MY) 2007 or newer certified emission standards. Remanufacturing must be completed during the project period. Other acceptable scrappage methods may be considered and will require prior written approval from the EPA Project Officer. If scrapped or remanufactured engines are to be sold, program income requirements apply.

- iv. The vehicle/equipment being replaced will be scrapped or rendered permanently disabled within ninety (90) days of the replacement, or remanufactured to a certified cleaner emission standard. Permanently disabling the chassis and disabling or remanufacturing the engine (see iii above) while retaining possession of the vehicle/equipment is an acceptable scrapping method. Disabling the chassis may be completed by cutting through the frame/frame rails on each side at a point located between the front and rear axles. Other acceptable scrappage methods may be considered and will require prior written approval from the EPA Project Officer. Vehicle/equipment components that are not part of the engine or chassis may be salvaged from the unit being replaced (e.g. plow blades, shovels, seats, etc.). If scrapped or remanufactured vehicles/equipment or salvaged vehicle/equipment chassis or components are to be sold, program income requirements apply.
- 4) Matching Funds: Recipient agrees that funds under this award cannot be used for matching funds for other federal grants, lobbying, or intervention in federal regulatory or adjudicatory proceedings, and cannot be used to sue the Federal Government or any other government entity.
- 5) Formerly Verified Technologies: Recipient agrees that funds under this award cannot be used for retrofit technologies on EPA's or CARB's, "Formerly Verified Technologies" lists: <http://www.epa.gov/cleandiesel/verification/deleted-list.htm>, [www.arb.ca.gov/diesel/verdev/vt/fv1.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv1.htm), [www.arb.ca.gov/diesel/verdev/vt/fv2.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv2.htm), and [www.arb.ca.gov/diesel/verdev/vt/fv3.htm](http://www.arb.ca.gov/diesel/verdev/vt/fv3.htm). Recipient agrees that funds under this award cannot be used for idle reduction technologies on EPA's "Technologies No Longer Verified" list that can be found at: <http://epa.gov/smartway/forpartners/technology.htm#tabs-4>. Recipient agrees that funds under this award cannot be used for technologies on the Emerging Technologies list which can be found at [www.epa.gov/cleandiesel/verification/emerg-list.htm](http://www.epa.gov/cleandiesel/verification/emerg-list.htm).
- 6) Emissions Testing: Recipient agrees that funds under this award cannot be used for emissions testing and/or air monitoring activities (including the acquisition cost of emissions testing equipment), or research and development.
- 7) Fueling Infrastructure: Recipient agrees that funds under this award cannot be used for fueling infrastructure, such as that used for the production and/or distribution of biodiesel, compressed natural gas, liquefied natural gas, and or other cleaner fuels.
- 8) Drayage Truck Model Year: With regards to drayage trucks, recipient agrees that funds



under this award cannot be used to retrofit, repower or replace a model year 1989 or older engine, or to retrofit a model year 2007 or newer engine with DOCs or DPFs, or retrofit a model year 2010 or newer engine with SCR, or replace model year 2004 or newer engine, or repower or convert model year 2007 or newer engine.

- 9) Nonroad Useful Life and Operating Hours: Recipient agrees that funds under this award cannot be used to retrofit, repower, upgrade or replace a nonroad engine or equipment that has less than seven years of useful life remaining. A table distinguishing which nonroad engine model years EPA has determined to have at least seven years of useful life remaining, based on the type and age of vehicle, can be found at <http://www.epa.gov/cleandiesel/documents/fy13-nonroad-remaining-useful-life.pdf>. In addition, recipient agrees that funds under this award cannot be used to retrofit, repower, upgrade or replace nonroad engines and equipment that operate less than 500 hours per year.
- 10) Nonroad Repower/Replacement: Recipient agrees that funds under this award cannot be used to repower or replace nonroad Tier 0 (unregulated) engines to a nonroad Tier 1 or lower nonroad engine standard or from a Tier 2 nonroad engine standard to a Tier 3 or lower nonroad engine standard.
- 11) Marine Repower/Replacement/Upgrade: Recipient agrees that funds under this award cannot be used to repower, replace or upgrade Tier 3 or Tier 4 marine engines, or to repower or replace marine engines from Tier 1 marine engine standard to Tier 1 or lower marine engine standard, or from a Tier 2 marine engine standard to a Tier 2 or lower marine engine standard.
- 12) Locomotive Retrofit/Repower/Replacement/Upgrade: Recipient agrees that funds under this award cannot be used to retrofit unregulated or Tier 0 locomotives with SCR, or to upgrade, repower or replace locomotives from: Tier 0+/1 to Tier 0+ or lower; Tier 1+/2 to Tier 1+ or lower; Tier 2 to Tier 1+ or lower; or, from Tier 2+ to Tier 2+ or lower. In addition, recipient agrees that funds under this award cannot be used upgrade, repower or replace line-haul locomotives from Tier 2 to Tier 4, or to upgrade, repower or replace line-haul locomotives from Tier 2+ to Tiers 3 and 4 , or to install Automatic Engine Start-Stop technologies on locomotives currently certified to Tier 0+ or higher.
- 13) Marine Shore Connection: No funds awarded under this RFP shall be used for marine shore connection system projects that are expected to be utilized less than 2,000 MW-hr/year.
- 14) Locomotive Shore Connection: No funds awarded under this RFP shall be used for locomotive shore connection system projects that are expected to be utilized less than 1,000 hours/year.
- 15) Locomotive and Marine Operating Hours: Recipient agrees that funds awarded under this RFP cannot be used to retrofit, repower, replace, upgrade or install idle reduction technologies on eligible locomotives or marine engines that operate less than 1000 hours per year.
- 16) Engine Upgrade: In the case of an engine upgrade with a certified remanufacture system applied at the time of rebuild (not manufacturer upgrades that are retrofits verified by EPA or CARB), recipient agrees that funds under this award cannot be used for the entire cost of the engine rebuild, but only for the incremental cost of the certified remanufacture system and associated labor costs for installation. Any question as to eligibility of engine upgrade costs should be directed to the EPA Project Officer.

**6. Drayage Vehicle Replacement Project Requirements :**

- 1) In addition to the scrappage requirements for all vehicles/equipment described in E.3.iv above, recipients replacing drayage vehicles are required to establish and document guidelines to ensure that the scrapped vehicle has a history of operating on a frequent



basis over the prior year as a drayage truck.

- 2) The recipient must establish and document guidelines to ensure that all drayage trucks receiving grant funds are operated in a manner consistent with the definition of a drayage truck, defined as any Class 8a and 8b in-use on-road vehicle with a gross weight rating (GVWR) of greater than 33,000 pounds operating on or transgressing through port or intermodal rail yard property for the purpose of loading, unloading or transporting cargo, such as containerized, bulk or break-bulk goods.

**7. Delays or Favorable Developments :**

The recipient agrees that it will promptly notify the EPA Project Officer of any problems, delays, or adverse conditions which may materially impair its ability to deliver on the outputs/outcomes specified in the work plan. This disclosure must include a statement of the action taken, or contemplated, and any assistance needed to resolve the situation. The recipient agrees that it will also notify the EPA Project Officer of any favorable developments which may enable meeting time schedules and objectives sooner or at less cost than anticipated or producing more beneficial results than originally planned.

**8. Procurement and Sub-grant Procedures :**

The recipient must follow applicable procurement and sub-grant procedures. EPA will not be a party to these transactions. If 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 40 CFR Part 30 or 40 CFR Part 31, as applicable. Approval of a funding proposal does not relieve recipients of their obligations to compete service contracts, conduct cost and price analyses, and use sub-grants only for financial assistance purposes, in accordance with Subpart B Section .210 of OMB Circular A-133.

**9. Employee and/or Contractor Selection :**

EPA will not help select employees or contractors hired by the recipient.

**10. Program Income :**

If program income is generated during the course of the project, program income requirements apply. Program income is defined as gross income received by the grantee or subgrantee directly generated by a grant supported activity, or earned only as a result of the grant agreement during the grant period. "During the grant period" is the time between the effective date of the award and the ending date of the award reflected in the Award Document. Program income earned during the project period shall be retained by the recipient and, in accordance with 40 CFR Parts 30.24 and 31.25 as applicable, recipient is authorized to use program income as follows:

- 1) Program income may be added to funds committed to the project by EPA and recipient and used to further eligible project or program objectives. The program income shall be used for the purposes and under the conditions of the grant agreement.
- 2) Program income may be used to finance the non-federal share of the project or program, including any mandatory or voluntary cost-share. The amount of the Federal grant award remains the same.
- 3) Deducted from the total project or program allowable cost in determining the net allowable costs on which the federal share of costs is based. This means that the recipient shall spend program income on project activities before spending/requesting federal funds

for project activities. This may result in unspent federal funds at the end of the project period.

The recipient will maintain records adequate to document the extent to which transactions generate program income and the disposition of program income.

#### **11. Equipment Use, Management, and Disposition**

These equipment use, management, and disposition instructions are applicable to assistance agreement recipients and subrecipients acquiring equipment under this award. State agencies may use, manage and dispose of equipment acquired under assistance agreements by the State in accordance with State laws and procedures.

Recipient agrees the equipment acquired under this assistance agreement will be subject to the use and management and disposition regulations at 40 CFR 30.34 and 31.32, as applicable. Equipment is defined as tangible non-expendable personal property having a useful life of more than one year and an acquisition cost and/or current market value of \$5,000 or more per unit. Certified or verified technologies, vehicles, engines and nonroad equipment are considered to be equipment to the extent they fall within this definition.

Recipient agrees that at the end of the project period the recipient will continue to use the equipment purchased under this assistance agreement in the project or program for which it was acquired as long as needed, whether or not the project or program continues to be supported by federal funds.

#### **12. Mandatory Cost-Share Requirement**

This award and the resulting federal funding share of **40%** as shown under "Notice of Award" above is based on estimated costs requested in the recipient's final approved workplan dated March 11, 2014. 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 equipment costs. 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 40 CFR 30.23 or 31.24, as appropriate. The cost share requirements are as follows:

- 1) **Engine Upgrades:** EPA will fund up to 40% of the cost (labor and equipment) of an eligible engine upgrade; recipient is responsible for cost-sharing at least 60% of the cost of an eligible engine upgrade.
- 2) **Idle Reduction Technologies on Locomotives :** EPA will fund up to 40% of the cost (labor and equipment) of an eligible idle reduction technology on a locomotive ; recipient is responsible for cost -sharing at least 60% of the cost of an eligible idle reduction technology on a locomotive .
- 3) **Marine Shore Power Connection and Alternative Maritime Power:** EPA will fund up to 25% of the cost (labor and equipment) of an eligible shore connection system or truck stop electrification technology; recipient is responsible for cost-sharing at least 75% of the cost of an eligible shore connection system or truck stop electrification technology.
- 4) **Certified Engine Repower :** EPA will fund up to 40% of the cost (labor and equipment) of an eligible engine repower ; recipient is responsible for cost -sharing at least 60% of the cost of an eligible engine repower .
- 5) **Certified Vehicle/Equipment Replacement:**
  - i. **Nonroad Diesel Vehicles and Equipment:** EPA will fund the incremental cost of a newer, cleaner vehicle or piece of equipment powered by a 2013 model year or

- newer certified nonroad diesel engine, up to 25% of the cost of an eligible replacement vehicle or piece of equipment; recipient is responsible for cost-sharing at least 75% of the cost of an eligible replacement vehicle or piece of equipment
- ii. Drayage Vehicle Replacement: EPA will fund up to 50% of the cost of eligible drayage trucks with a 2010 model year or newer heavy-duty engine equipped with a diesel particulate filter (or diesel oxidation catalyst in the case of a CNG engine); recipient is responsible for cost-sharing at least 50% of an eligible drayage replacement vehicle.
- 6) Clean Alternative Fuel Conversions: EPA will fund up to 40% of the cost (labor and equipment) of an eligible clean alternative fuel conversion; recipient is responsible for cost-sharing at least 60% of the cost of an eligible clean alternative fuel conversion.

The eligible acquisition cost of equipment means the net invoice price of the equipment including the cost of modifications, attachments, accessories, or auxiliary apparatus necessary to make the property usable for the purpose for which it was acquired. Other charges, such as the cost of installation, transportation, taxes, duty or protective in-transit insurance, shall be included or excluded from the unit acquisition cost in accordance with the recipient's regular accounting practices.

## **ATTACHMENT B**

2013 DERA Funding Opportunity – Projects to Improve Air Quality at Ports  
EPA-OAR-OTAQ-14-02-February 13, 2014 Application

## Projects to Improve Air Quality at Ports – 2013 DERA Funding Opportunity Request for Proposals (RFP) EPA-OAR-OTAQ-14-02

**Project Title:** Port of Tacoma Locomotive Engine Repower/Replacement Project

**Applicant Information:**

Port of Tacoma  
One Sitcum Plaza  
Tacoma, WA 98421  
<http://www.portoftacoma.com>

Jason Jordan  
Director, Environmental Programs  
Phone: (253) 830-5321  
Fax: (253) 593-4506  
[jjordan@portoftacoma.com](mailto:jjordan@portoftacoma.com)  
DUNS: 063341911

<b>Total Project Cost:</b>	<b>\$1,504,874.08</b>
<b>EPA Funds Requested:</b>	<b>\$601,949.63</b>
<b>Mandatory Match:</b>	<b>\$902,924.45</b>
<b>Voluntary Cost Share:</b>	<b>Any Value above Project Cost</b>

**Eligibility:** The Port of Tacoma is a public port authority that operates under Title 53 of the Revised Code of Washington with jurisdiction over transportation and air quality at a marine water port.

**Project Location:** The Port of Tacoma, and Pierce, Lewis, and Thurston Counties, in the State of Washington.

**Technology:** Certified Locomotive Engine Repower/Replacement including microprocessor control, Automatic Engine Start-Stop, (AESS).

**Short Project Description:** Replace one Tier 0 switcher locomotive engine with a Tier 3 or better certified diesel engine equipped with Automatic Engine Start-Stop (AESS) and microprocessor tractive control systems.

**Project Narrative:**

**Section 1. Project Summaries and Overall Approach**

The locomotive repower is proposed in partnership with Tacoma Rail, a short line railroad utility owned by the City of Tacoma and operated by Tacoma Public Utilities, with operations in Pierce, Thurston, and Lewis Counties. The Tacoma Rail project emission reductions are achieved by replacing the engine in the oldest and highest-emitting locomotive in its fleet with a new cleaner engine.

**Tacoma Rail Project Technologies:** The proposed locomotive repower/replacement strategy shall utilize a certified EPA Tier 3 level diesel engine(s) or better which incorporates computer-controlled fuel systems and microprocessor-controlled locomotive ancillary systems. The new diesel engine(s) shall also be equipped with an Automatic Engine Start-Stop (AESS) function that monitors operating conditions to ensure the highest level of efficiency while minimizing unnecessary engine idling. The new diesel engine will have reduced emissions with increased fuel efficiency. Up to 25% savings in fuel consumption and over 50% lube oil savings are estimated. The fully-integrated AESS system can reduce engine idle time by over 50%. The microprocessor controls engine diagnostics and protects against excessive wheel slippage, to maximize tractive effort and locomotive efficiency in all conditions. Maximizing tractive effort reduces emissions by allowing the repowered locomotives to perform more work, often eliminating the need to have a second locomotive in the train consist. Additionally, modern microprocessor controls typically utilize a flexible software platform allowing engines to be tuned for future emission compliance. The current EPA emission standard for new locomotives is Tier 3. A Tier 0 locomotive repower/replacement to Tier 3 emission standards can reduce HC and CO emissions by up to 70%, NOx by 58% and PM by 62%. The proposed locomotive was built in 1956, then repowered in 1973, thereby considered by EPA a Tier 0 engine.

**Options:** Retrofitting and engine rebuilding options for this project were not considered appropriate because of the age of the engine/locomotive. Replacing the locomotive with one built/re-built to modern standards would provide the maximum emissions and fuel-saving benefits for the investment.



**Typical Use:** Tacoma Rail's maritime activities include moving containerized goods between the cargo ships and interchanging them to Class I railroads for furtherance across the nation. The typical use of the proposed locomotive to be replaced is for intermodal and industrial switching within the Port of Tacoma area which includes port, terminal and rail yard locations. Switch locomotives are typically used to assemble railcars together in specific configurations needed to form trains within rail terminals and yards, but can also be used to power local and regional freight trains used to provide service to a diverse base of industrial freight rail customers. After the repower, the locomotive will be utilized in the same service.

**Table 1: Detailed Tacoma Rail Timelines**

EPA funding awarded	Jun-2014	Set engine, alternator, rack & air compressor	Jul-2015
Request for quotation process	Jul-2014	Set AC cabinet & wire	Jul-2015
Subcontract award process	Aug-2014	Route HV/LV wiring & all sub systems	Aug-2015
Onsite locomotive inspection	Aug-2014	Set aux TM blower & Air filter box	Sep-2015
Engineering & materials planning	Nov-2014	Rewire control stand, install hood & wire	Oct-2015
Materials arrive, begin repower process	Jan-2015	Rework cab & install all cab-related items	Nov-2015
Transport locomotive & inspect	Feb-2015	Air brake & air-related items	Nov-2015
De-truck, remove main reservoir tanks	Feb-2015	Prep unit for startup, perform testing	Dec-2015
Strip main components, remove HVC	Mar-2015	Prep & transport locomotive	Jan-2016
Power wash, damage & rust repair	Apr-2015	Locomotive inbound inspection	Jan-2016
Apply new HVC, modify equip-rack	May-2015	Project completion & reporting	Mar-2016
Long hood mods, oil & water piping	Jun-2015	Final report to EPA & grant closeout	Sept- 2016

The Port of Tacoma will be the proposed grant lead and the grant recipient. Tacoma Rail will coordinate and manage their respective projects. Table 1 is a detailed project milestone schedule for each particular aspect of a locomotive repower project. Under a sub-agreement with the Port of Tacoma, Tacoma Rail will in turn subcontract the project work to third parties as appropriate to accomplish the various tasks in support of the project. Tacoma Rail will develop subcontracts through a formal bid process in accordance with City of Tacoma purchasing policies.

Tacoma Rail will retain ownership of all repowered locomotives and provide required maintenance beyond the assistance agreement period to keep the equipment operational for providing transportation services to customers throughout their useful life.

**Attrition Schedule:** The locomotives in the Tacoma Rail fleet date back as far as 1956 (see fleet roster in attachments, with repower-targeted locomotive highlighted). All Tacoma Rail locomotives undergo routine inspections and maintenance as prescribed by FRA regulations, as well as any necessary overhauls based upon their specific operating histories. Tacoma Rail's vigilant maintenance has prolonged the life cycle of its locomotive fleet. The useful life of the proposed locomotive to be repowered/replaced is over three years from the proposed project start date. Due to cost avoidance and locomotive sustainability through maintenance, there is no set locomotive fleet attrition/turnover.

Due to the age and the power assembly history of the proposed locomotive under the regulations prescribed by 40 CFR Part 92, "TMBL 2006"<sup>1</sup> diesel emissions levels fall under Tier 0. Tacoma Rail records indicate that each and every power assembly on this locomotive has not been replaced over a five-year span. Therefore, no monies awarded under this project shall be used to fund the costs of emissions reductions that are mandated under Federal, State or local law as none currently mandate this work be undertaken. (See attached substantiation letter from Tacoma Rail).

## Section 2. Results – Outputs and Outcomes

This project supports EPA's 2011-2015 Strategic Plan Goal 1, "Take Action on Climate Change and Improve Air Quality," Objective 1.2 "Improve Air Quality," which states, "Achieve and maintain health-based air pollution standards and reduce risk from toxic air pollutants and indoor air contaminants." Specifically, the proposed activity will reduce emissions from diesel fleets, thereby reducing local and regional air pollution. By repowering/replacing the proposed locomotive diesel engine with a Tier 3 or better diesel engine, this project will reduce emissions and fuel consumption from diesel fleets,

<sup>1</sup>Tacoma Rail locomotive naming convention: TMBL means Tacoma Municipal Beltline Railway

thereby reducing local and regional air pollution, improving public and occupational health, and reducing particulate matter pollution in a PM<sub>2.5</sub> Nonattainment Area and PM<sub>10</sub> Maintenance Area.

**Table 2: Tacoma Rail Project Anticipated Outputs and Outcomes**

Repower/replace one switching locomotive engine	Installed certified EPA Tier 3 locomotive engine or better	<ul style="list-style-type: none"> <li>• Increased efficiency reduces operating costs</li> <li>• Emission reductions per Tier estimation               <ul style="list-style-type: none"> <li>○ Reduction of HC by 71%, NOx by 58%, PM by 62%, and CO by 70%</li> </ul> </li> <li>• Lifetime emission reductions per DEQ* (Table 5)               <ul style="list-style-type: none"> <li>○ HC by 55 tons</li> <li>○ NOx by 940 tons</li> <li>○ PM by 26 tons</li> </ul> </li> <li>• Reduction of engine idle time by more than 50%</li> <li>• Reduction of 25% in fuel consumption</li> <li>• Reduction of 50% lube oil consumption and further reducing particulate matter emissions</li> <li>• Annual diesel PM reduction of 0.97 short tons with annual health benefits of \$600,000**</li> <li>• Evidence of appropriate engine salvage or scrappage, including the engine serial numbers</li> <li>• Progress and final reports</li> </ul>
<p>* The EPA Diesel Emission Quantifier Tool (DEQ) was used to further provide an accurate description in which repower emissions benefits. An average annual hourly usage and diesel consumption from 2011-2013 was utilized.</p> <p>**DEQ calculated health benefits results (Table 3)</p>		

Quarterly progress reports and a detailed final report will be provided. Quarterly reports will include a summary of technical progress, planned activities for the next quarter and a summary of expenditures. The final report will be submitted to EPA within 90 calendar days of the completion of the period of performance. The final report will include summaries of the projects or activities, advances achieved, and costs of the projects or activities. In addition, the final report will discuss the problems, successes, and lessons learned from the projects or activities that could help overcome structural, organizational or technical obstacles to implementing similar projects elsewhere. Salvage and scrappage income or costs are provided in Table 5. Any program income or scrappage requirement questions will be resolved when more information is available. This will be reflected in the final financial status report for the grant for both projects.

### Section 3. Benefits to Communities and Public Health

The proposed project addresses a number of EPA's National Programmatic Priorities, specifically it:

- Conserves diesel fuel – Locomotive repowers will reduce fuel usage by approximately 25%, and over 50% lube oil savings—augmented by a fully-integrated AESS system that can reduce engine idle time by over 50%.
- In a voluntary measure to reduce emissions, Tacoma Rail has fueled all of its locomotives exclusively with ULSD fuel since 2006. The sulfur content is ≤15 parts per million.
- Is in the area of the Port of Tacoma, Tacoma Rail yards, distribution centers and terminals; which receive a disproportionate quantity of air pollution from diesel fleets.
- Annual diesel PM reduction of 0.97 short tons with annual health benefits of \$600,000 as shown in Table 3, EPA Diesel Emission Quantifier Health Benefits Module Results.

**Table 3: EPA Diesel Emission Quantifier Health Benefits Results Tacoma Rail<sup>2</sup>**

<b>Annual</b>	<b>NOx</b> (short tons/year)	<b>PM2.5</b> (short tons/year)	<b>HC</b> (short tons/year)	<b>CO</b> (short tons/year)	<b>CO2</b> (short tons/year)	<b>Diesel- Equivalent</b> (gallons/year)
<b>Baseline of Entire Fleet</b>	70.8714	1.4888	3.8038	12.2123	272.5605	24,555.0000
<b>Baseline of Vehicles Retrofitted</b>	70.8714	1.4888	3.8038	12.2123	272.5605	24,555.0000
<b>Percent Reduced (%)</b>	49.2%	65.2%	54.4%	0.0%	49.9%	49.9%
<b>Amount Reduced Per Year</b>	34.8351	0.9710	2.0688	0.0000	135.9084	12,244.0000
<b>Daily</b>	<b>NOx</b> (kg/day)	<b>PM2.5</b> (kg/day)	<b>HC</b> (kg/day)	<b>CO</b> (kg/day)	<b>CO2</b> (kg/day)	<b>Diesel- Equivalent</b> (gal/day)
<b>Kilograms Reduced Per Day (kg/day)</b>	86.5805	2.4133	5.1418	0.0000	337.7919	33.5452
<b>Lifetime</b>	<b>NOx</b> (short tons)	<b>PM2.5</b> (short tons)	<b>HC</b> (short tons)	<b>CO</b> (short tons)	<b>CO2</b> (short tons)	<b>Diesel- Equivalent</b> (gallons)
<b>Baseline of Entire Fleet</b>	1,913.5286	40.1985	102.7035	329.7323	7,359.1335	662,985.0000
<b>Baseline of Vehicles Retrofitted</b>	1,913.5286	40.1985	102.7035	329.7323	7,359.1335	662,985.0000
<b>Percent Reduced(%)</b>	49.2%	65.2%	54.4%	0.0%	49.9%	49.9%
<b>Amount Reduced</b>	940.5479	26.2164	55.8563	0.0000	3,669.5268	330,588.0000
<b>Amount Emitted After Retrofit, Retrofitted Vehicles</b>	972.9807	13.9821	46.8472	329.7323	3,689.6067	332,397.0000
<b>Amount Emitted After Retrofit, Entire Fleet</b>	972.9807	13.9821	46.8472	329.7323	3,689.6067	332,397.0000
<b>Fleet Capital Cost Effectiveness (\$/ton), Retrofitted Vehicles</b>	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
<b>Total Cost Effectiveness (\$/ton), Retrofitted Vehicles</b>	<b>\$1,600.00</b>	<b>\$57,401.92</b>	<b>\$26,941.87</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>Remaining Lifetime</b>	? Rail   Switch Locomotive 27.0 years					

<b>County and State</b>	<b>Annual Diesel PM2.5 Reduction (short tons)</b>	<b>Annual Cost<sup>++</sup></b>	<b>Annual Benefits<sup>++</sup></b>
<b>Pierce, Washington</b>	0.9710	-	\$600,000
<b>Total</b>	0.9710	\$0	\$600,000

Pierce County is home to more than 795,225 people, with 18% of the population being either under five years old or over 65 years old (2010 census). The EPA 1996 National Air Toxics Assessment ranked the Central Puget Sound region in the top 5% of the nation for potential cancer risk from air toxics.<sup>3</sup> Pierce County is listed as an FY13 Priority County and Area List. In 2008, EPA designated the Wapato Hills/Puyallup River Valley in Pierce County as a Nonattainment Area for PM<sub>2.5</sub> and Tacoma and Thurston County were designated as moderate PM<sub>10</sub> Nonattainment Areas in 1990. This area includes the Port of Tacoma, a location that is considered to contain environmental justice neighborhoods.

Maritime-related activities associated with goods movement are considered a major source of air emissions in the Puget Sound region. The 2011 Puget Sound Maritime Air Emissions Inventory for Port of Tacoma documents that locomotive port emissions account for the following tons per year: NOx at 364, PM2.5 at 11, DPM at 12. For OGVs NOx is 375, PM2.5 is 23, and DPM is 21.

<sup>2</sup> Diesel Emissions Quantifier Frequently Asked Questions, Office of Air Quality, <http://www.epa.gov/cleandiesel/documents/420f13008.pdf>, April 2013

<sup>3</sup>U.S. EPA. National-scale Air Toxics Assessment for 1996. Office of Air Quality Planning and Standards. EPA-453-/R-01-003. January 2001.



The Port of Tacoma engages the community on diesel emission reduction strategies and projects through the Puget Sound Maritime Air Forum. The forum is a voluntary association of private and public maritime organizations, air agencies, and other parties with operational or regulatory responsibilities for improving maritime industry air quality impacts. Forum members identify and quantify maritime-related sources of air pollution, and seek ways to voluntarily reduce air pollution impacts from this transportation sector. The forum provides opportunities for the public to comment on Northwest Ports Clean Air Strategy and ongoing emission inventory efforts.

#### **Section 4. Partnerships**

Building on past partnering experience, the Port of Tacoma has partnered with Tacoma Rail on various initiatives. With Tacoma Rail it is to provide reliable and efficient rail transportation of port cargo in support of the continued economic vitality of Tacoma and the Puget Sound Region. Under a sub-agreement with the Port of Tacoma, Tacoma Rail will coordinate and manage the projects. Tacoma Rail will in turn subcontract the installation to third parties with all subcontractors vetted through a formal request for proposals process in accordance with local purchasing policies. Tacoma Rail will retain ownership of their repowered equipment and provide required maintenance beyond the assistance agreement period to keep them working and providing transportation service through their useful life.

In addition, the Port of Tacoma has garnered support from many organizations. Contact information and letters of support from the community, local, state and federal government are also provided in the attachments.

#### **Section 5. Promote and Sustain Efforts to Reduce Emissions from Port Areas**

The Port of Tacoma has the ability to promote and continue efforts to reduce emissions from port operations after EPA funding for this project has ended through its partnership in the 2007 Northwest Ports Clean Air Strategy. In addition to the Port of Tacoma; the Port of Seattle, and the Vancouver Port Authority, are partners in this strategy. The strategy, which was updated in 2013, builds on early environmental efforts at each port, and establishes short- and long-term performance measures for reducing emissions from cargo-handling equipment, rail, harbor craft, OGVs and trucks. Locomotive performance targets for the strategy include: "Switcher locomotive owners/operators to upgrade or replace unregulated engines". Annual progress in the strategy will be established by tracking performance measures and reporting the implementation of planned activities. All partner ports in this agreement have developed emission inventories to help identify emission reduction priorities.

#### **Section 6. Diesel Emissions Reduction Effectiveness**

The proposed locomotive repower/replacement strategy shall replace an existing unregulated Tier 0 engine with a certified US EPA Tier 3 level diesel engine(s) or better which incorporates computer-controlled fuel systems and microprocessor-controlled locomotive ancillary systems. The new diesel engine(s) shall also be equipped with an Automatic Engine Start-Stop (AESS) function that monitors operating conditions to ensure the highest level of efficiency while minimizing unnecessary engine idling. This locomotive has an average annual usage rate of 3,000 hours per year over the last three years.

#### **Section 7. Past Performance—Programmatic Capability and Reporting on Results**

The Port of Tacoma and Tacoma Rail are both experienced with coordinating and successfully completing Federal and State-funded projects. Over the last three years, the two entities have strived to be good stewards of the environment and have been able to leverage multiple entities for assistance. With each project, the Port of Tacoma and Tacoma Rail have been compliant with all required reporting including quarterly updates, challenges met with solutions implemented, final project reports, documentation of expected results and any other contract terms.

The following projects are examples of their capability to complete these projects successfully:

- **In 2011:** EPA-verified diesel particulate filters: The Port installed EPA-verified diesel particulate filters (DPFs) on 13 port-owned and operated straddle carriers. The Port received a \$490,000 WSDOE Clean Diesel Grant to fund the retrofits. The diesel particulate filters reduce emissions in excess of 85%.
- **Prior to 2011:** Six Port of Tacoma heavy-duty forklifts were powered by old two-cycle Detroit diesel engines. With assistance from a \$145,000 WSDOE Clean Diesel Grant, they were repowered with new low emission EPA Tier 3 diesel engines reducing particulate emission by nearly 1 ton per year.
- **Between 2007 and 2011:** Port of Tacoma's terminal operator tenants received over \$525,000 in EPA and Ecology grant findings to install EPA-verified diesel particulate filters on 22 heavy-duty diesel cargo handling equipment, reducing emissions in excess of 85%, and 65 diesel oxidation catalysts reducing emissions by 25%.

- **2009-2011 Totem Ocean Trailer Express Shorepower Project DERA Grant by EPA:** Port of Tacoma received \$1,490,000 grant to Retrofit two OGVs for shorepower and add certified ship-side technology.
- **Port of Tacoma Clean Drayage Truck Program:** Established in 2008 to ban old diesel drayage trucks from serving marine terminals at the Port. In 2010, pre-1994 drayage trucks were banned from the port terminals, reducing diesel particulate emissions between 1-2 tons per year. The port is currently working with the trucking community to ban pre-2007 trucks by 2017. The City of Tacoma, in collaboration with the Port of Tacoma, the Puget Sound Clean Air Agency, and WSDOE, launched a Truck Scrappage Program in 2011. The goal of the program is to replace 135 regional trucks with newer low emission engine trucks. This program will work in synergy with the Port of Tacoma Clean Truck Program to further reduce drayage truck emissions at the Port.
- **November 2011, Locomotive Repower Project for Puget Sound, Grant No. 96094801 by the U.S. EPA:** Tacoma Rail completed a \$4.2 million project in partnership with the Puget Sound Clean Air Agency to replace three unregulated locomotives with EPA Tier 2 or better compliant locomotives through the American Recovery and Reinvestment Act's National Clean Diesel Funding Assistance Program. The Washington State Department of Transportation RailBank program was also utilized to support this project.
- **June 2007-2009 (multiple):** Tacoma Rail started its anti-idling initiatives, partnering with Washington State Department of Transportation, Washington State Department of Ecology, Puget Sound Clean Air Agency and the Olympic Region Clean Air Agency. Utilizing Rail Bank funding, Tacoma Rail continued its anti-idling initiatives and completed installation of AESS equipment on 13 of the 14 locomotives in the Tacoma Rail fleet. The anti-idling project was undertaken to reduce the amount of fuel used, to reduce diesel engine emissions, and has met or exceeded expectations.

#### **Section 8. Staff Experience/Qualifications**

The Port of Tacoma and its partners have the organizational expertise, plan, and staff required to achieve the reporting and accountability objectives of the proposed projects. The Port will be the focal point for the grant with principal responsibilities of monitoring. Tacoma Rail also has extensive experience in successful project planning and implementation.

**Dale King - Superintendent, Tacoma Rail.** Dale King is the railroad's Superintendent having joined the organization in December 2008. He began his career with the Central Railroad Company of New Jersey in 1974 and continued with its successor Conrail. Dale joined Burlington Northern Railroad in 1983 and held several positions in its operations and marketing departments. He moved to Willamette Industries in 1995 and following its acquisition by Weyerhaeuser in 2002 was named Director of Rail Services. In that role, Dale was responsible for Weyerhaeuser's rail operations in North America which included the management of five short line railroads. He holds a Bachelor of Science degree in Transportation from Arizona State University and an MBA from Indiana University. He is a certified member of the American Society of Transportation & Logistics.

**Alan Hardy - Assistant Superintendent, Tacoma Rail.** Alan Hardy is the railroad's Assistant Superintendent and has worked for Tacoma Rail since August 2004. Before coming to Tacoma Rail, Alan worked nine years for the nation's largest and the world's second largest railroad track equipment manufacturer and contract services company as supervisor and manager assigned to the Union Pacific and Burlington Northern Santa Fe Railroads in large scale construction and maintenance contracts. Before that he worked for a very successful short line railroad owned by and serving a Fortune 500 paper company in Florida. He held the positions of Signal Maintainer, Assistant Roadmaster and Roadmaster during his 21-year career there. Alan graduated from Wallace Community College in Dothan, Alabama, with a two-year technical degree in electronics. Hardy has completed a variety of railroad-related courses and seminars and has been a member of the American Railway Engineering and Maintenance-of-Way Association since 1982.

#### **Section 9. Budget/Resources**

The Port of Tacoma will be contributing to the project at no cost to the grant. All Tacoma Rail subcontractors will be vetted through a formal request for proposals process in accordance with City of Tacoma purchasing policies. Contractual equipment and labor costs are estimated. Actual costs and equipment details will be derived from submissions received in response to the formal bid process. Table 4 details the project budget for the Tacoma Rail sub-agreements respectively. Table 5 is provided as further detail, however, it is only an example due to the formal request for proposals process.

**Table 4: Budget Table**

	Annual Salary	Timeline	% Time	EPA Funding	Cost-Share
Personnel					
Project Manager	\$ 118,123.20	1.78 Years	4.5%	\$3,751.03	\$5,626.54
Project Assistant	\$ 71,489.60	1.78 Years	4.5%	\$2,270.17	\$3,405.25
Project Assistant	\$ 71,489.60	1.78 Years	4.5%	\$2,270.17	\$3,405.25
<b>TOTAL PERSONNEL</b>				<b>\$8,291.36</b>	<b>\$12,437.04</b>
Fringe Benefits					
20% of Salary & Wages					
- Retirement, Health Benefits, FICA SUI				\$1,658.27	\$2,487.41
<b>TOTAL FRINGE BENEFITS</b>				<b>\$1,658.27</b>	<b>\$2,487.41</b>
Contractual					
Engine & Related Repower/Replacement Equipment				\$400,000.00	\$600,000.00
Installation Labor				\$192,000.00	\$288,000.00
<b>TOTAL CONTRACTUAL</b>				<b>\$592,000.00</b>	<b>\$888,000.00</b>
<b>TOTAL FUNDING</b>				<b>\$601,949.63</b>	<b>\$902,924.45</b>
<b>TOTAL PROJECT COST</b>					<b>\$1,504,874.08</b>

**Table 5: Example Estimate**

Example Estimates: <b>Engine &amp; Related Repower/Replacement Equipment Cost Detail</b>	
Engine	\$446,700.00
Scrap Credit	(\$3,100.00)
Generator	\$86,800.00
Electrical Cabinet / Controls	\$139,700.00
Cooling Hood Equipped	\$210,100.00
AC Cabinet	\$23,900.00
Aux Generator / TM Blower	\$19,600.00
Equipment Rack	\$13,200.00
Air Filtration	\$7,700.00
Additional Material	\$55,400.00
<b>TOTAL EXAMPLE ESTIMATE</b>	<b>\$1,000,000.00</b>

#### **Section 10. Expenditure of Grant Funds**

The Port of Tacoma will conduct regular check-ins with its project partners on project progress. Any delays, grants management issues, or technical problems will be quickly resolved with the EPA project officer. There are well-established historic relationships between the Port of Tacoma and Tacoma Rail. They are also all conveniently located within a few miles of each other.

#### **Section 11. Applicant Fleet Information (See attachments)**



**Application for Federal Assistance SF-424**

**\* 1. Type of Submission:**

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

**\* 2. Type of Application:**

- ☒ New  
☐ Continuation  
☐ Revision

**\* If Revision, select appropriate letter(s):**

**\* Other (Specify):**

**\* 3. Date Received:**

**4. Applicant Identifier:**

**5a. Federal Entity Identifier:**

**5b. Federal Award Identifier:**

**State Use Only:**

**6. Date Received by State:**

**7. State Application Identifier:**

**8. APPLICANT INFORMATION:**

**\* a. Legal Name:**

Port of Tacoma

**\* b. Employer/Taxpayer Identification Number (EIN/TIN):**

91-6001026

**\* c. Organizational DUNS:**

0633419110000

**d. Address:**

**\* Street1:**

One Sitcum Plaza

**Street2:**

P.O. Box 1837

**\* City:**

Tacoma

**County/Parish:**

Pierce

**\* State:**

WA: Washington

**Province:**

**\* Country:**

USA: UNITED STATES

**\* Zip / Postal Code:**

98421

**e. Organizational Unit:**

**Department Name:**

Environmental Programs

**Division Name:**

**f. Name and contact information of person to be contacted on matters involving this application:**

**Prefix:**

Mr.

**\* First Name:**

Jason

**Middle Name:**

**\* Last Name:**

Jordan

**Suffix:**

**Title:**

Director, Environmental Programs

**Organizational Affiliation:**

Port of Tacoma

**\* Telephone Number:**

253-830-5321

**Fax Number:**

**\* Email:**

jjordan@portoftacoma.com

**Application for Federal Assistance SF-424**

**\* 9. Type of Applicant 1: Select Applicant Type:**

D: Special District Government

**Type of Applicant 2: Select Applicant Type:**

B: County Government

**Type of Applicant 3: Select Applicant Type:**

X: Other (specify)

**\* Other (specify):**

Port Authority

**\* 10. Name of Federal Agency:**

U.S. Environmental Protection Agency

**11. Catalog of Federal Domestic Assistance Number:**

66.039

**CFDA Title:**

National Clean Diesel Emissions Reduction Program

**\* 12. Funding Opportunity Number:**

EPA-OAR-OTAP-14-02

**\* Title:**

Projects to Improve Air Quality at Ports - 2013 DERA Funding Opportunity Request for Proposals

**13. Competition Identification Number:**

**Title:**

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Add Attachment

Delete Attachment

View Attachment

**\* 15. Descriptive Title of Applicant's Project:**

Port of Tacoma Locomotive Engine Repower/Replacement and Category 3 Oceangoing Vessel Engine Repower to Liquefied Natural Gas

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments



# Application for Federal Assistance SF-424

## 16. Congressional Districts Of:

\* a. Applicant

06

\* b. Program/Project

06, 09

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment

Delete Attachment

View Attachment

## 17. Proposed Project:

\* a. Start Date:

06/02/2014

\* b. End Date:

09/30/2016

## 18. Estimated Funding (\$):

\* a. Federal

601,949.63

\* b. Applicant

\* c. State

\* d. Local

902,924.45

\* e. Other

\* f. Program Income

\* g. TOTAL

1,504,874.08

## \* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on

☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

## \* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)

☐ Yes

☒ No

If "Yes", provide explanation and attach

Add Attachment

Delete Attachment

View Attachment

21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)

☒ \*\* I AGREE

\*\* The list of certifications and assurances, or an Internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

## Authorized Representative:

Prefix:

Mr.

\* First Name:

Jason

Middle Name:

\* Last Name:

Jordan

Suffix:

\* Title:

Director, Environmental Programs

\* Telephone Number:

253-830-5321

Fax Number:

\* Email:

jjordan@portoftacoma.com

\* Signature of Authorized Representative:

\* Date Signed:

3/11/14