MANAGING MEMBERS
ACTION ITEM

Item No.: 9B

Meeting Date: October 1, 2024

DATE: September 23, 2024

TO: Managing Members

FROM: John Wolfe, CEO

Sponsor: Jason Jordan, Senior Director, Environmental & Planning
Project Manager(s):
Steve Nicholas, Sr. Project Manager, Air Quality & Sustainable Practices
Kyle Smith, Project Manager II, Engineering
Stefan Wynn, Capital Project Leader

SUBJECT: Project Authorization: RFID Installation at Domestic Terminals

A.   ACTIONS REQUESTED

Request the Managing Members grant project authorization in the amount of $230,000, for a total authorized amount of $430,000, for work associated with the Installation of Radio-Frequency Identification (RFID) at Domestic Terminals (TOTE), Master Identification No. 201214.01.

Request the Managing Members grant project authorization in the amount of $250,000, for a total authorized amount of $450,000, for work associated with the Installation of RFID at Domestic Terminals (West Sitcum), Master Identification No. 201215.01.

Request the Managing Members grant project authorization in the amount of $280,000, for a total authorized amount of $330,000, for work associated with the Installation of RFID at Domestic Terminals (T-115), Master Identification No. N10574.

B.   SYNOPSIS

The NWSA Managing Members committed to implementing the Clean Truck Program 2007 engine requirement at the two domestic terminals in Tacoma – TOTE and W. Sitcum – and one in Seattle – T-115 - in the NWSA Clean Air Implementation plan 2021-25.

This project authorization is to install RFID infrastructure at these three terminals during 2024-25 in preparation for the requirement coming into effect at the end of 2025, bringing these terminals into alignment with the international container terminals.

C.   BACKGROUND

The Clean Truck Program has been implemented at NWSA international container terminals since January 1, 2019, relying on RFID technology at the terminal gates to provide a red light/green light by reading a truck's RFID tag, and allowing a truck entry to the terminal if they comply with the 2007 engine requirement. No action is required by terminal gate guards beyond directing non-compliant trucks who receive a red light to leave. International terminals use the RFID/emodal platform to manage their appointment systems, and the NWSA Operations team use the data to publish real-time wait times on the NWSA website. Enforcement at the gates is a requirement embedded in terminal leases – to date, updated language has been included in lease amendments for T-115 and W. Sitcum. Updated lease language is currently being amended in the TOTE lease and will be ready for approval by Managing Members in the coming months.

The three domestic terminals at the NWSA were not part of the Clean Truck Program enforced in 2019 – the initial focus was on the larger international container terminals to capture the majority of the NWSA truck fleet. This requirement has brought significant air quality improvements since its enforcement – recent results from the Puget Sound Maritime Emissions Inventory 2021 show that truck DPM emissions decreased by 87% between 2016 and 2021. However, while the majority of the trucks serving the domestic terminals were captured by the 2019 deadline and are compliant with the 2007 engine requirement, there are approximately 80-100 pre-2007 trucks still serving these terminals. To close this loophole and enforce the Program requirement evenly across the gateway, NWSA Managing Members committed to implement the NWSA Clean Truck Program 2007 engine requirement at the remaining domestic terminals by the end of 2025 in the NWSA Clean Air Implementation Plan, unanimously approved by Managing Members in 2021. This commitment will provide near-term air quality improvements in our near-port communities immediately, while the NWSA continues to work long-term towards a zero-emission truck fleet by 2050 or sooner.

NWSA Operations, IT and Environmental conducted a Request For Information (RFI) in 2022 to determine all possible technology providers to expand truck experience monitoring outside terminal gates, and what could enforce the Clean Truck Program at domestic terminal gates. The existing RFID platform provided by Kalmar-emodal was determined to be the only reliable and affordable option.

It is also anticipated to be a smooth transition for truck owners serving these terminals, as 80% of the trucks entering these terminals also serve the international terminals, so already own an RFID tag and are familiar with the e-modal platform.

Trucker Support

Since implementation of the Clean Truck Program deadline at the international container terminals in 2019, the NWSA has focused its efforts on passing through grant funding to truckers serving these domestic terminals. Using grant funding from the EPA DERA program, the City of Seattle and the WA Department of Ecology's Clean Diesel program, $1,966,957 has been made available to truck owners to upgrade their trucks since 2019. Depending on the age of the replacement trucks, a truck owner is eligible for up to $30,000 towards a new truck, while scrapping their old pre-2007 truck. By the implementation of this program at the domestic terminals at the end of 2025, NWSA expects to upgrade more than 80 trucks through this targeted program. Regular updates on the upcoming changes have been discussed thoroughly with WTA during development of the Clean Air Implementation Plan, and regular updates are given to the drayage community at the Trucker Outreach Forum. NWSA Environmental, Communications and Operations staff will increase outreach and publicity of the changes throughout 2024/25 to ensure all drivers know of the changes and need for RFID at these three terminals.

D. PROJECT DESCRIPTION AND DETAIL

To implement the Clean Truck Program requirement, RFID infrastructure needs to be installed at these three domestic terminals (TOTE, W. Sitcum and T-115) well in advance of the requirement deadline (end of 2025). This project request is specifically to provide authorization for installation of the RFID gate infrastructure at the three terminals. The South Harbor installations (TOTE and W. Sitcum) will be managed by Port of Tacoma Engineering, and the North Harbor (T-115) installation will be managed by Port of Seattle Waterfront Project Management Group simultaneously.

Project Objectives

Project Objectives are as follows:

- Design an efficient RFID reader and verification system for use at terminal gates
- Install electrical and data infrastructure necessary to support RFID hardware and software systems
- Purchase Kalmar brand RFID equipment to maintain consistency with international terminal systems

Scope of Work

The scope will include the purchase of Kalmar Global SmartPort brand RFID reader equipment and the construction of the necessary civil, electrical and mechanical infrastructure.

The scope of work will include:

- Installation of conduit, electrical wiring and data cables to connect hardware systems to security stations at terminal gates.
- Construction of metal poles and support structures to mount the RFID reader equipment.
- Integration with existing NWSA IT systems

Schedule

Design phase to complete early Q4 2024 with construction to begin thereafter and extend through Q1 and Q2 2025 as necessary.

Advertise for Bid	November 1, 2024
Open Bids	November 29, 2024
Substantial Completion	May 30, 2025
Final Completion	June 30, 2025

E. FINANCIAL IMPLICATIONS

Project Cost Details

South Harbor: TOTE Terminal

	Previous Requests	This Request	Total Project Cost	Cost to Date	Remaining Cost
Design	$95,000	$0	$95,000	$3,500	$91,500
Construction	$105,000	$230,000	$335,000	$0	$335,000
Total	**$200,000**	**$230,000**	**$430,000**	**$3,500**	**$426,500**

South Harbor: West Sitcum Terminal

	Previous Requests	This Request	Total Project Cost	Cost to Date	Remaining Cost
Design	$105,000	$0	$105,000	$3,500	$101,500
Construction	$95,000	$250,000	$345,000	$0	$345,000
Total	**$200,000**	**$250,000**	**$450,000**	**$3,500**	**$446,500**

North Harbor: Terminal 115

	Previous Requests	This Request	Total Project Cost	Cost to Date	Remaining Cost
Design	$50,000	$0	$50,000	$0	$50,000
Construction	$0	$280,000	$280,000	$0	$280,000
Total	**$50,000**	**$280,000**	**$330,000**	**$0**	**$330,000**

Source of Funds

The 2024-2029 Capital Investment Plan (CIP) Budget allocates $430,000 for MID 201214.01, $454,000 for MID 201215.01, and $330,000 for MID N10574, for a total of $1,214,000.

Financial Impact

The RFID infrastructure will be capitalized and depreciated over a five-year period, resulting in a total depreciation expense of approximately $243,000 per year. Operating revenue from the domestic terminals will cover the cost associated with this clean-air investment. The three domestic terminals are budgeted to provide approximately $19,600,000 of income in 2024.

F.   ENVIRONMENTAL IMPACTS/REVIEW

Permitting: SEPA exempt. No Environmental permits required.

Remediation: Not Applicable.

Stormwater: Construction best management practice will be implemented to protect stormwater discharges from pollutants.

Air Quality: Reduce Diesel Particulate Matter from pre-2007 trucks. Fulfils key milestone in NWSA Clean Air Implementation Plan 2021-26 to implement Clean Truck Program at domestic terminals.

G.   PREVIOUS ACTIONS OR BRIEFINGS

South Harbor: TOTE Terminal

Date	Action	Amount
May 6, 2024	Executive Authorization - Design	$200,000
TOTAL		**$200,000**

South Harbor: West Sitcum Terminal

Date	Action	Amount
May 6, 2024	Executive Authorization - Design	$200,000
TOTAL		**$200,000**

North Harbor: Terminal 115

<u>Date</u>	<u>Action</u>	<u>Amount</u>
September 5, 2024	Executive Authorization - Design	$50,000
TOTAL		**$50,000**

Item No.: 9B
Meeting Date: Oct. 1, 2024

Installation of RFID (Radio-Frequency Identification) at Domestic Terminals Project Authorization

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

Steve Nicholas, Sr. Project Manager
Stefan Wynn, Capital Project Leader
Kyle Smith, Engineering Project Manager II

1

ACTION REQUESTED

Request the Managing Members grant project authorization for work associated with the installation of Radio Frequency Identification for the following terminals in the following amounts:

(1). $230,000 for a total authorized amount of $430,000 at TOTE, MID 201214.01

(2). $250,000 for a total authorized amount of $450,000 at West Sitcum MID 201215.01

(3). $280,000 for a total authorized amount of $330,000 at Terminal 115 MID N10574.

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

2

2

3

Clean Truck Program – Domestic Terminals

- NWSA Clean Air Implementation Plan 2021-2026
  - 2007 engine requirement at all international container terminals since 2019
  - Milestone: Implement CTP at domestic terminals by end of 2025

  - Approx. 500 trucks serving domestic terminals
    - 80-100 trucks still pre-2007 engine

- Significant air quality benefits to near-port communities:
  - Post-2007 trucks emit 90% less DPM
  - International terminal program:
    - 87% reduction in truck DPM emissions between 2016-2021

4

4

Trucker Support

- Domestic Truck Scrapping Program open since 2019 to provide up to $30k towards a new compliant truck:

  - EPA DERA $900k grant approved Sep 2024
  - By Dec 2025, total of $1.96m provided to truck owners
  - Total 80 trucks upgraded by deadline

- Outreach to truckers – Trucker Outreach Forum, Trucker Appreciation events, banners, flyers, social media

5

5

Project Description and Details

Project Objectives:
- Design an efficient RFID reader and verification system for use at terminal gates
- Install electrical and data infrastructure necessary to support RFID hardware and software systems
- Purchase Kalmar brand RFID equipment to maintain consistency with international terminal systems

6

6

Project Description and Details

TOTE Main Security Gate

7

7

Project Description and Details

West Sitcum Main Security Gate

8

Project Description and Details

The scope will include the purchase of Kalmar Global SmartPort brand RFID reader equipment and the construction of the necessary civil, electrical and mechanical infrastructure.

- Installation of conduit, electrical wiring and data cables to connect hardware systems to security stations at terminal gates
- Construction of metal poles and support structures to mount the RFID reader equipment
- Integration with existing NWSA IT systems

9

9

Project Schedule

Activity	Timeframe
Advertise Bids	November 1, 2024
Bid Opening	November 29, 2024
Substantial Completion	May 30, 2025
Final Completion	June 30, 2025

10

10

Source of Funds

- The estimated total cost and 2024-2029 budget for the Design and Construction for these projects is $1,214,000 and is split as follows:
  - TOTE: $430,000 for MID 201214.01
  - West Sitcum: $450,000 for MID 201215.01
  - T-115: $330,000 for MID T10574
- The RFID infrastructure will be capitalized and depreciated over a five-year period, resulting in a total depreciation expense of approximately $243,000 per year. Operating revenue from the domestic terminals will cover the cost associated with this clean-air investment.
- The three domestic terminals are budgeted to provide approximately $19,600,000 of income in 2024.

11

11

Project Cost Summary

West Sitcum

Item	Previous Requests	This Request	Total Project Estimate	Cost to Date	Remaining Cost
Design	$105,000	$0	$105,000	$3,500	$101,500
Construction	$95,000	$250,000	$345,000	$0	$345,000
Project Total:	$200,000	$250,000	$450,000	$3,500	$446,500

12

12

Project Cost Summary

TOTE

Item	Previous Requests	This Request	Total Project Estimate	Cost to Date	Remaining Cost
Design	$95,000	$0	$95,000	$3,500	$91,500
Construction	$105,000	$230,000	$335,000	$0	$350,000
Project Total:	$200,000	$230,000	$430,000	$3,500	$426,500

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

13

13

Project Cost Summary

T-115

Item	Previous Requests	This Request	Total Project Estimate	Cost to Date	Remaining Cost
Design	$50,000	$0	$50,000	$0	$50,000
Construction	$0	$280,000	$280,000	$0	$280,000
Project Total:	$50,000	$280,000	$330,000	$0	$330,000

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

14

14

Environmental Impacts / Review

- Permitting: SEPA exempt. No Environmental permits required.

- Remediation: Not Applicable

- Stormwater: Construction best management practice will be implemented to protect stormwater discharges from pollutants.

- Air Quality: Reduce Diesel Particulate Matter from pre-2007 trucks. Fulfils key milestone in NWSA Clean Air Implementation Plan 2021-26.

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

15

15

ACTION REQUESTED

Request the Managing Members grant project authorization for work associated with the installation of Radio Frequency Identification for the following terminals in the following amounts:

(1). $230,000 for a total authorized amount of $430,000 at TOTE, MID 201214.01

(2). $250,000 for a total authorized amount of $450,000 at West Sitcum MID 201215.01

(3). $280,000 for a total authorized amount of $330,000 at Terminal 115 MID N10574.

THE NORTHWEST
SEAPORT ALLIANCE
SEATTLE + TACOMA

16

16