

# PROJECT ACTION MEMO

Port of Tacoma Commission



Item No: 6C  
Meeting Date: 12/17/24

---

**DATE:** December 9, 2024

**TO:** Port of Tacoma Commission

**FROM:** Eric Johnson, Executive Director  
Sponsor: Patrick Patterson, Director, Facilities Maintenance and Debbie Shepack, Sr.  
Director, Real Estate  
Project Manager: Elly Bulega, Engineering Project Manager II

**SUBJECT:** Port of Tacoma Decant Facility Design Authorization

---

**A. ACTION REQUESTED**

Request project authorization in the amount \$884,000 for a total authorized amount of \$1,234,000, for work associated with the Port of Tacoma Decant Facility Design, Project ID # 101640.01.

**Strategic Plan Initiative:** EL-3. Invest in projects that improve the quality of stormwater runoff from Port properties, embody best practices and empower our tenants to comply with complex permits.

**B. SYNOPSIS**

The Port of Tacoma's maintenance shop has a wastewater treatment facility (nicknamed Luigi) that was designed specifically to handle dirty/contaminated wash water from Straddle Carriers and other Port owned equipment. For years, vector decant and street sweeper wastewater collected from the Port's extensive stormwater infrastructure was processed in the Luigi system. Luigi was not originally designed or sized to handle vector and sweeper decant wastewater. As a result, the City has increased the monitoring, sampling and discharge criteria at Luigi. Using Luigi alone is no longer a viable option for management of vector/sweeper decant wastewater.

**C. BACKGROUND**

The Port of Tacoma is subject to the Phase 1 Municipal Stormwater General Permit (MS4) which requires the Port to inspect and maintain its infrastructure, which includes over 2,500 catch basins, 80+ oil/water separators and dozens of stormwater treatment systems. Maintaining all these catch basins and oil water separators produces wastewater and solid waste that must be managed and disposed of per the MS4 permit and local, federal and state law. Luigi is the only wastewater treatment facility at the Port where vector/sweeper decant wastewater can be disposed of. The system is also not permitted to manage hydro-excavated soils, limiting the capability of maintenance staff to be efficient when making plumbing repairs where hydro-excavating with the vector truck is required.

Luigi can process approximately 2,000 gallons per day, while the Port's vector truck holds 2,200 gallons. Since the Port's truck holds 200 more gallons than the system can handle, maintenance staff must take leftover decant wastewater offsite. Most offsite discharge facilities will not take material from the Port unless it has been characterized. The one facility authorized to take it does not always have capacity. The amount of work maintenance staff can perform is limited to the available capacity between Luigi and the offsite facility. Maintenance has no other option but to use Luigi until a new decant facility becomes available. If maintenance continues to discharge decant wastewater into Luigi, then extra discharge criteria, monitoring and sampling is required by the City of Tacoma. City of Tacoma requires annual inspections once per quarter, sometimes even monthly and filters are cleaned weekly. This results in inefficiencies, and the extra discharge requirements are costing the Port an additional \$200,000 - \$300,000 per year to maintain the current wastewater treatment system.

A permanent solution is to construct a facility specifically for treating vector/sweeper decant wastewater and managing all solids, including hydro-excavated soils that have the potential to be contaminated. The facility will also store all stormwater related equipment, supplies and treatment media. Currently this material is spread around many different Port properties. The goal is to consolidate stormwater operations to this one location. Another function of the facility will be to provide a testing facility associated with the Technology Assessment Protocol Ecology (TAPE) used for evaluating stormwater treatment technologies that will then go to the Department of Ecology for approval for use. The approved treatment technology could then be selected by any project proponent in the state to construct on their site. Setting up the TAPE program at the Port achieves strategic goal EL-3 in the Strategic Plan. The site recommended by Port Real Estate for the facility is part of Parcel 37, adjacent to/south of the rendering facility on Marc Rd.

The decant facility will not only allow the Port to maintain compliance with its permit requirements but will also provide the Port an opportunity to generate revenue by offering/charging a fee for local agencies/tenants to use the facility to manage their stormwater waste if needed or have access to the TAPE facility for testing new stormwater technology.

To help with the cost of the project, Port staff applied for the Washington State Department of Ecology's Water Quality Combined Funding grant in October 2024. The grant is for projects that improve and protect water quality throughout the state. Staff will be notified in January 2025 if the project has been shortlisted to provide additional information and advance to the next level for selection. If selected, staff will receive the grant in July 2025.

**D. PROJECT DETAILS**

The project includes design and construction of the vector/sweeper decant facility, that will be used to manage the Port's stormwater waste generated during maintenance activities. The work will also include construction of utility upgrades along Marc Street to support the facility's ability to discharge to the nearby sanitary sewer. The developed site will include a decant facility with two covered bays that can fit a vector truck, two other covered bays for holding and keeping materials like sand dry, a stormwater center small building where TAPE testing will take place, a stormwater biofiltration and possibly a lift sanitary sewer lift station.

The scope of work will include but is not limited to:

**1. Design (This request)**

- a. Grant application support
- b. Survey
- c. Geotechnical exploration
- d. Architectural design
- e. Structural, Civil, environmental and Electrical engineering
- f. Permit application support,
- g. Design of a decant facility that will,
  - i. Manage solid and liquid waste from stormwater infrastructure maintenance activities. This will allow maintenance staff more efficiency by hydro excavating soil around broken pipes.
  - ii. Allow the Port to consolidate all stormwater related media, vehicles and equipment, materials and supplies. Currently, stormwater related materials are stored/parked in four different locations.
  - iii. Have a testing center for engineered stormwater treatment systems in support of the Department of Ecology Technology Assessment Protocol. This testing center could be used in partnership with other ports, the City of Tacoma, the Washington Stormwater Center and other interested parties could lease the testing facility for their own devices.
- h. Permits
- i. Plans and specifications for public works contracting

**2. Construction (Future request)**

- a. Development of Parcel 37 to accommodate the new decant facility.
- b. Improving Marc Street to support the new and existing facilities.
- c. Installation of a stormwater treatment facility.
- d. Installation of the decant facility and associated structures.
- e. Engineering construction support.
- f. Inspections, testing and commissioning.

**Schedule:**

<b>Complete Design</b>	Q3 2025
<b>Bid Advertisement</b>	Q4 2025
<b>Begin Construction</b>	Q4 2025
<b>Substantial Completion</b>	Q2 2026

**E. FINANCIAL SUMMARY**

**Estimated Cost of Project**

The total project cost including all stages is estimated at \$8,266,000.

**Estimated Cost for This Request**

The total estimated cost of the Design for this project is \$1,234,000. If the cost of this estimate is anticipated to exceed the authorized amount, additional Commission authorization will be requested.

**Estimated Sales Tax**

The total estimated sales tax to be paid to local and state governments for this project is \$610,000.

**Cost Details**

Item	This Request	Total Previous Requests	Total Request	Total Project Budget	Cost to Date	Remaining Budget
DESIGN	\$884,000	\$350,000	\$1,234,000	\$1,234,000	\$25,593	\$1,208,407
CONSTRUCTION	\$0	\$0	\$0	\$7,032,000	\$0	\$7,032,000
<b>TOTAL</b>	<b>\$884,000</b>	<b>\$350,000</b>	<b>\$1,234,000</b>	<b>\$8,266,000</b>	<b>\$25,593</b>	<b>\$8,240,407</b>

**Source of Funds**

The 2025-2029 Capital Investment Plan (CIP) Budget currently allocates \$7,000,000 for both the design and construction phase. These budgets will be revised as necessary to accommodate changes in the scope of work and to reflect more accurate cost estimates as the design phase of the project advances.

**Financial Impact**

Project costs will be capitalized, and the capitalized project will have an estimated useful life of 30 years. The total annual depreciation will be \$233,000. There will be no depreciation expenses in 2024.

**F. ECONOMIC INVESTMENT/JOB CREATION**

There will be no permanent jobs created because of this project.

**G. ALTERNATIVES CONSIDERED AND THEIR IMPLICATIONS**

Alternative 1) Keep spending \$200,000 - \$300,000 per year (possibly more starting 2025) to manage vector/sweeper decant wastewater at Crystal Care.

Alternative 2) Design and build a new decant facility.

**Alternative 2 is the recommended course.**

**H. ENVIRONMENTAL IMPACTS/REVIEW**

Permitting:

All environmental, grading, building, mechanical and plumbing permits will be acquired before the contract is awarded.

Remediation:

Parcel 37 is located within the footprint of the old City of Tacoma municipal landfill. Refuse and contamination is likely present within the subsurface. Level of effort to address potential refuse and contamination is dependent upon design specifications of the decant facility and will be driven by the amount of subsurface work needed for the project. The impact will be determined during the design phase.

Stormwater:

The new facility will have improved capacity, allowing the Port to adequately manage its MS4 and ISGP permits. The new facility will also have a space to formally test new technologies that will support water quality improvements in the future.

Air Quality:

The main emission sources associated with operations at the facility will be the vector truck, two sweepers, and two pickup trucks. Planning/accommodation for future EV charging will be considered as the project advances.

**I. PREVIOUS ACTIONS OR BRIEFINGS**

<b>Date</b>	<b>Action</b>	<b>Amount</b>
October 2, 2023	Executive Authorization for Planning	\$20,000
May 1, 2024	Executive Authorization for Design	\$80,000
November 1, 2024	Executive Authorization for Design	\$250,000
<b>TOTAL</b>		<b>\$350,000</b>

**J. ATTACHMENTS TO THIS REQUEST**

- Decant facility conceptual plan and proposed location.

**K. NEXT STEPS**

Complete design and return to Commission for construction authorization summer 2025. Return to Commission with updates on the Ecology grant that staff applied for.