

APPENDIX E

Operations Manual Template



OPERATIONS PLAN

<DECANT FACILITY NAME>

<Address>

<Address>

<OWNER NAME>

<Address>

<Address>

Date

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PREFACE

This guidance template for developing a decant facility Operations Plan (the Template) was developed by the Regional Operations And Maintenance Program (ROADMAP) under a grant provided by the Washington State Department of Ecology (Ecology) The Template is designed to ensure that the operations plan(s) for your decant facility(facilities) addresses (address) all the necessary elements.

Before using the Template, be sure to read and understand the requirements in the permits applicable to your decant facility (facilities).

Some sections of this Template may not be necessary for some facilities. Additional elements may be added.

Tips for completing the Template:

- The Template is designed for use by all decant facilities and is not tailored to specific facility types. You may be required to make significant revisions and edits to ensure you have addressed all of your facility's operations.
- Each section includes instructions and space for your facility's specific information.
- We developed the Template in Microsoft Word so that you can easily add tables and additional text. Some sections may require only a brief description, while others may require detailed explanation or attachments.
- To make it easier to complete, the Template uses an underlined space where the operator enters information. Instructions are included within brackets [...].

While every effort has been made to ensure accuracy of all instructions and guidance contained in the Template, the legal requirements for permit compliance are determined by the relevant permits, not by the Template. In the event of a conflict between the Template and any corresponding permit provision, the permit controls.

1. INTRODUCTION

The [Facility Name] Decant Facility is owned and operated by [Name of Municipality or Private Entity]. The mission of the [Facility Name] Decant Facility is to provide an environmentally sound system for handling, treating, and disposing of stormwater liquids and solids generated from the cleaning of stormwater management systems. The purpose of this Operations Plan is to provide a comprehensive overview of all operations at the [Facility Name] Decant Facility so that all facility users can meet the requirements of the owner and regulatory agencies, consistent with this mission.

This Operations Plan has been reviewed and approved by:

- [Add name, title, and agency]

Related documents and information include:

- [List relevant documents and information]

Additional information or disclaimers:

- [Add here if any]

2. GENERAL INFORMATION

The [Facility Name] Decant Facility was constructed in [Year Construction Completed] and upgraded in [add years]. Other operations occurring at the facility site include: [List other operation co-located at the site]. General information about the decant facility is presented in Table 1. A vicinity map with facility access routes and access restrictions is provided in Figure 1. Figure 2 shows the facility layout.

[Describe facility access routes, and identify any access restrictions. Present vicinity map with and access routes in Figure 1. Present facility layout in Figure 2.]

[Describe general facility operations including:

- Who is authorized and prohibited to use the facility
- The materials accepted and prohibited
- The average amount of materials processed
- The maximum capacity of the facility for a given time frame such as daily, weekly, monthly and or yearly
- How the materials are processed and disposed of
- Note any signage at the facility outlining operating procedures.
- Other pertinent general information]

Table 1. Decant Facility Information	
Facility Name	
Facility Owner	
Facility Address	
Facility Phone/Website	
Days/Hours of Operation	
Emergency Contact	[Name, phone, email]
Primary Contact	[Name, phone, email]
Secondary Contact	[Name, phone, email]
Solid Waste Handling Permit	[Authority/Contact Health Department, contact name, phone, email]
Major Discharge Authorization (or other permission to discharge to sanitary sewer)	[Authority/Contact Sewer Agency, contact name phone, email]
Authorized Users	[Types (owner employees, approved governments and vendors, etc.)]
Acceptable Materials	[Types (stormwater cleaning, sweeper, ditch cleaning, trenching, etc.)]
Prohibited Materials	[Types (All non-stormwater except___)]
Site area	
Decant area	
Liquids storage volume	
Maximum allowed discharge rate	
Solids storage area	
Maximum solids storage volume	
Annual solids disposal volume	
Annual solids reuse volume	
Other Pertinent Information	
[Use additional rows as needed or delete]	

Figure 1. Vicinity Map and Access Routes to ___ Decant Facility.

8-1/2 x 11 or 11x17

Must fall on odd page if 11x17, can fall on any page if 8.5x11

Figure 2. Layout of the ___ Decant Facility.

8-1/2 x 11 or 11x17

Must fall on odd page if 11x17, can fall on any page if 8.5x11

3. ENVIRONMENTAL REGULATIONS AND PERMITS

[This section should list codes and regulations applicable to your facility. Those listed below may apply and are provided as examples. Delete and add as appropriate for your municipality and facility.]

3.1 Solid Waste Handling

The following applicable laws, regulations, permits, and codes pertain to the handling of solid materials [list]:

- Solid Waste Management - Reduction and Recycling (RCW 70.95)
- Solid Waste Handling Standards (WAC 175-350) for Piles Used for Storage and Treatment (WAC 173-350-320)
- Solid Waste Handling Permit issued by the municipality's health department/district in the study area, including permit number, issue date, effective date, expiration date, renewal schedule, and revision process for changes in operations plan
- Municipal codes or other local requirements
- Non-hazardous waste disposal permit or certificate issued by a private solid waste disposal company

3.2 Liquids Discharge

The following applicable laws, regulations, permits, and codes pertain to the discharge of liquids to a sewer [list]:

- The Washington State Water Pollution Control Act (RCW 90.48)
- Major Discharge Authorization, or other permission to discharge to the sanitary sewer, issued by the municipality's sewage treatment agency, including permit number, issue date, effective date, expiration date, renewal schedule, and revision process for changes in the operations plan
- Municipal codes or other local requirements

3.3 Stormwater

The following relevant regulations, permits, and codes pertain to stormwater management [list]:

- Phase I or Phase II Municipal Stormwater NPDES Permit with reference to Appendix 6 - Street Waste Disposal and including permit number, issue date, effective date, and expiration date. The Municipal Operations and Maintenance section of Section S.5 C.5 may also be applicable.
- Stormwater Management Manual for Western Washington (Ecology 2012)
- The Washington State Water Pollution Control Act (RCW 90.48)
- Stormwater Pollution Prevention Plan (SWPPP) consistent with NPDES permit requirements
- Municipal codes or other local requirements [List those that apply to your municipality and facility.] with particular reference to Appendix IV-G Recommendations for Management of Street Wastes

4. USE AUTHORIZATION

4.1 Authorized Users

Authorized users of [Facility Name] Decant Facility currently include:

- Any governmental agency or private vendor that meets the application process described below
- Designated employees of the following governmental agencies: [List authorized public users.] We accept designations made by municipal managers holding the following types of positions: [List Positions, e.g. Head of Public Works, Head of Roads Operations, Head of Stormwater Operations, etc.].
- Designated employees of the following private vendors: [List authorized private vendors.] We accept designations made by the owners or managers of the listed private vendors.

4.2 Application Requirements

[Describe application and approval system for users (by entity or individual driver).]

License Requirements

Authorized drivers must possess a valid commercial driver's license.

Authorized vendors must possess a business license for work in [identify city, county, or state as applicable].

Liability Insurance Requirements

[Define liability requirements and describe how proof of liability insurance is obtained. See Terms and Conditions Template on website at:

<http://www.wastormwatercenter.org/technical-tools.>]

Equipment Requirements

Vehicles using the decant facility must meet the following requirements:

- Ability to discharge liquids and solids separately
- Total capacity for liquid not to exceed _____ gallons
- Company sign or image on vehicle that is visible from 100 feet

- Decant discharge hose reaches ground
- Scale card issued to the specific vehicle (VIN # and Company ID # on scale card must match vehicle VIN # and ID # of the company it is registered to)

Compliance Statement

Authorized drivers must sign a statement indicating that they have read the Decant Facility Operations Plan, understand the facility's operation procedures and material acceptance requirements, and that not following them will result in no longer being allowed to use the facility.

4.3 Training Requirements

Upon approval of the use application, authorized users are trained in basic facility operations and practices.

[Describe the training requirements and procedures for internal and external users. Note differences for internal and external users if applicable.]

Include training details, such as the following:

- Frequency and location of training
- How to register for training and to maintain training records
- Availability for supplemental training if desired or required]

4.4 Revocation of Use Authorization

[Name of the Owner Entity of the Decant Facility] reserves the right to revoke authorized use of the [Facility Name] Decant Facility according to criteria and procedures described below, or as specified in the Terms and Conditions.

Revocation Criteria

Revocation of user authorization may occur and is not limited to the following triggers:

- Failure to follow the Operations Plan
- False reporting of material source location or condition
- Disposal of prohibited materials
- Misuse of scales or site
- Failure to pay

User Revocation and Notification Procedures

[Describe process for revocation of user authorization.

Describe notification procedure.

Describe how to prevent use by revoked users.

Describe process, if any, for reissuing revoked authorization.]

5. USER FEES AND BILLING

5.1 Rate Structure and Updates

[Describe user rate structure.

Describe when and how rates are updated.]

5.2 Fee Determination and Billing Process

[Describe how the disposal fee is determined.

Describe how the reuse fee is determined.

Describe the billing and payment process.]

6. MATERIAL QUANTITY MEASUREMENT

[Describe how to measure the quantity of liquid and solid materials received.

Describe scale operating procedures.

Describe liquid discharge measurement procedures.]

7. MATERIAL ACCEPTANCE AND INSPECTION

7.1 Material Acceptance

[Define acceptable and prohibited materials for your facility. Examples of accepted and prohibited materials are listed below. Delete or add to each list as applicable to your facility.]

Acceptable materials may include:

- Eductor liquids and solids from cleaning and maintenance of stormwater conveyance, detention, and treatment structures or facilities
- Excavated materials from cleaning and maintenance of stormwater conveyance, detention, and treatment structures or facilities
- Street and parking lot sweepings
- Ditch spoils
- Eductor liquids and soils generated during utility excavation and potholing
- Other materials deemed acceptable by the decant facility owner(s)

Prohibited materials may include:

- Suspected or confirmed contaminated waste (hot loads)
- Sanitary sewer waste
- Electrical vault waste
- Detergent washed surface waste
- Fuel or hazardous site waste
- Concrete or other inert construction site waste
- Grease trap waste
- Stormwater treatment media (filter media)
- Leachate from transfer stations
- Waste materials from other decant facilities
- Materials known or suspected of containing aquatic invasive species if the materials are to be reused in aquatic environments

7.2 Collection Site Review and Inspection

[Define collection site review and inspection procedures for your facility. Example procedures are listed below. Delete or add to the list as applicable to your facility.]

To prevent collection of prohibited materials, activities conducted before materials are collected and delivered to the decant facility may include:

- Environmental Manager reviews information on collection site characteristics to verify they do not represent known sources of prohibited materials.
- Driver inspects the collection site and materials prior to collection to identify the potential presence of prohibited materials.
- Driver completes and signs an inspection checklist or manifest to document collection site review and inspection observations.
- Driver does not collect prohibited materials and notifies Environmental Manager of their location.
- Environmental Manager determines appropriate methods for collection and disposal of prohibited materials.

7.3 Facility Inspection and Corrective Actions

[Define facility inspection and corrective action procedures for your facility. Example procedures are listed below. Delete or add to the list as applicable to your facility.]

To prevent receiving prohibited materials at the decant facility, activities conducted at the decant facility may include:

- Facility operator receives and reviews hauler inspection checklist or manifest.
- Facility operator inspects decanting of liquids and dumping of solids for the presence of obviously contaminated materials.

8. MATERIAL PROCESSING

8.1 Hot Load Identification and Handling

Hot loads are any materials known or suspected to exceed dangerous waste criteria, or other criteria established by owner or applicable permit.

[Describe training provided to drivers, such as the following:]

- Driver training on hot load identification using knowledge of material sources and visual inspection of materials before collection
- Driver training on hot load notification, collection, and handling procedures

Facility operators verify that drivers do not have a hot load by questioning the driver and inspecting the load.

[Describe operator training provided on hot load identification and handling procedures in case a hot load is deposited at the facility.]

8.2 Solids Handling

[Describe solids handling procedures. Suggested protocols may include the following:]

- Deposit eductor solids on sloped and covered impervious dewatering pad and allow to drain.
- Move dewatered solids to covered impervious solids storage area (or use tarps to cover solids in uncovered area) for drying and hydrocarbon degradation as required by end use.
- Deposit street sweeper solids and ditch dirt in solids storage area either separately or mixed with dewatered eductor solids.
- Store solids suspected of contamination in separate area.
- Develop and implement a sampling and analysis plan that complies with permit requirements, considers Appendix IV-G of the Stormwater Management Manual for Western Washington, and provides representative characterization of materials immediately prior to end use or disposal.
- Remove solids from storage area for reuse or disposal depending on test results and permit requirements, and record the amount of solids for reuse and disposal.
- Remove refuse from solids intended for reuse and properly store refuse pending disposal at a permitted facility.

8.3 Solids Disposal

[Describe frequency, scheduling, and methods of solids disposal.]

8.4 Solids Reuse

[Describe solids reuse methods, if any. Suggested protocols may include:]

- Remove refuse (trash) from solids and appropriately dispose of refuse.
- Separate solids consisting of greater than 90 percent leaves or other vegetation, and recycle at permitted compost facility.
- Screen and reuse coarse sand that is collected by street sweepers after recent road sanding and does not exhibit obvious contamination from spills.
- Define acceptable solids characteristics based on Appendix IV-G of the Stormwater Management Manual for Western Washington and on permit and material testing requirements for the following potential reuse options:
 - Daily cover or fill at a permitted municipal solid waste landfill
 - Fill or soil in commercial, industrial, and roadway areas where there is limited direct human contact, and where reuse as soil includes cover with vegetation or other means
 - Fill in public areas where direct human contact is prevented by cover with other approved materials
 - Other applications allowed by the jurisdictional health department or district

8.5 Liquids Handling

[Describe liquids handling procedures. Suggested protocols may include the following:]

- Decant liquids from eductor trucks to area designed to accept them.
 - Drain liquids from eductor truck decant area and solids dewatering area to a settling bay or vault for detention and treatment.
 - Drain vault to oil-water separator to remove floating oils, and maintain oil-water separator as needed for effective removal.
 - Monitor and record liquids discharge flow from vault according to permit requirements.
- Sample and test liquids according to standard operating procedures and permit requirements and considering Appendix IV-G of the Stormwater Management Manual for Western Washington.

- Excavate sediment from vault at specified intervals or maximum depth to maintain capacity, ensure proper function, and prevent loss of sediment.
- Provide additional liquids treatment as required by solid waste permit authority to infiltrate liquids to ground water or discharge liquids to surface water.

9. MATERIAL TESTING

[Describe how to test and report solids and liquids characteristics according to permit requirements.]

9.1 Liquids

[Describe liquids sampling location, frequency, and procedures.

Present test parameters, methods, and discharge criteria in Table 2.

Describe test result reporting procedures.]

9.2 Solids

[Describe solids sampling location (Figure 2), frequency (Table 3), and procedures.

Present test parameters, methods, and disposal/reuse criteria in Table 4.

Describe test result reporting procedures.]

Parameter	Test Method	Sampling Frequency	Sample Type	Daily Average Concentration (mg/L)	Instantaneous Maximum Concentration (mg/L)	Maximum Daily Loading

Table Notes

Table 3. Solids Sampling Frequency	
Cubic Yards of Solids	Minimum Number of Samples

Table 4. Solids Disposal and Reuse Criteria			
Parameter	Test Method	Disposal Maximum Value	Reuse Maximum Value

10. SECURITY/SAFETY/EMERGENCY PROCEDURES

10.1 Site Security

[Describe site security equipment and procedures.]

10.2 Personal Safety

[Describe required safety equipment and procedures.]

10.3 Emergency Procedures

[Describe procedures for emergency access outside regular operating hours.]

Identify operation restrictions during a power outage.

Identify emergency contacts and describe notification procedures for observations of spills or contaminated loads, equipment damage or theft, personal injury, or inappropriate operations.]

11. RECORD KEEPING AND NOTIFICATION

[Describe how to record and submit processed quantities according to permit requirements.

Describe how to record and report violations of operations plan and associated corrective actions.]

12. ENVIRONMENTAL CONTROLS

12.1 Stormwater

[Describe stormwater pollutant source control, detention, and treatment according to permit requirements or facility program.]

[Provide Stormwater Pollution Prevention Plan.]

12.2 Aquatic Invasive Species

[Describe aquatic invasive species control measures.]

12.3 Dust

[Describe dust control measures according to permit requirements.]

12.4 Odor

[Describe odor control measures according to permit requirements.]

12.5 Vector

[Describe nuisance animal vector control measures according to permit requirements.]

12.6 Noise

[Describe noise control measures according to permit requirements.]

13. VEHICLE/EQUIPMENT STORAGE AND MAINTENANCE

[Describe vehicle and equipment storage practices at facility.

Describe vehicle and equipment maintenance practices.]

14. FACILITY CLOSURE METHODS

[Name of Owner Entity of Facility] does not anticipate closure of the facility. In the event of closure, [Name of Owner Entity of Facility] will ensure that all activities are performed in compliance with WAC 173-304-407. A closure plan will be submitted to the [Name of local Health Department with jurisdiction over the facility] for approval 180 days prior to closure.

15. REFERENCES

Ecology. 2012. 2012 Stormwater Management Manual for Western Washington. Washington, Volumes I - V. Washington Department of Ecology Water Quality Program. Publication No. 12-10-030. August 2012.

[List any other references.]

