



# Environmental Management Plan for Street Waste



## INTRODUCTION

This document provides guidelines for proper reuse and disposal of street waste generated from stormwater maintenance activities such as street sweeping and catch basin cleaning and, to a limited extent, maintenance of other stormwater conveyance and treatment facilities. This document is consistent with the Washington State Department of Ecology's Stormwater Management Manual for Western Washington.

### What is street waste?

Washington State Department of Ecology defines street wastes as liquid and solid wastes collected during maintenance of stormwater catch basins, detention/retention ponds and ditches and similar storm water treatment and conveyance structures, and solid wastes collected during street and parking lot sweeping. Liquid street waste—such as decant water from vactoring of catch basins—is covered under Section 7 – Operations and Maintenance, Storm and Surface Water Plan, 2009. This guide focuses solely on solid street waste.

### Is street waste considered solid waste?

Yes. While street waste from normal street and highway maintenance is not considered dangerous waste, it is solid waste. Street waste solids may contain contaminants at levels too high to allow unrestricted reuse.

### What contaminants can be found in street waste?

- Petroleum Hydrocarbons
- Heavy Metals
- Carcinogenic PAHs



## TESTING

### How often should street waste solids be tested?

Early Spring – prior to composting

Early Summer – during composting when maximum vegetation is available and coming through the system

Early Fall – composted material, prior to reuse

### How many samples should be taken?

Table 1: Sampling Guidelines\*

CUBIC YARDS OF SOLIDS	MINIMUM NUMBER OF SAMPLES
0-100	3
101-500	5
501-1,000	7
1,001-2,000	10
>2,000	10 +1 for each additional 500 cubic yards

### What are acceptable levels for reuse?

Table 2: Suggested Maximum Values\*

PARAMETER	SUGGESTED MAXIMUM VALUE
Arsenic	20.0 mg/kg
Cadmium	2.0 mg/kg
Chromium	42 mg/kg
Lead	250 mg/kg
Nickel	100 mg/kg
Zinc	270 mg/kg
Mercury (Inorganic)	2.0 mg/kg
PAHs (Carcinogenic)	0.1-2.0 mg/kg
TPH, Diesel or heavy oil	200-460 mg/kg
TPH, Gasoline	100 mg/kg
Benzene	0.03 mg/kg
Ethylbenzene	6 mg/kg
Toluene	7 mg/kg
Xylenes	9 mg/kg



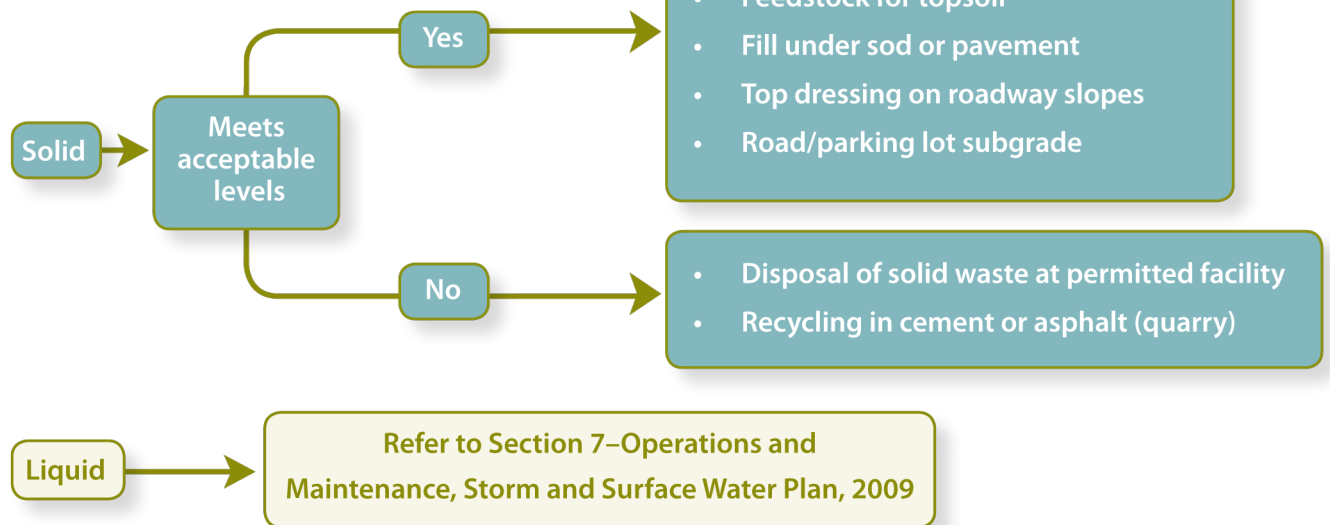
\* Stormwater Management Manual for Western Washington, Volume IV Source Control BMPs, Washington State Department of Ecology Water Quality Program, February 2005.



## REUSE AND DISPOSAL OPTIONS

### What are acceptable reuse and disposal options for street waste?

Figure 1: Reuse and Disposal Options



### WHAT CAN BE DONE TO IDENTIFY AND SEGREGATE CONTAMINATED SOLID WASTE?

A site evaluation is suggested as a method to identify spill sites or locations that are more polluted than normal. There are three steps to a site evaluation:

**1. Historical review** of the site for spills, previous contamination, and nearby toxic cleanup sites involving dangerous waste and materials.

**2. Area visual inspection** for potential contaminant sources such as a past fire, leaking tanks and electrical transformers, and surface spills. Look for the following signs of possible contamination:

- Color / staining
- Odor
- Sheen
- Containers / drums

**3. Waste and container inspection** before and during collection. Operator experience is the best guide to avoid collection of contaminated waste.



The street sweeping crews are the “front line” to visually inspect and otherwise determine whether street waste may be contaminated and should be segregated for proper disposal.