



# MILWAUKIE

*Dogwood City of the West*

City of Milwaukie  
Public Works Department

10.01 Preventive Maintenance

## STORM RAIN GARDEN

Standard Operating Procedure #10.01.006

July 25, 2013

By

Ronelle Sears  
Public Works Supervisor

Approved:

  
\_\_\_\_\_  
Public Works Director

9-9-13

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Date

  
\_\_\_\_\_  
Stormwater/Wastewater Supervisor

9-10-13

\_\_\_\_\_  
Date

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## 1.0 PURPOSE & APPLICABILITY

The purpose of this Standard Operating Procedure (SOP) is to establish uniform procedures pertaining to the practice and reporting of Rain Garden Maintenance as performed by the City of Milwaukie Public Works department. This procedure is written to meet the requirements of the National Pollution Discharge Elimination System (NPDES MS4) Permit Schedule F, Section B and the Stormwater Management Plan (SWMP) Element #8.

The policies and procedures of this SOP are applicable to all City of Milwaukie personnel involved in the planning, preparation, conducting and reporting of Rain Garden maintenance within the City of Milwaukie city boundaries.

The operator or inspector may deviate from these procedures when necessary due to unexpected or unique circumstances that may occur in the field. Any deviation must be discussed with supervisory personnel prior to implementation.

## 2.0 METHOD SUMMARY

Rain Garden maintenance is completed to remove sediment, garbage and weeds from the structure. At times the vegetation needs to be trimmed for sight distance and over growth. The maintenance is normally completed during the spring and summer months. Personnel will also inspect and remove sediment, debris and leaves during the fall and winter months.

## 3.0 DEFINITIONS

- 3.1 Rain garden: stormwater planter receiving runoff from city owned streets containing vegetation and having capability for infiltrating stormwater into the subsurface

## 4.0 HEALTH & SAFETY CONCERNS

Personal protective equipment such as safety glasses for splashing material, gloves for handling possibly contaminated material or contact with dead or live animals including bees and mice. Some of the concerns are exposure to hypodermic needles, loud noises, flying debris, heavy traffic areas, broken pipes, high water pressure, uneven surfaces and the general use of heavy equipment such as the Vactor. Foul odors may also be present. Hard hat may be required, as some areas may contain confined work areas and may have overhead limitations

## 5.0 PERSONNEL QUALIFICATIONS

Personnel must have a Class B Commercial Driver's License with a Tanker Endorsement, traffic control certification, blood borne pathogens training, rain garden maintenance training and Vactor operation training. Seasonal help may be employed to perform rain garden maintenance using hand tools only.

## 6.0 EQUIPMENT & SUPPLIES

Equipment used for rain garden maintenance consists of Vactor or VacCon and service truck. Hand tools used for maintaining the facility may include: shovels, rakes, buckets, garden tools, safety glasses, traffic control equipment, hearing protection, hard copy maps, work boots, high visibility safety wear, first aid kits, gloves, electronic devices and radios or cell phones, .

## 7.0 PROCEDURAL STEPS

- 7.1 Determine map and area.
- 7.2 Load tools and necessary equipment.
- 7.3 Proceed to work site, set up necessary traffic control.
- 7.4 Remove garbage, weeds and sediment.
- 7.5 Trim vegetation and/or replant if needed.
- 7.6 Dispose of all materials appropriately.

## 8.0 RECORDS MANAGEMENT

The personnel performing the work will complete the work order that is generated by the Hansen program under each numbered asset in the database. The report hard copies will be retained in accordance with the current City of Milwaukie records retention policy and Oregon Administrative Rules 166-200-120.

## 9.0 REFERENCES

- 9.1 City of Milwaukie Stormwater Management Plan (2012) Brown & Caldwell and City of Milwaukie
- 9.2 NPDES MS4 Discharge Permit # 101348 (March 16, 2012) Oregon Department of Environmental Quality
- 9.3 Vactor Operating Manual (2007)
- 9.4 City of Milwaukie Citywide Safety Manual (2002)
- 9.5 Recycling and Disposal of Materials SOP # 70.01

### Revision Record

Revision	Date	Author	Description of change