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City of Milwaukie Public Works Department

10.01 Preventive Maintenance

STORM SEDIMENTATION MANHOLE CLEANING

Standard Operating Procedure #10.01.003

July 25, 2013

By

Ronelle Sears Public Works Supervisor

Approved:	Gan	Par-
Public Work	s Birector	u Seas

9-9-13 Date 9-10-13

Stormwater/Wastewater Supervisor

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 practices, maintenance and reporting of Sedimentation Manhole Cleaning 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 Sedimentation Manhole Cleaning 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

Sedimentation manhole cleaning is performed to remove accumulated sediment, debris and pollutants from the stormwater system. Sedimentation manholes are required to be cleaned one time every two years.

3.0 **DEFINITIONS**

3.1 <u>Sedimentation manhole</u>: storm system manhole with deep sump below inlet and outlet flow line. May have 90° elbow installed on outlet to retain floatable solids or oils on water surface.

4.0 HEALTH & SAFETY CONCERNS

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.

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, and Vactor and VacCon operation training.

6.0 EQUIPMENT & SUPPLIES

Equipment used consists of Vactor or VacCon. Hand tools, shovels, and manhole hooks, safety glasses, traffic control equipment, hearing protection, hard copy maps, work boots, high visibility safety wear, first aid kits, gloves, and radios or cell phones. Work often requires at least two employees.

7.0 PROCEDURAL STEPS

- 7.1 Vactor or VacCon pre-trip inspection and preparation (water, safety supplies, paper towels, hand sanitizer).
- 7.2 Determine area selection, route and map.
- 7.3 Upon arrival turn on required flashers and lights.
- 7.4 Use a spotter to back up to the Sed-manhole.
- 7.5 Assess traffic control needs, set up accordingly.
- 7.6 Pull lid from Sed-manhole.
- 7.7 Insert Vactor tube, turn vacuum on.
- 7.8 Use hose reel mounted on the front of the Vactor to loosen the debris in the Sedmanhole.
- 7.9 Vacuum all debris.
- 7.10 Estimate amount of debris removed from Sed-manhole.
- 7.11 Replace asset lid or grate.
- 7.12 Secure hose reel and suction tubes on Vactor or VacCon.
- 7.13 Record amount of debris removed from Sed-manhole on hard copy maps.
- 7.14 Move to next Sed-manhole.

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 VacCon Operating Manual (2007)
- 9.5 City of Milwaukie Citywide Safety Manual (2002)

Revision Record

Revision	Date	Author	Description of change