



PETROLEUM, OIL, GREASE AND SAND (POGS) REFERENCE DOCUMENT TO PCWRA'S CODE OF RULES AND REGULATIONS

1. Purpose and Background

The purpose of this document is to outline PCWRA's Code of Rules and Regulations (Code) and provide producers of petroleum, oil, grease and sand (POGS) with information on how to minimize the pollution of POGS into the sanitary sewer system. When POGS enters the sanitary sewer system, it can contribute to pass-through of pollutants into East Plum Creek and the Chatfield Watershed. Additionally, sand and other materials may cause sewer blockages and could lead to a sanitary sewer overflow (SSO). Damage to pumping equipment in the wastewater collections and treatment systems may also occur.

The primary purpose of the Plum Creek Water Reclamation Authority's (PCWRA) Industrial Pretreatment Program is to protect the wastewater collection system and wastewater treatment plant from any adverse impacts from discharges to the sanitary sewer system. This is accomplished by monitoring discharges from users, such as Petroleum, Oil, Grease & Sand Facilities, in PCWRA's service area. PCWRA's service area includes: the Town of Castle Rock, Castle Pines Metropolitan District, Castle Pines North Metropolitan District, Silver Heights Water and Sanitation District and Castleton Center Water and Sanitation District.

2. Scope and Applicability

This document applies to ALL POGS facilities in PCWRA's service area. PCWRA sets forth requirements for users and ensures its service area complies with applicable state and federal laws, including the Clean Water Act (33 United States Code §1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations, Part 403).

2.1. Non-Domestic Users

All non-domestic users in PCWRA's service area that have the potential to produce and discharge POGS are required to comply with the Code. Examples of these facilities include but are not limited to:

- Automotive facilities (i.e. vehicle service stations and fleet maintenance stations)
- Mechanical repair shops
- Car or truck washes
- Any facility that contains an elevator

2.2. Domestic Users

This document does not apply to domestic users. However, the best management practices (BMPs) set forth in the Code and are referenced in this document are recommended for domestic users to assist in keeping the collection system and private sewer lines flowing freely.

3. Definitions and Acronyms

3.1. Definitions

Best Management Practices (BMPs) – Schedule of activities, prohibitions or practices, maintenance procedures, and other management practices; it also includes treatment requirements, operating procedures, and practices to control plant runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

BMP Inspection – Facility inspection to ensure BMPs are properly implemented.

Board – PCWRA Board of Directors.

Clean Water Act (CWA) – In 1972, the United States Congress passed the “Water Pollution Control Act” for the purpose to “restore and maintain” the quality of our nation’s water. The Water Pollution Control Act was amended in 1977 and renamed the “Clean Water Act”. Amendments to the Clean Water Act included requirements limiting the types and concentrations of pollutants that industries are allowed to discharge into the sanitary sewer.

Domestic User – Any private residential user that discharges wastes derived from ordinary processes excluding any commercial or industrial wastes.

General Pretreatment Program Regulations – 40 CFR Part 403; In 1978, the Environmental Protection Agency (EPA) established the “General Pretreatment Program Regulations”. These regulations and amendments require States and local wastewater districts to enforce national pretreatment regulations.

National Pollutant Discharge Elimination System (NPDES) – A permit issued under the National Pollutant Discharge Elimination System for Discharge of Wastewaters to the Navigable Waters of the United States pursuant to the Act.

Non-domestic User – Any user that does not meet the criteria for categorization as a domestic user shall be considered a non-domestic user.

Notice of Violation - Whenever PCWRA finds that any person has violated or is violating this Code, or any prohibition, limitation or requirement contained herein, it may serve upon such person a written notice stating the nature of the violation and providing a reasonable time, not to exceed thirty (30) days, for the satisfactory correction thereof.

Petroleum, Oil, Grease & Sand (POGS) - Any hydrocarbon or petroleum product including oils and greases, and/or sand, grit, gravel or any other aggregate.

Publicly Owned Treatment Works (POTW) – The wastewater system owned by PCWRA. This definition includes any sewer that conveys wastewater to the POTW treatment plants, except private sewers. For the purposes of this Code, POTW shall also include any sewers that convey

wastewater to the POTW from persons outside the POTW boundaries who are by contract or agreement with the POTW actual users of the POTW.

Sand/Oil Interceptor (SOI) – A plumbing device that is installed in a sanitary drainage system to intercept petroleum, oil, grease and sand (POGS) from a wastewater discharge and is identified by capacity volume and number of compartments.

Users – Any person who contributes, causes or permits the contribution of wastewater into the POTW.

3.2. Acronyms

BMPs – Best Management Practices

CWA – Clean Water Act

NPDES – National Pollutant Discharge Elimination System

PCWRA – Plum Creek Water Reclamation Authority

POGS – Petroleum, Oils, Grease and Sand

POGSA – Petroleum, Oil, Grease & Sand Application

POTW – Publicly Owned Water Treatment Works

SOI – Sand/Oil Interceptor

4. Roles and Responsibilities

4.1. PCWRA

PCWRA is responsible for implementing the Code in order to maintain compliance with the CWA, General Pretreatment Regulations, and PCWRA's NPDES Permit. Responsibilities include reviewing building plans, inspecting applicable users for compliance, and enforcement.

4.2. Users

Users identified in Section 3.0 shall comply with all requirements in the Code. The user shall permit inspections by PCWRA with or without notice for the purposes of determining applicability and/or compliance with the Code.

5. Petroleum, Oil, Grease and Sand Application

5.1. POGSA Requirements

POGSAs are required for all POGS facilities in PCWRA's service area and shall be submitted along with SOI and plumbing plans for approval prior to any of the following:

- Sale or transfer of ownership of the business;
- Modification or installation of a new SOI;
- Construction of a new building;
- Change in the trade name under which the business is operated;
- Change in the nature of the services provided or building use that affects the potential to discharge POGS; and/or
- Remodeling of the POGS facility that may result in an increase in flow or POGS loading or that otherwise requires the POGS facility to submit plans or specifications for

approval through a building or zoning department, or any other formal approval process of a city, county, or other jurisdiction.

5.2. POGSA Submittal Requirements

Diagram 2 set forth in Appendix E of the Code and 6.1 of this document shall be used as a reference for design and construction/installation of the SOI. The following information must be submitted to PCWRA to obtain approval:

- Detailed plans of SOI and piping;
- Number, type, and size of fixtures and drains connected;
- Proposed SOI location;
- Proposed SOI size;
- Sizing calculations; and
- Manufacturer and model no. of SOI (existing or to be installed).

6. Sand/Oil Interceptor Requirements

A SOI is a plumbing device that is installed to intercept POGS before they enter the wastewater collections system. A SOI is located underground outside the facility and can typically be recognized by two manhole lids labeled "SEWER".

Note: PCWRA does not allow facilities to install a SOI with a capacity smaller than 750 gallons.

6.1. Sizing, plumbing and structural requirements

A properly functioning SOI in conjunction with BMPs (section 7.0 of this policy) provides the following:

Necessary retention time for the wastewater to separate into three basic levels: POGS floats on top, sand and solids sink to the bottom, and the clearer mid-water flows out into the sanitary sewer as depicted in the picture below.

Note: Please see Appendix E of the Code for complete specifications and requirements for SOIs. The Code may be accessed at: <http://pcwracolorado.org/Pretreatment.html>

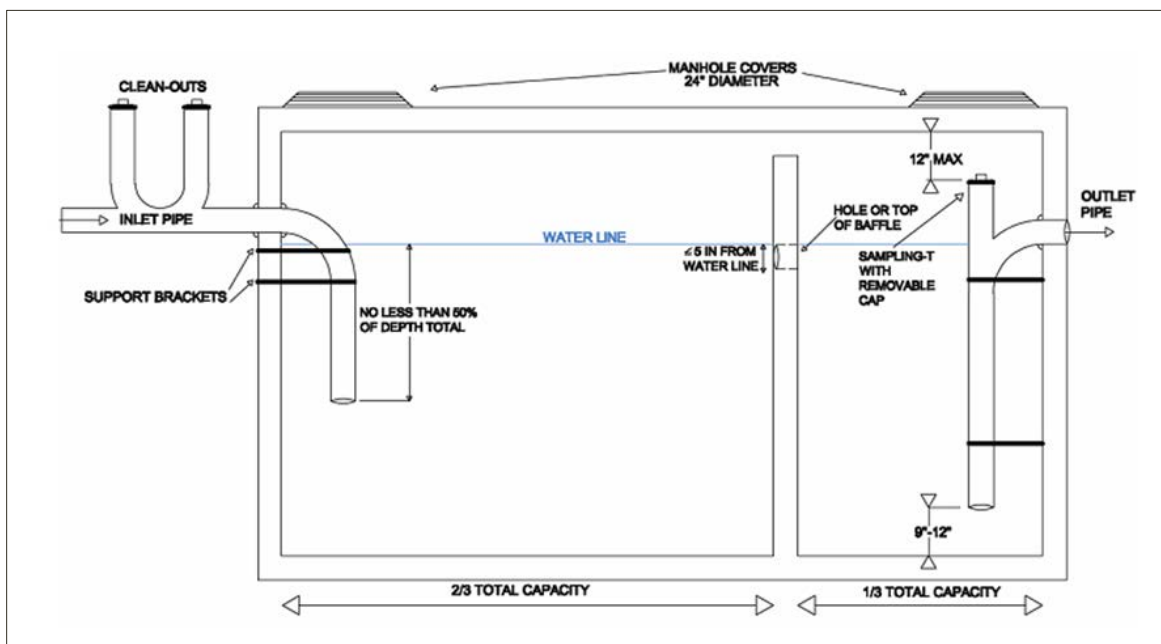


Diagram of a PCWRA approved SOI

6.2. Maintenance of SOI

- 6.2.1. Maintenance of the SOI is ultimately the responsibility of the record owner of the property to which the sanitary sewer tap has been issued, and the property owner must ensure that any tenant business owner or operator maintains the SOI in accordance with Appendix D of the Code.
- 6.2.2. SOIs must be maintained by regularly scheduled cleaning so that the SOI properly operates as intended in order to efficiently intercept POGS from the user's wastewater and prevent the discharge of POGS into the wastewater collection system.
- 6.2.3. Maintenance of the SOI is ultimately the responsibility of the record owner of the property to which the sanitary sewer tap has been issued, and the property owner must ensure that any tenant business owner or operator maintains the SOI in accordance with this Appendix C. The SOI must be evacuated entirely when the depth of sand/oil material in the first put is 25% of the total depth of the SOI (e.g. if the operating depth is 30 inches, the SOI must be pumped when grease layer is 7.5 inches). All SOIs must be evacuated at a minimum of every 3 months unless sand and oil accumulation (25% of depth) requires more frequent evacuation or, subject to approval by the Authority, it is determined that less frequent pumping is sufficient. Contents shall be hauled and disposed of properly, and legally, off-site and in accordance with all Federal and Local laws and ordinances.

7. Best Management Practices (BMPs)

The purpose of BMPs is to minimize the discharge of POGS and other prohibited materials into the SOI and the sanitary sewer system. The BMPs in this document are authorized by the Code. The following BMPs shall be implemented by all applicable facilities:

Installation of mesh screens: Mesh screens or a similar device shall be installed for facilities with the potential to discharge debris greater than ½ “.

Proper storage and disposal of wastes and raw materials: SOIs shall not be used as a means for disposal of unused, spent or spilled chemicals, automotive waste fluids, hazardous wastes or sludges. Such wastes shall be stored in appropriate containers in volumes consistent with local and state environmental regulations until collected for recycling and/or disposal by a professional waste hauler.

Employee training: Employees shall be trained and made aware of the requirements listed in this document and the Code.

Facility signage: Signage shall be posted above all sinks, drains and similar devices located in process areas prohibiting the discharge of oil and all other waste down the drains.

8. Facility Inspections

8.1. Annual BMP Inspection

- 8.1.1. On an annual basis, a PCWRA inspector will conduct a BMP inspection on all facilities that have the potential to discharge POGS into the sanitary sewer. These inspections may take anywhere from 30 minutes to 1 hour, depending on the size of the facility.

8.1.2. Inspections ensure BMPs are properly implemented and verify the following:

- Identification and description of plumbing fixtures;
- Identification of POGS reduction procedures;
- Identification of POGS rendering container, where applicable;
- Identification of bacterial, chemical or enzymatic users;
- POGS facility hours of operation;
- POGS facility schedule of routine drain line maintenance; and
- Verification of BMP use.

8.2. SOI Inspection

On a quarterly basis, unless otherwise determined by PCWRA, a PCWRA inspector will conduct SOI inspections on all facilities that have a SOI or sand/oil trap. Inspections verify the following:

- Location and accessibility;
- Approximate capacity;
- Identification of inlet and outlet compartments, where applicable;
- Identification of inlet and outlet piping systems;
- Identification of bacterial, chemical or enzymatic uses; and
- Approximate depth of accumulated solids and grease layer.

9. Enforcement

PCWRA has the authority to enforce the requirements within this document and in conjunction with the Code. Written notices of non-compliance shall be issued to the facility owner/manager and property owner. Failure to comply may result in penalties or may cause the sewer service to the premises in question to be terminated.

10. Variances

Please see Appendix D, Section K of PCWRA's Code of Rules and Regulations.

<http://pcwracolorado.org/Pretreatment.html>