

Petro-Pipe Use Maintenance and Installation



Petro-Pipe 6" X 16" Long Flanged with 7" Flanged Housing Pipe

The PIFH-616 Petro-Pipe is used for rainwater discharge from oil containment areas. The 7" housing pipe is flanged and is mounted through the liner or containment wall. The housing pipe is best when installed on a 15 - 25 degree slope allowing water to build up on the face of the Petro-Pipe providing positive head pressure for optimum flow of 3 to 3.5 gpm.



The Petro-Pipe is installed into the housing and is attached with 5 stainless steel screws. There is an o-ring between the flanges that is compressed when the screws are tightened creating an water/oil tight seal. In a liner application there is an additional flange that is attached to the liner prior to installing the housing pipe. This flange provides complete sealing of the liner to the Petro-Pipe.



Petro-Pipes have a retaining ring on the inside that is removable and a dirt filter is accessible. The dirt and debris filter keeps the Petro-Pipe free of dirt and requires checking usually once per year. Petro-Pipes allow for point discharge so they can be changed out and filters cleaned.

Petro-Pipe™ Maintenance & Replacement Information

1.0 **PURPOSE**

This standard practice provides the basic guidelines for safe maintenance and replacement of Petro-Pipe filters installed in a “Storm Water Conveyance System.”

2.0 **APPLICABILITY**

This standard applies to all qualified personnel maintaining and/or replacing Petro-Pipe filter cartridges.

3.0 **DEFINITIONS**

- 3.01 SPI: Solidification Products International
- 3.02 Storm Water Conveyance System: The bermed area surrounding oil filled equipment located in a sub-station or maintenance yard.
- 3.03 Swale: A low-lying or depressed paved stretch of land.
- 3.04 Visual Inspection: A visual inspection for an oil sheen, unusual color, mud or sediment on the water within the containment structure.
- 3.05 Petro-Pipe Complete Unit: Including sleeve and filter cartridges.
- 3.06 Petro-Pipe Sleeve: Plastic 16” long pipe with flange and cover.

4.0 **PROCEDURE**

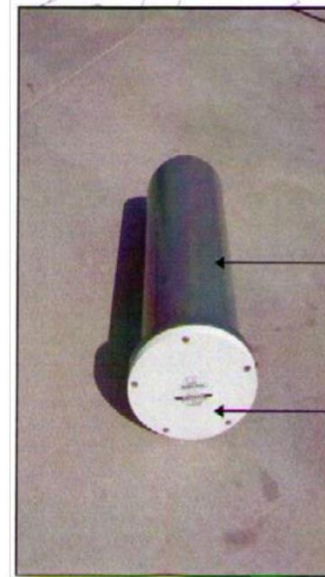
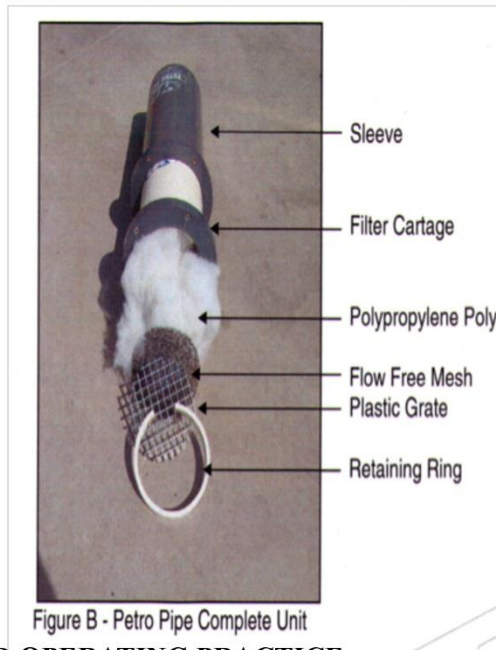
- 4.01 An annual inspect of all oil containment Petro-Pipe filters is recommended prior to the rainy season.
- 4.2 If a “Storm Water Conveyance System” is backed up with rain water and a “Visual Inspection” has been conducted; remove the Petro-Pipe’s cover (See Figure A) to quickly discharge the run off.

STANDARD OPERATING PRACTICE

No. 533.111

Disassemble Petro-Pipe Unit: See Figure B

- 4.01.1 Pinch retaining ring’s tabs with fingers and remove.
- 4.01.2 Remove Plastic Grate
- 4.01.3 Remove Flow Free Mesh and wash, (should not deteriorate).
- 4.01.4 Remove Filter Floss Material and replace if excessively dirty. The filter floss is 100% polypropylene poly fill.
- 4.01.5 Remove five flathead screws and replace filter cartridge if contaminated with oil.
- 4.01.6 Reassemble Petro-Pipe Unit in reverse order



STANDARD OPERATING PRACTICE

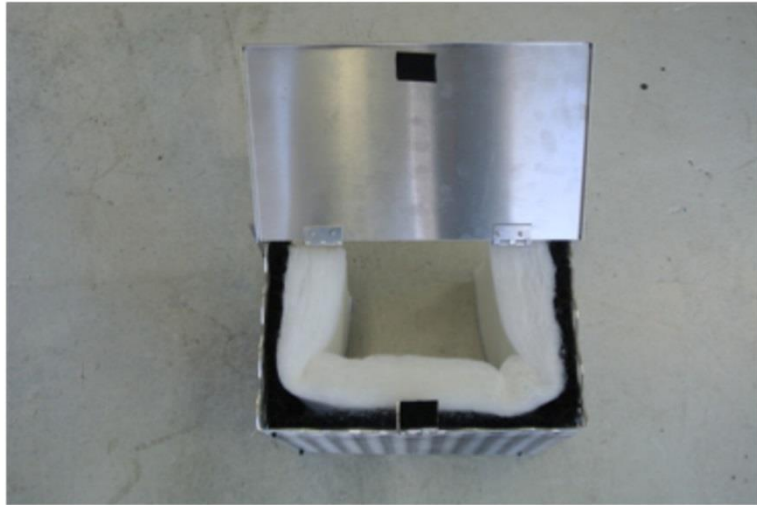
Note: If it is the rainy season, and the Petro-Pipe cartridge appears to be clogged do the above steps. If not successful in unclogging, follow-up as a possible complete Petro-Pipe cartridge replacement may be necessary.

- .3 Remove all trash and debris from the “Storm Water Conveyance System” and swales.
- .4 Install the pipe sleeve in the “Storm Water Conveyance System” with the Petro-Pipe flange facing out on the curb side, (the pipe flange’s bolt pattern is random). See Figure C.

5.0 Filtration Cage Maintenance:

The filter cage is used on the inside on the containment area to prevent dirt and debris from entering into the Petro-Pipe and should be visually inspected on a monthly schedule.

- 5.1 If leaves or debris is accumulated around the filter cage they should be removed. The filter cage itself should also be checked by lifting the cover and looking at the dirt content in the filter floss batting. If the Filter floss Batting is dirty it should be replaced.



PFB-1012 Filter basket with Floss Batting



Petro-Pipe and Filter Cage

6.0 Life span of Petro-Pipe

- 6.1 In wetter climates where rain fall is > 20 " per year Petro-Pipes should be replaced every three years.
- .2 In more arid climates with rainfall of < 20 " per year the Petro-Pipes should be replaced every 5 years.
- .3 The date sticker on the Petro-Pipe is to reflect the month and year the Petro-Pipe was installed, so this used properly is an easy reference of when replacement of the Petro-Pipes is needed.



Supplement to Maintenance:

The current Petro-Pipe internal filters have been improved with the following description:

1. Retaining ring
2. HDPE Grate
3. Flow free Plastic mesh
4. 2" Floss batting filtration disk
5. 4" Floss Batting Disk, Micro Mesh Fabric (not Shown)



Australasia Agents for SPI International Products is:

Oil Barriers Australasia

85 Tamahere Drive

Hamilton 3283

New Zealand

All SPI Products and replacement parts can be purchased from Oil Barriers Australasia:

150mm Petro-Pipe Cartridge Housing

150mm Petro-Pipe Replacement Cartridge

150mm Pre-Filter Disc's

Grills