



Vault-based system maintenance being performed by qualified third-party vendor



Vault-Based Stormwater Treatment Measures



Maintenance Requirements

Per **City of San José Municipal Code 20.95.120:**

- Property owners must maintain all stormwater treatment measures and keep service records onsite for five years.

What You Need to Do

Inspect systems twice annually (before and after the rainy season).

Inspect any related pumps at least once a year and service as needed.

Service systems per manufacturer's specifications but **no less than once every three years**.

- Maintenance should always be conducted by qualified personnel.
- Maintenance activities include:
 - › Removing sediment, debris and floatables by using a vacuum truck.
 - › Replacing filter media (at least once every three years) and cleaning cartridge screens as needed.
 - › Repairing any damage observed.
 - › Filter media **MUST** be replaced at least once every three years.

Document maintenance activities and maintain records onsite for five years.



Environmental Services

To find out more about specific stormwater treatment measures on a property, contact: City of San José Development Services
(408) 535-3555

For more information about stormwater treatment systems and the City of San José's stormwater programs, visit:
www.sjenvironment.org

Or call the City of San José at
(408) 945-3000



What are vault-based stormwater treatment measures?

Underground mechanical devices that filter stormwater and may include media filtration systems, hydrodynamic separators, and hydromodification vaults. These measures were required by the site's development permit and cannot be removed from the site.

Why are they used?

To prevent pollutants like trash, sediment, and debris from entering our local waterways. Pollutants are often carried by stormwater runoff flowing over streets, parking lots, and other paved surfaces. These systems remove pollutants, but are not meant to be used in place of regular site maintenance or good housekeeping.

Why is maintenance important?

Without maintenance, systems can clog causing pollutants to bypass the system or mosquito larvae to form.



Environmental Services

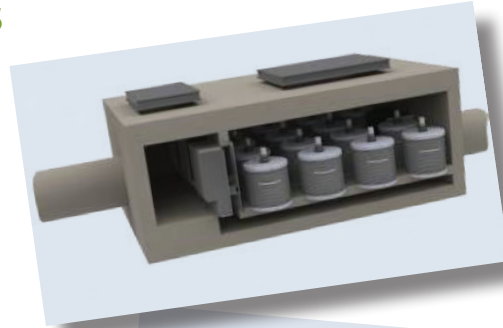
www.sjenvironment.org/stormwatertreatmentmeasures

Types of Vault Based Stormwater Treatment Measures

Media Filtration Systems

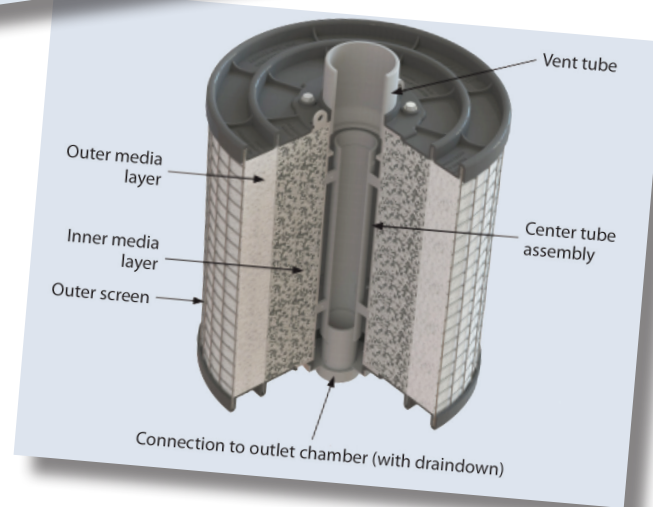
Media filtration systems (MFS) are flow-through treatment systems that remove a variety of pollutants from stormwater runoff, similar to a kitchen water filter, through screening and adsorptive media such as perlite, carbon, peat or other manufactured medias.

- Trash, sediment and debris are captured in the vaults while water flows through the cartridges.
- Pollutants like oils, nutrients from fertilizers, and other chemicals are removed from stormwater by the material inside the cartridge.
- If vaults fill with trash, cartridges become coated or media becomes clogged, water will fill up the vault and leave it through an overflow pipe without treatment.
- Overflow pipes allow water to leave the vault in case of heavy rains to keep the property from flooding.
- The number of cartridges needed in each vault varies and is calculated as part of the original site design.
 - The number of cartridges needed for your system are specified on the grading and drainage plans for your site. You can find your grading plans here: www.sjpermits.org.



Left: PerkFilter™ vault schematic

Below: Perkfilter™ cartridge diagram

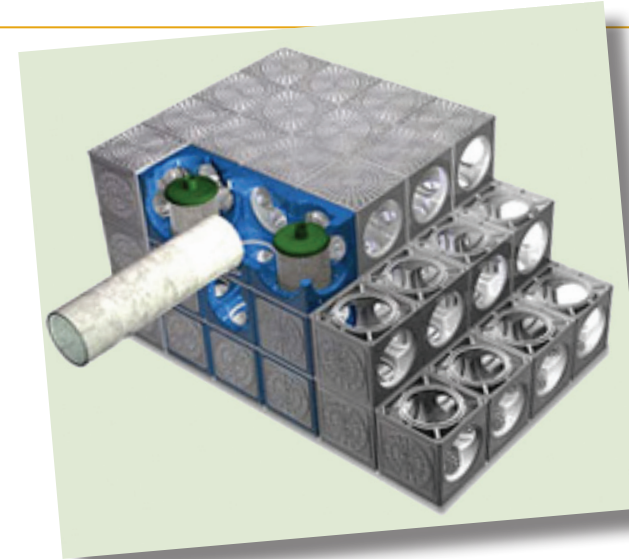
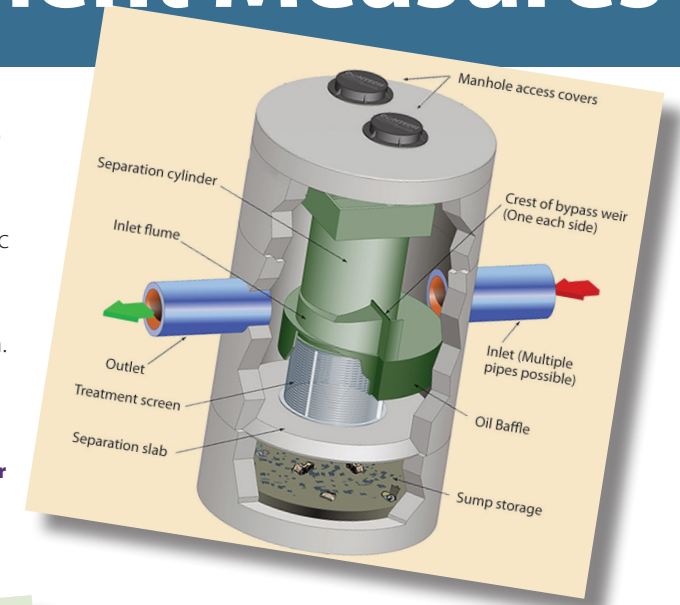


- Different filter designs will have specific maintenance requirements. Always check the manufacturer's maintenance documents to ensure proper care and function of device.

Hydrodynamic Separators (HDS Units)

Hydrodynamic separators use gravity and cyclonic action to capture trash, sediment, and some floating pollutants. As with MFS, once they fill up, stormwater and pollutants can bypass the system.

Right: Diagram of a hydrodynamic separator



Hydromodification Vaults

Hydromodification vaults collect stormwater and slowly release the water over time. Releasing water slowly from the site helps reduce erosion and flooding in local waterways and protects wildlife. Without regular maintenance, vaults can fill with sediment and reduce storage capacity.

Left: Hydromodification vault diagram

Quick Tips!

Always read inspection and service reports completely and be aware of any required actions listed.

Do regular visual inspections from the street level to make sure there are no obvious issues with your system.

Keep your property clean to reduce trash and debris reaching the systems and lower maintenance costs.

Be familiar with how your system works.

Failure to properly maintain devices **can result in fines.**

Please remember that storm drains flow directly to creeks and the San Francisco Bay. Stormwater is not treated prior to being discharged to the Bay like wastewater from sinks and toilets. Pollutants in the storm drain system **can affect public health and safety**, impact our water supply, and **harm wildlife** in and around our waterways.