COMPLETE CHECKLIST IN BLUE PEN AND SUBMIT ELECTRONICALLY OR BY MAIL TO THE ADDRESSES BELOW

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Urban Watershed Management Program
ATTN: Stormwater Review
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**Annual Self-Certification Checklist**

# DETENTION TANK
## (AKA: detention vault, detention pipe)

**Inspection Date:** _____ **Address:** _____ **Block / Lot #**_____ **Installation Date:** _____

**Inspected By: Name:** _____ **Phone:** _____ ☐ Property Owner ☐ Site Manager ☐ Contractor ☐ Other: _____

**INSTRUCTIONS:** All inspections, maintenance tasks and repairs are to be completed prior to the beginning of the rainy season (October 15). Mark all status boxes with an S or U, where S = Satisfactory (no maintenance required), and U = Unsatisfactory (maintenance required).See the Detention Vault Inspection Instructions included in this packet for detailed descriptions of conditions requiring maintenance and further action. See safety note on page 2 for confined space entry safety requirements.

| Item # | Inspection Item Description | Status | Indicate Action Required or Action Planned | Indicate Action Taken (Include Date Completed) |
|---|---|---|---|---|
| 1 | Unpleasant odors | | | |
| 2 | Access lid or hatch damaged / not operable / not accessible | | | |
| 3 | Water in vault during dry season / extended drawdown time of > 48 hrs | | | |
| 4 | Trash, debris or sediment accumulation within the vault | | | |
| 5 | Visible contaminants / pollution on interior vault surfaces or in sump | | | |
| 6 | Pretreatment device damaged or bypassed / offline | | | |
| 7 | Sediment build-up in pretreatment device / device clogged | | | |

| Item # | Inspection Item Description | Status | Indicate Action Required or Action Planned | Indicate Action Taken (Include Date Completed) |
|---|---|---|---|---|
| 8 | Inlet, outlet and/or emergency overflow blockage | | | |
| 9 | Piping, valves, vents or baffles damaged | | | |
| 10 | Access ladders or steps damaged or missing | | | |
| 11 | Structural damage to vault or major components | | | |
| 12 | Unauthorized Modifications | | | |
| 13 | Mosquitos / larvae observed inside vault* | | | |

*If mosquitos or mosquito larvae are observed, please contact the San Francisco Environmental Health Vector Control Program at (415) 252-3806, or email EnvHealth.DPH@sfdph.org.

**SAFETY NOTE:** Detention vaults are confined spaces. A confined space is a space that has limited openings for entry or exit, is large enough for entering and working, and is not designed for continuous worker occupancy. Refer to and follow all OSHA requirements and regulations before entering a confined space. Visit https://www.osha.gov/SLTC/confinedspaces/ for more information.

By completing and signing the Annual Self Certification (ASC), the Owner/Representative of the property subject to this ASC hereby acknowledges receipt of the ASC and agrees to take any and all necessary steps to comply with the ASC, the San Francisco Stormwater Management Requirements and Design Guidelines, the San Francisco Stormwater Management Ordinance (San Francisco Public Works Code Section 147 et seq.), and all other applicable laws, ordinances, and regulations. Failure to complete and provide a signature by the established deadline will result in the issuance of a non-reporting fee in accordance with the SFPUC Rates Schedule.

Signature: _____ Date: _____

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## Annual Self-Certification Checklist Instructions

# DETENTION TANK
## (AKA: detention vault, detention pipe)

**NOTE: These instructions are intended to be a companion piece to the Annual Self-Certification Checklist. The information contained herein is to be used to help the preparer of the Annual Self-Certification Checklist accurately conduct an inspection and properly complete the form.**

**SAFETY NOTE: Detention vaults are confined spaces. A confined space is a space that has limited openings for entry or exit, is large enough for entering and working, and is not designed for continuous worker occupancy. Refer to and follow all OSHA requirements and regulations before entering a confined space. Visit https://www.osha.gov/SLTC/confinedspaces/ for more information.**

**Abbreviations:** SMR: San Francisco Stormwater Management Requirements and Design Guidelines; SCP: Stormwater Control Plan; SMO: San Francisco Stormwater Management Ordinance; BMP: Best Management Practice (Detention Vault); GI: Green Infrastructure

| Item # | Inspection Item Description | Inspection Instructions and Explanation |
|---|---|---|
| 1 | Unpleasant odors | **Area of Concern:**<br>Several maintenance-related factors can lead to unpleasant odors in GI installations. Any vault that consistently fails to draw down completely within 48 hours can become anaerobic. The buildup of bacteria inside the vault, along with decaying organic material and trash can cause these odors.<br>**Maintenance Solution:**<br>For more information on ponded water and extended drawdown time, see Item #3 below. |
| 2 | Access lid or hatch damaged / not operable / not accessible | **Area of Concern:**<br>Inspection and maintenance tasks rely on unobstructed access to the detention vault structure. Note if the vault is inaccessible for any reason and take steps to correct the issue and restore accessibility.<br>**Maintenance Solution:**<br>Corrective measures may range from simply lubricating access hatch hinges to removing and replacing the entire access hatch or manhole frame and lid. |

| Item # | Inspection Item Description | Inspection Instructions and Explanation |
|---|---|---|
| 3 | Water in vault during dry season / extended drawdown time of > 48 hrs. | **Area of Concern:**<br>Ponded water resulting from extended drawdown times beyond 48 hours can lead to several problems such as: unpleasant odors, lack of capacity to accommodate runoff from successive storms, and creation of mosquito habitats.<br><br>Ponded water and drawdown failure can be caused by the following:<br>• large amounts of sediment or debris accumulation in the vault<br>• blocked, clogged, or broken drains<br>• blocked or clogged outflow structures and/or sand traps<br><br>**Maintenance Solution:**<br>Inspecting the outflow structure or sand trap can be done by removing the lid or opening the access hatch and visually inspecting for standing water or excessive debris accumulation.<br><br>Clogged outflow structures can be cleared by jetting or snaking the underdrain pipe or culvert that connects the structure to the sewer and by removing accumulated debris and sediment from the bottom of the structure with hand tools or by use of a vactor truck. Video inspection of the drain pipes may be performed to determine the source of the pipe failure or blockage. |
| 4 | Trash, debris, or sediment accumulation within the vault | **Area of Concern:**<br>Trash, debris, and sediment accumulation can clog outflow structures, which could lead to extended drawdown times. Clogged outflow structures can also lead to overflowing and flooding.<br><br>**Maintenance Solution:**<br>All trash and debris should be removed from the vault before the start of the rainy season (October 15), or as frequently as site conditions dictate, with hand tools or by use of a vactor truck, and discarded at an appropriate facility. |
| 5 | Visible contaminants / pollution on interior vault surfaces or in sump | **Area of Concern:**<br>Visible surface contaminants and pollution can range from inert substances to hazardous substances that impact environmental or human health.<br><br>Examples of inert contaminants are masonry, plaster or concrete “washout,” and masonry or roadway saw cutting slurry and residue. Examples of hazardous contaminants are petroleum-based substances, caustic chemicals, pesticides, and herbicides. These pollutants can often be identified by sight or smell when they become deposited in a detention vault.<br><br>**Maintenance Solution:**<br>If pollutants are detected, investigations must be conducted to determine the source of the contaminant, mitigate that source, and then take steps to clean up the contamination. For inert substances, cleanup can typically be conducted by regular maintenance personnel by simply scraping off, pressure washing, or vactoring the contaminated material and discarding it at an appropriate facility. Hazardous substance cleanup will require specially trained and licensed contractors and special disposal conforming to local and national laws and regulations. |
| 6 | Pretreatment device damaged or bypassed / offline | **Area of Concern:**<br>To provide floatable and sediment capture from stormwater upstream of the detention vault, a pretreatment device must be in place. The device must be clear of debris and sediment and working properly.<br><br>**Maintenance Solution:**<br>To ensure that pretreatment devices are online and working properly during dry weather, run a garden hose or other water source into a nearby cleanout or inlet to test that water enters and exits the pretreatment device before accumulating in the detention vault. If the pretreatment device is missing, unhooked or damaged, replace with a new device. |

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| Item # | Inspection Item Description | Inspection Instructions and Explanation |
|---|---|---|
| 7 | Sediment build-up in pretreatment device / device clogged | **Area of Concern:**<br>Sediment accumulation in pretreatment devices is normal and expected. However, steps must be taken to remove sediment accumulation on an annual basis (or more often, depending on site conditions) to keep the pretreatment device functioning properly.<br><br>**Maintenance Solution:**<br>Sediment and debris can collect in the sump area (sediment storage area). This accumulated sediment and debris must be removed by hand or by vactor truck before the start of the rainy season (October 15), or as frequently as site conditions dictate, and discarded at an appropriate facility. |
| 8 | Inlet, outlet, and/or emergency overflow blockage | **Area of Concern:**<br>Trash and debris can create blockages at the inlet and outlet points, or at the overflow structure of detention vaults, inhibiting the flow of water into, through, or out of the facility.<br><br>Inlet blockages can cause stormwater flows to bypass the vault, or only allow partial flows into the vault, creating a situation where the vault is non-functioning or underperforming. Outlet and outlet structure blockages can create excessive ponding within and around the vault, potentially leading to hazardous conditions and property damage.<br><br>**Maintenance Solution:**<br>Blockages must be cleared before the start of the rainy season (October 15), before each forecast storm if site conditions require, and/or as frequently as site conditions dictate. Trash and debris must be removed by hand or with a vactor truck and disposed of at an appropriate facility. Overflow structure grates, sumps and traps must be cleared of debris by hand or vactor truck and discarded at an appropriate facility. |
| 9 | Piping, valves, vents or baffles damaged | **Area of Concern:**<br>Detention vaults can contain many structural components that are key to the function of the installation. If any of the following components are damaged or inoperable, the function of the vault may be compromised.<br>• Inlet and outlet piping that directs stormwater to and from the vault<br>• Vent pipes and cleanouts that provide maintenance access and provide air movement and venting<br>• Baffles which separate floating and settled debris from the stormwater<br><br>**Maintenance Solution:**<br>Repair or replace damaged or inoperable components to restore the component's function. |
| 10 | Access ladders or steps damaged or missing | **Area of Concern:**<br>Inspection and maintenance tasks rely on unobstructed access to the detention vault structure, which is facilitated by ladders or steps cast into the vault walls. Note if the vault steps are damaged, take steps to correct the issue to restore accessibility.<br><br>**Maintenance Solution:**<br>Repair or replace damaged or missing ladders or steps. |

| Item # | Inspection Item Description | Inspection Instructions and Explanation |
|---|---|---|
| 11 | Structural damage to vault or major components | **Area of Concern:**<br>Minor damage to structural components such as walls, floors, baffles and lids should be repaired on an annual basis. These minor repairs can consist of, but are not limited to, patching chips and cracks to concrete structures.<br><br>More significant structural damage, such as damage caused by nearby construction work or natural disasters must be repaired as soon as possible. These major repairs can consist of removal and replacement of damaged lids, walls, floors, baffles or outflow structures, or structural bracing and supplemental reinforcement of failing structural components.<br><br>**Maintenance Solution:**<br>Repair or replace damaged components. |
| 12 | Unauthorized modifications | **Area of Concern:**<br>Unauthorized modifications consist of any changes to a vault that deviate from the approved construction documents. These modifications can take place during construction or can happen over time, after the vault is constructed.<br><br>The SMR Maintenance Agreement Exhibit B recorded on the deed of the property provides the original approved construction documents that can be referred to and used to determine if modifications have been made.<br><br>**Maintenance Solution:**<br>All unauthorized modifications must be corrected by returning the vault to its original configuration, as described in the approved construction documents contained in the SMR Maintenance Agreement Exhibit B. Take steps to correct the issue and restore to the original condition. |
| 13 | Mosquitos / larvae observed inside vault | **Area of concern:**<br>Ponded water resulting from extended drawdown time beyond 48 hours may lead to the development of a mosquito habitat.<br><br>**Maintenance Solution:**<br>See Item #3 above for remedies to extended drawdown times. For more information on mosquito control visit http://www.sfdph.org/dph/eh/WestNile/default.asp or http://www.sfmosquito.org/. If mosquitos or mosquito larvae are observed, please contact the San Francisco Environmental Health Vector Control Program at (415) 252-3806, or email EnvHealth.DPH@sfdph.org. Also, consult with a licensed professional pest control service for eradication, as appropriate. |