

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
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Annual Self-Certification Checklist

SUBSURFACE INFILTRATION SYSTEM (Concrete Structure)

(AKA: dry well, stormwater drainage well, stormwater injection well, infiltration gallery, seepage pit)

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 Dry Well (Concrete Structure) Inspection instructions included in this packet for detailed descriptions of conditions requiring maintenance and further action. See 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	Surface ponding over dry well location			
4	Water in dry well during dry season / extended drawdown time of > 48 hrs.			
5	Trash, debris or sediment accumulation within the dry well			
6	Visible contaminants / pollution on interior dry well surfaces			

7	Pretreatment device damaged or bypassed / offline			
Item #	Inspection Item Description	Status	Indicate Action Required or Action Planned	Indicate Action Taken (Include Date Completed)
8	Sediment build-up in pretreatment device / device clogged			
9	Inlet, outlet and/or emergency overflow blockage			
10	Piping, cleanouts, vents or baffles damaged			
11	Access ladders or steps damaged or missing			
12	Structural damage to dry well or major components			
13	Surface settlement over the dry well location			
14	Unauthorized modifications			
15	Mosquitos / larvae observed inside well*			

*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: Some dry wells 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.

Signature: _____ Date: _____



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Annual Self-Certification Checklist Instructions

SUBSURFACE INFILTRATION SYSTEM (Concrete Structure) (AKA: dry well, stormwater drainage well, stormwater injection well, infiltration gallery, seepage pit)

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: Dry wells 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 Regulations and Design Guidelines; SCP: Stormwater Control Plan; SMO: San Francisco Stormwater Management Ordinance; BMP: Best Management Practice (Dry Well); GI: Green Infrastructure

Item #	Inspection Item Description	Inspection Instructions and Explanation
1	Unpleasant odors	<p>Area of Concern: Several maintenance-related factors can lead to unpleasant odors in GI installations. Any dry well that consistently fails to draw down completely within 48 hours can become anaerobic. The buildup of bacteria inside the dry well, along with decaying organic material and trash can cause these odors.</p> <p>Maintenance Solution: For more information on ponded water and extended drawdown time, see the Inspection instructions and explanation for Item #4 below.</p>
2	Access lid or hatch damaged / not operable / not accessible	<p>Area of Concern: Inspection and maintenance tasks rely on unobstructed access to the detention dry well structure. Note if the dry well is inaccessible for any reason and take steps to correct the issue and restore accessibility.</p> <p>Maintenance Solution: Corrective measures may range from simply lubricating access hatch hinges to removing and replacing the entire access hatch or manhole frame and lid.</p>

Item #	Inspection Item Description	Inspection Instructions and Explanation
3	Surface ponding over dry well location	<p>Area of Concern: Surface ponding over the dry well location is an indication of a failure somewhere in the system. Several factors can lead to surface ponding, including:</p> <ul style="list-style-type: none"> • Reduced infiltration capacity due to: <ul style="list-style-type: none"> ○ Sediment build up in the dry well ○ Contaminants that have blocked infiltration surfaces in the dry well such as cement slurry ○ Over-compaction around the dry well structure ○ Root intrusion that has blocked aggregate void space • Clogged outflow or emergency overflow structures or pipes <p>Maintenance Solution: See Item #4 below for more information related to surface ponding.</p>
4	Water in dry well during dry season / extended drawdown time of > 48 hrs	<p>Area of Concern: Ponded water and extended drawdown times beyond 48 hours in dry well installations can lead to several problems such as unpleasant odors, lack of capacity to accommodate runoff from successive storms, and creation of mosquito habitats.</p> <p>Ponded water and drawdown failure can be caused by the following:</p> <ul style="list-style-type: none"> • large amounts of sediment or debris accumulation in the dry well • blocked, clogged, or broken drains • blocked or clogged outflow structures and/or sand traps <p>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.</p> <p>Maintenance Solution: 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.</p>
5	Trash, debris, or sediment accumulation within the dry well	<p>Area of Concern: 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.</p> <p>Maintenance Solution: All trash and debris should be removed from dry well 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.</p>
6	Visible contaminants / pollution on interior dry well surfaces	<p>Area of Concern: Visible surface contaminants and pollution can range from inert substances to hazardous substances that impact environmental or human health.</p> <p>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 dry well.</p> <p>Maintenance Solution: 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.</p>



Annual Self-Certification Checklist Instructions

Item #	Inspection Item Description	Inspection Instructions and Explanation
7	Pretreatment device damaged or bypassed / offline	<p>Area of Concern: To provide floatable and sediment capture from stormwater upstream of the detention dry well, a pretreatment device must be in place that is clear of debris and sediment and working properly.</p> <p>Maintenance Solution: 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 dry well. If the pretreatment device is missing, unhooked or damaged, replace with a new device.</p>
8	Sediment build-up in pretreatment device / device clogged	<p>Area of Concern: 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.</p> <p>Maintenance Solution: 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.</p>
9	Inlet, outlet, and/or emergency overflow blockage	<p>Area of Concern: Trash and debris can create blockages at the inlet and outlet points or at the overflow structure of dry wells, inhibiting the flow of water into, through, or out of the facility.</p> <p>Inlet blockages can cause stormwater flows to bypass the dry well or only allow partial flows into the dry well, creating a situation where the dry well is non-functioning or underperforming. Outlet and outlet structure blockages can create excessive ponding within and around the dry well, potentially leading to hazardous conditions and property damage.</p> <p>Maintenance Solution: 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.</p>
10	Piping, cleanouts, vents, or baffles damaged	<p>Area of Concern: Dry Wells 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 dry well may be compromised.</p> <ul style="list-style-type: none"> • Inlet and outlet piping that directs stormwater to and from the dry well • Vent pipes and cleanouts that provide maintenance access and provide air movement and venting • Baffles which separate floating and settled debris from the stormwater <p>Note if these components are damaged or inoperable and take steps to correct the issue to restore the component's function.</p> <p>Maintenance Solution: Repair or replace damaged or inoperable components.</p>

Item #	Inspection Item Description	Inspection Instructions and Explanation
11	Access ladders or steps damaged or missing	<p>Area of Concern: Inspection and maintenance tasks rely on unobstructed access to the detention dry well structure, which is facilitated by ladders or steps cast into the dry well walls. Note if the dry well steps are damaged and take steps to correct the issue to restore accessibility.</p> <p>Maintenance Solution: Repair or replace damaged or missing ladders or steps.</p>
12	Structural damage to dry well or major components	<p>Area of Concern: 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.</p> <p>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.</p> <p>Maintenance Solution: Repair or replace damaged components.</p>
13	Surface settlement over the dry well location	<p>Area of Concern: Improper backfilling during construction can lead to surface settlement that develops suddenly when the dry well first fills with stormwater or slowly over time from a repeated cycle of filling of the dry well and the subsequent infiltration of stormwater. This settlement can cause hazardous surface conditions if the dry well is located under or near a pedestrian area or accessible lawn area.</p> <p>Maintenance Solution: Note and monitor any settlement and have the settled surfaces repaired as soon as possible to reduce trip and fall hazards.</p>
14	Unauthorized modifications	<p>Area of Concern: Unauthorized modifications consist of any changes to a dry well that deviate from the approved construction documents. These modifications can take place during construction or can happen over time after the dry well is constructed.</p> <p>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.</p> <p>Maintenance Solution: All unauthorized modifications must be corrected by returning the dry well 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 to restore to the original condition.</p>
15	Mosquitos / larvae observed inside dry well*	<p>Area of Concern: Ponded water resulting from extended drawdown times beyond 48 hours may lead to the development of a mosquito habitat.</p> <p>Maintenance Solution: 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.</p>