

# Revel Environmental Manufacturing Inc.

sales@remfilters.com

(888) 526-4736 Lic. No. 857410

Northern California 960-B Detroit Avenue Concord, California 94518 P: (925) 676-4736 F: (925) 676-8676 Southern California 2110 South Grand Avenue Santa Ana, California 92705 P: (714) 557-2676 F: (714) 557-2679

# RE: Trash Treatment Control Device Application For REM Inc. Full Trash Capture TRITON CPS-FTC Device (Crescent Pipe Screen)

August 19, 2024

Mr. Leo Cosentini California State Water Resources Control Board Division of Water Quality P.O. Box 100 Sacramento, CA. 95812

Dear Mr. Cosentini,

REM Inc. would like to thank you for taking this opportunity to review our amended application for our certified full capture system, the **TRITON CPS-FTC** (application 12). The amended application has been updated to correspond to the current application requirements but includes changes not to the functionality of the system. The primary revision included in the amended application is clarification of when the deflector plate is mandatory or optional. A revision of the deflector plate itself is also included. The deflector plate now has a hinged flap for Vector access.

Again, we thank you for taking this time to review our amended application, and if any additional information is required or needed, please feel free to contact us when needed.

Charlie Fleischmann

Charlie Fleischmann Vice President Revel Environmental Manufacturing, Inc. REM Inc.



# Revel Environmental Manufacturing Inc.

(888) 526-4736 sales@remfilters.com

Lic. No. 857410

Northern California 960-B Detroit Avenue Concord, California 94518 P: (925) 676-4736 F: (925) 676-8676

Southern California 2110 South Grand Avenue Santa Ana, California 92705 P: (714) 557-2676 F: (714) 557-2679

#### Section: 1

# **Cover Letter**

#### 1A: General Description

The TRITON CPS-FTC can be used as a stand-alone filtration system for capturing trash and debris inside of storm drain catch basins. It is designed to capture trash as small as 4.8mm, exceeding the requirement of 5mm for Full Trash Capture Systems. It does this, while still maintaining excellent flow rates due to its 51% Open Area. The CPS-FTC system is intended to be mounted in front of the catch basins discharging connector pipe and is designed for lateral and surface flow capturing applications.

#### 1B: System owner contact and location information

Charlie Fleischmann Vice President 960 Detroit Ave. Suite B Concord, CA. 94518 (925) 676-4736 Charlie@remfilters.com

# 1C: Website Information

https://remfilters.com

#### **1D: Manufacturing Location**

All REM TRITON products are manufactured and designed in the state of California. REM Inc. has specialized in providing storm drain filters/trash capture systems all over the country for 26+ years. \*Address location listed above.

#### 1E: Brief summary of field/testing results to demonstrate device functions

The TRITON CPS-FTC was successful in capturing debris that is 5mm or greater in size, in a number of test basins located in the greater San Francisco Bay Area. It has been approved and in use for 8+ years.

#### **1F: Device Installation Locations**

REM Inc. has been installing CPS-FTC systems in numerous California locations as this currently an approved FTC system. Some installation areas of acknowledgement would be:

City of Santa Clara: Dept. of Public Works City of Concord: Dept. of Public Works City of Hayward: Dept. of Public Works

Please feel free to ask for a more detailed reference list.

#### 1G: High Flow System Preference

This filter system is not intended as a High Flow system and a High Flow listing is not necessary.

#### **1H:** Certification Clause

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons that manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Charlie Fleischmann

Charlie Fleischmann

Vice President

REM Inc.

<b>Section:</b>	2
occuon.	_

# **Table of Contents**

~ .		Page:
Section	ion: 3 Physical Description	
3A:	Trash Capture	<u>5</u>
3B:	Peak Flows/Trash Capture Volume	5
3C:	Hydraulic Capacity	<u>5</u>
3D:	Comparison Table	(
3E:	Design Drawings	_
3F:	Optional Components	
<b>3G:</b>	Bypass	0
3H:	Previously Trapped Trash	
3I:	Calibration Feature	9
<b>3J:</b>	Photos	10
3K:	Material Type	11
3L:		11
Section	ion: 4 Installation Guidance	
4A:	Standard Installation Procedures	12
4B:		14
4C:	Methods for diagnosing and correcting installation errors	14
Secti	ion: 5 Operation and Maintenance Information	
5A:	Inspection Procedures	14
<u>5B:</u>	Maintenance frequency considerations	14
<u>5C:</u>	Maintenance Procedures	14
<u>5D:</u>	Essential Equipment for maintenance activities	14
5E:	Effects of deferred maintenance	14
5F:	Repair procedures for system components	
Secti	ion: 6 Vector Control Accessibility	
<u>6A:</u>	Accessibility Summary for Vector Control Access of System	15
<u>6B:</u>		15
<u>6C:</u>	Date of submission for Vector access verification	17
<u>6D:</u>	Date of Verification from MVCAC	17
Secti	ion: 7 Reliability Information	
7A:	Estimated Lifespan of system and components	19
7B:	Warranty Information	19
7C:	Customer Support Information	10
Section	ion: 8 Field/Lab testing information and analysis	
8A:	Field testing and results for the system	19

## **Section 3: Physical Description**

#### **3A: Trash Capture**

The TRITON CPS-FTC system utilizes a 4.8mm Perforated Stainless Steel filter element, the 4.8mm circular openings ensure all 5mm or greater particles are captured. This open area helps minimize occlusion and blinding while filtering at high volumes. The PERF is housed on the exterior of a 10-gauge stainless-steel frame and is offered in a wide range of configurations depending upon the many different types and sizes of catch basins available today as well as to accommodate the challenges of existing infrastructure.

#### **3B: Peak Flows/Trash Capture Volumes**

The TRITON CPS-FTC system utilizes a 51% Open Area perforated stainless steel screen.

CPS-FTC systems are primarily sized in accordance with the catch basin exit pipe diameter/size. Selecting the correct size unit, comparative to the outgoing pipe size will ensure max flow/bypass rates are met. The catch basin structure size is next used as a determining factor for identifying the proper size unit. For example: a 3' X 3' catch basin could utilize a model TR24(16)CPS-FTC (24" wide unit) which allows enough spacing from the walls for incoming water flows and customized positioning based on infrastructure layout if needed.

#### 3C: Hydraulic Capacity

#### **Section 1:**

\*Hydraulic Capacity for standard systems below:

Model:	TR20CR12	TR24CR8	TR24CR8 TR24CR16 TR28CR16		TR40CR18	
Width:	20"	24"	24"	28"	40"	
Height:	12"	8"	16"	16"	18"	
Depth/ Radius:	8"	12"	12"	14"	20"	
Bypass Radius	6"	10"	10" 10"		18"	
Max Treatment Rate: (Empty)	3.40 (CFS)	3.44 (CFS)	6.88 (CFS)	8.03 (CFS)	12.90 (CFS)	
Treatment Rate at 50% capacity:	1.70 (CFS)	1.77 (CFS)	3.44 (CFS)	4.01 (CFS)	6.45 (CFS)	
Treatment Rate at 75% capacity:	.85 (CFS)	.86 (CFS)	1.72 (CFS)	2.01 (CFS)	3.22 (CFS)	
Bypass Flow:	15.48 (CFS)	25.65 (CFS)	25.65 (CFS)	29.24 (CFS)	42.55 (CFS)	

#### **Section 2:**

To determine the treatment rates, a commonly used equation was calculated. This is similar to the method used by the County of Los Angeles Dept. of Public Works in a 2006 report on Full Capture Screen and Bypass Requirements. An example of the equation is below:

$$Q_{MTFR} = \frac{C_d A \sqrt{2gh}}{SF}$$

Calculation for the model TR28CR16 CPS-FTC:

$$Q_{MTFR} = \frac{0.62 * 4.88sf \sqrt{2 * \frac{32.2ft}{s^2}} * .66ft}{2}$$

This equals: **8.03 CFS** for the maximum treatment flow rate, while utilizing a safety factor of 2.

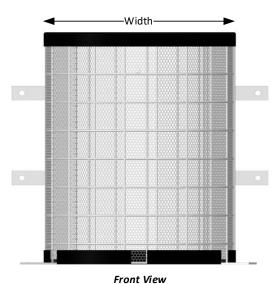
#### **3D:** Comparison Table

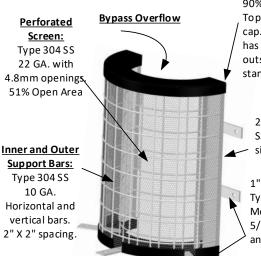
Model:	TR20CR12	TR24CR8	TR24CR16	TR28CR16	TR40CR18
Width:	20"	24"	24"	28"	40"
Height:	12"	8"	16"	16"	18"
Depth/ Radius	8"	12"	12"	14"	20"
Bypass Radius	6"	10"	10"	12"	18"
Max Treatment Rate: (Empty)	3.40 (CFS)	3.44 (CFS)	6.88 (CFS)	8.03 (CFS)	12.90 (CFS)
Maximum Trash Capture Volume: (gallons)	60.7 Gallons (3' X 3' Drain)	37 Gallons (3' X 3' Drain)	74 Gallons (3' X 3' Drain)	125.8 Gallons (3' X 5' Drain)	186.6 Gallons (3' X 7' Drain)

 $<sup>*</sup>This\ area\ intentionally\ left\ blank*$ 

#### **3E: Design Drawings for Standard Devices and Alternative Configurations**

## REM TRITON CPS-FTC Standard size dimensions





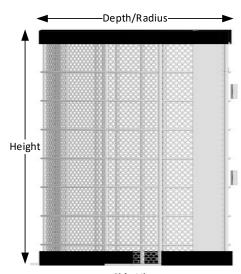
90% Recycled ABS Top and bottom cap. Bottom cap has 1" wide cut outs to prevent standing water.

> 20 GA. Type 304 SS U-Channel side supports.

1" Wide X 2" Length Type 304 SS Mounting Tabs with 5/16" hole for anchoring.

#### Notes:

- Units are constructed using a 10 GA. Stainless Steel inner and outer housing support for added structural integrity. Using a 22 gauge outer perforated stainless steel
- Perforated stainless steel is configured with a 51% Open Area.
- Custom sizes and configurations are available.
- Multiple units can be mounted vertically to increase capture capacity.
- CPS unit is capable of housing an absorbent media if ever required.
- CPS unit can also be elevated off the basin floor in "Sump" type basins.
- Unit can be configured with .5" thick HDPE back and bottom plates for added flexibility during installation.



#### Side View

#### **Deflector Plate**

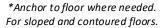
Mandatory Deflector Plate. Minimum of 3" diameter center opening with a flap door to prevent debris bypass.

> Deflector plate is configured using a .5" thick HDPE with Stainless Steel mounting brackets.



Simply attach to the bottom of CPS unit with (3) bolts, before installation.

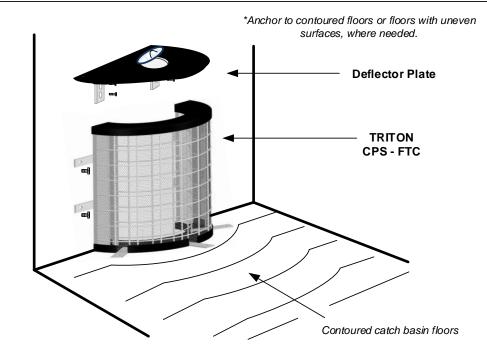
Contour Apron is configured using a Type 304 SS perforated sheet with 4.8mm openings.

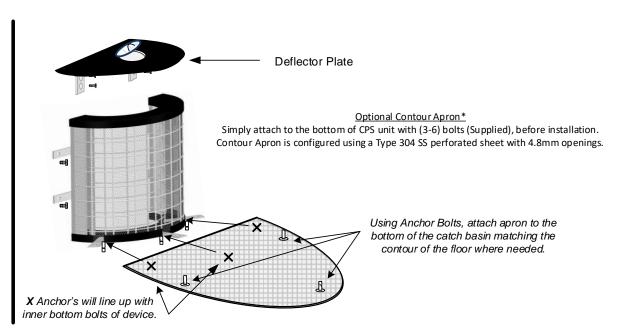


added Hexibility during installation.							
Model:	Width:	Height:	Depth/Radius:	Filtered	Bypass	Bypass	
moder.	wiatii.	Tielgiit.	Depthynadias.	Flow Rate:	Radius:	Flow Rate:	
TR20CR12 CPS-FTC	20"	421	8"	3.40	6"	15.48	
TRZUCKIZ CPS-FTC	20	20" 12"	8"	(CFS)		(CFS)	
TR24CR8 CPS-FTC	24"	8"	12"	3.44	10"	25.65	
				(CFS)		(CFS)	
TR24CR16 CPS-FTC	24"	16"	12"	6.88	10"	25.65	
				(CFS)		(CFS)	
TR28CR16 CPS-FTC	2011	4.611	16" 14"	8.03	42"	29.24	
	28" 16	16"		(CFS)	12"	(CFS)	
TR40CR18 CPS-FTC	40" 18"	10"	20"	12.90	10"	42.55	
		18"		(CFS)	18"	(CFS)	

# REM Inc. Triton Crescent (CPS) FTC Filter - Apron

(Designed for floor mounting in square and round catch basins when the basin floor is channeled or trough like)





THE DESIGN AND DETAIL OF THIS DRAWING IS THE PROPERTY OF REMINC. AND IS NOT	REM Inc.				
TO BE USED EXCEPT IN CONNECTION WITH OUR WORK, DESIGN AND INVENTION RIGHTS ARE RESERVED.		REM Triton Crescent (CPS) FTC Filter - Apron General use guidelines			
PH: (888) 526-4736	Drawn By:	n By: For: Date: St Square and Round catch basins		Sheet:	
Dimensions are in inches unless otherwise noted.	C.F.	(floor mount)	6/2024	1 of 1	

#### **3F: Optional Components**

The CPS-FTC has an optional 4.8mm stainless steel perforated apron. This is used in cases where the catch basin floor has some channeling or a trough like bottom. When properly attached, it will create a seal at the base of the CPS system and catch basin floor in circumstances where the floor is not a flat surface and in which the CPS bottom does not sit flush when installing.

#### **3G: Bypass**

The TRITON CPS-FTC has a built-in overflow bypass, this is breached only when the system has become inundated with an excessive amount of debris and the system has reached its debris holding capacity, or during a large storm event that exceeds the hydraulic capacity of the system.

It is ultimately the responsibility of the engineer and/or deciding party to determine that the correct unit size is appropriate for the selected basin and corresponding flow capacity.

<sup>\*</sup>Standard Bypass Rates Below:

Model: CPS-FTC	TR20CR12	TR24CR8	TR24CR16	TR28CR16	TR40CR18
Width:	20"	24"	24"	28"	40"
He ig ht :	12"	8"	16" 16"		18"
De pth/Radius:	8"	12"	12"	14"	20"
Filtered Flow Rate:	3.40 (CFS)	3.44 (CFS)	6.88 (CFS)	8.03 (CFS)	12.92 (CFS)
Bypass Radius:	6"	10"	10"	12"	18"
Bypass Flow:	rpas s Flow: 15.48 25.65 (CFS) (CFS)		25.65 (CFS)	29.54 (CFS)	42.55 (CFS)

#### **3H: Previously Trapped Trash**

With the design of the TRITON CPS-FTC, trash should only be re-introduced in a case where the system has reached 100% capacity during normal operating conditions. REM recommends that the systems are cleaned and maintained before or at 50% capacity to ensure proper functionality.

#### **3I:** Calibration Feature

These devices do not contain any adjustable calibration features.

\*This area intentionally left blank\*

# 3J: Photos



#### **3K: Material Types**

The design and construction of the TRITON CPS-FTC is comprised of two materials; Type 304 stainless steel and a 90% recycled content ABS plastic cap with UV Inhibitors. The main housing and structural support body is made up of an inner and outer wall of 10 GA. Type 304 stainless steel welded mesh with 2" X 2" square openings. These have a 20 GA. U-Channel on the right and left back side, welded to create a continuous support. Behind the outer wall of 10 GA. is the perforated screen which is 22 GA. Type 304 SS with 3/16" (4.8mm) 51% Open Area, punched holes on staggered centers.

The mounting tabs are also Type 304 SS, they are 1/16" thick, 1" wide, and extend 2" beyond the outer wall for anchor access. These have a 5/16" punched hole for anchoring. An optional apron for "trough or sloped" catch basin floors is also available and this is made from the same Type 304 SS 4.8mm perforated screen.

The Deflector Plates are comprised of the same Type 304 SS perforated steel for the Vector flap with stainless steel hook grab and .5" thick HDPE. Deflector plates are anchored to wall at the desired height greater than 6" above the top of the CPS using the stainless steel corner brackets and anchors.

#### 3L: Estimated Lifespan of Design

Under normal operations and with the impact of large storm events, the TRITON CPS-FTC has an estimated lifespan of 20+ years. Naturally occurring elements and mineral saturation do not have a resounding effect on either the stainless steel or ABS used in construction.

\*This area intentionally left blank\*

#### **Section 4: Installation Guidance**

#### 4A: Standard and Alternative Installation Procedures



# **Revel Environmental Manufacturing Inc.** sales@remfilters.com (888) 526-4736 Lic. No. 857410

Northern California 960-B Detroit Avenue Concord, California 94518 P: (925) 676-4736 F: (925) 676-8676 Southern California 2110 South Grand Avenue Santa Ana, California 92705 P: (714) 557-2676 F: (714) 557-2679

# INSTALLATION INSTRUCTIONS FOR THE TRITON MODEL: CPS – FTC

**Step 1)** CPS (Connector Pipe Screens) have been designed to be placed in front of the downstream exit pipe in a catch basin.

<u>Step 2)</u> Clean bottom of catch basin where the CPS Filter will be installed. Attach Neoprene gasket to back and bottom of CPS device.

Step 3) Place CPS filter into position. Using a hammer drill with ¼" masonry drill bit, drill through existing mounting plates pre-drilled holes that are attached to both the bottom and sides of the CPS Filter. Hammer in anchor bolt, place washer over plate, then tighten down with nut using a 7/16" socket drive.

<u>Step 4)</u> When installing the Deflector Plate, position the plate a minimum of 6" above the top of the CPS, then using the existing pre-drilled holes in the brackets, mark or drill through the holes used for the anchor bolts. Hammer in anchor bolts, place washer over plate, then tighten down with nut using a 7/16" socket drive.

The Contour Apron, if needed, is flexible enough to bend to the contour of a slightly channeled catch basin floor. Three to four anchor bolts should be adequate to secure apron to catch basin floor. The apron bolts onto the bottom of the CPS using the pre-installed bolts underneath it. (See Figure #3)

If you need further assistance please call us direct at (888) 526-4736 or email us your questions at: Sales @remfilters.com

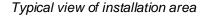
#### **TOOLS REQUIRED:**

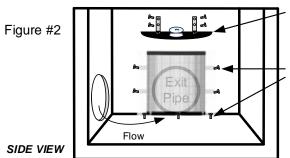
- 1) Hammer Drill, with ¼" masonry drill bit.
- 2) Hammer.
- 3) ¼" X 2" or 3" Concrete Anchors.
- 4) 7/16" Socket Drive.



MADE IN USA

Typical view of installation

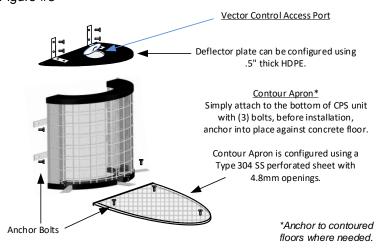


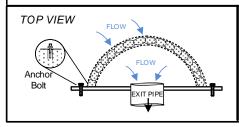


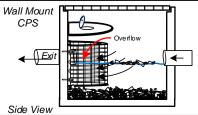
Deflector Plate
To be mounted above CPS Unit.

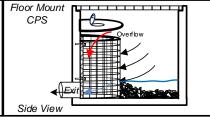
Stainless Steel
Mounting
Anchors
Simply drill holes
for ¼" anchors

Figure #3









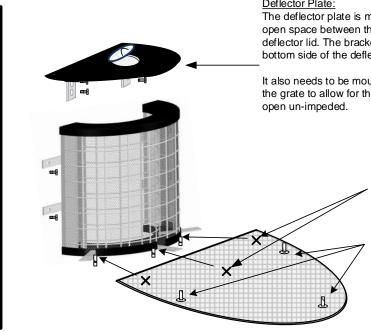
#### REM Inc.

# Installation instructions for the model: Triton Crescent (CPS) FTC Filter – Deflector & Apron

(Designed for floor mounting in square and round catch basins)

#### TOOLS REQUIRED:

- 1) Hammer Drill, with 1/4" masonry drill bit.
- 2) Hammer.
- 3) 7/16" Socket Drive.
- 4) 1/4" X 2.25" Concrete Anchors. (Supplied)



#### Deflector Plate:

The deflector plate is meant to be positioned with at least 6" of open space between the top of the CPS and bottom of the deflector lid. The brackets can be positioned on the top or the bottom side of the deflector.

It also needs to be mounted at least 4" below the bottom of the grate to allow for the opening of the Vector access port to

#### Contour Apron:

(If needed) (Not part of a standard CPS system configuration) The Contour Apron is used when the floor of the basin has an irregularity like a channeled or trough like floor.

It attaches to the bottom of the CPS using the already supplied bolts on the bottom of the CPS cap.

Once attached the CPS can be put into place and anchors installed into the CPS tabs and then directly into the apron in the pictured locations. Alternative anchor points may be needed du to catch basin infrastructure limitations.

Contour Apron is configured using a Type 304 SS perforated sheet with 4.8mm openings.

#### Apron:

Step #1) Attach the Apron to the bottom of the CPS device using the bolts located on the bottom of the device. Once attached, place the CPS unit up against the wall with the exit pipe centered through the opening of the unit. (Some units will be slightly offset) Drill through the tab opening or mark the hole placement with a permanent marker. Use hammer drill, and drill through the concrete. Attach the neoprene seal to the back of the CPS and the bottom if necessary. Place CPS unit back against wall and then concrete anchor in holes and hammer into place. Tighten down nut and washer.

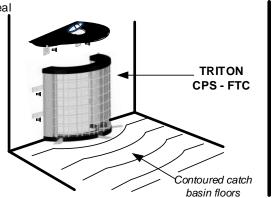
Step #2) Now that the CPS device is mounted, you can anchor the Apron into place. Press down on the apron to create some conformity between the apron and the channeled bottom, then simply drill through the perforated steel with your hammer drill and then hammer the anchors into place and tighten down with a socket wrench.

Step #3) Now that your Crescent is mounted securely, check for any additional gaps that may allow water to bypass the filter. Units are sent with a neoprene seal already attached, but due to irregular catch basin walls an expanding foam (not supplied) may be needed to fill any large gaps.

#### **Deflector Plate:**

Step #1) Position the Deflector plate evenly at least 6" above the CPS device. The Vector access port should be on the top side. The mounting brackets can be positioned on top or on the underneath of the plate. There should also be a minimum of 4" clearance from the top of the plate to the bottom of the grate.

Step #2) Drill through the pre drilled holes in the mounting brackets or mark with a permanent marker and then drill your holes. Insert anchors, hammer in place and then place Deflector Plate back in place and tighten down the nuts with a socket wrench.



THE DESIGN AND DETAIL OF THIS DRAWING IS THE PROPERTY OF REMINC. AND IS NOT		REM Ir	IC.	PATENT PENDING	
TO BE USED EXCEPT IN CONNECTION WITH OUR WORK, DESIGN AND INVENTION	REM Triton Crescent (CPS) FTC Filter - Apron (Installation instructions for floor mounting in square and round catch basins)				
RIGHTS ARE RESERVED.					
PH: (888) 526-4736	Drawn By:	For: Square and Round catch basins	Date:	Sheet:	
Dimensions are in inches unless otherwise noted.	C.F.	(floor mount)	6/2024	1 of 1	

#### **4B: Installation Limitations of System**

One of the common limitations found in the field are catch basins that are too shallow, or the infrastructure is not conducive for a standard trash capture system. We can filter many different types of storm drain configurations, but sometimes modifications or custom units are needed to properly capture the target contaminant. When we come across unusual drains, our approach is to always maximize the given catch basin configuration with the largest volume capturing ability. This may lead to a filter that will need to be customized to fit. Typical modifications that may be needed are: trimming the devices housing, cutting down the size of the filter, or adding attachments like an extension of stainless steel or HMWPE depending on the device and model type.

#### **4C: Diagnosing and Correcting Installation Errors**

A visual assessment can be done to determine if the device has not been installed correctly. If needed, the device can simply be removed by loosening the nuts on the anchors and removing the device. Proper re-installation can take place at that point.

# **Section 5: Operation and Maintenance Information**

#### **5A: System Inspection Procedures**

Each device inspection can be done visually. Remove the grate/manhole if needed and assess if the unit is damaged, at what capacity, or experienced a bypass event. REM recommends that devices not on a standard maintenance schedule be inspected 3 times per year or more if needed.

#### **5B: Minimum Maintenance Frequency**

REM recommends that devices be maintained 3 times per year, or as outlined by the governing body. It is recommended that devices do not reach more than 50% capacity without a maintenance event. This frequency is dictated by the loading capacity at each particular drain as well. If not properly maintained, devices will reach 100% capacity and begin the bypass event for debris entering into the catch basin. If filters are consistently above 50% full, REM recommends additional maintenance intervals.

#### **5C:** Maintenance Procedures

Secure area (Traffic and pedestrian controls, if needed). Pull grate and set aside. Remove (VAC) debris that has been captured in system. Pressure washing may also be necessary in some cases to remove certain debris. After system has been cleaned. Visually inspect filter for any damaged areas. Take a picture of the cleaned filter for your records. Fill out report if used for the given catch basin. Replace grate. Remove all traffic control devices.

#### **5D:** Essential Equipment and Materials

The maintenance on the TRITON CPS-FTC is accomplished for the most part by using an industrial vacuum truck due to the large capture capacity of the devices. Simply remove the grate and begin to remove the captured debris. The device can be brushed or sprayed off if needed. Take note of the amount of debris collected, along with the condition of the device. Vacuum Truck, Grate Pick.

#### **5E:** Effects of Deferred Maintenance

Typical implications of deferred maintenance consist primarily of debris that will begin to bypass the device because it has reached the full capacity of its limitations. If the device has been properly installed and supported, it should continue to remain in the original placement from the initial installation.

#### **5F: Repair Procedures**

In the case that a particular component is damaged, it is advised to call our customer service department for repair or replacement options. Please call (888) 526-4736 for repair or replacement issues.

# **Section 6: Vector Control Accessibility**

#### **6A: System Accessibility for Vector Control**

With a simple lift of the flap screen, access to the bottom and backside of the device is achieved. There is a hook in place that can be grabbed by hand or pick to allow for quick and easy Vector abatement activities. The access port opening will have a minimum 3" diameter opening and can range up to a 6" opening on larger systems. The flap door will overlap the opening by 1" on all sides.

6B: Accessibility drawings for Vector Control \*\*Please see next page for drawings\*\*

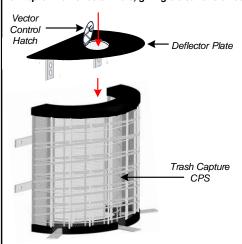
\*This area intentionally left blank\*

# **REM Inc.**VECTOR CONTROL ACCESSIBILITY

For Models: CPS-PERF-FTC (Triton Crescent Pipe Screen)

\*\*REM TRITON PERF Devices all have abatement access. All devices that use a cartridge or have deflector plates will have a Vector Control Access Hatch witch allows for a free and clear access to the bottom of catch basin's and/or the lateral lines below.

For CPS Filters, access to bottom of catch basin is done through the Vector Control Hatch on top of the Deflector Plate, giving a clear and direct opening access.



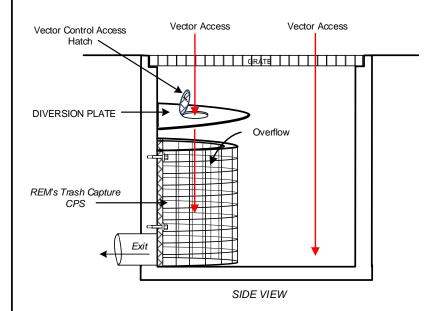


VECTOR CONTROL HATCH CLOSED



Top View

Center access opening has a minimum of 3" diameter opening. The size of the opening can be larger depending on the size of the system.









REM

Northern California 960-B Detroit Avenue Concord, California 94518 P: (925) 676-4736 F: (925) 676-8676 Southern California 2110 South Grand Avenue Santa Ana, California 92705 P: (714) 557-2676 F: (714) 557-2679



# **6C: Date of Submission to MVCAC**

Submission Date: 6/26/2024

# **6D: Date of Verification from MVCAC**

Verification and Approval Date: 8/14/2024

\*\*Approval letter on next page\*\*





One Capitol Mall, Suite 320 · Sacramento, CA 95814 · p: (916) 440-0826 · f: (916) 444-7462 · e: mvcac@mvcac.org

Revel Environmental Manufacturing Inc. 960 Detroit Ave. Suite B Concord. CA 94518

August 14, 2024

Dear Mr. Fleischmann,

Thank you for the submission of the Revel Environmental Manufacturing (REM) TRITON Connector Pipe Screen full trash capture device for review by the Mosquito and Vector Control Association of California pursuant to the SWRCB Trash Treatment Control Device Application Requirements. The Association has reviewed the conceptual drawings for the Connector Pipe Screen and verifies that provisions have been included in the design that allow for full visual access to all areas for presence of standing water, and when necessary, allows for treatments of mosquitoes.

It is understood that where space dictates a small Connector Pipe Screen with a minimum 3" access port opening, a larger access port shall be incorporated whenever the Connector Pipe Screen is able to accommodate such as indicated in Section 6 of the REM Inc. Full Trash Capture TRITON CPS-FTC Device application dated June 18, 2024.

While this verification letter confirms that inspection and treatment for the purpose of minimizing mosquito production should be possible with the REM Inc. TRITON Connector Pipe Screen full trash capture device as presented, it does not affect the local mosquito control agency's rights and remedies under the State Mosquito Abatement and Vector Control District Law. For example, if the installed device or the associated stormwater system infrastructure becomes a mosquito breeding source, it may be determined by a local mosquito control agency to be a public nuisance in accordance with California Health and Safety Code sections 2060-2067.

"Public nuisance" means any of the following:

- Any property, excluding water, that has been artificially altered from its natural condition so that it now supports the development, attraction, or harborage of vectors. The presence of vectors in their developmental stages on a property is prima facie evidence that the property is a public nuisance.
- Any water that is a breeding place for vectors. The presence of vectors in their developmental stages in the water is prima facie evidence that the water is a public nuisance.
- Any activity that supports the development, attraction, or harborage of vectors, or that facilitates the introduction or spread of vectors. (Heal. & Saf. Code § 2002 (j).)

Declaration of a facility or property as a public nuisance may result in penalties as provided under the Health and Safety Code. Municipalities and the vendors they work with are encouraged to discuss the design, installation, and maintenance of stormwater trash capture devices with their local mosquito control agency to reduce the potential for disease transmission and public nuisance associated with mosquito production.

Sincerely,

Megan MacNee

MVCAC Executive Director

## **Section 7: Reliability Information**

#### 7A: Estimated Lifespan of System

Under normal operations and with the impact of large storm events, the TRITON CPS-FTC has an estimated lifespan of 20+ years. Naturally occurring elements and mineral saturation do not have a resounding effect on either the stainless steel or ABS used in construction.

#### **7B:** Warranty Information

REM warrants the TRITON CPS-FTC system for 3 years after the installation date. This includes the device and material itself.

#### **7C: Customer Support Information**

For general regional assistance please contact the following REM representatives:

Marcel Sloane Northern California Regional Manager 960 Detroit Ave. Suite B Concord, CA. 94518 (888) 526-4736

(888) 526-4736

Marcel@remfilters.com

Charlie Fleischmann Southern California General Manager 2110 S. Grand Ave. Santa Ana, CA. 92705 (888) 526-4736

Charlie@remfilters.com

For technical and design information please contact:

Daniel Fagan Northern California Operations Manager 960 Detroit Ave. Suite B Concord, CA. 94518 (925) 676-4736 Daniel@remfilters.com

# Section 8: Field/Lab Testing Information and Analysis

\*\*REM utilizes a 5-millimeter screen. This section is not required.