

## **STORMWATER POLLUTION PREVENTION FOR INDUSTRIAL BUSINESSES**

### **AREAWIDE STORM WATER PROGRAM**

The City of Ontario is regulated under an Areawide Urban Storm Water Runoff Permit issued by the Water Quality Control Board. This permit requires Industrial Businesses conducting work in the City to implement Best Management Practices (BMPs), to eliminate the discharge of pollutants into the City's storm drains.

### **STORMWATER BEST MANAGEMENT PRACTICES (BMPs)**

Industrial Business owners shall be familiar with the following stormwater BMPs and shall educate and train their employees to implement these practices at the business site:

- Hazardous waste accumulated at the business shall be properly contained, labeled, and stored (see attached Hazardous Waste flyers).
- Oil spots shall be cleaned up with dry absorbent (kitty litter, sawdust) and swept up. If the dry absorbent does not work, introduce pressure washing followed by wastewater containment and proper disposal.
- Raw materials, used equipment, scrap metal, and chemicals shall be stored inside a building or within an outdoor storm resistant covered and spill-contained area.
- Vehicles and equipment shall not be washed outdoors unless the business is equipped with appropriate devices to discharge into the City's sanitary sewer.
- Industrial process wastewater, equipment cleaning water, and washwater shall be directed to building drains and not to a storm drain or gutter.
- Cooling tower blowdown water shall be directed to a sanitary or industrial sewer connection.
- Trash dumpsters shall have working lids, drain plugs, and shall be kept covered.
- Roll-off waste containers shall have tarps available to cover and secure during rainstorms.
- Trash compactors shall be maintained to prevent leakage.
- Liquid and solid waste under compactors shall be cleaned up daily.
- Business sites shall be maintained by regular sweeping of all paved areas.
- Landscape areas shall be maintained to prevent trash accumulation and erosion.

**Non-implementation of the above BMPs will result in a Notice of Correction (NOC). Failure to address the Notice of Correction (NOC) by the due date will result in a Notice of Violation (NOV). Notices of Violations (NOVs) schedule is as follows:**

- A fine of \$100 for the first violation.
- A fine of \$200 for the second violation (within 12 months).
- A fine of \$500 for the third violation (within 12 months).
- Continuous violations will result in escalating fines including the issuance of an Administrative Order with a minimum of \$1000 fee and eventually fines up to \$3000 per day or revocation of the business license.

## **WASTEWATER DISPOSAL INFORMATION**

Non-domestic wastewater from Businesses may be approved for discharge into the City's sanitary sewer system via a written authorization taken in the form of an issued permit, or may be contained onsite and hauled to a legal disposal facility. Prior to commencing a wastewater discharge into the sanitary sewer system, users seeking to obtain an industrial wastewater discharge permit must first complete and file with the City, an industrial wastewater discharge permit application. The application shall be submitted, as prescribed by the City and appropriate for evaluation, and in sufficient time to allow for a proper and thorough evaluation. Following an evaluation of the data, the City may issue a wastewater discharge permit, in accordance with all of the terms and conditions that are set forth in the City of Ontario Public Sewer System Ordinance, Title 6, Chapter 7, and any other applicable provisions of federal or State law or regulation. If you have any questions regarding the discharge of wastewater into the sewer system, please contact the Ontario Municipal Utilities Company at (909) 395-2600.

## **INDUSTRIAL GENERAL PERMIT**

Industrial Businesses are required to obtain coverage under the State's Industrial General Permit within thirty (30) days of notification. If an existing business is currently operating without a permit, the business owner must apply for the permit at <https://smarts.waterboards.ca.gov>. Following the application, the State will send an electronic confirmation letter including a Waste Discharger Identification Number (WDID #). A copy of the confirmation letter and the Waste Discharger Identification Number (WDID #) shall be forwarded to the City Engineering Department, Environmental Division.

## **STORMWATER PROGRAM**

For any information regarding the stormwater regulations, please contact the City of Ontario Engineering Department, Environmental Section at (909) 395-2025, or visit the City of Ontario website at <http://www.ontarioca.gov/engineering/environmental-services>.

## ATTACHMENT A

### FACILITIES COVERED BY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITIES (GENERAL PERMIT)

1. Facilities Subject To Storm Water Effluent Limitations Guidelines, New Source Performance Standards, or Toxic Pollutant Effluent Standards Found in 40 Code of Federal Regulations, Chapter I, Subchapter N (Subchapter N):

Cement Manufacturing (40 C.F.R. Part 411); Feedlots (40 C.F.R. Part 412); Fertilizer Manufacturing (40 C.F.R. Part 418); Petroleum Refining (40 C.F.R. Part 419), Phosphate Manufacturing (40 C.F.R. Part 422), Steam Electric (40 C.F.R. Part 423), Coal Mining (40 C.F.R. Part 434), Mineral Mining and Processing (40 C.F.R. Part 436), Ore Mining and Dressing (40 C.F.R. Part 440), Asphalt Emulsion (40 C.F.R. Part 443), Landfills (40 C.F.R. Part 445), and Airport Deicing (40 C.F.R. Part 449).
2. Manufacturing Facilities:

Facilities with Standard Industrial Classifications (SICs) 20XX through 39XX, 4221 through 4225. (This category combines categories 2 and 10 of the previous general permit.)
3. Oil and Gas/Mining Facilities:

Facilities classified as SICs 10XX through 14XX, including active or inactive mining operations (except for areas of coal mining operations no longer meeting the definition of a reclamation area under 40 Code of Federal Regulations. 434.11(1) because the performance bond issued to the facility by the appropriate Surface Mining Control and Reclamation Acts authority has been released, or except for areas of non-coal mining operations which have been released from applicable State or Federal reclamation requirements after December 17, 1990) and oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with any overburden, raw material, intermediate products, finished products, by-products, or waste products located on the site of such operations. Inactive mining operations are mining sites that are not being actively mined, but which have an identifiable owner/operator. Inactive mining sites do not include sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined material; or sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim.
4. Hazardous Waste Treatment, Storage, or Disposal Facilities:

Hazardous waste treatment, storage, or disposal facilities, including any facility operating under interim status or a general permit under Subtitle C of the Federal Resource, Conservation, and Recovery Act.
5. Landfills, Land Application Sites, and Open Dumps:

Landfills, land application sites, and open dumps that receive or have received industrial waste from any facility within any other category of this Attachment; including facilities subject to regulation under Subtitle D of the Federal Resource, Conservation, and Recovery Act, and facilities that have accepted wastes from construction activities (construction activities include any clearing, grading, or excavation that results in disturbance).
6. Recycling Facilities:

Facilities involved in the recycling of materials, including metal scrapyards, battery reclaimers, salvage yards, and automobile junkyards, including but limited to those classified as Standard Industrial Classification 5015 and 5093.
7. Steam Electric Power Generating Facilities:

Any facility that generates steam for electric power through the combustion of coal, oil, wood, etc.
8. Transportation Facilities:

Facilities with SICs 40XX through 45XX (except 4221-25) and 5171 with vehicle maintenance shops, equipment cleaning operations, or airport deicing operations. Only those portions of the facility involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication) or other operations identified under this Permit as associated with industrial activity.
9. Sewage or Wastewater Treatment Works:

Facilities used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge, that are located within the confines of the facility, with a design flow of one million gallons per day or more, or required to have an approved pretreatment program under 40 Code of Federal Regulations part 403. Not included are farm lands, domestic gardens, or lands used for sludge management where sludge is beneficially reused and are not physically located in the confines of the facility, or areas that are in compliance with Section 405 of the Clean Water Act.



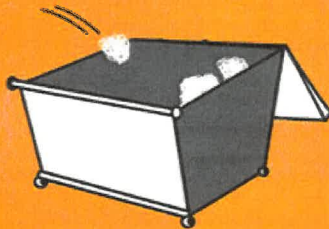
# COMMERCIAL TRASH ENCLOSURES

## FOLLOW THESE REQUIREMENTS TO KEEP OUR WATERWAYS CLEAN

Trash enclosures, such as those found in commercial and apartment complexes, typically contain materials that are intended to find their way to a landfill or a recycling facility. These materials are **NOT** meant to go into our local lakes and rivers.

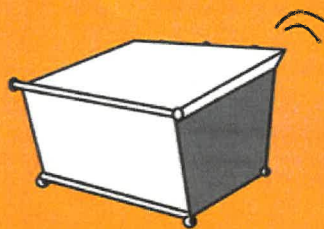
### PROTECT WATER QUALITY BY FOLLOWING THESE SIMPLE STEPS

#### PUT TRASH INSIDE



Place trash inside the bin (preferably in sealed bags)

#### CLOSE THE LID



Prevent rain from entering the bin in order to avoid leakage of polluted water runoff

#### KEEP TOXICS OUT



- Paint
- Grease, fats and used oils
- Batteries, electronics and fluorescent lights

### SOME ADDITIONAL GUIDELINES, INCLUDE

#### ✓ SWEEP FREQUENTLY

Sweep trash enclosure areas frequently, instead of hosing them down, to prevent polluted water from flowing into the streets and storm drains.

#### ✓ FIX LEAKS

Address trash bin leaks immediately by using dry clean up methods and report to your waste hauler to receive a replacement.

#### ✓ CONSTRUCT ROOF

Construct a solid cover roof over the existing trash enclosure structure to prevent rainwater from coming into contact with trash and garbage. Check with your local City/County for Building Codes.

In San Bernardino County, stormwater pollution is caused by food waste, landscape waste, chemicals and other debris that are washed into storm drains and end up in our waterways - untreated! You can be part of the solution by maintaining a water-friendly trash enclosure.

**THANK YOU FOR HELPING TO KEEP SAN BERNARDINO COUNTY CLEAN AND HEALTHY!**



To report illegal dumping (877-WASTE18) or to find a household hazardous waste facility (800-OILY CAT): [sbcountystormwater.org](http://sbcountystormwater.org)  
To dispose of hazardous waste call the San Bernardino County Fire Dept. - CUPA Program (909) 386-8401



# CONTENEDORES COMERCIALES PARA LA BASURA

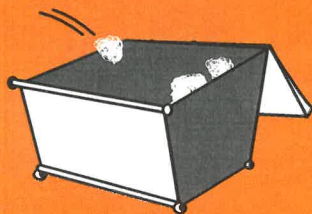
## SIGA ESTOS PASOS PARA MANTENER LIMPIAS NUESTRAS VÍAS FLUVIALES

Los contenedores de basura, tales como aquellos que se encuentran en las unidades comerciales y departamentos, generalmente contienen materiales que están destinados a los rellenos sanitarios o en algún establecimiento de reciclaje.

Estos materiales **NO** deben ser vertidos en nuestros lagos y ríos locales.

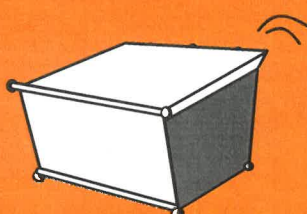
### SIGA ESTOS PASOS PARA PROTEGER LA CALIDAD DEL AGUA

#### COLOQUE LA BASURA ADENTRO



Coloque la basura adentro del contenedor (preferentemente en bolsas selladas)

#### CIERRE LA TAPA



Evite que la lluvia ingrese al contenedor para evitar un escape de escorrentía contaminada

#### MANTENGA LOS PRODUCTOS TÓXICOS AFUERA



- Pintura
- Lubricante, grasas y aceites usados
- Baterías, componentes electrónicos y luces fluorescentes

### ALGUNAS GUÍAS ADICIONALES, LAS CUALES INCLUYEN

#### ✓ BARRER CON FRECUENCIA

Barra con frecuencia las áreas de los recintos para la basura, en lugar de lavarlas con una manguera, para evitar que el agua contaminada se vierta en las calles y los desagües de lluvia.

#### ✓ REPARE LAS GOTERAS

Ocúpese inmediatamente de las goteras en los contenedores de basura. Use los métodos de limpieza en seco e infórmele a su recolector de basura para que reciba un reemplazo.

#### ✓ CONSTRUYA UN TECHO

Construya un techo de cubierta sólida sobre la estructura actual del recinto para la basura a fin de evitar que el agua de lluvia entre en contacto con los desechos y la basura. Consulte a su Ciudad/Condado para conocer los Códigos de Construcción.

En el Condado de San Bernardino, los desechos de alimentos y jardines, los productos químicos y otros restos que se vierten en los desagües de aguas pluviales y que terminan en nuestras vías fluviales sin tratamiento alguno provocan la contaminación de estas aguas. Usted puede ser parte de la solución si mantiene un recinto para la basura que no contamine el agua.

**¡MUCHAS GRACIAS POR AYUDAR A MANTENER LIMPIO Y SIN CONTAMINACIÓN AL CONDADO DE SAN BERNARDINO!**



Para informar acerca del vertedero ilegal, llame a (877-WASTE18), o para encontrar un establecimiento donde arrojar los residuos peligrosos del hogar, llame a (800-OILY CAT): [sbcountystormwater.org](http://sbcountystormwater.org)

Big Bear • Chino • Chino Hills • Colton • Fontana • Grand Terrace • Highland • Loma Linda • Montclair • Ontario • Rancho Cucamonga • Redlands • Rialto • San Bernardino • San Bernardino County • San Bernardino County Flood Control District • Upland • Yucaipa



**WASTE Type and Cost**

There is a small handling fee involved in the collection of hazardous waste from your business. Disposal costs depend on the type of waste.

Aerosols	\$1.29/lb.
Automobile motor oil	\$.73/gal.
Anti-freeze	\$1.57/gal.
Contaminated oil	\$8.82/gal.
Car batteries	\$.62/ea.
Corrosive liquids, solids	\$2.80/lb.
Flammable liquids, solids	\$1.57/lb.
Fluorescent Tubes/Bulbs	\$2.24/ea.
Mercury	\$10.08/lb.
NiCad/Alkaline Batteries	\$2.13/lb.
Oil Base Paints	\$1.00/lb.
Oil Filters	\$.56/ea.
Oxidizer liquids, solids	\$3.00/lb.
PCB Ballasts	\$5.94/lb.
Pesticides (most)	\$2.91/lb.
Television & Monitors	\$11.20/ea.
Additional Handling	\$138.00/hr.

\*Rates subject to change without notice\*

**WE CANNOT ACCEPT**

- \* Radioactives
- \* Water reactives
- \* Explosives
- \* Compressed gas cylinders
- \* Medical or biohazardous waste
- \* Asbestos
- \* Remediation wastes

San Bernardino County Fire Department  
 CESQG Program  
 2824 East "W" Street  
 San Bernardino, CA 92415-0799  
 Phone: 909-382-5401  
 Fax: 909-382-5413  
[www.sbcfire.org/hazmat/hhw.aspx](http://www.sbcfire.org/hazmat/hhw.aspx)  
 Email: [mvangese@sbcfire.org](mailto:mvangese@sbcfire.org)

**Used Oil and Filters  
 ARE 100%  
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**C** ONDITIONALLY  
**E** XEMPT  
**S** MALL  
**Q** UANTITY  
**G** ENERATOR  
**L** PROGRAM



**HAZARDOUS  
 WASTE  
 Disposal  
 for Small  
 BUSINESSES**

### WHAT IS A CESQG?

Businesses that generate 27 gallons or 220 lbs. of hazardous waste, or 2.2 lbs. of extremely hazardous waste per month are called "Conditionally Exempt Small Quantity Generators," or CESQs. San Bernardino County Household Hazardous Waste Program provides waste management services to CESQG businesses. The most common CESQs in San Bernardino County are painters, print shops, auto shops, builders, agricultural operators and property managers, but there are many others. When you call, be ready to describe the types and amounts of waste your business generates in a typical month. If you generate hazardous waste on a regular basis, you must:



- \* Register with San Bernardino County Fire Department (909) 386-8401 as a hazardous waste generator.
- \* To obtain an EPA ID# and application form from the State visit [www.dtsc.ca.gov](http://www.dtsc.ca.gov).
- \* Manage hazardous waste in accordance with all applicable local, state and federal laws and regulations.

### HOW DO I GET SERVICE?

To arrange an appointment for the CESQG Program, call 1-800-645-9228 or 909-382-5401. Be ready to describe the type and amount of hazardous waste your business is ready to dispose of, and the types and size(s) of containers that the waste is in.



## PROGRAMS FOR SMALL BUSINESSES

### WHY IS THE FIRE DEPARTMENT COLLECTING HAZARDOUS WASTE?

Small Quantity Generators often have difficulty disposing of small quantities of hazardous waste. Hazardous waste companies usually have a minimum amount of waste that they will pick up, or charge a minimum fee for service. Typically, the minimum fee exceeds the cost of disposal for the hazardous waste. This leaves the small quantity generator in a difficult situation. Some respond by storing hazardous waste until it becomes economical for the hazardous waste transporter to pick it up, putting the business out of compliance by exceeding regulatory accumulation time limits. Other businesses simply store their hazardous wastes indefinitely, creating an unsafe work environment and exceeding accumulation time limits. Yet other businesses attempt to illegally dispose of their waste at household hazardous waste collection facilities. These facilities are not legally permitted to accept commercial wastes, nor are prepared to provide legal documentation for commercial hazardous waste disposal. In answer to the problems identified above, the San Bernardino County Fire Department Household Hazardous Waste Program instituted the Conditionally Exempt Small Quantity Generator Program.



### PAYMENT FOR SERVICES

The CESQG Program will prepare an invoice for your business at the time of service. You can pay at the time of service with cash or a check, or you can mail your payment to the Fire Department within 30 days. Please note that we do not accept credit card payments. The preferred method of payment is to handle payment at time of service. Additional charges may apply for accounts not paid within 30 days.



### ARE THERE ANY OTHER WAYS THAT I CAN SAVE MONEY ON HAZARDOUS WASTE DISPOSAL?

Yes! First, start by reducing the amount of waste that you produce by changing processes or process chemicals, at your business. Next, examine if there is a way that you can recycle your waste back into your processes.



Network with similar businesses or trade associations for waste minimization and pollution prevention solutions.

### WHAT IF YOUR BUSINESS DOES NOT QUALIFY?

Call the San Bernardino County Fire Department Field Services Division for assistance with hazardous waste management at 909-386-8401. If you reduce the amount of waste you generate each month to 27 gallons or less, you may qualify in the future.



### WHAT HAPPENS TO YOUR HAZARDOUS WASTE?

Hazardous waste collected by the CESQG Program is transported to a state permitted processing facility in San Bernardino. The waste is further processed at this point and packaged for off-site recycling (oil filters, oil, latex paint, antifreeze, and batteries) or destructive incineration (pesticides, corrosives, flammables, oil based paint).





# POLLUTION PREVENTION

To reduce the amount of pollutants reaching our storm drain system, which leads to the Santa Ana River and Pacific Ocean, the San Bernardino County Stormwater Program has developed Best Management Practices (BMPs) for Industrial and Commercial Facilities. City and County ordinances require that businesses comply with these BMPs, where applicable, to protect local water quality. Local cities and the County are required to verify implementation of these BMPs by performing regular facility inspections.



## Prohibited Discharges

- Discontinue all non-stormwater discharges to the storm drain system. It is prohibited to discharge any chemicals, wastes or wastewater into the gutter, street or storm drain.

## Outdoor Storage

- Install covers and secondary containment areas for all hazardous materials and wastes stored outdoors in accordance with County and/or City standards.
- Keep all temporary waste containers covered, except when in direct use.
- Sweep outdoor areas instead of using a hose or pressure washer.

## Outdoor Processes

- Move all process operations including vehicle and equipment maintenance inside of the building or into a covered and contained area.
- Wash equipment and vehicles in a contained and covered wash bay which is closed-loop or connected to a clarifier sized to city standards, then discharged to a sanitary sewer or take them to a commercial car wash.

## Spills and Clean Ups

- Clean up spills immediately when they occur, using dry clean up methods such as absorbent materials and followed by proper disposal of materials.
- Always have a spill kit available near chemical loading dock doors, vehicle maintenance and fueling areas.
- Follow your Business Emergency Plan, as filed with the County Fire Department at (909) 386-8401.

# Industrial and Commercial Facilities

- Report all prohibited discharges and non-implementation of BMPs to your local Stormwater Coordinator either at (800) CLEANUP or as listed at [www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater).
- Report hazardous materials spills to (800) 33 TOXIC and your local Fire Department Hazmat Team at 911.

## Training

Train employees in spill response procedures and prohibited discharges to the storm drain system, as prescribed in your local Stormwater Ordinance and in applicable Best Management Practices available at [www.cabmphandbooks.com](http://www.cabmphandbooks.com) and [www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater).

## Permitting

Stormwater discharges associated with specific categories of commercial and industrial facilities are regulated by the State Water Resources Control Board (SWRCB) through an Industrial Storm Water General Permit. A copy of the General Permit and application forms are available at: [www.waterboards.ca.gov/stormwtr/industrial.html](http://www.waterboards.ca.gov/stormwtr/industrial.html)

To report illegal dumping or for more information on stormwater pollution prevention, call:

**1 (800) CLEANUP**

or visit our websites at:

[www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater)

[www.1800cleanup.org](http://www.1800cleanup.org)





# Prevención de Contaminación AL SISTEMA DE DRENAJE

Para reducir la cantidad de contaminantes que alcanzan nuestro sistema de aguas pluviales, las cuales desembocan en el Río Santa Ana y el Océano Pacífico, el Programa del Condado de San Bernardino ha desarrollado las pautas de Mejores Prácticas de Manejo (BMPs), por sus siglas en inglés) para instalaciones industriales y comerciales. Los decretos de la ciudad y del condado establecen que todas las empresas deben de cumplir con estas BMPs, cuando corresponda, para proteger la calidad del agua local. Las ciudades locales y el condado tienen la obligación de verificar la implementación de estas BMPs al llevar a cabo inspecciones regulares en sus instalaciones.

## Desagües Prohibidos

- Descontinúe todo desagüe de aguas no pluviales al sistema de drenaje de aguas pluviales. Está prohibido descargar cualquier sustancia química, residuo o agua residual a los drenajes de la cuneta, de la calle o de aguas pluviales.

## Almacenamiento al Aire Libre

- Instale cubiertas y áreas de retención secundarias para todos los materiales peligrosos y residuos almacenados al aire libre, estas instalaciones deberán de cumplir con los estándares establecidos por el condado y/o la ciudad.
- Mantenga todos los recipientes temporales de residuos cubiertos, con la excepción de cuando se estén utilizando directamente.
- Barra todas las áreas al aire libre en lugar de usar una manguera o un equipo de limpieza con agua a alta presión.

## Procesos al Aire Libre

- Reubique todos los procesos u operaciones, incluyendo el mantenimiento de vehículos y equipo, dentro de un edificio en una área cubierta e independiente.
- Lave el equipo y los vehículos en una fosa de lavado independiente que tenga un anillo cerrado o bien, esté conectada a un clarificador del tamaño de los estándares municipales, luego elimine los residuos en un drenaje sanitario o llévelos a un lavador de carros comercial.

## Derrames y Limpieza

- Limpie los derrames inmediatamente, utilice métodos de limpieza en seco como son el uso de materiales absorbentes y elimine estos materiales de la manera adecuada.
- Siempre tenga a la mano un estuche para derrames cerca de las puertas de los muelles de carga de sustancias químicas, en las áreas de mantenimiento de vehículos y en las áreas de combustible.

- Siga su Plan de Emergencia Comercial, como lo registró con el Departamento de Bomberos del



# Instalaciones Industriales y Comerciales

Condado marcando al (909) 386-8401.

- Reporte todos los desagües prohibidos y cualquier punto no implementado de las BMPs a su coordinador local de Aguas Pluviales llamando al (800) CLEANUP o como se indica en el enlace [www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater).

- Reporte cualquier derrame peligroso al (800) 33 TOXIC y al equipo Hazmat de su departamento local de bomberos marcando al 911.

## Capacitación

Capacite a los empleados sobre los procedimientos de respuesta ante un derrame y los desagües prohibidos al sistema de aguas pluviales, como lo indica el decreto local de aguas pluviales de Mejores Prácticas de Manejo (BMPs) disponibles en el sitio [www.cabmphandbooks.com](http://www.cabmphandbooks.com) y [www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater).

## Autoridad Competente

Los desagües de aguas pluviales relacionados con categorías específicas de instalaciones comerciales e industriales están regulados por la Junta Estatal de Control de Recursos Acuáticos (State Water Resources Control Board, SWRCB) a través de un permiso industrial general de aguas pluviales. Para obtener una copia de este permiso general y una solicitud, visite el sitio: [www.waterboards.ca.gov/stormwtr/industrial.html](http://www.waterboards.ca.gov/stormwtr/industrial.html)

Para reportar el desagüe de residuos ilegales o para obtener información adicional sobre la prevención de contaminación a las aguas pluviales, llame a:

**1 (800) CLEANUP**

o visite nuestro sitio:

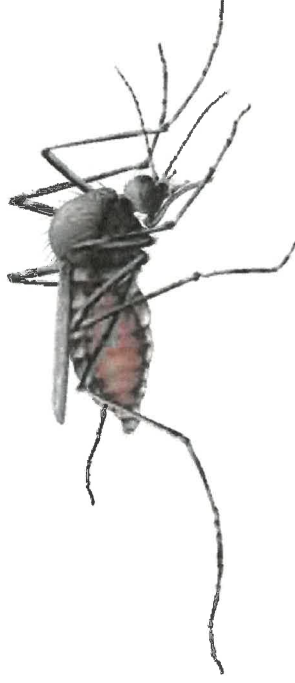
[www.sbcounty.gov/stormwater](http://www.sbcounty.gov/stormwater)

[www.1800cleanup.org](http://www.1800cleanup.org)





# Mosquitoes and Stormwater Devices



Mosquitoes can carry a variety of diseases that can affect humans. Some of the most common diseases include:

- West Nile Virus
- Zika
- St. Louis Encephalitis
- Dengue Fever

Stormwater devices can breed thousands of mosquitoes unless proper planning and maintenance is followed.



@wvmosquito



@WestValleyMVCD

## Stormwater Device Maintenance:

- Follow all instructions and plans for installation of BMPs.
- Identify and map all BMPs around the property.
- Check devices after any storm event for proper drainage.
- Clean and drain BMPs after storm events AND, at minimum, quarterly.
- Allow Vector Control Districts access to BMPs for inspections.
- Follow Vector Control District cleaning and maintenance recommendations.

## BMPs and Mosquitoes

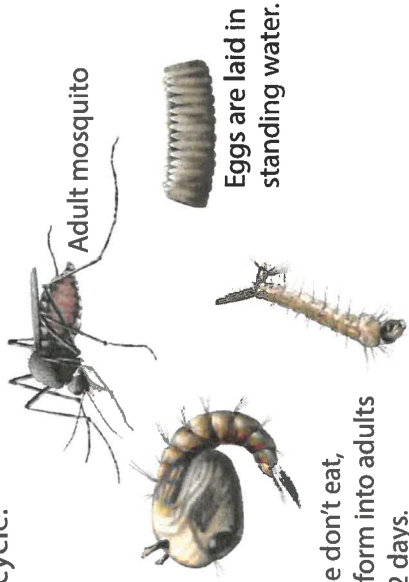
Stormwater devices are quickly becoming one of the most important urban mosquito breeding sources.

BMPs, especially constructed vaults, provide mosquitoes with a perfect habitat for development. A small entry point, stable temperature, and concentrated organic matter create prime conditions for rapid mosquito development.



## Mosquito Life Cycle:

There are four stages to the mosquito life cycle. It only takes 7-10 days to complete an entire life cycle.



Adult mosquito

Eggs are laid in standing water.

Pupae don't eat, transform into adults in 1-2 days.

Larvae eat and grow in the water.

Eggs, larvae, and pupae are completely dependent on water; without standing water they will die.

Mosquitoes thrive in conditions created by BMPs



## For Information and Assistance:

Contact the West Valley Mosquito and Vector Control District if you are experiencing problems with mosquitoes and need assistance.

**909-635-0307**

1295 East Locust St

Ontario, CA 91761

[www.wvmscd.org](http://www.wvmscd.org)