



Chapter 1 Introduction



This **Residential Urban Runoff Requirements Manual** (Manual) details requirements of residents of the City of Dana Point (City), which were developed as part of the City's Local Implementation Plan (LIP). The City produced this Manual in conjunction with the Dana Point Municipal Code (DPMC).

1.1 Introduction

This Manual is provided to assist residents of the City in complying with the City's Storm Water Management and Discharge Control regulations. The manual provides detailed information of the City's requirements and recommendations for residents to prevent pollution.

Many daily residential activities can contribute to the pollution of our creeks, rivers, streams, lagoons, and ultimately the ocean. Some examples of polluting activities and their effect include:

- Washing vehicles in the street or driveway can cause sediment, heavy metals, foaming agents, and oils & greases to enter the storm drains and end up in the Ocean
- Neglected pet waste and improper disposal of pet waste can contribute to elevated bacteria levels in the Ocean, often causing beach closures
- Excess nutrients from improper fertilizer and pesticide application can contribute to nuisance growth of aquatic vegetation

Therefore, it is necessary that all residents comply with the requirements outlined in this manual. This Manual is divided into the following four chapters:

Chapter 1 – Provides an introduction to the Manual and a brief overview of its purpose and relevance

Chapter 2 – Describes the requirements of all dischargers and the recommendations for residents.

Chapter 3 – Defines High Priority residential activities and details the requirements, & recommendations that residents conducting those activities must comply with

Chapter 4 – Summarizes the inspection and enforcement procedures of the City

1.2 What is Urban Runoff and Storm Water?

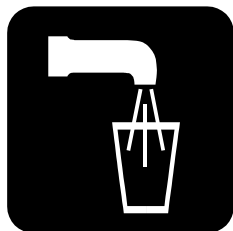
The terms, **Urban Runoff** and **Storm Water** (sometimes written as one word, "stormwater"), are commonly used in discussions about the quality of water in urbanized areas. These terms are often used interchangeably and, therefore, are confusing. **Urban Runoff** refers to water that originates in urbanized areas. Sources of Urban Runoff include precipitation, industry discharges, leaks, washing, irrigation, and natural springs. **Storm water** refers to water generated from precipitation during a storm event. However, in some cases inconsistent with its definition, storm water is used to refer to or to include Urban Runoff not exclusively resulting from precipitation. Inversely, the definition of **non-storm water** is water that is not the direct product of storm precipitation such as water from industry discharges, leaks, washing, irrigation, and springs. Therefore, **Urban Runoff is composed of both storm water and non-storm water.**

Regardless of the terminology, the quality of the water located in urbanized areas is of the utmost importance. The urban runoff and stormwater in urbanized areas drains to the storm drains, creeks, rivers and lagoons, and ultimately to the Pacific Ocean. It is important to realize that spills, trash, and pollutants that are washed from properties and roads flow right into these water bodies, untreated, and can make a significant negative impact on water quality.

It is also important to note that urban runoff and storm water is different from the wastewater that flows out of our homes and businesses into the sanitary sewer. The sanitary sewer is directed to wastewater treatment plant where the wastewater is treated to high standards prior to being discharged into receiving waters.



Chapter 2 Requirements of Residents



Best Management Practices (BMPs) have been developed with the goal of preventing pollution. BMPs can include policies, procedures, activities and structural controls. This Manual establishes BMP requirements for all residents within the limits and extraterritorial jurisdiction areas of the City. In addition, owners or managers of unoccupied residences are subject to these requirements, being the responsible party. Residents and responsible parties are formally referred to as Residential Dischargers.

2.1 BMP Requirements for All Dischargers

The following BMPs are required for all dischargers in the Dana Point, including all residents, businesses, construction facilities and any other entity which discharges to the storm drain system.

Eroded Soils

BMP A.1.1. Prior to the rainy season, Dischargers must remove or secure any significant accumulations of eroded soils from slopes previously disturbed by clearing or grading, if those eroded soils could otherwise enter the Storm Drain System or Receiving Waters during the rainy season.

BMP Description

Removal of eroded soils should be to an approval and licensed disposal facility. Securing eroded soils should be by implementing standard measures such as by securing a cover over the soils and by diverting runoff flows around the soils.

Pollution Prevention

BMP A.2.1. Dischargers shall implement those Urban Runoff pollution prevention practices that are generally recognized in that Discharger's industry or

business as being effective and economically advantageous.

Prevention of Illegal Discharges

BMP A.3.1. Illicit connections must be eliminated (even if the connection was established pursuant to a valid permit and was legal at the time it was constructed), and illegal discharge practices eliminated.

Slopes

BMP A.4.1. Completed slopes that are more than five feet in height, more than 250 square feet in total area, and steeper than 3:1 (run-to-rise) that have been disturbed at any time by clearing, grading, or landscaping, shall be protected from erosion prior to the first rainy season following completion of the slope, and continuously thereafter.

BMP Description

Protection of slopes typically is accomplished through covering the slopes, planting the slopes to stabilize vegetation, and/or installing sandbags, silt fences, or other measures to prevent runoff of sediment.

Storage of Materials and Wastes

BMP A.5.1. All materials and wastes with the potential to pollute Urban Runoff shall be stored in a manner that either prevents contact with rainfall and storm water, or contains contaminated runoff for treatment and disposal.

BMP Description

The preferred method of storage is in a covered and contained area so that the materials or wastes are protected from precipitation and runoff, and so that any spills of the materials or wastes are contained, restricted from discharge, and easily cleaned up.

Use of Materials

BMP A.6.1. All materials with the potential to pollute Urban Runoff (including but not limited to cleaning and maintenance products used outdoors, fertilizers, pesticides and herbicides, etc.) shall be used in accordance with label directions. No such material or product may be disposed of or rinsed into Receiving Waters or the Storm Drain System.

Environmentally Sensitive Areas – Bacteria Impairment

In addition to the requirements described above, the following BMP requirements are to be implemented by all Dischargers in the City. The City of Dana Point is tributary to the Pacific Ocean, a water body impaired for bacteria, and therefore a higher standard of BMP implementation may be necessary in order to ensure that pollutants are not present in discharges.

The City of Dana Point includes water bodies that have been listed as impaired by the EPA. Therefore, additional BMP measures are being incorporated to aid in reducing the pollutants that have been identified as impairing our water bodies.

Bacteria

The presence of elevated fecal coliform levels in a water body is an indication of contamination by wastes of warm-blooded animals or human, which may contain pathogens that may cause concern over public health. For areas in the City having significant use of its water bodies for contact recreation, elevated fecal coliform levels may result in beach closure and impact tourism.

The following are additional measures to help reduce the potential of bacteria in urban runoff. All dischargers are subject to all applicable minimum BMP requirements, including these additional measures to reduce bacteria.

The City will utilize the local media to remind residents that we all can help reduce bacteria in our urban runoff. Identification of bacteria sources and their potential relationship to beach closing will be addresses. Prior to the rainy season, residents and businesses will be encouraged to clean up loose, dry vegetation and dispose of it properly to prevent it from washing into the storm drain system. Citizens will also be reminded when sitting trash containers out for pick-up during the rainy season, they should be left up on the curb to prevent overturn by swift currents in the gutter.

The City will encourage recycling of vegetation clippings, yard waste and Christmas trees. Mulch that is given away as a result, will include instruction of proper use to prevent runoff. Pollution prevention information regarding food waste will be available at the weekly Farmers Market. Yard waste disposal recommendations will be included with trash collection billing statements. The City also provides

information regarding recycling when park and facility public use permits are requested.

BMP Requirements

- If pet wastes are found to be a concern on the property, install signs or mutt mitt dispensers to encourage clean-up and disposal.
- If bird or animal droppings are concern, install signs that prohibit the feeding of birds and animals.
- Keep trash storage containers covered so that wind or animals cannot spill contents into areas exposed to urban runoff.
- Regularly clean up leaves and other plant materials that could be conveyed in the gutter and into the storm drain systems. If excessive waste is noted and cannot be removed by personally, contact the City Public Works at (949) 248-3565. As always, yard clippings must be swept and properly disposed in the trash. No discharges of any kind are allowed in the storm drain system (including no sweeping of plant materials or dirt).

BMP A.7.1. Pick up Animal Wastes

- Grounds should be inspected on a regular basis for animal wastes.
- Wastes should be cleaned up and disposed of properly as part of a routine landscape maintenance program.
- Animal wastes may not be hosed down into storm drains or water bodies.

BMP A.7.2 Prevent Sewage Spills

- When a portable toilet facility is located on site, secondary containment shall be provided and the facility shall be maintained regularly.
- Perform periodic cleaning/maintenance to eliminate grease, debris, and roots in your lateral line if you are connected to the sewer system, and properly maintain your septic system if your wastewater is treated on site.
- Never pour grease or hazardous materials down garbage disposal, sink or toilets.

- Place baskets/strainers in sink drains to catch food scraps and solids and dispose of them properly in the trash.
- Avoid flushing items down your toilet that could cause a blockage (feminine products, paper towels, etc.)
- Make sure that your lateral clean-out cap is in good working condition. If you are uncertain about the condition; have your plumber inspect it.
- If you have a blockage or back-up, call a plumber immediately. If your plumber finds the blockage is beyond the lateral, call the South Coast Water District immediately. (949) 499-4555
- Contain sewage overflow or prevent it from entering the storm drain system (ex. rubber mats can be placed over inlets).
- Repair any structural problems in your sewer system and eliminate any rainwater infiltration/inflow leaks into your lateral line.
- Restaurants/ Industrial kitchens should make sure that grease interceptors are properly maintained and emptied regularly.

The Federal Fact Sheet indicates the following:

By definition, several bacteria can be classified as coliform, and are commonly found in soil, on the surface of leaves, in decaying matter, and can grow in water distribution mains. These types of coliform bacteria aren't fecal contamination related, and do not necessarily indicate unsafe water. The pathogenic fecal coliform bacteria, E-Coli, is naturally occurring in the intestines and feces of most warm-blooded animals, including humans, and when found in water is a direct result of fecal contamination. Almost all surface waters contain some bacteria, while groundwaters are generally free of bacteria unless under the direct influence of surface water. Surface and groundwater contamination can occur as a result of surface runoff through urban areas, woodlands, pastures, or feedlots; on-site septic tank/sewage disposal system leakage/failure; sewage treatment plant/disposal system overload or malfunction; or raw sewage deep well injection.

2.2 BMP Recommendations for all Residential Dischargers

This section includes general BMP recommendations (not requirements) for all Residential Dischargers.

Annual Review of Residences and Activities

The purpose of this recommendation is to actively engage Residential Dischargers in the identification and elimination of connections and practices that might otherwise lead to discharge violations. This is especially important for residences since they are not subject to other routine inspections.

Visual inspections are crucial to preventing or identifying problems in a timely manner. Thorough periodic inspections of residences and the surrounding property should be conducted by Residential Dischargers to ensure adequate BMP implementation and compliance with requirements. Yards, garages, and storage areas, if applicable, should be inspected periodically during the dry season (May 1 to September 30) and more frequently during the rainy season of the Dana Point area (October 1 to April 30).

Areas where water leaves the property should be visually inspected for evidence of, or the potential for, pollutants entering the street or other drainage ways. Measures to reduce pollutant loadings should be inspected and evaluated to determine whether they are still adequate and functioning properly.

Based on the results of the inspections, any additional potential pollutant sources should be identified and the necessary additional pollution prevention measures and controls should be implemented in a timely manner.

Pollution Prevention

Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants. Recycling, or the use of different types of products or chemicals, and altering procedures are all types of pollution-prevention practices that can reduce the amounts of pollutants generated by residents. Residents should review their current activities and determine if there are changes that they could make that would reduce the amount of pollutants that they generate.

Materials and Waste Management

Hazardous materials and wastes should be stored, managed, and disposed in accordance to label directions. Hazardous materials should be stored off the ground and in an enclosed or covered area. Drums and other containers should be kept in good condition and securely closed when not in use.

Spills of liquid or solid materials onto ground surfaces imposes great potential risk to Urban Runoff quality. If a spill occurs in an outside area that could be exposed to and washed off by precipitation, or otherwise transported off the property, the spill should be cleaned up immediately. Do not clean up spills by rinsing them down with a bucket of water or using a hose. Instead use "dry cleaning" methods, such as absorbing the material with towels, sweeping and/or vacuuming. If additional cleaning is still required, use a mop as appropriate.

Significant spills shall be reported promptly to the City (1-949-248-3565). Significant spills are those that discharge, or have the potential to discharge, contaminants directly or indirectly to the Storm Drain System or Receiving Waters. Spills that have been completely contained and cleaned up onsite are not considered significant unless they pose a threat to human health or safety.

Vehicles and Equipment

Residential Discharges should keep their vehicles and equipment properly maintained to prevent leaks and to keep other pollutants from the vehicles or equipment from entering Urban Runoff. Vehicles and equipment should be periodically checked during use and during storage to detect leaks. If leaks are identified, they should be repaired immediately and, in the interim, some type of containment such as drip pans should be used to collect the leaked materials so that they do not enter Urban Runoff.



Chapter 3 Requirements for Specific High Priority Residential Activities



In addition to the requirements and recommendations described in Chapter 2, the City developed requirements for specific common activities conducted by Residential Dischargers. The activities in this Chapter, for which the additional regulations were developed, were determined to be potential sources of significant pollutants to the Storm Drain System and/or Receiving Waters. Therefore, they have been designated as **High Priority Activities**. Because these activities have been identified as representing a high threat to water quality, the City has developed a higher standard of minimum BMP implementation.

This chapter contains regulations for the following High Priority activities:

- Vehicle & Equipment Repair and Maintenance
- Vehicle and Equipment Washing
- Vehicle Parking
- Landscaping & Gardening
- Household Hazardous Waste Care & Disposal
- Pet Care and Pet Waste Disposal
- Green Waste Disposal
- Private Sewer Laterals and Onsite Wastewater System Maintenance

Each activity includes *required* BMPs and *recommended* BMPs. Recommended BMPs have been developed to implement where applicable, and when residents desire to take additional steps toward protecting water quality. All residents are encouraged to consider these BMPs for implementation.

It should be noted, however, that if the City determines that the required BMPs are not adequate for a specific activity, the City may require implementation of additional recommended BMPs as necessary to achieve adequate water quality protection.

BMP Fact sheets for each individual activity can be requested from the City or obtained from the City's website, www.danapoint.org.

3.1 Vehicle and Equipment Repair & Maintenance

3.1.1 Applicability

The requirements in this section apply to repair and maintenance of motorized vehicles and equipment, including automobiles, boats, motorcycles, all-terrain vehicles, other motorized vehicles, lawn mowers, other motorized gardening equipment, gas-powered generators, and any other devices that require similar repair and maintenance.

3.1.2 Description of Impacts

Repair and maintenance activities have the potential to contribute many types of pollutants (such as motor oils, greases, antifreeze, solvents, trace metals and fuels) directly to the Storm Drain System or Receiving Waters when it rains or when residents wash off driveways and streets.

3.1.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all vehicle and equipment repair or maintenance activities:

BMP R.1.1. Vehicle and equipment repair and maintenance activity shall be performed under a permanent roof or other permanent cover, if such space is available. Maintenance and repair activities that are conducted without cover or without BMPs to prevent pollutant discharges are prohibited during times of precipitation.

BMP R.1.2. Any release of fluids during repair or maintenance shall be promptly contained and cleaned up. Any absorbent materials used must be disposed of properly.

BMP R.1.3. Hazardous materials and wastes must be stored indoors, or under cover, or in secure and watertight containers.

3.1.4 Additional Recommended BMPs

- Perform maintenance and repairs on impervious surfaces such as concrete so that spills and other wastes deposited on the ground can be readily cleaned up.

- Prevent leaks and spills from contacting storm water. Use drip pans, plastic sheeting, or other materials to catch and contain spills.
- Clean tools and parts only in contained areas that do not drain to the storm drain system.
- Do not wash down maintenance and repair areas, instead clean them using “dry cleaning” methods such as using brooms, towels and/or vacuums. Use mops as a last resort.
- Properly manage and dispose of wastes and materials, see section 4.6.
- Store batteries upright and indoors.
- Use commercial repair and maintenance facilities for major work that cannot be adequately supported at a residence.
- Keep the number of solvents used to a minimum to make recycling easier and to reduce hazardous waste management cost.
- Use non-hazardous cleaners when possible.
- Replace chlorinated organic solvents with nonchlorinated ones like kerosene or mineral spirits.
- Monitor parked or stored vehicles and equipment closely for leaks and pans placed under leaks to collect the fluids for proper disposal or recycling.
- Use reusable cloth rags to clean up drips and small spills instead of disposables: these can be professionally laundered and reused. Do not attempt to launder these at home or at a coin-operated laundry.

3.2 Vehicle and Equipment Washing

3.2.1 Applicability

The requirements in this section apply to washing of motorized vehicles and equipment, including automobiles, boats, motorcycles, all-terrain vehicles, other motorized vehicles, lawn mowers, other motorized gardening equipment, gas-powered generators, and any other devices with similar pollutant potential.

3.2.2 Description of Impacts

According to national surveys, 55 to 70 percent of households wash their own cars, with the remainder going to a commercial car wash. Pollutants generated by automobile washing can negatively impact water bodies through the excessive input of nutrient substances associated with phosphate-containing detergents, foaming agents, sediments, and a wide array of toxic substances including trace metals and various hydrocarbons. Runoff of

washwater onto driveways, carports, streets, parking lots, etc. can carry these pollutants to storm drains or to other surfaces where they accumulate until rainfall subsequently washes them into the Storm Drain System and ultimately to Receiving Waters.

3.2.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all vehicle and equipment washing activities:

BMP R.2.1. Vehicles and equipment shall be washed over pervious surfaces such as lawns and gravel areas where feasible. Better yet, take your vehicle to a commercial car wash.

BMP R.2.2. Remaining detergent solutions prepared for use in vehicle washing, but not used up in the process, may not be disposed by emptying into the Storm Drain System or Receiving Waters. In addition the solutions may not be disposed of in areas that could drain to the Storm Drain System or Receiving Waters, such as driveways, sidewalks, and patios. Dispose the solution into the sanitary sewer (e.g., through a sink, toilet, or floor drain) or to a pervious surface

BMP R.2.3. The use of “hose off” or single use engine degreasing chemicals is prohibited, unless captured and disposed of properly.

BMP R.2.4. Motor vehicle washing other than individual residential motor vehicle washing is prohibited, unless all wash and rinse water is diverted to or contained and disposed to a porous area or the sanitary sewer (permission may be required).

3.2.4 Additional Recommended BMPs

- Limit the use of detergents and/or other cleaners when washing.
- Use preventative practices to keep vehicles clean (i.e., park in a garage or carport, use a cover).
- Use “dry cleaning” methods to avoid the generation of wash and rinse water.
- Turn off the water when not in use or use a controllable spray nozzle that automatically turns off when left unattended.

- Establish neighborhood wash areas where washwater and contaminants can be properly managed.
- If washing cannot be conducted over pervious areas, divert the runoff washwater onto grass or landscaping to provide filtration.
- Use “dry” methods to decrease or clean especially dirty parts prior to “wet” washing and rinsing (e.g., remove grease or brake dust using towels).
- Use commercial wash facilities implementing proper BMPs to avoid the potential for pollution in residential neighborhoods. This is especially important while cleaning engines or the bottom of vehicles. Most commercial wash facilities reuse washwater several times before sending it to the sewer system for treatment.

3.3 Vehicle Parking

3.3.1 Applicability

The requirements in this section apply to the parking of any motorized vehicles in any location within the City.

3.3.2 Description of Impacts

Parked vehicles present a problem in urbanized areas due to their potential cumulative effects on water quality. Poorly maintained vehicles leak oil, antifreeze, and other fluids when parked. As a result, parking areas can contain heavy deposits of many automotive pollutants. These pollutants accumulate on driveway streets, parking lot surfaces, etc. and are directly transported to local Receiving Waters.

3.3.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all vehicle parking:

BMP R.3.1. Residents shall remove excessive accumulations of oil and grease deposited by vehicles they own from parking areas, using “dry cleaning” methods (e.g., absorbents, scraping, vacuuming, or sweeping).

BMP R.3.2. Residents shall move vehicles from streets when notified to do so to allow street cleaning.

3.3.4 Additional Recommended BMPs

- Use routine preventative maintenance practices and to make timely vehicle repairs.
- Repair leaky vehicles immediately, and in the interim, carry and use a drip pan whenever parked to collect leak and eliminate depositing pollutants on the ground.
- Park over pervious surfaces, such as lawns, dirt, gravel, porous pavement, etc.
- Cover vehicle-parking areas.

3.4 Landscaping and Gardening

3.4.1 Applicability

The requirements in this section apply to plant care and gardening activities such as plant and landscape maintenance, fertilization, and pesticide application.

3.4.2 Description of Impacts

Pollutant sources in landscaping include septic systems, fertilizers, animal waste, cleaning products, plant debris, and eroded soil. Phosphorus, nitrogen, and other nutrients can over stimulate aquatic weed and algae growth. As they decay, excess weeds, and algae take up oxygen in the water, which is needed by fish and other aquatic life. Most of the pesticides are considered to be toxic substances. Toxins can accumulate in the aquatic food chain, as a larger organism eats many smaller ones that are contaminated. Even in small concentrations, toxic substances can harm aquatic plants and animals.

Gardening can produce a variety of pollutants, such as eroded soil, green waste, fertilizers, and pesticides. These pollutants can be washed directly into the storm drain system and water bodies resulting in adverse impacts to both aquatic organisms and humans. Land surfaces without vegetation can be a serious source of pollutants. Uncontrolled sediment can clog storm water management systems, leading to flooding. As it settles, sediment can smother the fish eggs and bottom-dwelling organisms and destroy aquatic habitat. Suspended sediment can lower the transmission of light through water and interfere with the respiration and digestion of aquatic organisms. Other pollutants are adsorbed on the surfaces of soil particles and as sediments wash off-site they carry these pollutants with them.

Improper or excessive irrigation is often the most important contributing factor in the introduction of home and garden-generated pollutants to the MS4. Excessive irrigation water mobilizes pollutants by dissolving and/or washing them into the storm drain system. In the absence of excessive irrigation water, these pollutants will often be broken down into non-toxic compounds or assimilated through natural processes. Green waste is a byproduct of gardening and other landscape maintenance activities and may contain insecticide, pesticide, and fertilizer residues. Green waste washed into surface waters increases the biochemical oxygen demand (BOD) of the water body resulting in the consumption of dissolved oxygen needed by aquatic organisms. Green waste washed into water bodies can also alter the natural flow and configuration of stream channels and suffocate sensitive benthic (bottom-dwelling) organisms. (See section 4.8 for requirements related to disposal of green waste.)

3.4.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all landscaping and gardening activities:

BMP R.4.1. Irrigation systems should be routinely checked and adjusted to avoid excessive runoff.

BMP R.4.2. Spills of gardening chemicals, fertilizers, or soils to non-porous surfaces must be cleaned up, and properly disposed.

BMP R.4.3. Lawn and garden care products must be stored in closed labeled containers; or in covered areas; or off the ground under protective tarps.

BMP R.4.4. Household hazardous waste may not be disposed directly or indirectly to the trash or to the street, gutter or storm drain.

3.4.4 Additional Recommended BMPs

- Design timing and application methods of irrigation water to minimize the runoff of excess irrigation water into the storm drain system.
- Employ rain-triggered shutoff devices to prevent irrigation during and after precipitation.
- Design irrigation systems to each landscape area's specific water requirements.
- Include design featuring flow reducers or shutoff valves triggered by a pressure drop to control

water loss in the event of broken sprinkler heads or lines.

- Implement landscape plans consistent with County or City water conservation resolutions, which may include provision of water sensors, programmable irrigation times, etc.
- Group plants with similar water requirements in order to reduce excess irrigation runoff and promote surface filtration.
- Choose plants with low irrigation requirements, such as native or drought tolerant species.
- Use mulches in planter areas without ground cover to minimize sediment in runoff.
- Leave a vegetative barrier along the property boundary and interior watercourses to act as a pollutant filter, where appropriate.
- Avoid unnecessary pesticide use. Spot application of pesticide ensures that the smallest amount of chemical is applied to the ground and that the chemical is applied only in areas where it is needed. This reduces contamination of surrounding soil. Timely application ensures that applied chemicals do the most good when application is needed. This includes applying chemicals at times when they are most likely to be absorbed by the target species and not spraying in windy conditions or immediately before predicted precipitation events, which could blow or wash the applied chemical into the surrounding environment.
- Consider learning about and implementing Integrated Pest Management (IPM), in lieu of traditional chemical pesticides. IPM integrates common sense and nature to make it difficult for pests to survive. IPM techniques include cultural practices (such as mulching to prevent weeds), encouraging natural enemies (good bugs), and judicious use of pest control products.
- Improve mowing practices. Set the mower height so that no more than 1/3 of lawn height (no more than 1 inch total) is removed with each mowing.
- Compost landscaping waste. Composted green waste can be substituted for organic matter such as mulch and topsoil.
- Use erosion control mats and fabrics in channels to reduce the potential for erosion. If necessary, provide sodding or seeding on channels that are not stabilized with erosion control mats.
- After seeding, divert flows temporarily from seeded areas until stabilized.

- Sod stabilizes the area by immediately covering the surface with vegetation and enabling storm water to infiltrate into the ground.

3.5 Household Hazardous Waste Care & Disposal

3.5.1 Applicability

These requirements focus on the use and disposal of hazardous products and wastes by Residential Dischargers. Numerous hazardous products are used at residences. These products are generally oils, cleaners, bleaches, paints, solvents, polishes, pesticides and glues, although there are several other types of hazardous products. The following is a list of the household hazardous products and wastes that are accepted at the regional collection facility.

- Aerosols
- All-purpose Cleaners
- Ammonia
- Antifreeze
- Automobile Cleaners
- Barbecue Lighter Fluid
- Batteries
- Brake Fluid
- Chlorine Bleach
- Detergents
- Disinfectants
- Drain Opener
- Furniture Polish
- Gasoline
- Glass Cleaner
- Herbicides
- Mothballs
- Motor Oil
- Oven Cleaner
- Paint
- Paint thinner
- Pesticides
- Rubber Cement
- Rug/upholstery Cleaner
- Scouring Powder
- Silver Polish
- Toilet-bowl Cleaner
- Transmission Fluid
- Tube and Tile Cleaner
- Turpentine Varnish
- Water Sealant
- Wood Finish

3.5.2 Description of Impacts

Household hazardous products and wastes require proper handling, storage, and disposal to prevent accidental releases. If introduced to surface waters, they can cause toxicity endangering aquatic ecosystems. Improper or excessive application and disposal, and spills are important contributing factors in the introduction of household hazardous pollutants to the Storm Drain System. Improper use of household hazardous waste can also pose significant health risks.

3.5.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all hazardous waste handling:

BMP R.5.1. Painting equipment may not be cleaned out in or over streets, sidewalks or gutters.

BMP R.5.2. Action shall be taken to minimize and contain all spills of hazardous materials, if it is safe to do so.

BMP R.5.3. Household hazardous materials must be stored indoors or under cover, and in closed and labeled containers.

BMP R.5.4. Household washwaters (carpet cleaning, mop water, washing machine effluent, other gray water, paint wash-up water) may not be disposed of to the street, gutter, or storm drain or to Receiving Waters. Disposal to the sanitary sewer (e.g., through a sink, toilet or floor drain) or to a porous surface is required.

3.5.4 Additional Recommended BMPs

- Buy only hazardous products that are needed and only in quantities that will be used.
- If chemicals are not completely used, give them to someone who needs them or take them to a hazardous waste or recycling center that will accept them.
- Never dispose of household hazardous products in the regular trash or by putting them down the drain. Most sewage treatment plants cannot remove household cleaners, paints, solvents, and pesticides before returning the water to the environment.
- Do not flush harsh chemicals into a septic tank. This can damage its effectiveness by killing the soil microorganisms that process sewage. Harsh chemicals escape processing by the

microorganisms and thus may contaminate the septic tank drain field.

3.6 Pet Care & Pet Waste Disposal

3.6.1 Applicability

The requirements in this section apply to pet care and the disposal of animal and other pet waste including disposing any of the following: excrement dropped by animals, bedding and litter, and wastewater from bathing animals.

3.6.2 Description of Impacts

Pollutants from improperly disposed pet waste may be washed into storm sewers by rain. Storm sewers usually drain directly into our Receiving Waters. Since the storm drainage system does not connect to treatment plants, untreated pet feces can become a major source of water pollution. When pet waste decays into the water, it uses up oxygen and sometimes releases ammonia. Low-oxygen levels and ammonia combined with warm temperatures can harm the aquatic life. This not only kills fish, but may also place our health at risk. People exposed to contaminated waters are at risk for infection from some of the bacteria, parasites, or diseases found in pet waste. Diseases or parasites that can be transmitted from pet waste to human include the following: campylobacteriosis; cryptosporidium; toxocariasis; or toxoplasmosis.

3.6.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all animal and pet waste disposal activities:

BMP R.6.1. Manure deposited by confined livestock, horses, or other large animals on uncovered areas, from which runoff could enter Receiving Waters or the Storm Drain Systems, must be cleaned up at least twice weekly and either be composted, or be stored prior to disposal in a manner that prevents contact with runoff to Receiving Waters or the Storm Drain System.

BMP R.6.2. Areas used for composting such manure must be located, configured, or managed to prevent runoff to Receiving Waters or the Storm Drain System.

BMP R.6.3. Pet waste shall not be disposed to the Storm Drain System or Receiving Waters, or in

areas where it will drain untreated to the Storm Drain System or Receiving Waters.

3.6.4 Additional Recommended BMPs

- Always pick up pet waste, whether or not its on a pervious area, and dispose of it in the trash, toilet and properly compost the material.
- Always carry a bag, shovel, pooper-scooper, grovels, and anti-bacteria wraps to pick up your pet waste immediately and safely while walking in the park or your neighborhood area.
- Have a certified veterinarian inoculate your pet. Pet waste can carry diseases because of pet illness. Each pet vaccinated at less than one-year of age shall be revaccinated 12 months after the initial vaccination. After the initial rabies vaccination, every pet shall be vaccinated at not more that three-year intervals with a three-year vaccine or at one-year intervals with an one-year vaccine.

3.7 Green Waste Disposal

3.7.1 Applicability

The requirements in this section apply to the disposal of green waste. Green waste is the solid waste resulting from gardening, such as leaves, grass, shrub clippings, garden and yard waste, brush and woody materials, trees trunks, holiday trees, tree trimmings, and prunings.

3.7.2 Description of Impacts

Green wastes clog the storm drainage system and create flooding problems. Green waste washed into surface waters increases the BOD of the water body resulting in the consumption of dissolved oxygen needed by aquatic organisms. Green waste washed into water bodies can also alter the natural flow and configuration of stream channels and suffocate sensitive benthic (bottom-dwelling) organisms.

3.7.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all green waste disposal activities:

BMP R.7.1. Green waste may not be disposed of to the street, gutter, public rights-of-way, storm drain, or to Receiving Waters.

3.7.4 Additional Recommended BMPs

- Dispose of green waste through the City's waste collection service
- Do not mix green waste with regular garbage.
- Properly compost green waste materials.

3.8 Private Sewer Laterals and Onsite Wastewater System Maintenance

3.8.1 Applicability

The requirements in this section apply to private sewer laterals and onsite wastewater systems, such as septic systems.

3.8.2 Description of Impacts

Private sewer laterals and onsite wastewater systems carry untreated sewage that can contain numerous pollutants, especially bacteria and excessive nutrients. Improperly maintained private sewer laterals and onsite wastewater systems can break, clog, or malfunction that may result in an overflow and discharge of raw sewage. Raw sewage poses an extremely high risk to the health of the natural environment as well as to humans.

3.8.3 BMP Requirements

The following BMPs or equivalent measures, methods, or practices are required of Residential Discharges for all private sewer laterals and onsite wastewater systems:

BMP R.8.1. Dispose of grease in trash, not in the sink drain, to avoid solidifying grease in sewer lines potentially creating sewer overflows.

BMP R.8.2. Private sewer laterals shall be cleaned, maintained, and replaced, when necessary to prevent seepage and spills. Onsite wastewater systems shall be pumped, maintained, and repaired or replaced to prevent spills.

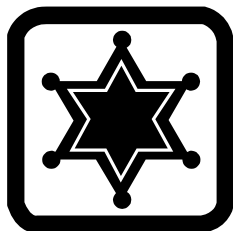
BMP R.8.3. Spills from private sewer laterals and onsite wastewater systems shall be contained and cleaned up in a manner that minimizes any release of pollutants to the Storm Drain System or Receiving Waters.

BMP R.8.4. Any release from a private sewer lateral that enters the Storm Drain System or Receiving Waters shall be immediately reported to the City.

BMP R.8.5. Failed onsite wastewater systems shall be repaired or replaced, after issuance of all required permits and approvals.



Chapter 4 Inspections and Enforcement



Inspections

The City of Dana Point will inspect its residential areas and activities to determine if they are in compliance with ordinances and permits, to review BMP implementation, to assess BMP effectiveness and to verify inventory information used for facility prioritization. Such inspections include review of:

- Material and waste handling and storage practices,
- Pollution control BMP implementation and maintenance, and
- Evidence of past or present unauthorized, non-storm water discharges.

Inspections will occur on an as needed basis, as determined by the City Code Enforcement Officer. Inspections may also occur as a result of one of the following:

- A public or municipal staff reporting

- An illicit discharge investigation
- As a follow-up to a previous inspection, violation, or citation

Enforcement

The City is required to enforce its ordinances for all of its residential areas and activities. The City employs several enforcement mechanisms and penalties to ensure the compliance with its ordinances. The levels of enforcement and associated penalties are typically issued at the discretion of the authorized City officer with consideration of relevant circumstances regarding the violation. The different types of enforcement actions used by the City are listed below.

- Verbal Warnings
- Written Warnings
- Administrative Citations
- Notice of Non-Compliance
- Suspension, Revocation, or Denial of Permits
- Civil and/or Criminal Court Actions

It should be noted that other agencies, such as the SDRWQCB, also exercise enforcement rights if violations fall within their jurisdiction. Often the penalties associated with the enforcement actions of these agencies are more severe than the City's.