

City of Santee

Guidelines for Surface Water Pollution Prevention

June 2015



10601 Magnolia Avenue, Department of Development Services, Building 4

www.santeeh2o.org

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1 Introduction

1.1 Guidelines for Surface Water Pollution Prevention

The City of Santee (City) Guidelines for Surface Water Pollution Prevention (hereafter, “Manual”) supports the City’s Storm Water Management and Discharge Control Ordinance (Storm Water Ordinance), codified as Santee Municipal Code Chapter 13.42. The Manual also supports as the water quality protection provisions of Municipal Code Chapters 15.58, Excavation and Grading. Moreover, the Manual is not a stand-alone document but must be read with applicable parts of the aforementioned chapters of the Municipal Code (collectively, “Ordinances”). In general, this Manual categorically and explicitly establishes what dischargers must do to comply with the Ordinances and to receive permits for projects and activities that are subject to them. The Manual and the Ordinances have been prepared to provide the City with the respective legal authority and administrative actions necessary to comply with the requirements of California Regional Water Quality Control Board, San Diego Region (RWQCB) Order No. R9-2013-0001, as amended by Order No. R9-2015-0001 (Municipal Permit).

1.2 Purposes and Use

The Manual establishes minimum storm water management requirements and controls to address the highest priority water quality condition (HPWQC) in the Water Quality Improvement Plan (WQIP) for the San Diego River Watershed Management Area (WMA). Further, the Manual supports the following objectives stated in Section 13.42.020 of the Storm Water Ordinance:

1. Effectively prohibiting non-storm water discharges to the storm water conveyance system.
2. Eliminating illicit discharges and illicit connections to the storm water conveyance system.
3. Reducing the discharge of pollutants from the storm water conveyance system, to the maximum extent practicable in order to achieve applicable water quality objectives for surface waters in San Diego County.
4. Achieving compliance with Total Maximum Daily Load regulations.

In the San Diego River WMA, bacteria has been identified as the HPWQC. During dry weather conditions, non-storm water flows transport bacteria and other pollutants. For this reason, the City has minimum requirements to effectively prohibit non-storm water discharges and will implement activities to reduce them. The requirements described in the Manual are primarily in the form of BMPs to be used to reduce the amount of pollutants discharged to the City’s STORM WATER CONVEYANCE SYSTEM. The Manual is intended to provide direction to

residents, businesses, contractors, developers, and City staff about what is necessary to meet the City's storm water requirements. All terms used in the Manual have the same meaning as defined in Municipal Code Chapter 13.09, unless otherwise noted.

2 Other Applicable Regulations

The Manual describes storm water BMPs required by the City of Santee. Some actions and activities associated with storm water BMP requirements may be subject to additional requirements or approvals, such as other City departments or non-municipal agencies. Other agencies, such as the RWQCB, the US Army Corps of Engineers, and the County of San Diego Department of Environmental Health, may also have applicable requirements. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. Dischargers are responsible for determining what other requirements may apply, if any, and taking actions as necessary to comply with them.

Discharges to the sanitary sewer system may require approval from the City's Community Services Department's Public Services Division. Call (619) 258-4195 for more information. Structural improvements to properties, such as building an overhead canopy, may require City permits. Contact Development Services Department's Building Division at (619) 258-4100 (x155) for more information.

3 Minimum BMP Requirements

This section presents minimum BMP requirements for the following land uses, activities, and projects within the City:

- Industrial, commercial, and municipal facilities or areas
- Residential areas
- Construction sites
- Development projects (post-construction BMPs)

These are the minimum BMP requirements that must be implemented for applicable activities. However, additional consideration should be given to the following:

- Due to site-specific conditions, some BMP requirements reference terms such as "where applicable" or "where feasible." These terms require that BMPs be implemented at the discretion and with the final determination made by City personnel or their designees (i.e., contract staff). City staff or their designees also have the authority to require additional BMPs, if necessary, to comply with the Storm Water Ordinance and/or the Municipal Permit.

- References to “CASQA Factsheets” refer to factsheets in manuals prepared by the California Stormwater Quality Association (CASQA). CASQA materials can be accessed at www.casqa.org. Some materials may not be viewable without a paid subscription.

3.1 Industrial, Commercial, and Municipal

Minimum BMP requirements for industrial, commercial, and municipal sites and activities are provided in Table 1. These BMPs have been developed, and are supported by, factsheets adopted by the CASQA¹. City exceptions to the procedures described in the CASQA factsheets are identified in footnotes. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the Municipal Code, the requirements of the Manual and the Municipal Code shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

¹ CASQA (2015). *Stormwater Best Management Practice Portal: Industrial and Commercial*. www.casqa.org.

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Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
<p>These best management practices (BMPs) are applicable to all industrial, commercial, and municipal facilities and activities. The BMPs listed in this table are the minimum required BMPs; however, additional tools and education may be necessary to facilitate BMP implementation onsite. Additional BMPs may include 1) developing a written BMP plan, 2) conducting regular training on BMP implementation, and 3) stenciling storm drains. A BMP plan is a site-specific or mobile activity-specific written plan that identifies applicable BMPs and provides clear instructions on proper BMP implementation. Staff should be regularly trained on the minimum BMP requirements and how they are met for a particular facility or activity. Storm drain stenciling promotes storm water awareness and may include concrete stamps, painted stencils, signs, and the installation of ceramic or plastic tiles. Storm drain signage should include a message similar to “No Dumping – Drains to Ocean”.</p>			
<p>Discharge Control</p>			
1	Eliminate illicit connections to the MS4.	Illicit connections are man-made physical connections to the municipal separate storm sewer system (MS4) that convey an illicit discharge. Find and abate all illicit connections to the MS4 through properly approved procedures, permits, and protocols.	SC-10, SC-44
2	Eliminate illicit non-storm water discharges.	Non-storm water (water other than rain) shall not be discharged to the City of Santee’s (City) MS4. To eliminate illicit discharges, do not allow any solid or liquid material except uncontaminated storm water to enter City storm drains, curb gutters along City streets, or any other part of the City’s MS4. Non-storm water discharged to the MS4 as a result of emergency or non-emergency firefighting activities, both emergency and non-emergency activities, is considered an illicit discharge if the City or the California Regional Water Quality Control Board, San Diego Region (RWQCB) identifies the discharge as a significant source of pollutants to receiving waters. Other limited exceptions may apply. During emergency situations, priority of efforts is directed toward life, property, and the environment (in descending order). The City’s minimum BMPs should be implemented, but should not interfere with immediate emergency response operations or impact public health and safety.	SC-10, SC-11, SC-44

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
3	Properly dispose of process and wash water.	All process water and wash water shall be contained, captured, and reused, or properly disposed of to the sanitary sewer or removed by an appropriate waste hauler. Wash water which does not contain chemicals or oil/grease, may be discharged to landscaping or other pervious surfaces.	SC-10, SC-41 ²
4	Eliminate the discharge of vehicle and equipment wash water.	<p>This BMP is applicable to all industrial, commercial, and municipal facilities and activities, regardless of whether the activity is conducted by the facility owner/operator, lessee, contractor, or other persons. Water associated with washing activities shall not be allowed to enter City storm drains, curbs and gutters, or any other part of the City’s MS4. When washing is conducted outside permanent designated wash areas, all wash water must be contained, captured, and disposed of appropriately.</p> <p>Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff. Use of a control nozzle or similar mechanism is required to maximize control over the quantity of water used. Allowing contained water to evaporate is an acceptable method of disposal only if any remaining residue is removed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system with the approval of the City’s Community Services Department’s Public Services Division. Contact the Public Services Division at (619) 258-4195 for approval of any discharges to the sanitary sewer system; businesses are responsible for obtaining necessary permits. Wash water containing oil, paint, or other hazardous waste should be disposed of properly in accordance with applicable regulations.</p> <p>If only biodegradable soaps and uncontaminated water are used, wash water may be directed to onsite landscaped or pervious area(s) to infiltrate or evaporate, without resulting in erosion or runoff to the MS4 or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area.</p>	SC-10, SC-21

² Factsheet SC-41 - Building & Grounds Maintenance, states (in regards to pressure washing), "If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff." Non-storm water discharges of this nature, even if filtered, are not allowed to enter the MS4. Wash water must be contained, collected, and disposed of properly.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
5	Properly dispose of water from fire sprinkler maintenance activities.	Fire sprinkler system discharges often contain corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer system, not the MS4. Fire sprinkler system discharges without corrosion inhibitors, fire suppressants, or antifreeze shall be disposed through the sanitary sewer, if practicable. When not practicable to discharge to the sanitary sewer system due to the presence of prohibited contaminants, the water shall be collected and disposed of by an appropriately certified party. When not practicable to discharge to the sanitary sewer system for reasons other than the presence of prohibited contaminants, the water may be discharged to an impervious or landscaped area as long as it does not create erosion, or run off from the area. Adequate precautions must be taken to prevent the transport of pollutants to the MS4.	SC-10, SC-41
6	Eliminate irrigation runoff.	Irrigation runoff to the MS4 shall be eliminated through proper landscape maintenance and watering practices. All irrigation water and associated pollutants from nurseries, garden centers, and similar facilities shall be prevented from reaching City storm drains, curb gutters along City streets, or any other part of the City’s MS4.	SC-10 ³ , SC-41
7	Eliminate air conditioning condensation discharges.	Air conditioning condensation discharges shall be controlled from reaching City storm drains, curb gutters along City streets, or any other part of the City’s MS4 and are prohibited from entering the City’s MS4	Ordinance
8	Eliminate floor mat cleaning discharges.	Floor mats shall be cleaned in a manner such that there is no discharge to City storm drains, curb gutters along City streets, or any other part of the City’s MS4. Indoor wash areas, mop sinks, or indoor floor drains may be designated as wash areas for floor mats if these areas drain to the sanitary sewer system.	SC-10, SC-21

³ Factsheet SC-10 – Non-Stormwater Discharges states that “landscape irrigation drainage and landscape watering” may be discharged to the storm drain with conditions; however, in accordance with the Municipal Permit, no irrigation runoff may be discharged to the City’s MS4.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
9	Eliminate pumped groundwater, foundation, and footing drain discharges.	Pumped groundwater, including water from crawl space pumps is prohibited unless a separate National Pollutant Discharge Elimination System (NPDES) permit has been obtained to cover the discharge, or the RWQCB has determined in writing that no permit is needed. Discharges from foundation and footing drains that are at or below the groundwater table are also prohibited, unless covered by an NPDES permit, or the RWQCB has determined in writing that no permit is needed.	SC-10
10	Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/ footing drain discharges.	Discharges from rising groundwater, diverted stream flows, riparian habitat and wetlands, uncontaminated groundwater infiltration to the MS4, springs, and potable water sources are exempt unless they are identified as a source of pollutants to receiving waters by the City or the RWQCB.	SC-10
11	Direct runoff from pavement, rooftops, and other impervious surfaces to landscaped areas.	Runoff from pavement, rooftops, and other impervious surfaces shall be directed to landscaped or pervious area(s) to infiltrate or evaporate, where suitable areas exist onsite. Energy dissipation and erosion control measures shall be used to prevent erosion and sediment transport. Where possible, divert runoff collected on roofs, canopies, and other coverings from discharging into areas of potential pollutant use or storage. Downspouts should be directed to avoid critical areas such as loading/unloading areas, fueling, fabrications, lead tool, and dye storage of hazardous waste storage areas. If possible, divert run-on generated by neighboring facilities or adjacent properties before it can enter the site grounds. This should be done in such a manner as to prevent flooding of adjacent property. Berming, diversion ditches, and dikes can direct flow away from the site.	SC-10

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
12	Regularly clean and maintain structural BMPs, including LID installations, to ensure proper performance.	BMPs implemented, including Low Impact Development (LID) and structural BMPs, must be inspected at a minimum annually, and properly operated and maintained. All installed LID or structural BMPs shall be inspected at a minimum of once annually for proper function and maintained to confirm the BMP is serving the purpose for which it was intended.	SC-44
Erosion and Sediment Control			
13	Protect unpaved areas, including landscaping, from erosion using vegetative or physical stabilization.	Exposed soils that are actively eroding or prone to erosion due to disturbance shall be protected from erosion. Significant accumulations of eroded soil shall be removed or contained to prevent sediment transport in runoff to the MS4.	SC-40, SC-42
Good Housekeeping			
14	Regularly clean parking areas.	Paved parking lots, roads, and driveways located on the property shall be cleaned as needed to prevent pollutants from entering the City’s MS4, including the curb and gutter. Sweeping is the preferred method of cleaning. Wet cleaning methods, such as mopping or power washing, may be substituted for sweeping if all wash water is contained, captured, and disposed of appropriately.	SC-41, SC-43, BG-62 ⁴
15	Implement good housekeeping to keep site free of trash and debris.	Outdoor areas shall be cleaned as needed to keep them free of accumulations of trash, sediment, litter, and other debris.	SC-41

⁴ Factsheet BG-62 – Mobile Cleaning – Surface Cleaning, states (in regards to pressure washing) that screened, or filtered, wash water can be discharged to a gutter, street, or storm drain. Non-storm water discharges of this nature, even if filtered, are not allowed to enter the MS4, which includes the streets and gutters. Wash water must be contained, collected, and disposed of properly.

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
16	Keep storm drain inlets and under drains free of sediment, trash, and debris.	Accumulated materials shall be removed from on-site storm drains and under drains at least once per year.	SC-44
Material Storage and Handling			
17	Provide and maintain secondary containment to catch spills if storing liquid pollutants in outdoor areas.	Drums and other containers shall be kept in good condition and securely closed when not in use. Effective secondary containment shall be provided and maintained for all containers of liquid with the potential to leak or to spill onto outdoor areas to prevent leaks or spills from discharging pollutants to the MS4. Secondary containment shall also be provided for all liquids during transport to prevent spills due to leaks or punctures. A variety of methods are available, including but not limited to: containers, curbs, and vendor products. To maintain the effectiveness of secondary containment, regularly remove and appropriately dispose of spills, precipitation, or other liquids that accumulate in the secondary containment. Provide liquid storage containers with covers to prevent precipitation from accumulating in or causing overflows from the secondary containment. If evidence of spills due to inadequate containment is observed, the City enforcement official may specify a minimum required containment capacity. Other applicable regulations may apply to the use of secondary containment, especially for hazardous materials, which are regulated by the County of San Diego Department of Environmental Health.	SC-20, SC-31
18	Cover, contain, and/or elevate materials stored outside that may become a source of pollutants in storm water or non-storm water.	Materials stored outdoors shall be covered, contained, and/or elevated to prevent storm water and non-storm water from contacting and/or transporting materials and pollutants to the MS4. Some examples of cover are roofs, awnings, and tarps. Where coverage is not feasible or is cost prohibitive, alternative approaches such as installing berms around the stored materials, directing runoff to pervious areas, or installing treatment devices may be allowed. Note that installing structural coverage will usually require obtaining permits from the City prior to installation. To determine applicable regulations and whether a permit would be required, contact the Development Services Department’s Building Division at (619) 258-4100 (x155).	SC-20, SC-33

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
19	Properly store and dispose of hazardous materials.	Hazardous materials and wastes shall be stored, managed, and disposed in accordance with federal, state, and local laws and regulations. Hazardous materials and wastes and their primary storage containers shall also be stored such that they will not come into contact with storm water, even if leaks or spills occur. Hazardous materials and wastes generated by business activities are additionally regulated by the County of San Diego Department of Environmental Health. Disposal of hazardous wastes using an authorized hazardous waste collection service is required. Store hazardous materials and wastes, and their primary storage containers, with sufficient cover and/or containment to prevent contact with storm water. See BMPs 18 and 19 for additional details regarding storage.	SC-20, SC-31, SC-33
20	Label containers to prevent mishandling of hazardous materials and other potential pollutants.	Outdoor containers and storage areas of pollutants shall be labeled to facilitate proper material handling and spill response. Hazardous materials and wastes shall be clearly labeled in accordance with all applicable regulations.	SC-31
21	Minimize the amount of liquid cleaning agents and solvents used.	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations including vehicles, equipment, aircraft or ship cleaning, metal work, and painting practices. Use products other than liquid cleaning agents to the maximum extent practicable; Substitute cleaning methods such as wire brush scraping or using a bake oven. Reuse solvents and use sparingly; pre-soak parts in "dirty" solvents before placing in fresh solvent to reduce volume of solvent used.	SC-22
22	Protect storage containers from being damaged by vehicles.	Prevent vehicle impact damage to storage containers by installing bollards, traffic barriers, fences, and curbs to protect containers stored in locations accessible to vehicles. Vehicles may damage storage containers leading to ruptures and cracks that may lead to significant spills and leaks.	SC-31

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Pesticide and Fertilizer Management			
23	Properly manage pesticides and fertilizers.	Pesticides and fertilizers shall be applied in strict accordance with manufacturer's label, as authorized by U.S. Environmental Protection Agency. Chemicals shall be stored safely in covered and contained areas. See BMPs 18 and 19 for additional details regarding storage. Waste products shall be disposed of in accordance with the manufacturer's label and applicable hazardous waste regulations. The use of integrated pest management (IPM) principles is encouraged to reduce or eliminate use of chemicals. For more information about integrated pest management, see the University of California Statewide IPM Program at http://www.ipm.ucdavis.edu .	SC-35, SC-41, BG-40
Outdoor Work Areas			
24	Implement controls to minimize pollution from exposed outdoor work areas.	Activities that may generate pollutants shall be conducted in covered, contained areas, or equivalent measures taken to prevent the discharge of associated pollutants. In order to avoid contaminating storm water runoff, the following precautions shall be taken as appropriate: (1) move activities indoors;(2) cover areas where outdoor activities are performed, including building canopies; (3) protect areas where outdoor activities are performed from runoff from upstream areas, including building berms; (4) prevent spills or by-products from escaping contained areas; (5) do not conduct outdoor activities that may generate pollutants when it is raining; (6) protect storm drain inlets and ensure adequate spill response materials are readily available; and, (7) thoroughly clean outdoor work areas at least daily to remove accumulated sediment, debris, oil and grease, particulate matter, and other pollutants. Structural treatment devices shall also be installed to remove pollutants from contaminated runoff if source control BMPs are not effective.	SC-20, SC-30, SC-32, SC-34, SC-42
Spill Prevention and Response			
25	Prevent or capture liquid leaks from vehicles and equipment.	Leaking vehicles or equipment shall be repaired promptly. Drip pans or other equivalent means shall be used to capture spills or leaks of oil and other fluids from vehicles awaiting maintenance and during maintenance activities. Captured fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-11, SC-22

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
26	Immediately contain and clean up spills.	Spills shall be cleaned up immediately and prevented from entering the MS4. Dry cleaning methods such as the use of rags and absorbents are preferred cleaning methods. Spills that enter a storm drain and cannot be fully recovered shall be reported promptly to the City's Storm Water Hotline at (619) 258-4100 (x168).	SC-11
27	Maintain a readily accessible spill cleanup kit that is appropriate for the type of materials stored onsite.	Materials and equipment appropriate for the type and quantity of potential spills shall be kept onsite and with any mobile activities as a spill cleanup kit. Keep cleanup materials in close proximity to locations where spills may occur, with instructions for use clearly displayed.	SC-11, SC-22
28	Drain fluids from inoperable vehicles and store or dispose of appropriately.	Oil, antifreeze, and other fluids shall be drained from inoperable vehicles intended for recycling or long-term storage that are stored outside. Drained fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-22
29	Temporarily protect storm drains from non-storm water discharges at and downstream of the work area while conducting activities that have the potential to result in a discharge.	If activities conducted cannot be fully contained or minor failures in containment would potentially result in discharges of non-storm water to the MS4, temporary measures shall be used to protect storm drains. Any activity-related materials that enter the MS4 shall be removed promptly and disposed of appropriately (in accordance with other minimum BMPs).	SC-10, SC-44

Table 1. Minimum Best Management Practices (BMPs) for Industrial, Commercial, and Municipal Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Waste Management			
30	Keep trash/waste storage areas free of exposed trash, sediment, and debris.	Stored waste shall be protected from contact with storm water and non-storm water run-on and run-off. Disposal areas for trash and other wastes (e.g., waste cooking oil) shall be cleaned as frequently as necessary to keep these areas free of loose trash, litter, debris, liquids, powders, and sediment. Liquid waste, hazardous waste, medical waste, universal waste, and other items prohibited by current regulations shall not be placed in solid waste dumpsters. Dry cleaning methods such as sweeping, scraping off residue, using dry mop, or rags are preferred. If wet cleaning methods are used, all wash water must be contained, captured, and disposed of appropriately. See BMP 4 for information on appropriate wet cleaning practices.	SC-34, SC-41
31	Protect waste storage areas from contact with storm water and non-storm water flows onto the property.	Stored trash and other wastes shall be completely protected from contact with storm water and non-storm water flows. Trash and other wastes shall be contained to prevent transport of trash off site, and to keep surrounding areas and on site storm drains free of trash and other wastes.	SC-34
32	Properly store and dispose of green waste.	Green waste shall be properly removed, stored, and disposed of such that it will not be transported to the MS4 by storm water or non-storm water runoff, wind, or other means.	SC-34, BG-40
33	Manage animal waste and animal washing in a manner that prevents transport of wastes and wash water off-site.	Animals and animal waste shall be managed and stored in a manner that prevents animal waste and wash water from entering the MS4. Collect and dispose of animal waste to the trash or the sanitary sewer, as appropriate.	SC-34, BG-10

3.2 Residential

Table 2 below presents the minimum required BMPs for residential sites and sources. The City's BMP standards are based on the CASQA BMP factsheets. City exceptions to the procedures described in the factsheets are identified in footnotes. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the Municipal Code, the requirements of the Manual and the Municipal Code shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

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Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources⁵

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Discharge Control			
1	Eliminate illicit connections to the MS4.	Illicit connections are man-made physical connections to the municipal separate storm sewer system (MS4) that convey an illicit discharge. Find and abate all illicit connections to the MS4 through properly approved procedures, permits, and protocols.	SC-10, SC-44
2	Eliminate illicit non-storm water discharges.	Non-storm water (water other than rain) shall not be discharged to the City of Santee's (City) MS4. To eliminate illicit discharges, do not allow any solid or liquid material except uncontaminated storm water to enter City storm drains, curb gutters along city streets, or any other part of the City MS4.	SC-10, SC-11, SC-44
3	Properly dispose of wash water.	All process water and wash water shall be contained, captured, and reused, or properly disposed of to the sanitary sewer, an appropriate waste hauler, or to landscaping or other pervious surfaces.	SC-10, SC-41 ⁶

⁵ To the extent practicable, the City's established minimum BMPs for industrial, commercial, municipal sites/sources shall also be implemented for any industrial/commercial type of activities conducted at a residence where appropriate.

⁶ Factsheet SC-41 - Building & Grounds Maintenance, states (in regards to pressure washing), "If soaps or detergents are not used, and the surrounding area is paved, wash runoff does not have to be collected but must be screened. Pressure washers must use filter fabric or some other type of screen on the ground and/or in the catch basin to trap the particles in wash water runoff." Non-storm water discharges of this nature, even if filtered, are not allowed to enter the MS4. Wash water must be contained, collected, and disposed of properly.

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
4	Properly dispose of vehicle and equipment wash water.	<p>Water associated with washing activities are not allowed to enter City storm drains, curbs and gutters, or any other part of the City’s MS4. When washing vehicles, boats or other equipment in an area that may reach the MS4, the following BMPs must be employed.</p> <ul style="list-style-type: none"> • Use of a control nozzle or similar mechanism is required to minimize the quantity of water used. • Wash areas should not be located near any drains that connect to the MS4. Designated washing areas may consist of a container, a berm, or a liner to collect and contain liquids and prevent runoff. • When washing is conducted all wash water must be contained, captured, and disposed of appropriately. Allowing contained water to evaporate is an acceptable method of disposal <u>only if</u> after the water has evaporated, any remaining residue on pavement or other impervious areas is removed and properly disposed to prevent future pollutant discharges. Captured wash water may be disposed through the sanitary sewer system. • Wash water containing oil, paint, or other hazardous waste shall be disposed of properly in accordance with applicable regulations. • <u>If only biodegradable soaps and uncontaminated water are used</u>, wash water may be directed to onsite landscaped or pervious area(s) to infiltrate into the ground or evaporate, without resulting in erosion or runoff to the MS4 or any adjacent property. This can be accomplished by washing the vehicle on a landscaped area or using a berm to direct wash water to a landscaped area. 	SC-10, SC-21
5	Properly dispose of water from fire sprinkler maintenance activities.	<p>Fire sprinkler system discharges are likely contain corrosion inhibitors, fire suppressants, antifreeze, corroded materials, and bacteria from stagnant water and therefore, shall be disposed through the sanitary sewer system, <u>not</u> the MS4. Fire sprinkler system discharges without corrosion inhibitors, fire suppressants, or antifreeze may be disposed through the sanitary sewer, if practicable. When not practicable to discharge to the sanitary sewer system due to the presence of prohibited contaminants, all discharged water shall be <u>collected and disposed of by an appropriately certified party</u>. When not practicable to discharge to the sanitary sewer system for reasons other than the presence of prohibited contaminants, the water may be discharged to a landscaped area, so long as it does not create erosion, or runoff from the landscaped area.</p>	SC-10, SC-41

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
6	Eliminate irrigation runoff.	Irrigation runoff to the MS4 shall be eliminated through proper landscape maintenance and watering practices. All irrigation water and associated pollutants from nurseries, garden centers, and similar facilities shall be prevented from reaching City storm drains, curb gutters along City streets, or any other part of the City's MS4.	SC-10 ⁷ , SC-41
7	Eliminate air conditioning condensation discharges.	Air conditioning condensation discharges shall be controlled from reaching City storm drains, curb gutters along City streets, or any other part of the City's MS4 and are prohibited from entering the City's MS4. The following BMPs are recommended: <ol style="list-style-type: none"> 1. Evaluate AC system to ensure it is operating properly. There should not be constant runoff from the system. 2. Air conditioning condensation can be directed to the sanitary sewer where feasible. 3. Air conditioning condensation discharges can be directed to onsite landscaped or pervious area to infiltrate or evaporate, without resulting in erosion or runoff to the MS4 or any adjacent property. Directing discharges to landscaping immediately adjacent to a building foundation is not recommended. 	SC-10, SC-42
8	Eliminate pumped groundwater, foundation, and footing drain discharges.	Pumped groundwater, including water from crawl space pumps is prohibited unless a separate National Pollutant Discharge Elimination System (NPDES) permit has been obtained to cover the discharge, or the California Regional Water Quality Control Board, San Diego Region (RWQCB) has determined in writing that no permit is needed. Discharges from foundation and footing drains that are at or below the groundwater table are also prohibited, unless covered by an NPDES permit, or the RWQCB has determined in writing that no permit is needed.	SC-10

⁷ Factsheet SC-10 – Non-Storm Water Discharges states that “landscape irrigation drainage and landscape watering” may be discharged to the storm drain with conditions; however, in accordance with RWQCB Order No. R9-2013-0001 (Municipal Permit), no irrigation runoff may be discharged to the City's MS4.

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
9	Minimize rising groundwater, diverted stream flows, uncontaminated groundwater infiltration, springs, riparian habitat/wetland flows, potable water sources, and foundation/footing drain discharges.	Discharges from rising groundwater, diverted stream flows, riparian habitat and wetlands, uncontaminated groundwater infiltration to the MS4, springs, and potable water sources are exempt unless they are identified as a source of pollutants to receiving waters by the City or the RWQCB.	SC-10
10	Direct runoff from pavement, rooftops, and other impervious surfaces to landscaped areas.	Runoff from pavement, rooftops, and other impervious surfaces shall be directed to landscaped or pervious area(s) to infiltrate or evaporate, where suitable areas exist onsite. Energy dissipation and erosion control measures shall be used to prevent erosion and sediment transport.	SC-10
11	Regularly clean and maintain BMPs, including LID installations, to ensure proper performance.	All BMPs require maintenance, including Low Impact Development (LID) and structural BMPs. At a minimum, BMPs must be inspected annually, and properly operated and maintained. All installed LID or structural BMPs shall be inspected at a minimum of once annually for proper function and maintained to confirm the BMP is serving the purpose for which it was intended.	SC-44

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Erosion and Sediment Control			
12	Protect unpaved areas, including landscaping, from erosion using vegetative or physical stabilization.	Exposed soils that are actively eroding or prone to erosion due to disturbance shall be protected from erosion. Significant accumulations of eroded soil shall be removed or contained to prevent sediment transport in runoff to the MS4.	SC-40, SC-42
Good Housekeeping			
13	Regularly clean parking areas.	Paved parking lots, private roads, and driveways located on the property shall be cleaned as needed to prevent pollutants from entering the City's MS4, including the curb and gutter. Dry sweeping, or a street sweeper which vacuums up debris and water, are the preferred method of cleaning. Wet cleaning methods, such as mopping or power washing, may be substituted for sweeping if all wash water is contained, captured, and disposed of appropriately.	SC-41, SC-43
14	Implement good housekeeping to keep site free of trash and debris.	Outdoor areas shall be cleaned as needed to keep them free of accumulations of trash, sediment, litter, and other debris.	SC-41
15	Keep storm drain inlets and under drains free of sediment, trash, and debris.	Accumulated materials shall be removed from on-site storm drains as needed to keep them free of trash, sediment, litter, and other debris.	SC-44
Material Storage and Handling			
16	Reduce the amount of liquid cleaning agents and solvents used.	Reduce potential for pollution from cleaning agents such as soaps and detergents used in any maintenance operations. Use products other than liquid cleaning agents to the maximum extent practicable. Substitute non-toxic or less-toxic cleaning agents.	SC-22

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Pesticide and Fertilizer Management			
17	Properly manage pesticides and fertilizers.	Pesticides and fertilizers shall be applied in strict accordance with manufacturer's label, as authorized by U.S. Environmental Protection Agency. Chemicals shall be stored safely in covered and contained areas. Waste products shall be disposed of in accordance with the manufacturer's label and applicable hazardous waste regulations. The use of integrated pest management (IPM) principles is encouraged to reduce or eliminate use of chemicals. For more information about integrated pest management, see the University of California Statewide IPM Program at http://www.ipm.ucdavis.edu .	SC-35, SC-41
Spill Prevention and Response			
18	Prevent or capture liquid leaks from vehicles or equipment.	Leaking vehicles or equipment shall be repaired promptly. Drip pans or other equivalent means shall be used to capture spills or leaks of oil and other fluids from vehicles while stored and during any maintenance activities. Captured fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-11, SC-22
19	Immediately clean up spills.	Spills shall be cleaned up immediately and prevented from entering the MS4. Dry cleaning methods such as the use of rags and absorbents are preferred cleaning methods. Spills that enter a storm drain and cannot be fully recovered shall be reported promptly to the City's Storm Water Hotline at (619) 258-4100 (x168).	SC-11
20	Drain fluids from inoperable vehicles and store or dispose of appropriately.	Oil, antifreeze, and other fluids shall be drained from inoperable vehicles intended for recycling or long-term storage that are stored outside. Drained fluids shall be disposed of in accordance with applicable hazardous materials regulations.	SC-22
21	Temporarily protect storm drains from non-storm water discharges while conducting any activities that has the potential to runoff.	If activities conducted cannot be fully contained or minor failures in containment would potentially result in discharges of non-storm water to the MS4, temporary measures shall be used to protect storm drains. Any activity-related materials that enter the MS4 shall be removed promptly and disposed of appropriately (in accordance with other minimum BMPs).	SC-10, SC-44

Table 2. Minimum Best Management Practices (BMPs) for Residential Sites/Sources (continued)

No.	BMP Title	BMP Description	CASQA BMP Factsheet Reference
Waste Management			
22	Keep trash/waste storage areas free of exposed trash, sediment, and debris.	Stored waste shall be protected from contact (both run-on and run-off) with storm water and non-storm water. Disposal areas for trash and other wastes shall be cleaned as frequently as necessary to keep these areas free of loose trash, litter, debris, liquids, powders, liquid residue, and sediment. Liquid waste, hazardous waste, medical waste, universal waste, and other items prohibited by current regulations shall not be placed in solid waste dumpsters. Dry cleaning methods such as sweeping are preferred. If wet cleaning methods are used, all wash water must be contained, captured, and disposed of appropriately. See BMP 3 for information on appropriate wet cleaning practices.	SC-34, SC-41
23	Protect waste storage areas from contact with storm water and non-storm water flows on to the property.	Stored trash and other wastes shall be protected from contact with storm water and non-storm water flows. Trash and other wastes shall be contained to prevent transport of trash off site, and to keep surrounding areas and on site storm drains free of trash and other wastes.	SC-34
24	Properly store and dispose of green waste.	Green waste shall be properly stored and disposed of such that it will not be transported to the MS4 by storm water or non-storm water runoff. Contact Waste Management to request a free recycling bin.	SC-34
25	Manage animal waste and animal washing in a manner that prevents transport of wastes and wash water off-site.	Animals and animal waste shall be managed and stored in a manner that prevents animal waste and wash water from entering the MS4. Collect and dispose of animal waste to the trash or the sanitary sewer, as appropriate.	SC-34

3.3 Construction

Table 3 presents the minimum BMPs required for construction sites within the City's jurisdiction. The City's BMP standards are based on the CASQA BMP factsheets. Where any conflict may exist between CASQA factsheets and requirements in the Manual or the Municipal Code, the requirements of the Manual and the Municipal Code shall prevail. Complying with the BMPs described in the Manual does not ensure compliance with all other regulatory requirements, including requirements of other agencies. See Section 2 for more information about other potentially applicable requirements.

Construction site BMPs are required to be implemented in an effective combination of BMPs that are site specific, construction phase appropriate, and seasonally appropriate. Dry season (May 1 through September 30) BMP implementation must plan for and address rain events that may occur in the dry season. BMP implementation for ground disturbing activities should include an effective combination of both erosion and sediment control BMPs. The City emphasizes erosion control BMPs as the primary approach to reducing pollution in storm water discharges from construction sites.

Because site conditions change over time and from phase to phase, site owners and operators should regularly evaluate BMP implementation to verify continued effectiveness. City staff also assess BMP implementation during construction, most commonly during site inspections. City staff have the authority to require BMPs that are appropriate to the observed condition and phase of a construction site to ensure discharges of pollutants are reduced to the MEP, even if those BMPs are not explicitly shown on the approved plans.

Construction sites also must adhere to the requirements of all applicable additional SWRCB or RWQCB general or site-specific NPDES permits for construction activities (see Section 2) at the time of construction.

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Table 3. Minimum Best Management Practices (BMPs) for Construction Sites

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories							CASQA BMP Objectives					
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	House-keeping	Non-Storm Water Management	Active/Passive Sediment Treatment	Erosion Control	Sediment Control	Tracking Control	Wind Erosion	Non-Storm Water Management	Waste Management
Project Planning	Yes	EC-1	Scheduling	x							P	S	S	S		
Erosion Control	Yes, Select Effective Combination ²	EC-2	Preservation of Existing Vegetation	x	x						P					
		EC-3	Hydraulic Mulch		x						P			S		
		EC-4	Hydroseeding		x						P			S		
		EC-5	Soil Binders		x						P			S		
		EC-6	Straw Mulch		x						P			S		
		EC-7	Geotextiles and Mats		x						P			S		
		EC-8	Wood Mulching		x						P			S		
		EC-14	Compost Blankets		x						P					
	Yes, Select Effective Combination ²	EC-9	Earth Dikes and Drainage Swales			x					P					
		EC-10	Velocity Dissipation Devices			x					P					
		EC-11	Slope Drains			x					P					
	Yes	EC-12	Stream Bank Stabilization		x						P	S			S	
	Potential Alternative ³	EC-15	Soil Preparation Roughening		x						P	S				
		EC-16	Non-Vegetative Stabilization		x						P	S			S	

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories							CASQA BMP Objectives					
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	House-keeping	Non-Storm Water Management	Active/Passive Sediment Treatment	Erosion Control	Sediment Control	Tracking Control	Wind Erosion	Non-Storm Water Management	Waste Management
Sediment Control	Yes, Select Effective Combination ^{2,4}	SE-1	Silt Fence ⁵				x					P				
		SE-2	Sediment Basin ⁶				x					P				
		SE-3	Sediment Traps ⁶				x					P				
		SE-4	Check Dam				x				S	P				
		SE-5	Fiber Rolls ⁵				x				S	P				
		SE-6	Gravel Bag Berm				x				S	P				
	Yes	SE-7	Street Sweeping and Vacuuming				x	x				S	P			
	Yes	TC-1	Stabilized Construction Entrance/Exit				x				S	S	P			
	At Discretion of City ⁷	TC-2	Stabilized Construction Roadway				x				S	S	P			
	At Discretion of City ⁷	TC-3	Tire Wash				x					S	P			
	Yes	SE-10	Storm Drain Inlet Protection				x					P				
	Potential Alternative ⁸	SE-12	Manufactured Linear Sediment Controls				x				S	P			P	
		SE-13	Compost Socks and Berms				x				S	P				
		SE-14	Biofilter Bags				x					P				
	At Discretion of City ⁷	WE-1	Wind Erosion Control				x					S		P		
At Discretion of City ^{7,9}	SE-11	Active Treatment Systems ¹⁰								x	P					

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories							CASQA BMP Objectives					
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	House-keeping	Non-Storm Water Management	Active/Passive Sediment Treatment	Erosion Control	Sediment Control	Tracking Control	Wind Erosion	Non-Storm Water Management	Waste Management
Waste Management and Good Housekeeping	Yes	NS-1	Water Conservation Practices						x		S	S			P	
	Yes	NS-2	Dewatering Operations						x			S			P	
	Yes	NS-3	Paving and Grinding Operations						x						P	S
	Yes	NS-4	Temporary Stream Crossing						x		S	S	S		P	
	Yes	NS-5	Clear Water Diversion						x						P	
	Yes	NS-6	Illicit Connection/Discharge						x						P	
	Yes	NS-7	Potable Water/Irrigation ¹⁰						x						P	
	Yes	NS-8	Vehicle and Equipment Cleaning					x	x						P	
	Yes	NS-9	Vehicle and Equipment Fueling					x	x						P	
	Yes	NS-10	Vehicle and Equipment Maintenance					x	x						P	
	Yes	NS-11	Pile Driving Operations						x						P	
	Yes	NS-12	Concrete Curing						x						P	P
	Yes	NS-13	Concrete Finishing						x						P	P
	Yes	NS-14	Material Over Water						x						P	P
	Yes	NS-15	Demolition Adjacent to Water						x							P
	Yes	NS-16	Temporary Batch Plants						x							P
	Yes	WM-1	Material Delivery & Storage					x								P
	Yes	WM-2	Material Use					x								P
	Yes	WM-3	Stockpile Management					x			S	S				P
	Yes	WM-4	Spill Prevention & Control					x								P
Yes	WM-5	Solid Waste Management					x								P	

Table 3. Minimum Best Management Practices (BMPs) for Construction Sites (continued)

BMP Categories	Required, Where Applicable ¹	CASQA BMP Factsheet No.	CASQA BMP Factsheet Name	Municipal Permit BMP Categories							CASQA BMP Objectives					
				Project Planning	Erosion Control	Run-on & Runoff Control	Sediment Control	House-keeping	Non-Storm Water Management	Active/Passive Sediment Treatment	Erosion Control	Sediment Control	Tracking Control	Wind Erosion	Non-Storm Water Management	Waste Management
Waste Management and Good Housekeeping (Continued)	Yes	WM-6	Hazardous Waste Management					x								P
	Yes	WM-7	Contaminated Soil Management					x								P
	Yes	WM-8	Concrete Waste Management					x	x						S	P
	Yes	WM-9	Sanitary/ Septic Waste Management					x	x							P
	Yes	WM-10	Liquid Waste Management					x	x							P

Notes

CASQA BMP Objectives: P – Primary, S - Secondary

1. BMPs marked as required do not need to be included in plans or implemented if demonstrated not to be applicable satisfactory to City staff.
2. A combination of the BMPs within these categories that will be effective, as determined by City staff, shall be proposed. Typically not all BMPs within the category will be necessary to provide an effective combination. In some cases only one BMP from the category may be necessary to be effective.
3. These BMPs may be included as part of the overall effective combination of erosion control BMPs if approved by City staff.
4. An effective combination of sediment control BMPs includes both full perimeter protection and sediment control within the boundaries of the site.
5. Silt fence and fiber rolls shall be staked into the ground as shown in the CASQA factsheet to be effective. Therefore, unless otherwise approved by City staff, they may not be used in paved areas or other areas where staking is not possible; gravel bags (SE-6) or compost socks (SE-13) shall be used instead.
6. Sediment basins and traps shall be sized per CASQA and City standards. Sediment basins and traps shall be maintained after storms in accordance with the CASQA factsheets unless otherwise directed by City staff. Due to site drainage patterns, sediment basins and traps are often located where permanent post-construction BMPs will eventually be installed. All accumulated sediment from the construction phase shall be removed prior to final installation of permanent post-construction BMPs to maintain the as-designed percolation rate.
7. These BMPs are not required to be included in plans or implemented unless specifically directed to be included by City staff to meet the MEP standard.
8. These BMPs may be included as part of the overall effective combination of sediment control BMPs if approved by City staff.
9. Active treatment systems are required for CGP Risk Level 3 sites. They may also be required for other sites at the discretion of City staff.
10. The CASQA factsheet implies some irrigation runoff may be acceptable. However, irrigation runoff discharges are considered illegal discharges and are prohibited per the City's Municipal Code.

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3.4 Development Projects

The City's BMP requirements for new and re-development projects are presented in the City's Standard Urban Stormwater Mitigation Plan, which is available on the City's website (www.ci.santee.ca.us). These BMPs include, but are not limited to, site design, source control, and post-construction structural BMPs (e.g., flow control or treatment control devices).

3.4.1 Notice of Upcoming Changes to Requirements

By 2016, the City anticipates adopting updated BMP requirements for new and re-development projects that will be consistent with the Municipal Permit adopted in 2013. The updated requirements and associated guidance document (referred to as the "BMP Design Manual" in the Municipal Permit) are being prepared cooperatively with staff from multiple San Diego County municipalities and other interested parties. The City will be publishing notices and informing the development community of these new requirements as they near coming into effect. Project proponents that anticipate acquiring City approvals for construction toward the end of 2015, or initiating construction near then, are advised to contact the City's Development Services Department's Engineering & Traffic Services Division at (619) 258-4100 (x186) to evaluate applicability of the new requirements.

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